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Changing Approach to Human Resource Principles in Mobile Internet Generation (i – generation)

Article by Sam Bodunrin
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E-mail: bodunrinbs12@yahoo.com

Abstract

People and culture are expedient in work place and they determine how strong or successful any organization is in terms of talent wealth and people optimization. However, the paradigm shift of managing talent in new age of mobile internet generation (i – generation) is drastically eroding from what we used to know and the ability of organizations to swiftly realize and catch-up with this innovative trend will determine their survival strategy in competitive Red Ocean.

The purpose of this research work is focused on the new trend of work culture in i-generation and compares the evolution of change in various categories relating to functions in a Human Resource Management.

Furthermore, a research survey was conducted to establish how this mobile generation thinks and their most preferred medium of doing things regarding work pattern. The result of our findings was shared in this article with the reaction of most millennia agreed to prefer being reached out to work via their mobile phones or social media which they access mostly.

The article also matched other work areas such as performance management in mobile generation, employee productivity and engagement, learning system via clouding and virtual method, resourcing and social media impact in i-generation, talent value as related to intellectual property compares to stock option for the big bosses, virtual work efficiency against traditional physical office amongst others.

Keywords: i-Generation, Millennial, Mobile-Internet Generation, Talent, HR Evolution, Baby Boomers and Gen X.

Introduction

It is a known fact that the impact of broad band (optic fiber) and ADSL (Land phone lines) are already phasing out of relevance with the advent of mobile internet in our world. Mobile internet is a new way of connecting to the internet through 3G or 4G lite mobile phone network (smart phones). Mobile internet could also be accessed via dongle (modem), data cards, tablets, mifi unit, laptops, palmtop, phone pad etc. via wireless internet network.

Mobile Internet is a flexible and mobile way of accessing the internet via portable and wireless devise. According to Statistic portal (www.statitics.com), number of mobile phone user worldwide in 2016 was 4.61billion people and it is expected to reach 5.07billion in 2019.

Since2007, there has been paradigm shift in the use of internet from desktop to mobile devices. Also, many of those internet users are confirmed to access the internet via mobile internet. “Google Report 2010 - 85% of all internet pages are now mobile friendly”. The implication of this report is that mobile internet is the latest trend in business and social environment and no other best way to reach out to the public other than mobile internet because of its easy accessibility.

In view of this changing lifestyle of talents, how to engage and optimize the new generation of Employees is becoming tougher for Human Resource Professionals. i.e. The transactional methodology of managing workplace and talent performance is becoming archaic, therefore, there is need for firms to join this new trend and prepare for the challenges ahead in the future of work. E.g. artificial intelligence.

This study underscored some of the limitations of longstanding ways of managing Human Resources whose values are eroding in the light of new i-generation preferences that is emerging. An online survey was carried out amongst millennial at Transsion holding (a Telecommunication Company in Africa)
and the feedback from our respondents is of remarkable importance to readers, thought leaders, CEOs and Human Resource Professionals.

Sample and survey method

Online questionnaire /survey was administered on our sample population at Transsion Holding Nigeria. This cut across male and female from different regions of the country and they are all millennial between age 18 to 25years. Our survey was designed and prepared from this website www.surveymokey.com

Our questionnaire was concise and simple with only 4 key questions directed to get basic information about changing approach to Human Resources in mobile internet generation. We decided to use an online survey questionnaire on our sample population because we believe that majority of Millennials are tech savvy and are active users of social media and mobile devices.

Result

In order to establish the relevance of mobile internet to I-generation, we conducted an online survey for group of 150 young workers in a TECNO Mobile - a telecoms company in Nigeria and below is the outcome of the survey. The name of the survey is www.surveymokey.com

1. Respondents were asked what medium they prefer to be reached on for job related messages. (Email: 80/150 x 100 = 53.33%, SMS: 72/150 x 100 = 48%, Phone Call, 14/150 x 100 = 9% WhatsApp 14/150 x 100 = 9.5% Others = 0.00).

2. Respondents were asked if they consider if faster to be reached via phone call (Yes: 129/150 x100 = 86%, No: 21/150 x 100 = 14%).

3. How would you rate your attachment to your phone? Respondents answered as follows (Extremely High: 14/150 x100 = 9.5%, High: 86/150 x 100 =57%, Moderate: 30/150 x 100 = 33.33%, Low: 0% and Others: 0%).

4. Through what medium do you access your Social Medial Platform (Desktop: 0% laptop: 0% Mobile phone, 150 x 100 =100% tablet/palm-top: 0% and others: 0%).

Discussion

Traditional performance appraisal vs real time feedback

One of the major impacts of technology on Human Resource Management is the way Employee performance are measured. Unlike before when key performance indicator (KPI) are set at the beginning of each year. Managers do not give feedback until mid-year review and later, annual performance appraisal. Modern technology and mobile internet have made this approach much simpler. With the aid of mobile devices, Managers can monitor team members’ performances in real-time from anywhere through the support of internet and give feedback almost immediately without necessarily waiting till the end of year for annual employee performance review.

Employee productivity vs employee engagement

The Scientific School of Thought (Fredrick Taylor) focused on Employee efficiency and machine – the logic of piece rate output. This is a function of what an Employee produces per minute or rate. The approach is long overdue and is phasing out of relevance in modern Management theories e.g. the theory compares Humans to machines without taking into cognizance other motivating factors other than money.

The world of Mobile internet generation appreciates Employee valued ownership and intellectual property (innovations) individual contributes to Company’s value chain for business continuity.

Another area of relevance is Employee Engagement and tools that are available for Employees to fill online surveys from their mobile devices. Employer could monitor Employees Engagement rate, feedback and work on how to build a better Employer valued proposition (EVP) Companies.

Classroom training vs. virtual learning

Mobile Internet world has changed the way we learn today. Needless to say, that we do not need to attend classroom lectures before learning could take place. Virtual learning system is the modern trend
in Mobile internet world. Employees can log in to online learning platforms and learn different skills or knowledge. They can also take online assessment or test for evaluation purpose also.

**HR data safekeeping vs. HR data clouding**

The era of filing and documents keeping in cabinets and safes are gone. “Cloud based data management” is more applicable due to its flexibility and convenience. Employees can access their data online via mobile phones and other devices. This system encourages Employee self-service at ease anytime, anywhere provided their devices are connected to the internet. Also, the emergence of mobile friendly applications which firms could customized for both commercial and internal use is an amazing advantage for managing i-generation activities at work.

**Hierarchy benefits and innovation value benefits**

Amongst the non-financial benefits Top Management executives enjoys include short term incentives (STI), Mid- term incentive (MTI), Employee Stock Option (ESOP) etc. These are strictly allotted to top hierarchy according to their positions and ranking in their organisation.

On the contrary, valuation of employee benefits is changing in mobile internet generation. Emphasis are placed on innovation rather than hierarchy. Employees who invent into Company’s intellectual properties are value higher, placed on stock ownership with huge profit sharing for adding to Company’s value system. This is common in Silicon Valley Companies such as Google, Facebook, etc. They also practice flat organization structure and value creativity more than hierarchy.

**Offline recruiting vs. online resourcing**

Some of the traditional media of recruiting talents such Newspaper, Magazine, TV/Radio advertisement, job agencies are proving to be less effective in attracting i-generation when compared to social media-based channels. Job seekers prefer to get more jobs alert online or search for jobs prospect on different job websites to checking newspapers for jobs.

The fact remains that millennia who are dominating our work-force cycle are tech savvy and are active more on social media platforms. Any employer that wants the best tech employees should focus on social media platforms where their undivided attention is Subsequently, some recruiters prefer to test applicants’ ability or determine their character traits to establishing if they are culture fit for their jobs or not via online I.Q tools or digital assessment centers. Company’s convention is confirmed through Computer-Based Test (CBT). This could be done “real-time” with instant evaluation without no error. More so, applicants could also get evaluation result anytime from their mobile devices.

**Onsite vs telecommuting**

The future of work is becoming a reality through virtual work system. (Work from home or anywhere) through the aid of internet system. According to a research done by Stanford University in 2013, it shows that telecommuters are above 13% more efficient than their Colleagues working in the office, this was also proved by Penn State University research in 2013 that telecommuters work about 5 to 7 hours higher than regular worker.

World of work is moving from traditional factory system to online based system. In Companies such as Microsoft and Google, where they practice flat organization structure, staff are flexible on work scheme and could get their work done anywhere while meeting any timeline set for the completion of their work.

**Future in view**

The future of work in years to come will be controlled by robots and artificial intelligence. The challenge with older generations is that most Gen X and Y are not fully prepared for this change that will cause huge job loss. For example, Self-driving cars was launched in Arizona by Uber in Feb 2017, Drone Taxi was launched in Dubai in August 2017, TEZ voice mobile banking was launched in India to provide seamless banking services, etc. All these innovations are pointing to the future of work which only few workers (mostly i-generation) can cope. The role of HR professionals is to ensure that there is more awareness on this global change and prepare people to be equipped with new set of skills that will be relevant in 22nd century.
Other challenges that Human Resources should prepare to manage include LGBT (Lesbian, Gay, Bi-Sexual and Transgender) right to work and protection against any form of discrimination, datafication of Human Resource Information for analytics and strategic decision making, HR as business driver focusing more on external customer satisfaction and investor evaluation, war for talent-next level?, etc.

**Conclusion**

The deduction from the above-mentioned points is that the world of work in shifting with the emergence of the millennia and i-generation into the labour market while their ways and level of engagement are quite different from the past generations. This is a food for thought for all Managers, HR professionals, business stakeholders, CEOs and Entrepreneurs to take cognizance of this new trend of workers and their lifestyle if they want to optimize their talent grid by getting the best out of them.

Learning also from Silicon Valley Companies that encounter these set of workers frequently due to their tech skills that is extremely required in information technology sector. It is a clarion call for change of thought in the way we plan, implement and evaluate our work in the nearest future next door!

**Figures and tables**

1. Respondents were asked what medium they prefer to be reached on for job related messages and they responded as follows;

   Table 1.1. Source: field survey (www.surveymonkey.com)

<table>
<thead>
<tr>
<th>Answer choices</th>
<th>Responses</th>
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</tr>
<tr>
<td>Phone Call</td>
<td>9.52%</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>9.52%</td>
</tr>
<tr>
<td>Others (Please specify)</td>
<td>0.00%</td>
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2. Respondents were asked if they consider it faster to be reached via phone call.

   Table 1.2. Source: field survey (www.surveymonkey.com)

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<td>14.29%</td>
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3. How would you rate your attachment to your phone? The respondents answered as follows;

   Table 1.3. Source: field survey (www.surveymonkey.com)

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<td>Moderate</td>
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<tr>
<td>Low</td>
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<tr>
<td>Very Low</td>
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4. Through what medium do you access your social media account? Respondents answered as follows;

   Table 1.4. Source: field survey (www.surveymonkey.com)

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<td>100.00%</td>
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<tr>
<td>Desktop</td>
<td>0.00%</td>
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<tr>
<td>Tablet</td>
<td>0.00%</td>
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<tr>
<td>Others (Please specify)</td>
<td>0.00%</td>
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Figure 1.1. Source: field survey (www.surveymonkey.com)

Figure 1.2. Source: field survey (www.surveymonkey.com)

Figure 1.3. Source: field survey (www.surveymonkey.com)

Figure 1.4. Source: field survey (www.surveymonkey.com)
References


[5]. www.indiainfoline.com

[6]. http://www.techcrunch.com

[7]. http://www.usnews.com/opinion/articles/2013/03/15/telecommuting-can-boost-productivity-and-job-performance
Credit Risk Management Assessment as an Operational Strategy in the Ghanaian Banking Sector: Empirical Evidence

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Abstract

Banks are very important in achieving the Sustainable Development Goals (SDGs). They provide financial support to enterprises to increase production and boost economic development. It is necessary for banks to be engaged in profitable activities and also have the ability to grow and survive in the industry. Sustaining growth and survival of banks in Ghana requires efficient strategic, tactical and operational management of credit risk in the banking sector. Credit risk has the potential to negatively affect the survival of banks. The study set out to assess the credit risk management strategy in the banking sector using Cal Bank Limited as a case study. Extensive literature on credit risk management was reviewed. Quantitative approach was used in the study. Data was collected from 4 Cal Bank branches (Graphic Road, Achimota, Derby Avenue and Ring Road Central) in Accra using likert scale questionnaires and open-ended questionnaires and the data were statistically analysed using Statistical Package for the Social Sciences (SPSS). The study indicated that the banks have credit risk management procedures in place. The respondents indicated that credit risk management is an important strategic management tool employed by banks. However, risk assessments are not frequently carried out and qualified personnel to carry out effective risk monitoring are inadequate.

Keywords: Management Information System Market Line (ML), Statistical Package for the Social Sciences (SPSS).

Introduction

Efficient running of financial sectors is pre-requisite for economic transformation, growth and development. Key players in the financial sector are the banking institutions (Singh, 2010). The commercial banking concept was integrated into the formal banking system since the colonial era in 1896. The first bank to operate in Ghana is the British Bank of West Africa now Standard Chartered Bank (Ghana) Limited (Kwakwa, 2014). Commercial banks are owned and managed as a limited company. The law governing the operations of commercial banks allows them to operate in every region (Aboagye and Otieku, 2010). The banking sectors are mandated to receive as savings, transfer funds from the saving units to investors for economic growth and development. Commercial banks serve as financial intermediation in the economy by mobilizing savings from surplus units and channelling them as credit facilities to deficit units.

Sinkey (2002) defines credit risk as the potential that a bank borrower or counterpart will fail to meet its obligation in accordance with agreed terms. Credit risk can be defined as the risk that a firm's customers and parties to which it has lent out money will delay or fail to make payments based on the agreed terms (Coyle, 2002). Credit is the major source of revenue to the banks. Credit therefore poses the major risks to banks due to high default rate among borrowers. This calls for sound risk management techniques in the banking industry.
This paper explores the nature of credit risk at the Cal Bank Ghana Ltd branches in Accra and how the bank's credit risk management policies and procedures influence the overall operations of the bank. Specifically, this paper explores the identity of credit risk management procedures followed at the Cal Bank Ghana Ltd., assesses the bank's credit risk environment, and examines the challenges constraining it from implementing credit risk management procedures.

**Literature review**

**Credit risk management**

Ghosh, Islam and Hasan (2014) indicate that managing credit risk is heart and soul of banks as it seriously affects the performance of banks because it effectively helps analysing credit worthiness of clients/borrowers. In the views of Nikolaidou and Vogiazas (2014) credit risk management is the combination of coordinated tasks and activities aimed at controlling and directing risks confronted by banks by applying management strategies. Frank, Simon and Josephine (2014) point out that the practice of credit risk management by banks or any organizations are not intended to eradicate risk entirely but are rather directed at curtailing circumstances that may result in the occurrence of and/or increase in risks.

Santomero (1997) and Allen and Santomero (1998) have outlined a certain procedure in managing credit risk. According to him, there should be standards and reports. Each bank must apply a consistent evaluation and rating scheme to all its investment opportunities in order for credit decisions to be made in a consistent manner and for the resultant aggregate reporting of credit risk exposure to be meaningful. To facilitate this, a substantial degree of standardization of process and documentation is required. This leads to standardized ratings across borrowers and a credit portfolio. A single value is given to each loan, which relates to the borrower’s underlying credit quality. At some institutions, a dual system is in place where both the borrower and the credit facility are rated. In the latter, attention centres on collateral and covenants, while in the former, the general credit worthiness of the borrower is measured. Some banks prefer such a dual system, while others argue that it obscures the issue of recovery to separate the facility from the borrower in such a manner (Kibor, 2015).

**Empirical studies on credit risk management**

Niinimaki (2004), in his paper entitled “the effects of competition on Banks’ risk taking” found that the magnitude of risk taking depends on the structure and side of the market in which competition takes place. He concluded that if the bank is a monopoly or banks are competing only in the loan market, deposit insurance has no effect on risk taking. Banks in this situation tend to take risks, although extreme risk taking is avoided. In contrast, introducing deposit insurance increases risk taking if banks are competing for deposits. In this case, deposit rates become excessively high, thereby forcing banks to take extreme risks.

Niinimäki (2004) also conducted a study to understand the joint effect of competition and deposit insurance on risk especially banks when bank risk is unobservable to depositors. The study found out the magnitude of risk that can be taken by banks depends on the structure of the bank and the market within which it operates. Unior and Carvalho (2013) carried out a study on the impact of risk management on project performance by surveying 415 projects at different levels of complexity in different industrial sectors in Brazil. The study found that designing and implementing risk management strategies in the operations of business impacts positively on the success, growth and survival of the business. The study indicated that managers must pay attention to uncertainties of projects and apply risk management techniques to boost the profitability of the business.

Olamide, Uwalomwa and Ranti (2015) also researched on the impact of effective risk management on bank’s financial performance using the ordinary least square regression. The study collected secondary data from the annual reports of banks listed on the Nigerian Stock Exchange. It found that there is a negative non-significant correlation between risk management proxies and bank’s performance. The study indicated that financial performance of the banks could not be explained away by the compliance or non-compliance to Basel’s regulation by financial institutions, but could be as a result of the accumulation of minor difficulties and inconsequential malfunction of the individual actors resulting in a massive breakdown.
Safari, Shateri, Baghiabadi and Hozhabnejad (2016) also conducted a study by reviewing literature on good risk management governance for banks and other financial institutions. The study found risk management has become a priority for most companies and therefore inability to address risk completely has adverse impacts on banks’ operations. Safari et al. (2016) further indicated that managing risk prevents losses and promotes competitive advantage. Harelimana (2017) undertook a study in Rwanda to assess the role that risk management plays on financial performance using the Unguka Bank Ltd as a case study. Data were quantitatively and qualitatively taken from 30 employees of the bank Ltd. The study discovered that the main factors determining risk management include credit risk, operational risk, and interest rate and liquidity risk. The study also indicated that there is a very strong relationship between risk management and financial performance. Risk management improves profitability continuously particularly those in risk management in order to enable them apply accepted tools of risk management in a professional manner and to enable them give relevant and reliable answers to questions on credit risk management.

Methodology

Research approach

Inference from the literature review informed the adoption of a quantitative research approach to this study. The study also selected this approach because the quantitative approach helped the study to utilize standardized statistical instruments such as descriptive statistics. Consistent with this view, this investigation uses a survey questionnaire to extract data on the credit risk management practices at Cal bank.

Research design, population, sample

The research design for the study is a case study design. The target population for this study included all workers in banks located in Ghana while the accessible population for the study included workers in the four Cal Bank branches in the Greater Accra Region (Graphic Road, Achimota, and Derby Avenue and Ring Road Central branches). The inclusion criterion for selecting the respondents is people who are directly involved in the day to day activities of the bank, being in position to accurately give information on credit risk management strategies in the sectors. The total number of workers in the 4 selected banks is estimated at 168 people. An online sample size calculator called Creative Research Systems survey software was used to determine the sample size for this study. The study used a margin of error (confident interval) of +/- 5 %. A confidence level of 95% was estimated for this study. With the application of the Creative Research Systems survey software, the sample size for the study gave the number of respondents as 117 workers. However, during the data collection period only 100 respondents could be contacted. The study used purposive sampling. The purposive sampling enabled the study to make in-depth judgment in selecting respondents especially when there was the need to reach the accessible population quickly (Creswell, 2007). Purposive sampling helped in carrying out the case study design in detail.

Data collection and analysis

Both primary and secondary data were collected. A closed ended questionnaire instrument was employed and developed for the study. Most questions required the participant to mark the extent of their agreement or disagreement with a statement using a seven-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The data were analysed with the Statistical Package for Social Sciences (SPSS) software, generating frequency tables, chi-square, regression, correlation and other vital statistics for analysis and discussion. The study made use of content and thematic analysis for the open-ended questionnaires.

Findings

Before detailing the findings from the relevant survey section, some general survey findings are useful.
Demographic characteristics of respondents

Gender of respondents

The result on the gender of respondents utilized for the study is presented in Figure 4.1.

The majority of the sampled respondents were males representing 60(60%) whilst significant numbers were females representing 40(40%).

Educational level of respondents

The educational level of sampled respondents was also investigated. The result regarding the educational qualification of utilized respondents is presented in Figure 4.2.

A sizeable majority hold bachelor’s degree (accounting and finance) representing 50%, 25% masters’, 20% professional certificates and 5% diplomates. This clearly depicts a well-educated workforce.

Number of years in the organization

The study investigated the number of years respondents have been at the organization. The result is presented in Figure 4.3.
Figure 4.3. Sample distribution of number of years in the organization

(Source: Field Data, 2018).

Reliability analysis of scale

Table 4.1. Test of reliability for scale

<table>
<thead>
<tr>
<th>Dimensions of Scale</th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
<th>No of Valid Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit risk management practices</td>
<td>.804</td>
<td>.825</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

(Source: Field Data, 2018).

Table 4.1 shows the test of reliability analysis and the validity of cases. The result shows the reliability of the overall scale (Credit risk management practices). The result from the sampled respondents in connection with reliability test shows a high Cronbach Alpha indicating a high reliability for the data. The results indicate a Cronbach’s alpha value thus coefficient $\alpha = .804$ which is suitable and acceptable. In terms of number of standardized items or questions utilized for the study higher Cronbach value was obtained representing $\alpha = .82$. The N value representing the number of observations or standardized Likert scale level questions presented to respondents was 46. The study also shows that all items utilized in connection with sampled respondents were valid showing 100 valid cases as recorded in Table.

The first study objective was to identify credit risk management procedures followed at the Cal Bank Ghana Ltd. The result is presented as follows;

Table 4.2. Credit Risk Management Procedures

<table>
<thead>
<tr>
<th>Credit Risk Procedures</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection by the supervisory staff</td>
<td>-</td>
<td>5(5%)</td>
<td>5(5%)</td>
<td>40(40%)</td>
<td>50(50%)</td>
</tr>
<tr>
<td>Audit and Physical Inspection</td>
<td>-</td>
<td>2(%)</td>
<td>38(38%)</td>
<td>20(20%)</td>
<td>40(40%)</td>
</tr>
<tr>
<td>Financial Statement Analysis</td>
<td>-</td>
<td>-</td>
<td>5(5%)</td>
<td>20(20%)</td>
<td>65(60%)</td>
</tr>
<tr>
<td>Risk Survey</td>
<td>40(40%)</td>
<td>50(30%)</td>
<td>-</td>
<td>10(10)</td>
<td>-</td>
</tr>
<tr>
<td>Process Analysis</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>40(40%)</td>
<td>60(60%)</td>
</tr>
<tr>
<td>SWOT Analysis</td>
<td>-</td>
<td>4(4%)</td>
<td>-</td>
<td>38(38%)</td>
<td>58(58%)</td>
</tr>
<tr>
<td>Inspection by Board Members</td>
<td>-</td>
<td>10(10%)</td>
<td>20(20%)</td>
<td>58(58%)</td>
<td>12(12%)</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>57(57%)</td>
<td>37(37%)</td>
<td>6(6%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Scenario Analysis</td>
<td>55(55%)</td>
<td>35(37%)</td>
<td>10(10%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Internal Communication</td>
<td>-</td>
<td>5(5%)</td>
<td>5(5%)</td>
<td>40(40%)</td>
<td>50(50%)</td>
</tr>
</tbody>
</table>

(Source: Field Data, 2018)
It is clear from Table 4.2 that Cal Bank’s branches under consideration have credit risk management structure; however, significant numbers of critical procedures are not within their jurisprudence. The result shows inspection by the supervisory staff, financial statement analysis, audit and physical inspection, process analysis, SWOT analysis, inspection by board members, and internal communication are practices followed within the branch organizations. However, risk survey, benchmarking and scenario analysis were not found within the credit risk operation of the branches. Despite this, it appears the bank has vital credit risk management procedures.

The study further examined the significance of these procedures using the t test. The result is presented in Table 4.3.

Table 4.3. T test result on credit risk management procedures

<table>
<thead>
<tr>
<th>Credit Risk Management Procedures</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>sig</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection by the supervisory staff</td>
<td>100</td>
<td>18.57</td>
<td>11.44</td>
<td>.002**</td>
<td>p &lt; 0.05</td>
</tr>
<tr>
<td>Audit and Physical Inspection</td>
<td>100</td>
<td>16.18</td>
<td>12.01</td>
<td>.001**</td>
<td>P &lt; 0.05</td>
</tr>
<tr>
<td>Financial Statement Analysis</td>
<td>100</td>
<td>24.43</td>
<td>15.43</td>
<td>.001**</td>
<td>P &lt; 0.05</td>
</tr>
<tr>
<td>Risk Survey</td>
<td>100</td>
<td>15.04</td>
<td>13.32</td>
<td>.211</td>
<td>P &gt; 0.05</td>
</tr>
<tr>
<td>Process Analysis</td>
<td>100</td>
<td>34.83</td>
<td>19.80</td>
<td>.000**</td>
<td>P &lt; 0.05</td>
</tr>
<tr>
<td>SWOT Analysis</td>
<td>100</td>
<td>13.06</td>
<td>11.09</td>
<td>.000**</td>
<td>P &lt; 0.05</td>
</tr>
<tr>
<td>Inspection by Board Members</td>
<td>100</td>
<td>15.00</td>
<td>11.55</td>
<td>.003**</td>
<td>P &lt; 0.05</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>100</td>
<td>34.83</td>
<td>19.80</td>
<td>.076</td>
<td>p &gt; 0.05</td>
</tr>
<tr>
<td>Scenario Analysis</td>
<td>100</td>
<td>13.06</td>
<td>11.09</td>
<td>.651</td>
<td>P &gt; 0.05</td>
</tr>
<tr>
<td>Internal Communication</td>
<td>100</td>
<td>15.00</td>
<td>11.55</td>
<td>.000**</td>
<td>P &lt; 0.05</td>
</tr>
</tbody>
</table>

(Source: Field Data, 2018).

Table 4.3 shows the descriptive and t test result regarding useful credit risk management procedures by Cal Bank. The aim was to explore the most utilized procedures by the bank. With regards to the statistical significance with a confidence interval of 95% (0.05 significant level), the result shows statistically significant use of credit risk management procedures indicated as [ p < 0.05]. However, no statistical significance was discovered for the procedures or tools. The result shows that supervisory staff, financial statement analysis, audit and physical inspection, process analysis, SWOT analysis, inspection by board members, and internal communication were practices that follow within the credit risk procedures. However, risk survey, benchmarking and scenario analysis were not found within the credit risk operation of the bank indicating no statistical significance. This clearly suggests moderate use of adopted tools in Ghana. Moreover, banking institutions follow key credit risk procedures in managing credit risk. This confirms the study by Santomero (2000) who outlined certain procedures in managing credit risk. According to him, there should be standards and reports. Each bank must apply a consistent evaluation and rating scheme to all its investment opportunities in order for credit decisions to be made in a consistent manner and for the resultant aggregate reporting of credit risk exposure to be meaningful.

Risk assessment and analysis

The second study objective was to assess the credit risk environment of the Cal Bank Ghana Ltd. Key indicators were utilized including risk assessment and analysis, risk identification and credit risk monitoring. The study examined risk assessment and analysis from the perspective of sampled respondents. The result is presented in Table 4.4.
Table 4.4. Risk assessment and analysis

<table>
<thead>
<tr>
<th>Risk Assessment and Analysis</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications of risk management techniques reduce costs or expected losses</td>
<td>40(40%)</td>
<td>50(50%)</td>
<td>5(5%)</td>
<td>5(5%)</td>
<td>-</td>
</tr>
<tr>
<td>It is important to emphasize on continuous review and evaluation of the techniques used in credit risk management</td>
<td>-</td>
<td>10(10%)</td>
<td>30(30%)</td>
<td>15(15%)</td>
<td>45(45%)</td>
</tr>
<tr>
<td>It is crucial to apply the most sophisticated techniques in credit risk management</td>
<td>-</td>
<td>-</td>
<td>5(5%)</td>
<td>25(25%)</td>
<td>70(70%)</td>
</tr>
<tr>
<td>Managing credit risk is important to the performance and success of the Cal Bank</td>
<td>50(50%)</td>
<td>50(30%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accountability for credit risk management is clearly set out and understood throughout the bank</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>40(40%)</td>
<td>60(60%)</td>
</tr>
<tr>
<td>Response for credit risk management is clearly set out and understood throughout the bank</td>
<td>38(38%)</td>
<td>58(58%)</td>
<td>-</td>
<td>4(4%)</td>
<td>-</td>
</tr>
<tr>
<td>There is a common understanding of credit risk management</td>
<td>58(58%)</td>
<td>12(12%)</td>
<td>20(20%)</td>
<td>10(10%)</td>
<td>-</td>
</tr>
</tbody>
</table>

(Source: Field Data, 2018)

The finding suggests that some level of credit risk assessment and analysis is done by the bank albeit rarely so. Although, managing credit risk is important to the performance and success of banking institutions in Ghana, risk accountability and management is rarely done by banks in Ghana. This explains the collapse of some banks in the country as clients default continuously on loan taken. Proper credit risk assessment and analysis will reduce the default rate of clients on loans for most banks in Ghana. The result suggests that banks in Ghana do rarely employ risk assessment and analysis, portraying a dangerous lack of the capacities required in monitoring and managing client loans. It is reported the credit risk management policy of most banks is conducted on adhoc basis instead of being a long-term strategic plan; as a consequence, assessing credit risk is difficult.

Credit risk identification

Risk identification is another environmental variable examined by the researcher. The indicators on risk identification were examined and the result is presented in Table 4.5.

Table 4.5. Credit risk identification

<table>
<thead>
<tr>
<th>Risk Identification</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The bank has developed and applied procedures for the systematic identification of investment opportunities</td>
<td>-</td>
<td>15(15%)</td>
<td>4(4%)</td>
<td>45(45%)</td>
<td>36(36%)</td>
</tr>
<tr>
<td>The bank has developed and applied procedures for the systematic identification of investment opportunities</td>
<td>-</td>
<td>10(10%)</td>
<td>30(30%)</td>
<td>15(15%)</td>
<td>45(45%)</td>
</tr>
<tr>
<td>The bank is aware of the strengths and weaknesses of the credit risk management systems</td>
<td>20(20%)</td>
<td>71(71%)</td>
<td>9(9%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Changes in credit risk are</td>
<td>-</td>
<td>50(50%)</td>
<td>50(50%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The bank finds it difficult to prioritize its main risk

Table 4.5 shows the result on risk identification indicators as applied to banking operations in Cal Bank in Ghana. The findings imply that although banks have procedures required for risk identification and prioritizing, most banks find it difficult to prioritize their risk. This therefore weakens the overall effectiveness of risk management in the organization. Since banks do not know the strengths and weaknesses of their competitors regarding risk management systems, it has the propensity of affecting their risk operations negatively. This confirms the study by IAIS, (2003) who posited that an effective system that ensures repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses, thus the long-term success of any banking institution and this can be achieved through effective risk identification.

Credit risk monitoring

The paper evaluated credit risk monitoring as one of the key environmental techniques utilized by banks in Ghana regarding risk management. In order to assess such monitoring practices, the t test was employed and the result is presented in Table 4.6.

Table 4.6. T test result on credit risk monitoring

<table>
<thead>
<tr>
<th>Credit Risk Monitoring</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>sig</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>The bank’s policy encourages training programs in credit risk management</td>
<td>100</td>
<td>12.17</td>
<td>.94</td>
<td>.161</td>
<td>p &gt; 0.05</td>
</tr>
<tr>
<td>The bank emphasizes the recruitment of highly qualified people having knowledge in credit risk management</td>
<td>100</td>
<td>14.15</td>
<td>1.02</td>
<td>.211</td>
<td>P &gt; 0.05</td>
</tr>
<tr>
<td>Effective risk management is one of the objectives of the bank</td>
<td>100</td>
<td>12.01</td>
<td>12.73</td>
<td>.000**</td>
<td>p &lt; 0.05</td>
</tr>
<tr>
<td>It is too risky to invest the bank’s funds in one specific sector of the economy</td>
<td>100</td>
<td>13.04</td>
<td>11.02</td>
<td>.003**</td>
<td>P &lt; 0.05</td>
</tr>
<tr>
<td>The level of credit risk management practices of this bank is excellent.</td>
<td>100</td>
<td>11.27</td>
<td>.84</td>
<td>.161</td>
<td>p &gt; 0.05</td>
</tr>
<tr>
<td>The bank’s risk management procedures and processes are documented and provide guidance to staff about managing credit risks</td>
<td>100</td>
<td>13.18</td>
<td>10.02</td>
<td>.001**</td>
<td>P &lt; 0.05</td>
</tr>
<tr>
<td>The bank is effective in continuous review/feedback on credit risk management strategies and performance</td>
<td>100</td>
<td>10.01</td>
<td>9.73</td>
<td>.002**</td>
<td>p &lt; 0.05</td>
</tr>
<tr>
<td>The bank’s executive management regularly reviews the organization’s performance in managing its credit risk</td>
<td>100</td>
<td>8.04</td>
<td>5.02</td>
<td>.221</td>
<td>P &lt; 0.05</td>
</tr>
</tbody>
</table>

Statistical significance with a confidence interval of 95% (0.05 significant level), portrays that majority of the sampled practices were statistically significant. This means most of the practices are either fairly done or rarely done or not all indicated as \( p > 0.05 \).

However, significant number indicators were not significant. Although banks have effective risk management objectives, they fail to employ qualified risk management experts. It therefore affects employee training on credit risk management practices and strategies among banks in Ghana. The result shows clearly that credit risk monitoring practices fairly or rarely exist in Ghanaian banks.

(Source: Field Data, 2018)
supports the study by Ernest and Young (2009), who indicated seven key challenges in effectively managing credit risk; prominent among them is poor risk monitoring. Many banks fail to put proper monitoring tools in place to mitigate risk.

**Challenges faced by banks in credit risk management**

Figure 4.4 portrays respondents’ views on credit risk management challenges.

![Figure 4.4. Challenges regarding credit risk management](Source: Field Data, 2018).

To the question: “Do banks face challenges with regards to credit risk management”, the predominant majority of respondents admitted there are critical challenges representing (91.0%). Mitigating these challenges is a necessary prerequisite for survival in the financial sector.

**Table 4.7. Challenges to financial sustainability**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor loan payment</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
</tr>
<tr>
<td>Weak record keeping</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
</tr>
<tr>
<td>Stringent government policies</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
</tr>
<tr>
<td>Use of simple technology</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Inadequate financial infrastructure</td>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Interest rate risk</td>
<td>6&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Poor management of the institutions</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Lack of institutional capacity</td>
<td>8&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Ineffective Monitoring</td>
<td>9&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Poor credit appraisal techniques</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

(Source: Field Data, 2018).

Credit risk management is very critical to the survival of banks in Ghana. However, the challenges outlined above can pose serious problems to the survival of banks. Among the challenges non-payment of loans disbursed to customers is seriously affecting the operations of banks. Non-payment affects the ability of the banks to recoup adequate liquidity to meet the withdrawal demands of depositors.

As a consequence, Amonoo et al. (2003) observe that in order to survive in business banks reduce interest rates on deposits, increase interest rates on loans and introduce stringent and cumbersome loan application procedures which also drive potential customers away.

Another key challenge facing banks is unfriendly government policies. The external environment is highly influenced by government actions and inactions. Unfavourable government policies resulting in high taxation and increase in utility tariffs increase the cost of business of banks. Generally, the capital base of most banks such as savings and loans companies and rural banks are lower compared to bigger financial institutions such as commercial banks. Therefore, policies resulting in high taxation, interest rate ceiling and increase in utility tariffs affect all the players in the financial sector and potentially suffocate most banks leading to their collapse. This assertion is supported by Kosmidou (2008).
Technology plays a vital role in this current business environment. The application of feasible technology in the financial industry has boosted the performance of many institutions. Inability to perfectly install and use technology in the operations of banks results in fraudulent activities by staff and other fraudsters. Ineffective technologies also increase operational costs of banks. Instead of technology improving performance, some banks record reduction in productivity due to inadequate IT personnel to manage the application hardware and software.

**Concluding comments**

**Summary of the study**

Banks are economic instruments used to boost productivity, economic growth and poverty alleviation. Efficient running of the financial sector is a pre-requisite for economic transformation, growth and development. The survival and growth of banks is critical for the sound provision of financial support to the economic players. Growth and survival of banks depend on effective credit risk management strategies. Credit risk in banks has to be effectively assessed to ascertain threat levels to profitability, growth and survival. The findings of the study indicate that management of the bank pay close attention to credit risk management. The bank is fully aware of the impacts of credit risk on the survival of business. They therefore follow procedures laid out to diagnose and rectify any challenges posed by credit risk. The respondents are knowledgeable about risk management procedures. However, it is surprising to note that majority of the workers are not closely involved in the management of credit risk in the bank which is solely reserved for top management. Key credit risk management strategies the study found include inspection, financial statement analysis, audit and physical inspection, process analysis, SWOT analysis, and internal communication. It is noted that the bank does not utilize risk survey, benchmarking and scenario analysis as credit risk management tools.

The bank utilizing risk assessment and analysis to aid management in formulating credit risk strategies is low in the company. A finding indicates the bank has rigorous procedures in place to effectively identify risks. Prioritizing identified risks remains a challenge which negatively impacts overall performance.

Credit risk monitoring strategies used by the company include regular management review, continues review and feedback on risk management, documentation of risk management practices undertaken in the company, strategic recruitment of staff. These practices are proven to be effective but are not regularly applied. Deducing from the study, credit risk management is an important strategic management tool employed by banks in Ghana. Despite being a powerful survival tool, risk assessments are barely employed by banks. Qualified personnel to carry out effective risk monitoring are inadequate.

**Study limitations, suggestions for future research**

The main limitation of the study was on the use of only quantitative approach in the study. A future study could employ mixed methods; the use of interview tool is effective in gaining in-depth knowledge. The selection of only Cal Bank provided another limitation to the study. The interpretation of the results was cautiously done since not all players in the banking industry were included in the study. Data collection was a challenge. Some the respondents were unavailable at the data of data collection. This limitation was overcome through persistence and ingenuity. The researcher also has connections in the banking industry which aided in the data collection process. Further studies could examine the nature of the credit risks identified in the study. It is recommended that the actual impacts of credit risk management in the banking sectors should be researched into. Studies could also be conducted to explore innovative ways of assessing credit risks. The actual effects of risk identification on the management of credit risk among banks have to be researched into.
References


The Prevention of HIV Infections in South Africa Focusing on Attitude and Behaviour

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Abstract

The prevalence of Aids in South Africa has pushed us to painting a picture of a “friendly HIV/Aids”, and thus eliminated the fear that is crucially necessary. Socially (practically) South Africans are more exposed to Aids than to condoms (and other preventions). Condoms are plenty but we are shy. We are shy to talk about them, we are shy to get them, and we are shy to use them. This may be because there are stigmas attached to them, greater than those attached to Aids itself. Psychologically we are more exposed to Treatment than the reality of the virus and its effects. When we imagine ourselves being infected, the first thing that comes to our minds is the taking of treatment rather than suffering and "the possibility of death". So, there is more comfort towards Aids than prevention because treatment is regarded as the worst consequence. We have become numb to the true danger of Aids. If we start showing people reality, we can change the status quo. Aids is manageable but it is intensive, which is similar to smoking and secondary smoking. We need to show graphics of this killer. It will take real fear for people to be really careful. We should not allow the next entire generation to also be vulnerable to this disease by the superfluous shielding of the dignity of those who are already infected. This can be done within the confines of our National Health Act and without compromising human rights. Activists need to make this sacrifice for our future. A lot of people don’t know what AIDS really is. They have never seen the extremes of it and the cruelty it has. No one is openly and publicly telling the true personal pain of living with AIDS but everybody is talking about treatment and survival. If we attach fear to our prevention efforts, we can save millions of people and South African Rands.’

Keywords: AIDS: Acquired immune deficiency syndrome (AIDS) is the name of the fatal clinical condition that results from infection with the human immunodeficiency virus (HIV), which progressively damages the body’s ability to protect itself from disease organisms.

Alcohol: A colourless, volatile, flammable liquid synthesized or obtained by fermentation of sugars and starches and widely used, either pure or denatured, as a solvent and in drugs. Also called ethanol, ethyl alcohol. Intoxicating liquor containing alcohol put in drinks.

Circumcision: Circumcision is the surgical removal of the skin covering the tip of the penis. Circumcision is a religious or cultural ritual for many Jewish and Islamic families, as well as certain aboriginal tribes in Africa and Australia. Circumcision can also be a matter of family tradition, personal hygiene or preventive health care. Sometimes there's a medical need for circumcision, such as when the foreskin is too tight to be pulled back (retracted) over the glans. In other cases, particularly in certain parts of Africa, circumcision is recommended for older boys or men to reduce the risk of certain sexually transmitted infections.

GDP: Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country’s borders in a specific time period. Though GDP is usually calculated on an annual basis, it can be calculated on a quarterly basis as well.

HIV: HIV (human immunodeficiency virus) is a virus that attacks the immune system (targeting white blood cells), the body’s natural defence system. Without a strong immune system, the body has trouble fighting off disease. Both the virus and the infection it causes are called HIV.
Literacy: Literacy is traditionally understood as the ability to read, write, and use arithmetic. The modern term's meaning has been expanded to include the ability to use language, numbers, images, computers, and other basic means to understand, communicate, gain useful knowledge and use the dominant symbol systems of a culture.

Unemployment: The World Bank defines unemployment as the share of the labor force that is without work but available for and seeking employment.

Introduction

Healthcare is not only expensive for individuals and government but also a setback for many other national developmental goals.

Aids is like global warming. We only see outcomes and so many become ignorant until they are personally touched.

HIV is the acronym for Human Immunodeficiency Virus, which is an infection that weakens the immune system and makes it harder for the body to fight infections. It is commonly spread by having unprotected sex. In the late stages HIV is also called acquired immunodeficiency syndrome (AIDS) which is often a combination of multiple infections and causes severe damage to the immune system.

This proposal is about the fight against HIV/AIDS, focusing on South Africa. It makes use of accredited research and statistics to uncover the truth about the spread of HIV/AIDS. The purpose of the research is to shift the attention of the world from the virus and disease themselves to the people. Analyzing the relationship between people and the disease will help us discover the cause of the easy spread of HIV/AIDS in South Africa by focusing merely on knowledge, beliefs and attitudes, using documented facts and interviewing ordinary youths and adults in South Africa, England, and Myanmar.

Methods

A compare and contrast analysis are used. The author selected five distinctive countries and used them to deduct South Africa’s failure in addressing HIV/AIDS from various variables, including prevalence, statistics, knowledge, beliefs and attitudes over HIV to explore the differences and find meaning in the importance of our knowledge, beliefs and attitudes as the perfect tools to fight the AIDS epidemic through behavioural change.

We will use the following research instruments and evaluations:

- Reaction to HIV/Aids and condoms from different age groups.
- Reactions from hospital visits.
- Putting up banner at night on busy streets with graphics and messages and seeing by passers' reaction in the morning. We will look at how long will they stare? and how many will ignore.
- Setting up testing tents on sidewalks and invite pedestrians to get tested.
- Questions based interviews.

Questions for adults to assess parental intervention.

- What can you tell me about HIV/AIDS?
- When how old were you when you first heard or read about HIV/AIDS?
- Has anyone who is HIV positive ever disclosed their status to you, personally?
- How many people do you personally know who are HIV positive?

Questions for youths

- Can you tell me anything about HIV?
- Are you taught about HIV/AIDS at school?
- Have you ever had a HIV/AIDS activist come to your school or community?
- Have you ever seen posters, billboards, etc. about HIV/AIDS?
- Where?
- How were they?
Do you and your friends talk about HIV/AIDS?
How often?
When last did you come across something that covers anything about HIV/AIDS in the media?
Where was it?

Results

Looking at a country with a much bigger population than South Africa such as Bangladesh which has one of the lowest AIDS rates in the world would be less relevant because AIDS is not contagious. Similarly, looking at a country with a much smaller population such as Samoa which also has one of the lowest rates would be less ideal because it is more manageable.

Bangladesh had a population 1000 times the size of Samoa in 2016 (162,910,864 to 194,523) while the AIDS rate in 2015 was almost equivalent at 0,1% to 0,01%. This can give us confidence in ruling out population as a causal factor.

Yet it is highly significant because it showcases the relevance of awareness through outreach education and socialization. It is also noteworthy that Samoa is an isolated island with limited migration and immigration trends. However, it is a very tiny nation that connects all citizens to one another, which would make it vulnerable to diseases. Bangladesh is a very cultural nation with customary traditions in socialization and relationships. However, it is one of the countries with the highest rape statistics.

Bangladesh identified its first HIV case in 1989, while Samoa's first case was reported in 1990. Condoms were in both countries promoted by government as prevention measures in the early 90 thought religious and cultural organizations have been forces of resistance.

Common risk factors

- Unemployment- (4,50% and 5,70% in 2011).
- Drugs- we look at alcohol consumption because alcohol is the most prevalent drug. (0,0037 ltr and 1,4 ltr in 2001).
- Literacy (61,5% and 99% in 2015).
- GDP per capita ($1,358.78 and $4,027.76 in 2016).
- Injection use [prevalent vs. highly prevalent].
- We look at how much each of the two nations is spending on Aids and how their preventative programs differ (today and in the year of the first case report).
- Bangladesh [$300] million to Samoa [$70] million.
- Circumcision as another prevention measure has also played a significant role.
- In Bangladesh [above 80%] and Samoa [less than 20%].
- We now need to conduct a compare and contrast analysis of three countries with about the same population size, namely South Africa, England, and Myanmar.

Circumcision in South Africa is at a rate of 20-80%. Condoms have been freely distributed in South Africa since 1992. Today free condoms are available in clinics, hospitals, and other public places and institutions such as post offices and in universities. They are even distributed to hangout spots such as taverns and clubs.

HIV/AIDS testing in South Africa is free in all state health institutions, including universities and mobile clinics. In 2016 [66,5%] of the population was tested. [80,1]% of them tested positive. If the whole population tests for HIV the rate is inevitably to rise in a shocking way that may lead to the assumption that 1 in every 5 South Africans is HIV positive. Many people in South Africa are HIV positive but just don’t know it.

An estimated [4,264,860] people are on ART’s in South Africa. ART's are free and given to all HIV patients. Children born to mothers with the HI-virus are treated before birth to prevent transmission. However, most people with HIV are not on treatment.

Myanmar identified its first HIV case in [1988] and introduced free condoms in [1989], while England's first case was reported in [1981] and free condoms were introduced in [1981]
England has one of the lowest AIDS statistics in the world, with just [0.16%] in a population of [66,573,504] million people.

England only has [12] million people more than South Africa but has an AIDS rate that is multiple times lower than that of South Africa. Treatment is distributed to [96%]. This is the same treatment used in South Africa.

Myanmar also has one of the lowest AIDS statistics in the world, with just [1.3%] in a population of [52.89] million people. Myanmar only has [3] million people less than South Africa but has an AIDS rate that is [12.6%] lower than that of South Africa.

From these comparisons we can deduce that early intervention was critical in the prevention of infection.

There is only a slight difference in the HIV rate between England and Myanmar, but the prevalence might correlate if we equal the population of the two nations.

These three nations are of about the same population but differ by Wealth and Culture.

The similarity in population is vital when comparing density. South Africa has a population density of [46.1] while England is at [419] and Myanmar with [81.82]. South Africa's low density was supposed to be a resistance to the high spread of diseases.

The economy allows us to look at its relative influence. England is one of the wealthiest first world countries with a GDP of [3.2.629 trillion in 2016] while South Africa is a developing nation emerging with a GDP of [294.8 billion] and Myanmar's GDP is at [67.43 billion]. With this fact we can rule out both wealth and poverty as major causes. South Africa has also spent more on HIV than any other nation from its own budget and international donors.

It is of paramount importance that we look at some commonly listed factors contributing to the struggle against HIV/AIDS in South Africa.

South Africa has one of the highest crime rates in the world. In societal safety and security, South Africa ranks as the 15th worst country in the world, and the 8th most violent with a murder rate of 31 per 100,000 people. One (1) person is raped every 17 seconds. South Africa is the country with the highest rape rate at 53.2 to 100,000. The country with the second highest rape incidences is Sweden at 63 to 100,000 and had an AIDS rate of 0.18% in 2014.

Poverty in South Africa is high with 12 million people living in extreme poverty and 17 million people are on permanent welfare. Unemployment at 26.80% in 2016, it is one of the biggest problems faced by South Africans, particularly youths. Idleness which is caused by unemployment increases risk behavior, but this does not fully explain the AIDS problem faced by the country when compared to other nations, as in Syria where unemployment is at 50% has a HIV/AIDS rate of only 0.01%.

Drugs play a major role in most of South Africa’s social ills. Pure alcohol consumption (per litre) in South Africa was at 11.5 litre per capita per year in 2016. We are the third biggest drinking nation in Africa and the 19th biggest drinking nation in the world. Drugs increase the vulnerability of contracting HIV.

Same sex marriage was legalised in South Africa in 2006 with The Civil Union Act. Today there is an estimated 4.9 million homosexuals in South Africa. Though homosexuals are more vulnerable to contracting HIV/AIDS, other countries with higher statistics of homosexuals, such as England and America have very low HIV/AIDS rates.

South Africa is not the worse in all these lifestyle patterns. However, they may not pose remarkable danger individually but their combinations can be hazardous, which is the case for South Africa.

**Discussions**

From these comparisons, can we say that South Africans lack information or is South Africa the most ignorant nation in the world?

The advancement of the spread of HIV and the global advancement in fighting it have long run parallel.
In 1980 the United States of America was hit by a series of cases that led to the diagnosis and recognition of AIDS, to be the first nation to report a case of AIDS.

Two years later the first case of AIDS in South Africa was identified in 1982 in a homosexual man who contracted the virus while in California (USA).

Today more than 25 million people have died of AIDS worldwide since the first case was reported, with at least 1 to 2 million dying each year from the disease.

An estimated 34 million are currently living with HIV/AIDS, with Sub-Saharan Africa having around 22.9 million people living with HIV/AIDS.

The country with the highest HIV/AIDS rate is Swaziland with 27% of its population living HIV/AIDS, while South Africa has the biggest epidemic, with well over 6 million people living with HIV/AIDS, which comes down to above 12.6% of its population of only 54,95 million people.

This statistic has increased from zero in a period of just thirty-five years. In 2016 it was reported that the country has been spending R23 billion on HIV/AIDS annually. The figure is distributed across prevention, testing and treatment.

Compared to the United States of America where the AIDS epidemic was first reported, America only has 1.2 million people diagnosed with HIV in a population of 325,816,150 people.

So, where did South Africa go wrong?

Majority of South Africans will say they have never seen someone with AIDS because they have never seen someone with the full-blown disease because these people are hidden at homes and hospitals.

It is easy to see a person with HIV/AIDS but difficult to see HIV/AIDS in a person. If (1,3) in every (10) people in South Africa is HIV positive, who is that one?

How many people today, living with HIV/AIDS know where they got it?

What is even more frightening is, how many people in the world today know their status?

**Conclusion**

HIV is a common enemy and the biggest threat to our society, so we cannot glorify it and shield it. We have marketed treatment and the Aids ribbon more than we show people what aids is. Even at health settings. We only see graphic posters of TB, Malaria and other diseases.

There is a need to redefine Aids in South Africa. There is also a need to not only give people risk information but also explain to them 'how it feels to live with it' socially, emotionally, psychologically, and physically.

We must show people what's really happening in cases of repulse. The full length of HIV and Aids from infection to the full blow of it. We cannot continue to only show cases of survivors and the strong and healthy. These stories only encourage treatment. Safety will only be encouraged by the publication of those cases of despair, vulnerability and death.

The passage of this legislation will save lives and taxpayer rands.

Furthermore, the promotion of the DIY HIV test kit is a self-defeating practice. It is going to disadvantage statistics, counselling, and treatment. So, it must be accompanied by necessary measures to address this crucial process. If not, statistics will go down but deaths and infections will continue to rise without being adequately monitored.

We must remember that counselling is not only a preparation to diagnosis but also to urge against anger, vengeance, and intentional spreading of the virus. It is dangerous to have undocumented people out there who know they are infected. It is like giving a gun to an untrained person. Testing is the beginning phase of a critical health process that must be done intensively.

Therefore, this research will have the following recommendations:

1. The mass publication of graphic footages in public spaces and true-life stories of HIV/Aids in the media.
2. Send children to hospitals with chronic AIDS patients for exposure.
3. Send activists to schools and communities for campaigns with extreme graphics.
4. Distribute condoms in school, giving them to every child rather than put them somewhere for pickups because young people are shy.
5. Acknowledge and disclose the incapability of ART.
6. The reviewing of the allowance of the sale of DIY test kits. If this is made a territorial implementation effectiveness can be efficiently measurable.

Tables

Table 1. Comparison between Bangladesh and Samoa

<table>
<thead>
<tr>
<th></th>
<th>BANGLADESH</th>
<th>SAMOA</th>
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</thead>
<tbody>
<tr>
<td>Population</td>
<td>162,910,864</td>
<td>194,523</td>
</tr>
<tr>
<td>Aids Rate</td>
<td>0.1%</td>
<td>0.01%</td>
</tr>
<tr>
<td>Year of First Case Identification</td>
<td>1989</td>
<td>1990</td>
</tr>
<tr>
<td>Unemployment</td>
<td>4.50%</td>
<td>5.70%</td>
</tr>
<tr>
<td>Alcohol Consumption</td>
<td>0.0037 ltr</td>
<td>1.44 ltr</td>
</tr>
<tr>
<td>Literacy</td>
<td>61.5%</td>
<td>99%</td>
</tr>
<tr>
<td>Circumcision</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>GDP</td>
<td>1.358</td>
<td>4.027</td>
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</table>

Table 1. Comparison between South Africa, England and Myanmar

<table>
<thead>
<tr>
<th></th>
<th>South Africa</th>
<th>England</th>
<th>Myanmar</th>
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<tbody>
<tr>
<td>Population</td>
<td>54.95 million</td>
<td>66.573 million</td>
<td>52.89 million</td>
</tr>
<tr>
<td>Population Density</td>
<td>46.1</td>
<td>419</td>
<td>81.82</td>
</tr>
<tr>
<td>Aids Rate</td>
<td>12.6%</td>
<td>0.16%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Year of First Case Identification</td>
<td>1980</td>
<td>1981</td>
<td>1988</td>
</tr>
<tr>
<td>Year of free condoms</td>
<td>1996</td>
<td>1981</td>
<td>1989</td>
</tr>
<tr>
<td>GDP</td>
<td>$294.8 billion</td>
<td>2.629 trillion</td>
<td>67.43 billion</td>
</tr>
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References

[6]. UNAIDS. UNAIDS Report on the Global AIDS Epidemic,
[8]. UNAIDS. UNAIDS Report on the Global AIDS Epidemic,
“The Viability of a Crop Insurance Scheme; A Case Study - Guyana”

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Abstract

Guyana is a developing tropical country on the Atlantic coast of South America and a member of the Caribbean Community (CARICOM). Guyana has a land mass of 214,970 sq. km and the current estimated population is 772,298 with approximately 90% living on the coastal land of the country. This is a narrow strip of land which constitutes only 10% of the total land mass, but provided 90% of its cultivation land. Guyana’s coastal plain is below sea level and its muddy and clay soil texture makes it ideal for rice cultivation. The cultivation and export of sugar, rice along with gold, bauxite, shrimp and timber contributes to the country approximately 60% of its Gross Domestic Product. Guyana has two major rainy seasons per year- May to August and November to January, which can result in overflow of rivers causing the agriculture sector to suffer losses mainly from flooding, especially flash floods.

This research aims to investigate the viability of a crop insurance scheme in Guyana. This is because the current system by the government to provide relief to farmers affected by crop failure for whatever reason is not sufficient to compensate them for full extent of the losses suffered. Current data obtained Windward Island Crop Insurance Limited suggest that there are crop insurance in other CARICOM countries providing significant assistance to farmers especially in the Windward Islands which are prone to hurricane of increasing magnitude.

Keywords: Crop Insurance, Government Aid & Windward Island Crop Insurance Limited.

Introduction

This paper looks at the sustainability of the implementation of crop insurance in Guyana. A comparative analysis is undertaken comparing the type of crop failure relief available to farmers, in Guyana (Government intervention/ aid) in the event of natural disasters, to that of the crop insurance scheme available to farmers other Caribbean countries and in particular that in the Windward Islands (Windward Island Crop Insurance Limited)

According to Wenner (2005), the effects of natural disasters are as follows:

● Decrease in income for farmers and their workers due to a corresponding decrease in employment.
● An increase in the prices of food items due to decrease in local produce.
● A decrease in exports and export income.
● An increase in loan/ credit defaults to financial intermediaries and suppliers by farmers due to their decrease in income.

Crop insurance is a valuable risk management tool that allows to farmers to insure against losses due to adverse weather conditions, fire, insects, disease and wildlife1. There has not been a published feasibility study for crop insurance in Guyana to date, nor critical review of the existing system whereby government continually bailout farmers when there is a disaster. There are, however, efforts by international lending agencies such as the Inter-American Bank looking at the feasibility of crop insurance in the wider Caribbean already in existence is The Caribbean Catastrophe Risk Insurance Facility, which is the ‘Caribbean’s Government Insurance Fund for Earthquake and Hurricane Catastrophes’; however, Guyana is not a member of this Facility.

This paper investigated the model of Government aid in Guyana, and compared it to the crop insurance scheme WINCROP, while also investigating the sustainability of these schemes in order to

1 Source: The Pennsylvania State University, 2008.
identify the feasibility of crop insurance over Government aid and also the possibility of implementing a crop insurance scheme in Guyana against flooding, their major natural disaster.

Research methodology

The main research method used is the ‘Explicatory Method’ whereby historic data is gathered from people and written sources in order to explain a current or future situation. The explicatory method is not a purely descriptive one but also requires critical evaluation of the results gathered. This method is best suited for this dissertation as we are investigating the current situations in Guyana and Windward Caribbean region with respect to financial relief available to farmers in the event of natural disasters in order to determine the more favorable and sustainable financially and the future opportunities available.

Data gathering techniques

The data collected will be both quantitative and qualitative; however, both types will be analyzed qualitatively using the explicatory method.

Interviews conducted face to face (or telephonic) between the interviewer and interviewee in order to gain information and insight from the latter. This allows for the gathering of primary data which may be more credible and accurate than secondary data as it is straight from the source. It is also advantageous in that there is immediate feedback and an opportunity to clarify or investigate further into a question. Therefore, all data obtained from this research was secondary.

This research looks at the sustainability of the implementation of crop insurance in Guyana. A comparative analysis is undertaken comparing the type of crop failure relief available to farmers, in Guyana (Government intervention/ aid) in the event of natural disasters, to that of the crop insurance scheme available to farmers other Caribbean countries and in particular that in the Windward Islands (Windward Island Crop Insurance Limited).

Identification / defining research problem

The effects of natural disasters are as follows:

• Decrease in income for farmers and their workers due to a corresponding decrease in employment.
• An increase in the prices of food items due to decrease in local produce.
• A decrease in exports and export income.
• An increase in loan/ credit defaults to financial intermediaries and suppliers by farmers due to their decrease in income.

Farmers are particularly affected by the effect of natural disaster. However, because of the interconnectedness of farming to the rest of the economy not the only persons directly affected by natural disasters suffer but the country as a whole. Because of this ripple effect it is pertinent that there is a sustainable and reliable form of relief to compensate farmers in the event of natural disasters. Crop insurance is a valuable risk management tool that allows farmers to insure against losses due to adverse weather conditions, fire, insects, disease and wildlife. There has not been a published feasibility study for crop insurance in Guyana to date, nor critical review of the existing system whereby government continually bailout farmers when there is a disaster. There are, however, efforts by international lending agencies such as the Inter-American Bank looking at the feasibility of crop insurance in the wider Caribbean already in existence is The Caribbean Catastrophe Risk Insurance Facility, which is the ‘Caribbean’s Government Insurance Fund for Earthquake and Hurricane Catastrophes’; however, Guyana is not a member of this Facility. This research will also investigate the model of Government aid in Guyana, and compared it to the crop insurance scheme WINCROP, while also investigating the sustainability of these schemes in order to identify the feasibility of crop insurance over Government aid and also the possibility of implementing a crop insurance scheme in Guyana against flooding, their major natural disaster.

The main research question that arises based on current research conducted so far is;

‘Is Crop Insurance Viable in Guyana?’
Expected output

This research is expected to build the capacities of all stakeholders inclusive of government agencies of the potential and extreme cost benefits that exists for the establishment of a crop insurance scheme in Guyana. Further, the Government of Guyana should persistently explore joining with studies currently conducted around the Caribbean and draw from their experience and available resources in order to develop a strong regionally structure of a crop insurance scheme. Guyana should also exploit partnerships agreement or form strategic alliances with other developed countries outside of the region such as China and India to gain insight and resources into their scheme.

Societal and scientific relevance

This study will provide valuable insights on the risk factors prevalent to the rice sector in Guyana and how guaranteed options can mitigate risk and add value to the overall benefits to product value and revenue. Other determinants such as risk appetite of famers, climate change effects and coupled with competitive global markets are facets to be considered. Additionally, with the reduction of aid from developed countries, smaller countries like Guyana need to provide long term protection and financial support to its farmers and this can only be sustained through investment in the appropriate framework and infrastructure preferably with the establishment of a “stabilization or contingency fund.” Further, a booming agriculture sector will auger well for strong macro activities and development for Guyana.

Literature review

Crop Insurance vs. Government support. According to the Committee on World Food Security (2003), Dominica and its food security are no longer highly vulnerable to effects of tropical storms due to several factors which includes “Risk spreading” due to the introduction of WINCROP, their compulsory banana crop insurance scheme. Other supporting evidence for the value of crop insurance schemes throughout the rest of the world is:

- Rickey Bearden (T. Nelson, 2009), Chairman of NCC’s Crop Insurance Task Force (USA): “crop insurance must be developed, delivered and administered as an effective risk management tool and innovative policies must be developed to make crop insurance more useful in various and ever-changing production conditions.” Bearden, who has been in the agricultural sector for 34 years, considers insurance coverage in Texas as a risk management tool to be as important as any other production input.
- Jerry Moran (S. Kuschmider, 2009), Subcommittee Ranking Member, House Agriculture Committee: “The crop insurance program is of significant importance to farmers across the nation. Farmers often tell me they could not continue to function without it. In a report published by CTA and Inter-American Institute for Co-operation on Agriculture (IICA), it is stated that agricultural insurance is critical for any successful agricultural scheme. They also claim that there is considerable scope for the private sector to be involved in this area and key factors in the successful implementation of such schemes include (CTA, 2007):
  - Sound open market criteria
  - Appropriate ratings of premiums
  - Support from Governments

Here we see that even with the implementation of a crop insurance program, there is still a degree of dependence on the Government.

According to a press release by the Government of Dominica in October 2007, they provided EC$ 2.8 million to banana farmers who sustained losses due to Hurricane Dean. Of course, in any major natural disasters with or without crop insurance schemes, governments will still be required to contribute to the disaster relief due to the disproportionate size between the losses suffered by major disasters and the capacities of insurance companies. Once the Insurance Company has not come to the point where they depend solely on government subsidies then they will reduce the burden on the government and government funds by a percentage. Also, obviously crop insurance seems to be very sensitive and unsustainable. In Brazil, the Southern neighbor of Guyana, the crop insurance market declined 50% from 2003 to 2005 due to prolonged droughts. Even with this occurrence, it is thought
that an increase in crop insurance along with sustainable farming practice and state subsidy are tools that will help Brazil deal with the effects of drought (Candel, 2007). However, with the decline in crop insurance due to these conditions how can they re-implement the scheme and make it flourish.

Other risks to the insurance scheme are (Department for International Development, 2004):

- Past climate patterns are not a viable predictor for the future due to our changing climate.
- Reluctance of farmers to take up insurance unless it is mandatory

There is a lack in the crop insurance market and a need for international insurance companies to share their experience and technical skills in developing such. It is also vital that there is cooperation among countries facing the same threats and access to international reinsurers (Candel, 2007).

With all these factors acting as a deterrent to the successful implementation of crop insurance, the alternative of depending on support through Government aid seems to be the more attractive option. However, government support is costly to the country and has serious effects on their monetary and fiscal policies (Skees et al, 1999). This brings about a need for an alternative self-sustaining program. This is seconded by Wenner (2005) who states that a lack of crop insurance leading to ad hoc, post interventions can have 4 major effects on the government and country:

- Interfering with budget plans and administration due to funds having to be reallocated to these disasters from other planned areas. In developing countries especially this can result in deficit financing leading to an increase in bank interest rates which in turns affects the farming industry again by making much needed lending too costly.
- The creation of ‘moral hazard’ in which farmers rely on the fact that they will receive government relief and as such do not make an effort to reduce their susceptibility to disasters. As such the government will forever have to be providing aid to the agricultural industry as there is no incentive to fix the situation. Also, this deters the attractiveness for insurance companies to enter and offer a potentially costly scheme as farmers would prefer receiving tax-free aid rather than paying premiums.
- Due to lobbying by an influential group of farmers, government may be requested to provide aid. In some cases, the influential group of farmers may not the ones who are in most need of aid. Wenner (2005) suggested that to counteract this, government should only provide aid in instances where insurance companies do not.

The provision of government aid may result in utilization of debt forgiveness of agricultural loans which affects banks’ solvency, etc. and discourages them from offering financial facilities in the future hindering the expansion of the agricultural sector. Only larger scaled farmers who are more stable will be able to access financial facilities thereby increasing the gap between the small/poor and larger scaled/well off farmers.

**Government aid in guyana and the possibility of crop insurance**

In Guyana in 2005, there was the worst flood in a century which caused approximately 59.5% damage to the country’s GDP due to Guyana being an agriculture-based economy. In Armendariz and others’ report on ‘Identifying Binding Constraints to Growth in Guyana’ (2007).

It was highlighted that the agricultural industry has suffered due to current climatic changes and a lack of crop insurance to mitigate the risk of such natural disasters among other factors. This idea of the need for crop insurance in Guyana in order to improve security in the agricultural sector has been around for some time now, for example, in 2001, in a political candidate’s manifesto, one of the methods planned in order to ‘resuscitate the rice industry and secure its future’ was to implement a crop insurance scheme (Peoples National Congress, 2001).

The Guyana Ministry of Agriculture has also suggested that in order to compensate for the risks of climatic disasters to the agricultural industry there is a need for crop insurance. However, it has also been pointed out that insurance companies are not interested in such insurance schemes and as such alternatives will have to be developed. An alternative suggestion was to develop a self-insurance scheme which would require an initial contribution by the Government into a fund to be maintained for
farmers for utilization in the event of natural disasters writing off the implementation of a local crop insurance scheme\(^2\).

CARICOM, of which Guyana is a member, is investigating the development of a disaster relief program in the form of agricultural insurance which would include relief for flooding, etc. It is unclear if and to what extent Governments will have to provide financial support to such a program. So far, there has been no definitive decision on such a program\(^3\).

Further, the Government of Guyana is promoting its ‘Grow More’ campaign to encourage the agricultural industry to produce more locally and help to mitigate the rising food costs in Guyana. However, to sustain this campaign, there needs to be improved security in the industry against unpredictable, adverse climatic conditions. One subsequent consequence of the lack of security which is also a deterrent in the industry to the farmers is difficulty in obtaining financing.

This difficulty is shown in the limited funds set aside for banks in their budgets for this industry and also their high interest rates which farmers may not be able to afford. The Government stated that in order to overcome this, government intervention may be needed here again. Also, crop insurance is needed as well (Government Information Agency, 2008). However, as said before, local insurance companies are not open to this scheme, therefore it seems there will be a prolonged reliance on government intervention. The question arises, why is there reluctance for local insurance companies to develop a crop insurance scheme.

**Windward island crop insurance limited (W INCROP)**

According to a report by Benson and Clay in 2001, WINCROP has been successful due to the following factors:

- A well-defined market
- A straightforward and reliable structure for collecting premiums, assessing losses and paying out.
- The company is owned by well-developed and invested organizations and boards within

  The island making reinsurance easier to access.

Even though banana plants are very susceptible to damage by winds of and over 40 mph, the recovery of the industry is fairly swift partially due to farmers being encouraged to re-enter the industry due to financial compensation and protection from WINCROP\(^4\). Hurricane David (1979), Frederick (1979) and Allen (1980) all caused severe damage for the banana farmers in Dominica; however this subsequently increased their share in the banana market globally. This is reflected in the diagram shown below (Benson, Clay, 2003). A similar situation is predicted to occur in Guyana where the Guyana Rice Development Board is predicting an increase in the demand for rice exports due to the major climatic disasters which occurred recently and the continuing unpredictability of weather worldwide. The banana industry was able to meet this demand even after the natural disasters due to the presence of WINCROP among other factors.

However, the sustainability of this scheme is being threatened due to (Benson, Clay, 2003):

1. Risk being insufficiently widely spread when all the islands are affected the same time by natural disasters.

2. A decline in the banana industry due to a decrease in its profitability. To overcome this, an option would be to diversify, however this is restricted due to legislation and high reinsurance premiums.

Also, in another report by Mechler and others in 2006, other issues arising with WINCROP are as follows:

- There are complaints by farmers that the premiums are too high while the payouts are too low.
- Farmers are against having mandatory insurance.
- As a result, at the end of 2004, there were 20\% of the premiums being in arrears affecting the company’s liquidity.

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\(^2\) Ministry of Agriculture, 2007

\(^3\) Government Information Agency, 2008.

\(^4\) Note: WINCROP was largely responsible for the re-development of the industry after Hurricane Hugo (Benson, Clay, 2003).
In the event of continued disaster, this scheme would not be sustainable and in the event of its collapse, government intervention would have to be sought.

**Insurance model parametric**

The Inter-American Development Bank is also performing a study on the feasibility of an agricultural insurance scheme in Jamaica using the parametric insurance model. Parametric insurance is “a type of insurance that uses a model to calculate damage post-catastrophe. This means that unlike traditional insurance, loss adjusters do not need to tally damage after catastrophe occurs, which can take months or even years. It is the estimated loss, calculated totally objectively, which dictates whether or not a policy triggers and how much the payout will be.”

EU funded All ACP Agricultural Commodities Program, noted problems relating to traditional agricultural insurance as being moral hazard and high costs.

**Reinsurance**

For insurance schemes to be profitable, the total premiums paid by farmers need to be in excess of their total claims. As this does not occur every year due to increased number of disaster events or administration costs, international reinsurers have to step in.

Without reinsurance and government subsidies, crop insurance would fail and the cost of the risk would be passed on to the farmers making it too expensive. Conversely in the current economic

In developed countries utilizing traditional crop insurance, government largely subsidizes this e.g. Government in USA pays 100% of the premiums for Catastrophic Crop Insurance. In Guyana, the only aid to farmers affected by flooding is Government relief. Therefore, the question arises, should the insurance companies implement this crop insurance or should the existing system of Government relief prevail as it is too risky in the current environment?

**The rest of the world**

Such insurance is important in developing countries due to the domino effect of uninsured farmers adapting low risk strategies, yielding lower returns, an economic disadvantage for the already disadvantaged, and in a disaster losing their produce casting them further into a spiral of destitution.

This was repeated by Wenner (2005) in his report in which he states that due to a lack of insurance farmers continue to produce inside its production possibility curve and increases its chances of remaining below or close to the poverty line. The frequency and intensity of disasters are predicted to increase as there has been an 87% increase in hydro-meteorological global hazards in the last 20 years to 2007. Therefore, there is a growing need to find ways to mitigate the effect of the resultant losses.

There have been new government initiatives set up to deal with mitigating the losses:

- Pooling cash reserves – This is prevalent in the Eastern Caribbean Bank. However, as the cash used for loss relief is in terms of a loan, it has not been utilized.
- Indemnifying debts - This was set up by the Commonwealth Disaster Management Agency to provide affordable insurance to government.
- Pooled insurance
- Catastrophe financing instruments e.g. catastrophe bonds
- Calamity Funds – As seen in Mexico where the Fund for National Disasters was developed with the support of international agencies.
- Micro-insurance

There seems to be a trend to find alternatives other than crop insurance because of the high risks involved. In the Caribbean, there is the Caribbean Catastrophe Risk Insurance Facility where payouts are based on the intensity of the disaster rather than the actual damage. Guyana is not a member of this facility and it also does not cover agricultural losses specifically therefore in 2006 when Hurricane Dean hit the Caribbean community causing tremendous losses to the agricultural industry, there were no

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5 The Caribbean Catastrophe Risk Insurance Facility, 2009
7 Department for International Development - 2004 Adaptation to Climate Change.
payouts from this facility. The AACP also does not believe that this facility will be beneficial to small scaled farmers and appropriate for covering agricultural losses due to natural disasters.  

**Findings and discussion**

Guyana’s coastal plain is below sea level and this makes it ideal for rice cultivation. The cultivation and export of sugar, rice along with gold, bauxite, shrimp and timber earns the country approximately 60% of its Gross Domestic Product. Guyana has two major rainy seasons per year- May to August and November to January, which can result in overflow of rivers causing the agriculture sector to suffer losses mainly from flooding, especially flash floods as shown in Figure 1. January, November and December rainfall amounted to approximately 200 mm and the heaviest between May to July to approximately 300mm. In January 2005, rainfall was 1108.2mm, almost six times the 30-year average.

**Figure 1.** Column chart depicting one year’s rainfall average in georgetown (ECLAC, 2005)


Guyana has 16 registered insurance companies, none of which offer insurance to farmers for loss of crops due to flooding. Therefore the Government and Non-Governmental Organizations usually come to their aid with financial or other relief. An example of the amount of relief given to the entire country as result of the floods in December 2004/ January, 2005 by NGO’s and other supporting countries is shown in the table 1.

| Classes of Insurance Business are defined in Schedules 1 and 2 of the Insurance Act 1998. |
|-----------------|-----------------|-----------------|
| Classes:        | Long-Term Insurance | Classes:        | General Insurance |
| 1               | General Life     | 1               | Accident and Liability |
| 2               | Health           | 2               | Auto               |
| 3               | Annuities and Pensions | 3               | Marine and Aviation |
| 4               | N/A              | 4               | Fire               |

8 (Erin Bryla, World Bank, 2008).
9 Source: Central Intelligence Agency(2009)
10 Source: Bank of Guyana Website www.bankofguyana.org.com
Table 1. Table of relief assistance for flooding in 2005 (ECLAC, 2005.) relief assistance by agency and amount as at February 25.2005.

<table>
<thead>
<tr>
<th>Donor</th>
<th>Amount (USD$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Government</td>
<td>50,000.00</td>
</tr>
<tr>
<td>USAID</td>
<td>653,000.00</td>
</tr>
<tr>
<td>DIFID</td>
<td>263,200.00</td>
</tr>
<tr>
<td>IDB</td>
<td>200,000.00</td>
</tr>
<tr>
<td>European Union</td>
<td>910,000.00</td>
</tr>
<tr>
<td>CIDA</td>
<td>37,240.00</td>
</tr>
<tr>
<td>UNDP</td>
<td>100,000.00</td>
</tr>
<tr>
<td>UNICEF</td>
<td>116,269.00</td>
</tr>
<tr>
<td>PAHO</td>
<td>100,000.00</td>
</tr>
<tr>
<td>CDB</td>
<td>50,000.00</td>
</tr>
<tr>
<td>France</td>
<td>62,500.00</td>
</tr>
<tr>
<td>China</td>
<td>100,000.00</td>
</tr>
<tr>
<td>Alúmina &amp; Bauxite Co.</td>
<td>100,000.00</td>
</tr>
<tr>
<td>Japan</td>
<td>120,000.00</td>
</tr>
<tr>
<td>OAS</td>
<td>15,000.00</td>
</tr>
<tr>
<td>Guyanese in New York</td>
<td>8,573.00</td>
</tr>
<tr>
<td>Atlantic Tele Network</td>
<td>50,000.00</td>
</tr>
<tr>
<td>GBTI</td>
<td>15,000.00</td>
</tr>
<tr>
<td>Others</td>
<td>27,884.00</td>
</tr>
<tr>
<td>South Korea</td>
<td>30,000.00</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>384,000.00</td>
</tr>
<tr>
<td>Germany</td>
<td>100,000.00</td>
</tr>
<tr>
<td>IICA</td>
<td>40,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,742,666.00</strong></td>
</tr>
</tbody>
</table>

As seen from the table above, the European Union was the highest contributor of $910,000 US dollars, followed by USAID with $653,000 and Trinidad and Tobago with $384,000.00. A total percentage average of approximately 52% of the total contributions received.

Windward islands

The Windward Islands agriculture output consists mainly of bananas, citrus fruits, coconuts and herbal oils and extracts. This contributes up to 10% of the region’s Gross Domestic Product.

The region workforce is broken down as per 2000 estimates into the following sectors according to the Central Intelligence Agency:

- Agriculture: 40%
- Industry: 32%
- Services: 28%

Other facts as compared to Guyana are as follows and based on 2008 estimates:
Table 2. Table of average economic comparison of guyana Vs. caribbean region

<table>
<thead>
<tr>
<th>Item</th>
<th>Windward Island</th>
<th>Guyana.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP- Purchasing Power Party</td>
<td>USD $ 719.8 million</td>
<td>USD $ 3.01 billion</td>
</tr>
<tr>
<td>GDP- Official Exchange rate</td>
<td>USD $ 365 million</td>
<td>USD $ 1.134 billion</td>
</tr>
<tr>
<td>GDP- Per Capital (PPP)</td>
<td>USD $ 9,900</td>
<td>USD $ 3,900</td>
</tr>
<tr>
<td>GDP- Real Growth Rate</td>
<td>2.6%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Comparison to world</td>
<td>150</td>
<td>133</td>
</tr>
<tr>
<td>GDP- Agriculture</td>
<td>17.7% (est.)</td>
<td>31.9%</td>
</tr>
<tr>
<td>GDP –Services</td>
<td>49.5% (2004 EST.)</td>
<td>47.2%</td>
</tr>
</tbody>
</table>


The table above indicates that Guyana’s GDP- Agriculture accounts for 31.9% of its total Gross Domestic Product as compared with Windward Island at 17.7%. Also, Guyana’s GDP in Purchasing Power Party and Official Exchange rate are at higher values.

The major agriculture produce is bananas. The banana industry thrived in the 1970’s and 1980’s peaking at 70% of export earnings. However, partially due to subsequent hurricanes this industry is now struggling. The Windward Islands have experienced several major hurricanes and tropical storms which caused considerable damage to their banana production.

Table 3. Table of examples of damages caused by hurricanes/ storms.

<table>
<thead>
<tr>
<th>Hurricane/ Storm</th>
<th>Damaged Caused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical Storm Debbie (1994)</td>
<td>25% of banana plants.</td>
</tr>
<tr>
<td></td>
<td>(Dominica- European Community, 2007.)</td>
</tr>
<tr>
<td>Hurricane Luis (1995)</td>
<td>95% of banana plants.</td>
</tr>
<tr>
<td></td>
<td>(Encyclopedia of the Nations, 2008.)</td>
</tr>
<tr>
<td>Hurricane Dean (2007)</td>
<td>85% of banana plants.</td>
</tr>
<tr>
<td></td>
<td>(Wind ward’s Bananas, 2009).</td>
</tr>
</tbody>
</table>

In 1995 Hurricane Luis accounted for almost a total 100% loss. As a result of disasters, Windward Crop Insurance Limited (1988) Ltd was formed on August 22, 1988 with the head office in Dominica. Its objective is to carry out business of crop insurance and to maintain reinsurance against any and all insurance risks assumed. It provides mandatory insurance and optional contractual insurance against loss of banana plantings by windstorm and volcanic eruption. Currently, farmers are covered for 80% of the damages to their crops. The company calculated damages to the crop on a random sampling basis. They also covered by international reinsurers. WINCROP does not depend on subsidies from the government, however as there is a decline in the banana industry in the Caribbean region and this is causing serious financial difficulties to the company. They have incurred consecutive losses in the last eight years due to current world financial crisis and also that more farmers are abandoning the banana industry due to increasing operational cost.

Conclusion and recommendations

This dissertation set out to investigate whether crop insurance was financially viable and sustainable in Guyana over Government aid. The paper examined the structure and current situation of a developed crop insurance scheme (WINCROP) in Dominica and compared that to the current type of relief offered in Guyana, Government aid. From data analyzed, we can conclude that due to the relatively small proportion of relief given to losses incurred, Government aid relief is not as attractive as crop insurance coverage and the only types of farmers to derive any benefit from this scheme would-be small-scale farmers. Larger scale farmers are not covered and they are the ones to stand greater losses and thus require protection as well.

The current scheme of government aid, while partially beneficial to small scale farmers seems to have an overall adverse effect on the country’s financial situation as there are no contingency funds for these situations and this affects revenues, reserves or international aid or financing. This means that funds are taken on an ad hoc basis from monies that were allocated for or could have been used for other
development projects for the country. The cost of the relief, G$ 253 million and G$ 400 million in 2004/2005 and 2005/2006 respectively, is too immense to be sustainable on a consistent basis. Also, with the current unpredictability of and increasing natural disasters globally, affecting the agricultural industry and Guyana being largely dependent on this, the costs of these disasters increasing correspondingly and government aid would not be sufficient to cover these losses and encourage rapid rehabilitation of the agricultural industry. With the sustained implementation of Government aid, Guyana would not be able to exploit its full potential in the agricultural industry.

The Government of Guyana now appears to ready to expand its attention to other agricultural products thus possibly causing reduced attention and resources on the rice industry in the future. At the same time, the GRDB is hopeful that the rice industry will improve its viability based on increases in revenues from rice exported in the last three years. The question is whether a crop insurance scheme would be a sustainable alternative. From the investigation of WINCROP, the answer is yes provided that a prudent framework is built for Guyana. This should include defined parameters for claim settlements, scope to monitor and measure rainfall within all regions in Guyana and educational development practices drafted and implemented so farmers can be aware of the technical facets that must be administered in the daily agricultural activities. Never the less certain polices, framework and organizational structures can be examined and quantified to ensure best practices are adopted and implemented. WINCROP is a unique crop insurance scheme as it has not had to rely on Government subsidies unlike crop insurance schemes in the developed world such as the US and has still been able to survive for as long as it did when other schemes have withered away as in Brazil. Some best practices or facets under examination that have made WINCROP successful in the past that should be replicated in a crop insurance scheme in Guyana to be sustainable are as follows;

**Mandatory Insurance** – With the implementation of a crop insurance scheme there may be some request to understand whether it will provide maximized returns to all participants inclusive of the current insurance companies in Guyana. Also, small scale farmers may hold the view that they cannot afford the premiums given their operational scale. Further, to enhance sustainability of the scheme and also to aid in preventing adverse selection and a portfolio of clients to spread the risks efficiently and effectively, mandatory insurance should be adopted in Guyana to attract both large- and small-scale farmers. This will also require legislative support.

Additionally, this can enable the financial institutions in Guyana who are lenders into the agricultural sector to ease on lending requirement since cash flow will be covered with insurance. It may also reduce the risk premium attached to interest rates for these types of products. Incrementally the default risk factors in these loans is reduced by the financial protection of an insurance scheme then rates will decrease and financing will be affordable.

**Structure of the Scheme** – The method of calculating premiums in WINCROP should be transferred to Guyana as it is a fair and easy method which makes this scheme affordable and also deters adverse selection. The method of farmers paying a set rate per the amount they export ensures that farmers only pay for what they produced and exported. Therefore, small scale farmers can afford the premiums as well as larger scale farmers and the scheme will be able to attract both types to develop their portfolio of clients. The structure of assessing losses and payouts are also attractive as these assessments are made quickly and objectively, reducing moral hazard and will be cost efficient rather than the costlier traditional methods. Even though the loss is estimated on a random sampling basis and the payout is only a proportion of this, we see that the percentage of payout to loss suffered is significantly higher than that of the Government aid given to loss suffered in Guyana.

**Reduction of Moral Hazard** – As Guyana is larger than the islands; each area in the country is not always affected at the same time or to the same extent by natural disasters. Therefore, it would be easier to offer incentives to farmers in the event that they do not make claims. This would be in order to reduce their complacency at having financial protection.

**Shareholders** – The shareholders of the scheme should be vested members in the rice industry such as GRPA and GRDB along with large rice farmers as these members would have more to gain from just the company alone but from also the success of the scheme within the rice industry itself. This would hold their loyalty to the company and ensure their support, skills, and resources.
WINCROP, although successful for over twenty years, is now facing severe liquidity problems. Investigation of their financial position gives us insight on how to improve the situation, opportunities that need to be explored and lessons to be learned when implementing a crop insurance scheme in Guyana.

These are as follows:

**Bundling with other crops or products** – We see that the declined of the banana industry is a significant factor in the declined of WINCROP’s liquidity. Therefore, the scheme should not be solely dependent on one crop; once developed the scheme should immediately investigate the inclusion of other crops to diversify its portfolio.

In order to survive, WINCROP needs to diversify into a more lucrative crop or into a more lucrative island. This diversification is slow in prevailing due to legislations and a threat of an increase in reinsurance premiums. Therefore, in developing a new scheme, these matters should be taken into consideration at the inception. When assessing a potential reinsurance company attention should not only be given to the current chargeable premiums but premiums in case of an expansion should be negotiated. A scheme in Guyana should take account of WINCROP’s difficulties and be able to find ways of mitigating the same. As with a regional scheme, this would offer the opportunity to have a range of crops insured therefore with the decline of one industry, it would not be a detriment to the entire scheme.

**Available Experience, Skills, and Resources** – As said before, the Government in Guyana should persistently explore joining the studies currently conducted around the Caribbean and draw from their experience and available resources in order to develop a strong regionally structure of a crop insurance scheme. Guyana should also engineer partnerships or bilateral agreement / strategic alliances with other developed countries outside of the region such as China and India to gain insight and resources into their scheme. Further, we see that for WINCROP, having branches in different countries has benefits which outweigh the disadvantage and as such it would be beneficial for Guyana to join a regional crop insurance scheme as being piloted by CARICOM rather than to have a local insurance company enter the field alone. Local insurance companies are currently struggling in the light of the current economic crisis and may not have the resources to take on a riskier project, let alone to diversify this project regionally or over a number of different crops, therefore Guyana joining a regional scheme would be the ideal solution. Thereafter, Guyana can build on exposure and increase local content skills and knowledge. This would also make reinsurance more accessible and more affordable. With the backing of a strong regional body with knowledge, experience and resources the risks may be decreased and reinsurers may be more willing. Reinsurance is imperative for the sustainability of the scheme and its independence from government intervention. Finally, the findings of this dissertation are limited due to the fact that one significant factor which was not investigated in detail for this research;

**Farmers attitudes and financial capabilities** – An investigation including interviews with farmers in order to obtain their thoughts on the aspect of implementing crop insurance, the benefits they perceive to be derived from the same and their opinions on the current situation of local Government aid was not carried out. This was not considered due to the fact there is no:

- Defined structure for crop insurance in Guyana, hence farmers may not be aware of such.
- Poor infrastructure to measure climatic conditions which is pivotal in a crop insurance scheme.
- No guidelines/ mechanism to measure farmer’s technical agricultural applications and its correlation to crop insurance.

Further research into this area should be done as they are key players in the crop insurance scheme; farmers are the clients and without them no scheme would survive and the Government may need to task the Ministry Of Agriculture to appoint a new independent body to administer local insurance companies to partake in the administration of the regional crop insurance scheme or allow one of the local insurance bodies to administer the crop insurance directly in the Guyana.

I believe that the current research done firmly indicates that Government aid is more financially feasible than a crop insurance scheme. However, we see the insufficiency of Government aid to farmers and the unfavorable burdens on the country and also that a crop insurance scheme once managed prudently is able to survive for a long period of time without Government intervention thus reducing the
burden on the country’s fiscal payments in the event of natural disaster. Notwithstanding for crop insurance to be implemented effectively in Guyana, the following must be satisfied:

- Defined structure for crop insurance in Guyana.
- Development of infrastructure to measure climatic conditions.
- Drafting and implementation of guidelines/mechanism to measure farmer’s technical agricultural applications and its correlation to crop insurance.
- Institutional support from financial institutions such as insurance companies and commercial banks.
- Availability of technical skills and resources in startup phases.

In the interim a stabilization funds should be established to support farmers which should include defined pay out mechanisms inclusive of qualifying criteria, benchmark payment amounts along with prudent segregation of internal checks and balances for disbursements officers. Future research on the areas mentioned must be taken into context in order to strengthen this decision and also to derive additional opportunities available to the scheme where this dissertation has not.

References

[6]. Government Information Agency (2005), President provides relief for flood hit Region Two farmers, GINA: Author.
[7]. Government Information Agency (2005), Region 5 rice farmers receive flood relief cheques/seed paddy - Distribution exercise to be completed in one week -- Robeson Benn, GINA: Author.
Marketing Education: A Critical Factor in Reducing Unemployment and Entrepreneurship Failure in Developing Economies

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Abstract

Due to the increasing rate of unemployment among the youth, especially school graduates in many countries of the world (both developing and developed) and its resultant negative effects on the society, many countries now emphasize entrepreneurship training for their citizen as a means of reducing the unemployment problem. This is laudable especially for developing countries with high population but low level of industrialization. However, encouraging people to acquire vocational or technical skills in order to establish their own business can only provide permanent solution to unemployment if the entrepreneurs are well equipped with marketing skills to make their business relevant for a long period of time rather than a short period as statistics have shown that as high as 80% of small business fail during their first five years. The high rate of business failure would only compound the unemployment situation rather than solve it. Although there are many reasons why these businesses fail, but the writer is of the opinion that inadequate market research and planning resulting from little knowledge of marketing by business owners is mainly responsible for the failure of their businesses. This paper therefore discusses the meaning, functions, and importance of marketing in a business organization and recommends comprehensive marketing training for potential and current entrepreneurs as this is believed to be capable of reducing business failure greatly.

Keywords: unemployment, Entrepreneurship, Vocational/Technical Skills, Marketing, Business failure.

Introduction

As a result of the growing number of unemployed graduates in the society, many countries (both developed and developing) are emphasizing entrepreneurship training for their citizens as a way of reducing the unemployment problem in the society. However, encouraging people to acquire vocational skills to be able to establish their own businesses either in production of tangible goods or rendering of intangible services would be capable of providing permanent solution to unemployment problem if the citizens are well equipped with marketing skills to make their businesses relevant for a long time rather than a short period of time.

This paper therefore discusses entrepreneurship as a solution to unemployment problem and the critical role of marketing education in guaranteeing entrepreneurship success in developing economies.

Concept of unemployment

Unemployment is a situation where some people who fall within the ages of working population, capable and willing to work, are unable to obtain befitting work to do (Anyaele, 2003). The problem of unemployment is becoming chronic and without any solution in sight as the number of school leavers is increasing at a geometric rate yearly without corresponding increase in the number of organizations (private or public) that can absorb the school leavers. Thus, unemployment is a condition whereby willing and able-bodied persons are unable to get paid job as a means of livelihood.

Consequences of unemployment

Unemployment has always led to serious negative consequences in any country. These consequences include increase in crime rate, migration of people to seek for better life or greener
pastures elsewhere, reduction in investment, threat to peace and stability, high rate of dependency, wastage of manpower, and low standard of living.

As a result of the negative impact of unemployment on any economy, every responsible and responsive government would want to find solution to it. In Nigeria and many other countries of the world, entrepreneurship training in and outside the formal school system is encouraged. However, it has been observed that more emphasis is laid on the vocational and technical skills training without giving marketing skill acquisition the place of pride it deserves in the training of potential entrepreneurs in the school system, secondly. Secondly, most students think entrepreneurship is synonymous with small business management. With these observed shortcomings, the objectives of entrepreneurship training in our schools may not be achieved especially when the private sector is expected to become Nigeria’s engine of growth.

**Concept of entrepreneur and entrepreneurship**

Many definitions of an entrepreneur abound in literature. According to Fernandez (2018) “an entrepreneur is a person who identifies a need and starts a business to fill that void”. Business day dictionary.com (2018) defines it as “someone who exercises initiative by organizing a venture to take benefit of an opportunity and as the decision maker, decides how, and how much of a good or service will be produced”. Banerjee (2012), describes an entrepreneur as “someone who mixes passion, innovation, and drive to turn a vision into working business”. An entrepreneur is usually a sole proprietor, a partner or the one who owns the majority of shares in an incorporated venture. An entrepreneur is usually willing to risk loss in order to make money, and usually an employer of productive labour.

Entrepreneurship has been defined in different ways by many writers. Some of these definitions are: Cantillon (1734) in Weirich, Cannice and Koontz (2008:409) defined it as ‘self-employment with uncertain return’, Robbins and Coulter (2007:44) defined entrepreneurship as “the process of starting new businesses, generally in response to opportunities”. The French economist say in Drucker, (1985:19) described entrepreneurship as shifting of economic resources out of an area of lower into an area of higher productivity and greater yield. Tijani-Alawe (2004:3) also defined an entrepreneur as “an independent, growth-oriented owner-operator”. That is, entrepreneurship is the process of owning and operating growth-orientated ventures independently.

From the definitions above, certain themes are implied. First, entrepreneurship is about risk bearing. Secondly, it is the pursuit of opportunities, it is pursuing environmental trends and changes that no one else has seen or paid attention to. Third, entrepreneurship is innovation, it involves changing, revolutionizing, transforming, or introducing new products or services or new ways of doing business. Fourth, entrepreneurship is growth, entrepreneurs pursue growth, and they are not content for their organizations to stay small.

**Roles of entrepreneurs and small-scale businesses in developing economies**

Although entrepreneurship is not synonymous with small business, it is however, believed that entrepreneurs in most cases start their business on a small scale and develops it into a medium and large-scale business with time. Therefore, attention is paid in this paper to the starting point of entrepreneurs or businesses. Small business firms contribute to social and economic development of any nation. These contributions include as stated by Owualah (2005), Byrd & Megginson (2009) and Olawale (2017):

1. Transformation of traditional (indigenous) industry to giant modern corporations
2. Development and promotion of local technology
3. Mobilization and utilization of domestic savings
4. Employment creation for a large number of people
5. They mitigate rural-urban migration
6. Utilization of local resources (human and material)
7. Dispersal of economic activities
8. Production of specialized items in small quantity to meet current and diverse demands
9. Low patronage of imported goods
They ensure the supply of high-quality parts and components and intermediate products thereby strengthening the international competitiveness of manufactured goods

11. They provide training ground for unskilled workers

12. Development of local areas where such business is located.

13. They ensure the structural balance in terms of large and small industrial sector as well as rural and urban areas

14. They are effective in subcontracting with large enterprises

15. They enhance the standard of living of the populace.

**Objectives of entrepreneurship course**

In appreciation of the numerous ways small scale businesses have contributed to the social and economic development of the society, entrepreneurship course had been incorporated into the programmes of students in our educational institutions (Colleges, Polytechnics, and Universities) to equip our graduates (potential entrepreneurs) to start and successfully manage small and medium scale enterprises (SMES). The knowledge gained in the course is to encourage self-employment as a conscious and predetermined choice of occupation. The course encourages graduates to be job-creators for themselves and other people rather than being job seekers. Thus, apart from generating employment opportunities, there is reduced pressure on government and large firms for salaried employment.

Entrepreneurs are encouraged to be inward looking in sourcing production resources. This has dual linkage effects of rural development and import substitution and less pressure on foreign exchange.

The teeming youths as well as retired workers have opportunity to upgrade their welfare as well as contribute to national development and economic growth.

**Small business failure**

“According to statistics the world over, one out of every three new businesses has failed within the first year of operation, while as high as 80% of small businesses failed during their first five years” (Fatunla, 2000).

According to Owulah (2005), Channey (2016) and Schaefer (2018), Small scale business can fail for many reasons, some of the reasons include starting for the wrong reason, lack of differentiation (or unique value proposition), failure to advertise and market, (no website or no social media) wrong location, inadequate managerial skill, under-capitalization, high propensity toward risk, inaccurate record keeping, personal habit (financial indiscipline), psychological and physical stress, inability to cope with growth and competition, inconsistent government policy on small scale business due to political instability, obsolete technology, shortage of skills, inadequate market research and planning.

Many businesses have failed because of the failure of the owners to carry out adequate market research and planning. The market research and planning answers the following questions:

(a) What to produce?
(b) Who to produce for?
(c) When to produce?
(d) How to produce?
(e) How to get the goods to the market (buyers)?
(f) What quantity to produce?
(g) What price to sell?

If these questions are properly addressed, the risk of failure of any business would be greatly reduced as many of the problems that cause business failure would have been solved; hence the need for more emphasis on marketing education by our institutions (formal and informal) engaged in training entrepreneurs.

**Meaning of marketing**

Marketing deals with identifying and meeting human and social needs. One of the shortest definitions of marketing is “meeting needs profitably” (Kotler and Keller, 2009:5). Kotler (1988:11) also defined marketing as the “process of planning and executing the conception, pricing, promotion,
and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives”. Stanton, Walker and Etzel (2001:6) defined marketing as “a total system of business activities designed to plan, price, promote and distribute want-satisfying products to target markets in order to achieve organizational objectives”. Marketing is also described by Kotler (1984) as “the business function that identifies current unfilled needs and wants defines and measures their magnitude, determines which target markets the organization can best serve, and decides on appropriate products, services and programmes to serve these markets. Thus, marketing serves as the link between a society’s needs and its pattern of industrial response”.

These definitions have the following significant implications:

- **Focus**: The entire business activities should be customer-oriented. Customers’ wants must be recognized and satisfied.
- **Duration**: Marketing should start with an idea about a want-satisfying product and should not end until the customers’ wants are completely satisfied, which may be some time after the exchange is made.
- **Magnitude**: The size of the market (demand) must be measured to avoid over production or under production.
- **Satisfaction**: Exchange has to satisfy both customers and organizational objectives (i.e. symbiotic relationship must exist between the organization and its customers) Industries respond to society’s needs identified by marketing.

In summary, the American Marketing Association offers the formal definition: “Marketing is an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders (Kotler and Keller, 2009:6). From this definition it is clear that marketing consists of some activities (functions and processes) that any entrepreneur should understand to be successful in business. The activities of functions involved in marketing process are discussed below.

**Functions of marketing**

Basic functions of marketing in an organization according to Nwokoye (2004:4-5), Bradley (2018) include:

1. Market research and sales forecasting
   Marketing gathers and analyze data about demand, consumer wants, competition, government policies, new products and general changes in our social structure. This function underscores the fact that marketing begins even before the product is produced.

2. Product planning and development
   Marketing advises on what to produce, the quality, style, design, brand name and packaging-all based on consumer and market research.

3. Pricing
   Marketing plays a large role in setting prices whether at, above or below the competitor’s prices, and in determining a system of discounts for the middlemen who handle the product

4. Selecting channels of distribution and middlemen
   The proper channels-whether direct or indirect – though which the product will be distributed must be selected and the distributors, retailers and agents appointed to participate

5. Promotion (communication)
   This is meant to create awareness as well as persuade buyers that the product will satisfy their needs. This function is performed by using such methods (tools) of advertising, personal selling, sales promotion and merchandising, publicity, public relations and direct marketing.

6. Physical distribution and warehousing
   Marketing arranges for the physical handling of goods: storage, transportation and proper inventory management.

7. Credit management and financing
   Credit is often used in serious business transactions where firms buy and sell on credit. In addition, various types of financing provide permanent as well as temporary capital for the marketing process.

8. Buying
This involves selecting from an assortment of goods, determining quantity and quality, selecting sources of supply and negotiating the terms of purchase. (This is sometimes called purchasing or procurement)

9. Personal selling

This is done through person to person contact. A large number of salesmen are engaged in outside sales work or in retail sales shops and market places. The sales force must be properly selected, trained and motivated to perform.

10. Post-sale transactions

Marketing must arrange to handle customer complaints after the sale, and provides for after sales service, especially for machines, equipment and consumer durable goods. This shows that marketing does not end with the ringing of the cash register.

If these functions are performed well and carefully by any business organization, the chance of failure would be reduced.

Apart from understanding the marketing functions, entrepreneurs must also be verse in product policy, stages of new product development, product life cycle and marketing strategies for each stage of the life cycle. Product classification and characteristics which definitely would influence its marketing strategy.

The entrepreneurs also need to understand the market and the marketing environment, the various forces in the micro environment (suppliers, intermediaries, customers, competitors, publics etc) and the macro environment (economic, political/legal, socio-cultural, demographic, technological and physical) factors.

Knowledge of concepts in marketing (production, product, selling, marketing and societal marketing concepts) should also be understood by entrepreneurs and the situation which each concept can be applied.

Entrepreneurs need to understand the controllable tactical marketing tools-product, price, place (distribution) and promotion that the firm can blend to get the desired response from the target market. This is popularly called the marketing mix elements or the “four Ps” of marketing. The entrepreneurs should also realize that the basic “four Ps” are not adequate when offering services, but additional “3Ps” (people, process and physical evidence) are required for successful marketing.

Knowledge of international marketing is also necessary for the entrepreneurs to take advantage of opportunities abroad

**Importance of marketing in a business organization**

The financial success of any business firm often depends on its marketing ability. Other business functions (finance, operations or production, accounting and personnel) would not really matter if there is not sufficient demand for products and services for the firm to make profit. Many companies have now created a Chief marketing Officer (CMO) position to put marketing on a more equal footing with other C-level executives such as the Chief Executive Officer (CEO) and Chief Finance Officer (CFO).

Marketing according to Kotler and Keller (2009) is tricky, but it has been the pivot of many prosperous companies worldwide. Large, well-known businesses, such as General motors, Kodak, Xerox, Guinness, have confronted newly empowered customers and new competitors; and have had to rethink their business models. Even market leaders such as Microsoft, Wal-Mart, Butel, Nike, and Coca-cola recognize that they cannot afford to relax. Jack Welch, General Electric’s brilliant former CEO, repeatedly warned the company “change or die”.

The success of any business firm hinges on making the right decisions by managers; but making the right decisions is not always easy. Entrepreneurs must make major decisions such as what features to design into a new product, what prices to offer customers, where to sell products, and how much to spend on advertising or sales. They must also make detailed decisions such as the exact wording or colour for new packaging. The companies at greatest risk are those that fail to carefully monitor their value offerings. They take a short term, sales-driven view of their business and ultimately, they fail to satisfy their stockholders, their employees, thier suppliers, and their channel partners, skillful marketing is a never-ending pursuit.
Marketing ensures efficient use of resources (or reduces wastage) since required goods and services are produced.

Marketing ensures customers satisfaction in terms of pricing, quality and availability of the needed products and services.

Aggressive marketing practices have led to high material standard living in the society. Marketing links local communities to the outside world and acquainting people with the process of the exchange economy and promoting habits and attitudes appropriate to it.

Marketing serves as a key to the growth of the firm and the economy by making the right goods and services available at the right time and place at the right price.

In a highly competitive and dynamic economy, marketing is necessary for business success as “the two-fold goal of marketing is to attract new customers by promising superior value and to keep and grow current customers by delivering satisfaction” (Kotler and Armstrong, 2012:28)

Marketing education as a means of employment Generation

From the functions of marketing discussed above, marketing according to Gleeson (2018) “isn’t simply an important part of business success… it is the business. Everything else in the business depends upon marketing”. The various activities of marketing ranging from market research, product/operation, planning and development, distribution, promotion etc. are means of employment generation in the society.

The marketing industry provides excellent job opportunities for the youths and the experienced, creative or analytic. According to the Bureau of Labour Statistics marketing jobs will continue to have steady job growth in the coming years (Gleeson, 2018). Some of the best jobs in marketing include: Product manager, Digital Marketing Manager, Brand Marketing Manager, Marketing Director, Marketing manager, Communications Specialist, Marketing Specialist, Brand Ambassador, salesman, sales driver, sales technicians, etc.

Marketing Education provides opportunities to work with large business organizations in various capacities as mentioned above as well as equips someone with the required skills and knowledge to start one’s own business.

Conclusion and recommendation

If the rate of unemployment is to be reduced in the society in order to avoid its serious negative consequences, business entrepreneurs or business owners would only be encouraged if the products they offer are acceptable and demanded by the people to ensure their business or enterprise succeed and grow. This in turn can only be guaranteed if the entrepreneurs and their business organizations give marketing the right place in their business and they can only do this if it is inculcated into them during their entrepreneurship training and development.

Currently, apart from those who are in Business Education or marketing departments in our tertiary institutions, that offer many marketing courses, others undergo only a summary of marketing topics/activities as contained in the principles of small business management courses or introduction to entrepreneurship. This shallow knowledge of marketing, to the researcher is not adequate for successful entrepreneurship. Therefore, it is recommended that: entrepreneurs (current and potential) should be made to undergo comprehensive and detailed training in marketing as the deep knowledge of marketing by business owners and managers is likely to greatly reduce the risk of business failure in developing countries like Nigeria. The National Youth Service Corps orientation while in the camp and during the primary assignment should be used to inculcate and strengthen entrepreneurial (marketing) skills in our graduates so as to be productive immediately after the service year instead of seeking for jobs that are not available.

If this is realized then other objectives of entrepreneurship training programmes and contributions of entrepreneurs and small and medium scale businesses in the society would be achieved.
References


Enhancing the Inclusion of Small and Medium Enterprises into the Global Value Chain through Upgrading Support in the Mining Sector in Zambia

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Abstract

The use of the global value chain approach is becoming the vogue as a poverty reduction strategy in the word today. This approach requires participants to upgrade and meet international requirements. Unfortunately, Zambia has not been active in its development plans to use this approach which links small and medium enterprises (SMEs) to the value chain activities. The main objective was to determine the effect of upgrading support from NGOs, Government and Private Mining companies on SME inclusion in the mining global value chain. The relevant global value chain literature was reviewed to give insight on how upgrading support enhances SME inclusion. A random sampling was conducted among the SMEs from the mining area to determine whether government policy support, NGO support and private mining support help SMEs upgrade to meet international requirements. The findings show that SMEs do not receive enough support from government and mining companies to upgrade despite the presence of government agencies and mining supplier development programme but from NGOs. The study recommends that government must form a mining commission of Zambia to implement SME policy support programmes, mining companies must create the Supplier Development Working Group to implement SME support programmes and NGOs must partner with the government and the mines to improve SME competitiveness and enable them to be included in the mining global value chain to supply and earn sustainable income.

Keywords: Inclusion in the mining global value chain, Mining Global Value chain, Upgrading support of SMEs.

Background information

The inclusion of Small and Medium Enterprises (SMEs) in the mining global value chain in Zambia has been restrictive over the years due to competitive barriers (CMZ & ICMM, 2014), and yet a study by Gereffi (2013) show that it is one method of increasing SMEs’ productivity and poverty reduction. The global value chain (GVC) covers the full range of activities performed by various firms to bring a product from its inception to the end user and beyond (OECD, 2013a). The various activities that are performed in the value chain that offer opportunities for SMEs’ inclusion are exploration, extraction of minerals from earth, processing them, and disposing them as final products (BRGM, 2001; Sigam & Garcia, 2012). The SMEs who have upgraded themselves in process and functional technology, capacity to supply, skills and competencies and meet international requirement provide goods and services as input to the value chain activities (Kaplinsky, 2013), but unfortunately, this is not the case for most of the Zambian SMEs in the mines (World Bank & UKaid, 2011). The term “inclusion of SMEs,” as applied to value chains refers to increasing opportunities for SMEs to access new market from various investment and be able to supply and earn sustainable income (Dunn, 2014). Once SMEs are included in the global value chain, they access higher grade markets for their income generation (OECD, 2013b), they create remunerated jobs leading to poverty reduction (Kowalski et al., 2015). Dunn (2014) stresses that inclusiveness promotes economic growth with poverty reduction by facilitating the integration of large numbers of SMEs into competitive value chains. A survey carried out in the mines (Chibwe, 2008;10-11) reveals that the mines have put in place a supplier development programme to help upgrade SMEs to meet the mining requirement; Government policy as espoused in the Mines and Minerals development Act No.11 of 2015 demands that the mines provide support to SMEs to participate in the
chain (Fessehaie, 2011), and there has been a presence of a strong voice from various Non-government organization (NGO) in the support of SMEs in upgrading possibilities to enhance SME inclusion (Barrick, 2013:27; Barrick, 2015a). However, these efforts from public and private organizations are at the centre of this study to determine the extent to which they enhance upgrading capacity of SMEs to participate in the mining global value chain

Problem definition

Poverty continue to strike the local communities in the mining sector in Zambia despite commercial activities (Chibwe, 2008:10-11). SMEs in the area are marginalized and unable to supply to the mines due to competitive problems. Recent studies in the Zambian mines such as World Bank & UKaid, 2011:5; and CMZ & ICMM, 2014:4&68 have shown that SMEs in the mining areas in Zambia are unable to meet the strict requirements of modern supply chain management practices. in addition, SMEs experience difficulties to access public and private support to enable them upgrade and meet the buyers’ requirements. The study therefore aims at enhancing the inclusion of SMEs through upgrading support from government, NGOs and mining companies.

Research objective

The objective of the study was to determine the effect of upgrading support on SME inclusion in the mining value chain. SME upgrading support is emanates from government, Non-governmental organizations (NGOs) and Private mining support (Mines). The various support trajectory enhances the upgrading capacity for SMEs to enable their competitiveness and inclusion in the mining global value chain where they earn sustainable income and poverty reduction

Theoretical proposition

Government, NGOs and Private upgrading support enhances SME competitiveness to meet international requirements for inclusion in the mining global value chain.

Arising from the theoretical proposition, three specific hypotheses were developed.

- Government upgrading support may negate SME competitiveness to meet international requirement for inclusion in the mining global value chain
- NGO upgrading support may negate SME competitiveness to meet international requirement for inclusion in the mining global value chain
- Private Mining companies’ upgrading support may negate SME competitiveness to meet international requirement for inclusion in the mining global value chain

Literature review

In this study, global value chain (GVC) theory is being used to gain insight in the relationship between private sector production and trade on the one hand and poverty reduction on the other. The theory specifically focuses on the role of GVC in linking various players for a win-win situation as well how upgrading support may enhance the inclusion of SMEs in the mining global value for them to supply and earn sustainable income and poverty reduction.

The theory of global value chain centers on upgrading of all players wishing to participate in the chains as well as the governance of the value chains. The mining sector is buyer driven and therefore the mines set the rules regarding who should participate (Gereffi, 2013). Some of the rules the mines set are based on upgrading of SME technology, speed of delivery, quality of products and capacity to supply and failures to meet these requirements lead to exclusion (OECD, 2013a).

UNCTAD (2013) stresses that GVCs act as a route to market for export products and services which in turn directly spawns value added contributing to GDP, job creation, income generation, and tax income. However, governments, development practitioners, and non-profit firms promote inclusion by building SME’s capabilities, facilitating improved market opportunities, and improving the quality of information available for them to make correct decisions.

NGO-support: Non-Governmental organizations (Helmsing & Vellema, 2011; Cooper, 2013) have become important in enhancing inclusiveness of the global value chains through the support of SMEs to upgrade and become competitive to meet international requirements. They provide financial support
to improve SME capacity, technology upgrade for SME competitiveness and skills training for SMEs competencies to participate which are requirements for SME inclusion in the mining global value chain (Muller et al., 2006). NGOs play a significant role in making GVC inclusive by providing market information, train SMEs in negotiation skills, act as intermediaries, and collaborate with lead firms to enable small and medium primary producers to benefit from large producers (Nelen et al., 2012). NGOs also enhance collaborations among various actors and facilitate stakeholder meetings in the global value chains (Helmsing & Knorringa, 2009; UNIDO, 2009) and typically they offer technical support and credit facilities to chain actors (van Wijk & Kwakkenbos, 2011). They provide expert knowledge on certification systems, they have good contacts with certifiers, and are well positioned to create consumer demand for certified products. They are seen to have power in the value chains emanating from their capacity to finance chain building, upgrading, standard setting and facilitation of access to markets (Altenburg, 2006:47; Cooper, 2013).

**Government support:** The government through its various agencies may be helpful in upgrading possibilities of SMEs through the provision and facilitation of standards acquisition such as ISO, 9000 &14,000 (Cattaneo et al., 2013), tax concessions (OECD, 2013b), economic empowerment and micro-credits (SELA, 2012). Some governments such as in Zambia have provided Mines and Minerals development Act No.11 of 2015, Section 31&32 to foster investors to empower SMEs and the communities around the mines. In Malaysia, the government policy towards SMEs aims at helping them to upgrade to meet international standards. Governments also influence chains by providing public goods, services, and infrastructure and its sound legal systems support export for all actors in the chains. In addition, the government through different agencies enhances linkages of local SMEs with international firms, fostering their supply and innovativeness (Albu & Griffith, 2005). The availability of policies may promote good relations between SMEs, local and Multinational companies in the value chains. Policies improve connectivity with global markets and address traditional barriers, customers, transport and telecommunication and logistics in the global value chain and they are conducive for upgrading opportunities (Fortwengel, 2011). A stable macroeconomic policy and well-designed structural policies associated with competition, international trade and investment, financial markets, labour markets and education, including human resources capacity building for internationalisation is suited to growth and development of SMEs. In addition, the licensing and permit system, tax system, property rights law, standard compliance certification procedures, efficient dispute settlement procedures and bankruptcy law are cardinal in GVC (OECD, 2007a:1). The government may also set up business incubators to support local SMEs to access financial support, upgrading possibilities, business linkages and technical support (Buyu & Mbewana, 2007).

**Private Support:** Private sector involvement is important in value chains and play a pivotal role on the fringe of public services and downstream market networks. The private mining companies themselves are the buyers of goods and services from SMEs (Cooper, 2013), and therefore provide upgrading support to SMEs through supplier development programme (Drost et al., 2012). In using value chain approach, key downstream private sector chain actors can be involved in the identification of key bottlenecks within the value chain that are mutual constraints for both upstream and downstream player and ultimately there is facilitation of ownership and agreement on subsequent key interventions and reforms (Van Wijk et al., 2009). Private sector is crucial in the delivery of business development services in many remote and underprivileged areas and in cases where the public sector can only play a minor role due to lack of outreach resources, the private sector in the form of public-private partnership (PPPs) is encouraged to take initiative alone (Hoermann et al., 2010:29). Multi-stakeholder partnerships are increasingly recognized in order to include smallholder producers in developing countries. These are voluntary, collaborative arrangements between actors from two or more domains of society. These multi-stakeholders strive to include smallholders into the value chains, and enhance their sustainability through overcoming government failures, and increasing efficiency in the value chains (Trienekens, 2011). Value chain partnership improve production and delivery of products and services of SMEs, and they construct new institutional arrangement in order to address important technological and institutional gaps that hinder smallholder producers from producing and transacting into global value chains and supply chains (Gomez, 2010). Collaborations among various partners in the value chain imply sharing of risk, resources and rewards. It also entails a formalization of
governance structures, and contracture arrangements to specify objectives, activities, roles, and responsibilities. Trust building among partners is very important, and improves relationships. Transparency, prosperity, and control are breeders of trust, and these decrease risk in the value chain (Gereffi, 2013). Value chain partnerships meet key conditions for successful collaborations, and mitigate institutional barriers to upgrading for SMEs. Therefore, critical success factors include; win-win situation, formalized goal alignment, stakeholder embeddedness, stakeholder involvement, risk and resource sharing, shared processes, formalised governance structures, clear roles and contributions, trust building and transparency (Drost, van Wijk & Mandefro, 2012: 2-5).

Conceptual model

![Conceptual Model Diagram]

Source: Author, 2018

Operationalization of variables arising from literature review

<table>
<thead>
<tr>
<th>Variables</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining support</td>
<td>ISO standards, Statutory compliance, Bidding process</td>
</tr>
<tr>
<td>NGO support</td>
<td>support in Skills, Technology, Financial</td>
</tr>
<tr>
<td>Government policy support</td>
<td>Tax concession, Micro-credit, ISO standards</td>
</tr>
<tr>
<td>SME inclusion</td>
<td>Income, Job creation, poverty reduction</td>
</tr>
</tbody>
</table>

Explanation of variables

i) **Mining support and SME inclusion**: It is assumed that once mining companies support suppliers to upgrade through development programmes in quality assurance, statutory compliance, and bidding process, the suppliers (SMEs) will meet international requirements and therefore included in the mining GVC and earn sustainable income, job creation and poverty reduction

ii) **NGO support and SME inclusion**: It is assumed that NGOs help in terms of financial and technical support to upgrade SMEs to meet international requirements and enhances inclusion in the mining GVC for SMEs to earn sustainable income, job creation and poverty reduction

iii) **Government policy support and SME inclusion**: Government through different agencies help local SMEs to upgrade and meet international requirement. Policy support from Zambia Bureau of standards, ministry of mines and citizens economic empowerment provide incentives to local SMEs to upgrade and meet international requirements thereby enhancing the inclusion into the mining GVC for SMEs to earn sustainable income, job creation and poverty reduction
Methodology

Type of data

A survey was conducted to obtain quantitative data which gave an opportunity to the researcher to identify the various interventions from government support, NGO support and Private support and how the support was attributed to the upgrading of local SMEs and inclusion into the mining global value chain.

Sampling

A random sampling was conducted among the SMEs from the mining suppliers and contractor’s association of Zambia. 150 SMEs participated as respondents to provide data to ascertain the contribution of the intervention towards SMEs and subsequent poverty reduction. The 150 respondents sampled met the requirements of EQS (structural equation modeling software) as less than 150 gives errors (Maxwell, Kelly, & Rausch, 2008).

The table below show the various intervention from Government (Ministry of mines – (MoM), Zambia bureau of standards (ZABS), Citizens Economic Empowerment Commission (CEEC); Non-governmental organization (Catholic relief services (CRS), International Financial Corporation (IFC), Oxfam; and mining companies which has been coded as private support towards SMEs.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Type of support</th>
</tr>
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<tbody>
<tr>
<td>Mining support</td>
<td>Support in ISO standards, Statutory compliance, Bidding process</td>
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<td>support</td>
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<tr>
<td>SME inclusion</td>
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</tr>
</tbody>
</table>

Data analysis

A structural equation modeling was performed using EQS to carry out the RMSEA Test, FIT indices test, and multiple regression analysis test

A RMSEA: A RMSEA test was performed to measure how the global value chain model fits the proposed relationships between independent and dependent variables as this tells us how well the model with optimally chosen parameter estimates fits the populations’ covariance matrix. (Diamantopoulos and Siguaw, 2000: 85). Recommendations for RMSEA in the range of 0.05 to 0.10 was considered an indication of fair fit and values above 0.10 indicated poor fit (Steiger, 2007; (Diamantopoulos and Siguaw, 2000; Hu and Bentler, 1999; MacCallum et al., 1996).

FIT Indices: A good-fitting measurement model is required before interpreting the causal paths of the structural mode. A good-fitting model is one that is reasonably consistent with the data and so does not necessarily require respecification and therefore a Fit Indices test was done to determine how perfectness of the model before estimating causal relations (O’Boyle, & Williams, 2011; Kenny, Kaniskan, & McCook, 2014).

MULTIPLE REGRESSION: A multiple regression analysis was carried out to predict the SME inclusion. The upgrading support from government, NGO, and private companies are predictors and predicting SME inclusion. Whereas regression analysis is used to understand which among the independent variables are related to the dependent variable (Saunders et al., 2009), and to explore the forms of these relationships (O’Boyle, & Williams, 2011), regression analysis has been done to enable the researcher to infer causal relationship between the independent and dependent variables although this may this may lead to illusions or false relationships.

RMSEA

A RMSEA test show a RAMSEA values of 0.04, Saunders et al., (2016) have suggested that a RMSEA value of about .05 or less reflects a model of close fit, whereas values between .05 and .08 indicate reasonable fit (Steiger, 2007). This means that the model used to discuss the relationship...
between government, NGO, and Private Mine support is good and fits well to be used to explain the relationship

FIT Indices

An extract from EQS show the following fit indices below. Fit indices reading of 0.9 indicating a good-fitting model that is reasonably consistent with the data and so does not necessarily require re-specification. Fit Indices test values showing 0.9 show the perfectness of the model before estimating causal relations (O'Boyle, & Williams, 2011)

FIT INDICES

-----------------
BENTLER-BONETT NORMED FIT INDEX = 0.873
BENTLER-BONETT NON-NORMED FIT INDEX = 0.892
COMPARATIVE FIT INDEX (CFI) = 0.964
BOLLEN'S (IFI) FIT INDEX = 0.972
MCDONALD'S (MFI) FIT INDEX = 0.998
JORESKOG-SORBOM'S GFI FIT INDEX = 0.992
JORESKOG-SORBOM'S AGFI FIT INDEX = 0.959
ROOT MEAN-SQUARE RESIDUAL (RMR) = 0.047
STANDARDIZED RMR = 0.038
ROOT MEAN-SQUARE ERROR OF APPROXIMATION (RMSEA) = 0.041
90% CONFIDENCE INTERVAL OF RMSEA (0.000, 0.172)

Multiple Regression
ANALYSIS OF VARIANCE

Source SUM OF SQUARES DF MEAN SQUARES F p

REGRESSION 22.067 3 7.356 5.814 0.001
RESIDUAL 184.707 146 1.265
TOTAL 206.773 149

An extract from the EQS output from structural equation modeling on ANOVA test show that overall, government support, NGO support and Mining support are predictors of Inclusion of SME in the mining global value chain. The p-value is equal to 0.01. This means that government, NGO and Mining support sit statistically Significant to determining inclusion of SMEs and therefore is a significant predictor of inclusion of SMEs in the Mining global value chain

====== R and R squared ======
Dependent Variable = INCL_SME
Number of obs. = 150
Multiple R = 0.3267
R-square = 0.1067
Adjusted R-square = 0.0884
F (3, 146) = 5.8141
Prob > F = 0.0009
Std. Error of Est. = 1.1248
Durbin-Watson Stat.= 1.4356

An extract from output of EQS for structural equation modeling above show Multiple R-value of 0.3267 and R-Square of 0.1067. This means that in terms multiple R, the correlation between government, NGO and Mining support is 0.33 while R-Square of 10.67% indicate that government, NGO and mining support account for 10.67% of the variance Inclusion of SMEs. This means that we cannot account for 89.33% of the inclusion of SMEs.

===============REGRESSION COEFFICIENTS===============
HETERO-
ORDINARY SCEDASTIC
VARIABLE B STD. ERROR STD. ERROR BETA t p

| Intercept 2.217 0.366 0.483 4.593 0.000 |
| GRZ_SUPP -0.122 0.096 0.106 -0.099 -1.146 0.254 |
| MINING_S 0.114 0.064 0.064 0.141 1.786 0.076 |
| NGO_SUPP 0.224 0.067 0.079 0.264 2.853 0.005 |

The regression analysis show that NGO support is statistically significant predictor of SME inclusion while government and Mining support are not statistically significant predictors of SME inclusion in the global mining value chain.

Discussion

The study shows that there is a significant benefit that SMEs derive from NGO support with a p-value of 0.005. This means that the NGO help SMEs to upgrade to meet international requirement to supply to the mines and earn sustainable income. On the other hand, mining upgrading support show a p-value of 0.076 indicating that there is not enough support coming from the mining companies but as compared to government support whose p-value 0.254 gives an impression of some form of assistance towards SMEs from mining companies. Although the p-value is not significant (0.076), mining support renders some assistance through supplier development programme which is currently existing. The P-value of government support (0.254) show that there is very little government policy support towards SMEs to improve their position in the value chain.

Conclusion and recommendation

Conclusion

The study concludes that there is greater support towards SMEs coming from NGOs in terms of technology upgrade, financial support, and skills training while the mining companies have a supplier development programme which is non-functional. Although there is some form of support from the mining companies towards SMEs, the support is not enough to influence change towards improvement of SMEs and inclusion in the mining global value chain. The government support dimension seems absent. Government policy support is not helping SMEs to be included in the mining value chain.

Recommendations

i) The government through the Ministry of Mines must setup a Mining Commission of Zambia to implement the Mines and Minerals development Act No.11 of 2015 that requires mining companies to partner with local stakeholders in upgrading possibilities for inclusive growth in the mining global value chains.

ii) The Citizenship Economic Empowerment Commission must be transformed from merely offering micro-credits to selected sectors of the economy into a Business Incubator for SME development so that its local incubation facilities and innovation system are created for nurturing SMEs providing integrated technical and business development support to SMEs, mentoring and coaching.
SMEs, technology upgrading for competitiveness to SMEs participation in the mining global value chain

iii) Creation of the Supplier Development Working Group to implement the aspirations of the dormant supplier development programme such as upgrading support of SMEs, supplier and buyer partnerships, on-site technical support and business development and any economic program of the non-functional supplier development programme so that SMEs build capacity for competitiveness and inclusion in the mining global value chain. The group may comprise executives from the mines, mining suppliers and contractor’s association of Zambia, NGOs, and the ministry of mines whose task will be upgrading of SMEs.

Recommendation for further research

The study recommends that another study be done to examine how cluster management approach may help in reducing poverty. The value chain approach links individual SMEs or various individual stakeholders to the global value chain. However, there are many limitations of capacity barriers, competency barriers, financial barriers and many more. Cluster management approach involves grouping SMEs in clusters making them more competitive and therefore the study recommends that a research be done to examine this may help in reducing poverty.

References


Role of Public Capital Inflows in Financial Inclusion in Uganda

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Abstract

This paper provides an empirical analysis of the role of public capital inflows in financial inclusion in Uganda. Financial inclusion was measured using three dimensions (access, usage and quality). Whereas public capital inflows were measured using three proxies of loans, grants and donations. The study anchored on financial intermediation theory. The target population was public organisations that have received public capital in Uganda. The study used data collected from Bank of Uganda and Ugandan investment Authority, Ministry of Finance for the period 2012-2016. A cross sectional descriptive designs were used while data was analyzed using descriptive statistics and multivariate Logistics regression analysis. It was found that public capital inflows did not play any role in promoting financial inclusion in Uganda. From the findings the study concluded that loans contributed 89% of public capital while grants contributed 11%. The study recommends that government particularly Bank of Uganda, Ministry of Finance and Uganda Investment Authority to formulate policies to ensure loans are reduced and parliament through its oversight role should ensure this happens. Further, grants and donations which are sustainable and stable sources of inflows should be deepened and widen by ensuring that adequate accountabilities for grants are done.

Keywords: Public Capital, Financial Inclusion, Inflows, Uganda.

Introduction

The government of Uganda has continued to reform the policy and legal environment for the financial sector to foster the optimization of private and social benefits from financial intermediation given the rapidly changing financial sector landscape. These reforms are designed to leverage the financial sector to support Uganda’s economic growth and socio-economic transformation agenda. Some of the legislative and institutional reforms that have been undertaken include the amendment of the Financial Institutions Act, 2004 to allow Banking Financial Institutions supervised by the Central Bank to provide Islamic Financial products and services, Bancassurance and Agent Banking. Independent regulatory bodies for the Non-Bank Financial Services have also been established to build consumer and investor confidence in Uganda’s financial sector. There are now numerous investment opportunities for both existing and new participants in Uganda’s financial sector and indeed the region’s financial sector with the promise for scale through provision of financial services through digital platforms.

Uganda’s financial sector is currently regulated under the following legal frameworks: the Financial Institutions Act, 2004 as amended; the Microfinance Deposit-Taking Institutions Act, 2003; the Insurance Act, 2017; the Uganda Retirement Benefits Regulatory Authority Act, 2011; the Capital Markets Authority Act, 2011 as amended; the Tier 4 Microfinance Institutions and Money Lenders Act, 2016 and the Anti-Money Laundering Act, 2013 as amended. Currently Government is considering reforming the policy and legal environment further to respond to the rapidly changing financial landscape largely driven by new digital technological advancements and new participants to mitigate the new risks without stifling innovation.

Public investment in physical infrastructure, utilities, innovative activity, education and clean energy are identified by the National Development Plan II as fundamental enablers for socio-economic transformation of the country, in line with Uganda Vision 2040. It is, however, clear from the analysis above that the response of private investment to increased government spending on
infrastructure has been weak. Strengthening this response is an imperative for realizing the much needed fiscal stimulus of the expansionary fiscal policy that government is pursuing ahead of the effective date of the East African Community monetary union and it is convergence criteria. Furthermore, with the Public Private Partnership Act (2015) in place, public investments involving private investors can go a long way in supporting effective management and implementation of projects for higher economic growth returns. The following are areas where the government of Uganda uses capital which comes from public sources.

Budget Support. This is where capital resources from a Development Partner are transferred directly to the consolidated fund of the recipient Country following the fulfilment of agreed conditions for disbursement. Budget support is normally in two forms namely; General Budget Support and Sector Budget Support (earmarked/targeted towards a specific Sector). The capital resources thus received are part of the national resources of the country and are consequently used in accordance with the public financial management system of Uganda. These resources are appropriated by Parliament as part of government funds.

Project Support. Under this modality of financing, Government of Uganda which is the recipient country enters into an agreement with the Development Partner and both agree on a set of inputs, activities and outputs to reach specific outcomes within a defined timeframe, with a defined budget and in a defined area.

Export Credit financing. This is where the borrower normally Government Of Uganda and a Development Partner Export Credit Agency pre-identify a contractor to implement a project largely in the borrower’s jurisdiction. The main objective of this financing is to support domestic companies of the ECA to carry out international export operations and other activities. The financing facilitates the companies to remove the risk of uncertainty of exporting to other countries and underwrite political risks and commercial risks of overseas investments, thus encouraging exports and international trade. For the case of Uganda, this arrangement has been used to finance government projects implemented by such companies.

Technical Assistance. This basically entails the transfer of ideas, knowledge, practices, technologies or skills from either development partner identified experts or procured experts under respective projects. This knowledge transfer is mainly for policy development, institutional development, capacity building, and project or programme support.

Off Budget Support. This covers all Official Development Assistance referred to ad (ODA) not channeled through Government systems and structures both in form of disbursement and management; hence not appropriated by Parliament. The related project activities and finances are mainly channelled through NGOs, CBOs or directly implemented by Development Partners.

Public capital to Uganda

Government of Uganda has over the years been getting financing from public sources to undertake its priority projects. During the Financial Year 2017/18 for instance, financing which were received from public sources reached US$ 1,150.18 million compared to US$ 884.2 million received in 2016/17 financial year. (Ministry of Finance, 2018). Of the total resources mobilised, 53% (US$ 610.60 million) were in form of Loans and 47% (US$ 539.58 million) were Grants. This represents a 30% increase in external public resources from where resources were mobilised compared to the Financial Year 2016/17 (Ministry of Finance, 2018). Although loans contributed more to the resources received, it is, however, worthy noting that the increase in total resources received is as well attributed to an increase of about US$ 268.58 million committed through grant financing from US$ 271.0 million in the Financial Year 2016/17. The amounts committed through loans financing decreased by US$ 2.60 million.

Trends in public external sources of financing over the last five years show an upward turn from US$ 496 million in the Financial Year 2012/13 to US$ 2,911.10 million in the Financial Year 2014/15, thereafter took a downward trend to US$ 1,150.18 million in Financial Year 2017/18. The decline in loans contracted is attributed to government deliberate efforts of adhering to the Public Finance Management Act 2015 as well the Public Debt Management framework of ensuring short and long-time debt sustainability. The increase in grant commitments is mainly attributed to US$ 245.57
Public capital inflows in the form of public debt is the totality of public and publicly guaranteed debt owed by any level of government to either citizens or foreigners or both. As at end of December 2017, the outstanding total public debt, including publicly guaranteed debt, amounted to US$ 10.24 billion compared to US$ 8.7 billion compared to end December 2016, an increase of 21.8%. Domestic debt increased from US$ 3.2 billion in December 2016 to US$ 3.3 billion at end December 2017, an increase of 2.6%. (Ministry of Finance, 2018). On the other hand, external debt (Disbursed and Outstanding (DOD)) increased by 17.4% from US$ 5.5 billion at end December 2016 to US$ 6.8 billion at end December 2017. Domestic and external debt accounted for 32.8% and 7.2% respectively by end December 2017.

Public and publicly guaranteed (PPG) external debt stock has continued to rise over the last five years, increasing to US$ 6.9 billion in December 2017 from US$ 5.5 billion in December 2016, a rise of 26%. The increase was attributed to disbursements from commercial syndicated loans, multilateral and bilateral creditors as well as foreign exchange rate movements.

Uganda’s external stock of debt outstanding and disbursed has continued to increase overtime and as of December 2017 stood at US$ 4.26 billion. The debt exposure had dropped substantially to US$ billion in the Financial Year 2008/09 because of the Uganda’s debt relief under the Multilateral Debt Relief Initiative (MDRI), nonetheless, subsequent developments following the MDRI tend to have increased Government’s appetite to contract more debt to enhance infrastructure developments.

Statement of the problem

Despite the remarkable benefits the Ugandan economy stands to get from public capital inflows and its known contribution to financial inclusion and standard of living of the people of Uganda, the problem arises as to what extent the Ugandan economy should depend on public capital to promote financial inclusion. The most critical challenge of poor but also developing countries in this 21st century, Uganda inclusive is over reliance on public sector as well as public capital inflows. With this heavy reliance on the public sector as well as public capital, the extent of financial inclusion is not very encouraging. This study, therefore, did investigate whether initiatives like public capital inflows is a means through which financial inclusion can be promoted and further examined the relationship between public capital and financial inclusion. The following research questions are, therefore stated. What is the level of public capital to Uganda? What is the relationship between public capital inflows and financial inclusion in Uganda?

The main objective of this study was to examine the role of public capital inflows in Financial Inclusion in Uganda. Specifically, the following objectives guided the study:

- Ascertain the level of Public capital inflows to Uganda
- Examine the relationship between public capital inflows and financial inclusion in Uganda

Furthermore, the study was guided by the following hypothesis: Ho1: The level of public capital inflows to Uganda are not significant. Ho2: There is no relationship between public capital inflows and financial inclusion in Uganda.

The remaining parts of this study are arranged as follows. Section two of the study presents methodology whereas section four presents data and results as well as a discussion of the results. Section five presents conclusion and specific policy recommendations.

Literature review

Theoretical review

The theory of financial intermediation which analyses the role of financial intermediaries in the economy and is associated three theories namely; information problem, transaction costs and money regulation guided the study. This theory was started by (Gurley and Shaw, 1960).

The first theory of financial intermediation is the informational asymmetries argument. These asymmetries are of an ex ante nature, generating adverse selection, they can be interim, generating

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moral hazard, and they can be of an ex post nature, resulting in costly state verification including enforcement. The informational asymmetries issue generates market imperfections. These imperfections in the market lead to specific forms of transaction costs within the market. However, Financial intermediaries seem to overcome these transaction costs in a partial way.

(Diamond and Dybvig, 1983) do recognize that banks are seen as coalitions of several depositors that give households insurance against idiosyncratic shocks that adversely affect their liquidity position. Further, (Leland and Pyle, 1977) see financial intermediaries as information sharing coalitions. (Diamond, 1984) for instance demonstrate that intermediary coalitions do achieve significant economies of scale. Further, (Diamond, 1984) is equally of the view that financial intermediaries act as delegated monitors on behalf of ultimate savers. Monitoring will be viewed to involve increasing returns to scale, which therefore, implies that specialization may be an attractive way. Individual households will delegate the monitoring activity to such a specialist, who are financial intermediaries. The households will as such, put their cash and other deposits with the intermediary. Furthermore, depositors will positively value the intermediary’s role and involvement in the ultimate investment (Hart, 1995). Also, they can be assigned a positive incentive effect for instance of short-term debt, and deposits, on bankers (Hart and Moore, 1995).

Researchers like (Qi, 1998), (Diamond and Rajan, 2001) all demonstrate that deposit finance creates incentives for bank’s management. Liquid assets of the bank result in a fragile financial structure that is essential for disciplining the bank’s management. Note that in the case of households that do not turn to intermediated finance but prefer direct finance, there is still a brokerage role for financial intermediaries notably among others investment banks (Baron, 1979 and 1982). Based on this, the reputational effect is equally at stake. In financing, it is important to note that the reputation of both the borrower and the financier are relevant (Hart and Moore, 1998). Furthermore, (Dinç, 2001) studies the effects of financial market competition on bank’s reputation and argues that the incentive for the bank to keep its commitment is derived from its reputation, as well as the number of banks in competition including their reputation, and the competition arising from bond markets. These four aspects clearly interact (Boot, Greenbaum and Thakor, 1993).

The informational asymmetry theory focusses on the bank/borrower and the bank/lender relationships. In bank lending, one can easily distinguish transactions-based lending and relationship lending. In the former, information which is relatively available at the time of loan origination is used. In the latter, data gathered over the course of the relationship with the borrower is used (Lehman and Neuberger, 2001; Kroszner and Strahan, 2001; (Berger and Udell, 2002). The central themes in bank/borrower relationship are screening and monitoring function of the banks. The adverse selection problem as pointed out by (Akerlof, 1970), and credit rationing as pointed out by (Stiglitz and Weiss, 1981), the moral hazard problem as noted by (Stiglitz and Weiss, 1983) and of course the ex-post verification problem which was pointed by (Gale and Hellwig, 1985). The central themes in bank/lender relationship are; the bank runs, why they do occur, how they can be prevented, including their economic consequences (Kindleberger, 1989; Bernanke, 1983; Diamond and Dybvig, 1983). Another avenue in the bank/lender relationship are models for competition between banks for the deposits in relation to their lending policies and the probability that they fulfill their obligations as pointed out by (Boot, 2000; Diamond and Rajan, 2001).

The second theory of financial intermediation is the transaction costs (Benston and Smith, 1976; Campbell and Kracaw, 1980; Fama, 1980). In contrast to information problem above, this theory does not in a way contradict the assumption of complete markets. It is based on non-convexities in transaction technologies. Transactions costs, financial intermediaries act as coalitions of individual lenders and/or borrowers who exploit economies of scale. The issue of transaction costs includes just not only exchange costs (Tobin, 1963; Towey, 1974; Fischer, 1983), but as well any search costs, monitoring including auditing costs (Benston and Smith, 1976). On the transaction costs, the role of the financial intermediaries is to transform financial claims into other types of claims which is qualitative asset transformation. Because of that, they therefore, offer liquidity (Pyle, 1971) and diversification opportunities (Hellwig, 1991). The provision of liquidity is as such a key function for savers and investors and increasingly for corporate customers, whereas the provision of diversification
is increasingly being appreciated in personal and institutional financing. Invariably, researchers like (Holmström & Tirole, 2001) provide a suggestion that liquidity should play a key role in asset pricing.

The third theory of financial intermediation is the regulation of money production and saving in financing of the economy as noted by (Guttentag and Lindsay, 1968; Fama, 1980; Mankiw, 1986; Merton, 1995b). Regulation function affects solvency and liquidity with the financial institutions. (Diamond and Rajan 2000) reveal that bank capital affects bank safety, bank’s ability to refinance, and bank’s ability to extract repayment from borrowers. The legal-based view asserts regulation as a crucial factor that shapes the financial economy (La Porta et al., 1998). Policy makers including users of financial information view financial regulations as something that is exogenous to the financial industry. However, activities of intermediaries inherently ask for regulation. This is because banks by the way and the art of their activities are inherently insolvent and illiquid (Merton and Bodie, 1993). Furthermore, money and its value, the key raw material of the financial services industry, to a large extent is both defined and determined by the state. Safety and soundness of the financial system as a whole and the enactment of industrial, financial, and fiscal policies are regarded as the main reasons to regulate the financial industry (Kareken, 1986; Goodhart, 1987; Boot and Thakor, 1993).

**Empirical review**

This section provides empirical studies conducted on public capital inflow components notably loans, grants and donations as seen below.

A study jointly done by (UNDP, Growing Inclusive Markets and New American Foundation, 2011) on a third way for official development assistance, savings and conditional cash transfers to the poor. Evidence from Mexico’s Oportunidades program suggests that conditional cash transfers (CCTs) can increase savings and investment, promote banking, and create more responsible spending habits. These ancillary effects are in addition to the documented health and educational outcomes discussed earlier.

The advantage of this study is that it was jointly done and as such, there was thorough robustness of data and analysis including the approach in which the study was done. However, this study is not within the time scope of this current study which is between 2012 and 2016. As such, reliance on such data, results and approach which is way long will result in inconsistency in conclusion and therefore, may not be relied upon for policy decisions. Further, this study was done in a more developed country—Mexico as opposed to Uganda, a less developed country where this current study is being done.

Going further, (Barrientos, David Hulme, and Joseph Hanlon, 2010) recently argued that rather than maintaining a huge aid industry to find mechanism to support the very poor, it is crucial and important to give money to the poor people directly for them (the poor) to find an effective means that allows them to escape if not reduce poverty. Invariably, the Consultative Group to Assist the Poor (CGAP, 2009) reported that over 140 million people worldwide are receiving cash donations, grants or transfers from their very own governments.

While it is generally agreed based on the above data and findings including the conclusions thereof that social assistance from government facilitates financial inclusion which is the interest of this current study as well, however, it is equally worth noting that while such a huge number of people do receive cash transfers from their governments in form of social support, only one quarter do receive these cash benefits into a financially inclusive bank account leaving three quarters of them not financially inclusive.

At a micro level, there are mainly three basic needs which drive the financial actions of the poor people. These basic needs include among others the following: Financial basics including how to manage the cash flows to transform the irregular income into a reliable resource which meets the daily needs of the poor households; the coping mechanism with the risks associated with the poor including emergencies that derail families with the very little in their reserve; and raising lump sums amount that would allow the poor families to seize any opportunities and pay for all household expenses. It is equally important to recognize that at a macro level just like at micro level, the current reports from economic models do suggest that lack of access to financial services among others can be, according to (World Bank, 2008), the critical mechanism for generating persistent income inequality or poverty traps, as well as lower growth.

As illustrated by the World Bank report, countries that have the highest percentage of households below poverty lines are associated with the lowest deposit account penetration. However, there are few exceptions which outliers are. Take for instance, Mongolia which has a high banking penetration service. This could be attributed to government payments which are made through accounts for children and families. All these facts
do point to the fact that it is possible to provide bank accounts to populations largely in poverty. One sample of 52 industrial and developing countries over the period 1980 to 2000 looked at the relationship between financial development (proxied by the total value of private credit relative to GDP), poverty alleviation, and changes in the distribution of income.

Notable authors like (Beck, Demirgüç-Kunt, and Levine, 2006) showed in their study that financial development: Boosts the growth rate of poorest quintile’s income, suggesting that financial development reduces income inequality, which therefore, suggests that financial development reduces income inequality significantly; Induces a drop in Gini coefficient measure of income inequality even though controlling for real per capita GDP, thus suggesting that financial development reduces income inequality beyond the relationship between finance and aggregate growth; finally, financial development reduces the fraction of the population who are living on less than 1 dollar per day and the poverty gap when controlling for average per capital GDP. They concluded therefore, that the poor people in turn pay a penalty for being poor and for their (poor) lack of access to financial services and products when participating in the open markets.

In a study conducted by (Adams, Sakyi and Opoku, 2016) on whether capital inflows promote domestic investment using a case study of 25 Sub Saharan African Countries from the period 1981 to 2010, they reported that foreign direct investment positively impacts domestic investment, but external debt has a negative impact on domestic investment in the long run. This implies that increase in foreign direct investment and/or reduction in external debt will promote domestic investment in sub-Saharan Africa. Therefore, measures must be put in place to attract more foreign direct investment and reduce the inflow of external debt in the region.

A study conducted by (Salome Musau, Stephen Muathe and Lucy Mwangi, 2018) on the topic Financial Inclusion, Bank Competitiveness and Credit Risk of Commercial Banks in Kenya which analyzed the effect of financial inclusion on credit risk and the mediation effect of bank competitiveness of commercial banks in Kenya. Financial inclusion was measured using three dimensions of bank availability, bank accessibility and bank usage, bank competitiveness used (HHI) while credit risk was represented by the non-performing loans ratio. The study was anchored on financial intermediation theory supported by finance growth theory and asymmetry information theory. The results obtained found that bank availability, bank accessibility and bank usage had significant effect on credit risk of commercial banks in Kenya. Bank competitiveness was found to partially mediate the relationship between financial inclusion and credit risk.

This study has several advantages which are like this current one including the following: the time scope of the study is done in 2018 as such, the data and findings including the conclusions are very updated, it has similar variables which are loans and financial inclusion, the study is within East Africa just like this current one done in Uganda.

In another related study conducted by (Vasudha et al, 2016), on how using Department of Posts (DoP) promotes financial inclusion in grants payment in Visakhapatnam. It examines, by studying the issues in disbursement of Social Security Pensions (SSPs) in a region. The empirical study is confined to only one initiative of DoP, that is, SSP disbursements in Visakhapatnam district of Andhra Pradesh. The primary data was collected during the transition period when DoP was into SSP disbursements in urban as well as rural areas of Visakhapatnam on an experimental basis (February–April 2015). Altogether eight hypotheses were tested for significance, based on the data collected through observation, interviews, survey and literature review. The results show that DoP has been successful in achieving the first level of financial inclusion and has to work towards achieving the second level through collaborative partnerships.

However, some other studies conducted on the same topic do contradict the findings of (Adams, Sakyi and Opoku, 2016). For instance, the study done by (Muhammad Shahbaz and Mohammad Mafizur Rahman, 2010). Furthermore, another study conducted by (Pierre-Olivier Gourinchas and Olivier Jeane, 2013) reported that there is indeed a relationship between public capital inflows and financial inclusion.
Methodology

Design

A cross sectional descriptive designs were used in the study. The data used in this study are obtained from published annual reports and websites of the World bank, Bank of Uganda, Uganda Investment Authority and thesis data. The study covered the period from 2012 to 2016.

Empirical model

\[ Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 \]  
(Model 1)

Where  
\( Y_1 \) = Access to financial inclusion  
\( \alpha \) = Constant  
\( \beta_i \) = Coefficients of the explanatory variables  
\( X_1 \) = Loans  
\( X_2 \) = Grants  
\( X_3 \) = Donations  
\( X_4 \) = Inflation  
\( X_5 \) = Interest rate  
\( X_6 \) = Exchange rate  
\( X_7 \) = Gross Domestic Product

\[ Y_2 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 \]  
(Model 2)

Where  
\( Y_2 \) = Usage of financial services  
\( \alpha \) = Constant  
\( \beta_i \) = Coefficients of the explanatory variables  
\( X_1 \) = Loans  
\( X_2 \) = Grants  
\( X_3 \) = Donations  
\( X_4 \) = Inflation  
\( X_5 \) = Interest rate  
\( X_6 \) = Exchange rate  
\( X_7 \) = Gross Domestic Product

\[ Y_3 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 \]  
(Model 3)

Where  
\( Y_3 \) = Quality of financial services  
\( \alpha \) = Constant  
\( \beta_i \) = Coefficients of the explanatory variables  
\( X_1 \) = Loans  
\( X_2 \) = Grants  
\( X_3 \) = Donations  
\( X_4 \) = Inflation  
\( X_5 \) = Interest rate  
\( X_6 \) = Exchange rate  
\( X_7 \) = Gross Domestic Product

Results

Level of public capital inflows

The study sought to establish in objective one, the level of public capital inflows to Uganda. Public capital inflow included Loans and grants. The level of public capital inflows to Uganda from 2012 to 2016 is as shown in the table below.
Table 4.1. Level of public capital to Uganda

<table>
<thead>
<tr>
<th>Year</th>
<th>Loans in US$</th>
<th>Grants in US$</th>
<th>Total in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3,779,371,000.00</td>
<td>1,315,100,000.00</td>
<td>5,094,471,000.00</td>
</tr>
<tr>
<td>2013</td>
<td>8,739,157,000.00</td>
<td>1,266,460,000.00</td>
<td>10,005,617,000.00</td>
</tr>
<tr>
<td>2014</td>
<td>8,952,316,000.00</td>
<td>1,340,220,000.00</td>
<td>10,292,536,000.00</td>
</tr>
<tr>
<td>2015</td>
<td>9,925,262,000.00</td>
<td>1,230,540,000.00</td>
<td>11,155,802,000.00</td>
</tr>
<tr>
<td>2016</td>
<td>9,946,994,000.00</td>
<td>-</td>
<td>9,946,994,000.00</td>
</tr>
<tr>
<td>Total</td>
<td>41,343,100,000.00</td>
<td>5,152,320,000.00</td>
<td>46,495,420,000.00</td>
</tr>
<tr>
<td>Percentage</td>
<td>89%</td>
<td>11%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Researcher’s calculation based on data from Ministry of Finance and BoU

The same information above can as well be shown using a chart comparing the two proxies of public capital inflows as shown below.

![Chart Comparison Between Loans and Grants to Uganda in US$](image)

Figure 1.0. Level of public capital inflows to Uganda

Source: Researcher’s calculation based on data from Ministry of Finance and BoU

From the table and chart above, it is seen that two categories of public capital inflows were significant to the Ugandan economy and these are; Loans and Grants. Of the total inflows for 2012 of US$ 5,094,471,000.00, Loans contributed US$ 3,779,371,000.00 while Grants contributed US$ 1,315,100,000.00. In 2013, Loans contributed US$ 8,739,157,000.00 while grants contributed US$ 1,266,460,000.00 with the total of US$ 10,005,617,000.00. In 2014, total inflows were US$ 10,292,536,000.00 and loans contributed US$ 8,952,316,000.00 while grants contributed US$ 1,340,220,000.00. In 2015, loans contributed US$ 9,925,262,000.00 while grants contributed US$ 1,230,540,000.00 with a total of US$ 11,155,802,000.00. In 2016, loans contributed US$ 9,946,994,000.00 while grants contributed US$ 0.00 with a total of US$ 9,946,994,000.00.

Overall, loans contributed US$ 41,343,100,000.00 while grants contributed US$ 5,152,320,000.00 with an overall total of US$ 46,495,420,000.00. The contribution of loans to public capital inflows to Uganda represented 88.92% while grants represented 11.08% during the years 2012 to 2016.

Relationship between public capital inflows and financial inclusion

The second objective of the study was to establish the relationship between public capital inflows and financial inclusion in Uganda. In this objective, the null hypothesis (H0) stated that there was no relationship between public capital inflows and financial inclusion. The table below is a correlation matrix of public capital inflows and financial inclusion.
Table 4.1. Correlations

<table>
<thead>
<tr>
<th></th>
<th>Financial Inclusion</th>
<th>Public Capital Inflows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Inclusion</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1074</td>
</tr>
<tr>
<td>Public Capital Inflows</td>
<td>Pearson Correlation</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.685</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1074</td>
</tr>
</tbody>
</table>

Source: Primary data

The correlation results show that the coefficient $r = -0.012$ and its level of significance $p = 0.685$ for a sample of $N = 1074$. This result shows that as public capital inflows increase, financial inclusion does not move in the same direction since the relationship is negative. Therefore, since the p value ($p = 0.685$) is more than the alpha value $\alpha = 0.05$, ($0.685 > 0.05$), the null hypothesis ($H_0$) is retained/accepted and the alternative hypothesis ($H_1$) rejected. This is because there is inconclusive evidence about the significance of the relationship between public capital inflows and financial inclusion.

A regression analysis was established to determine if public capital inflows can predict financial inclusion. The results are shown in the tables below.

Table 4.2. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.012</td>
<td>.000</td>
<td>.000</td>
<td>8.24369</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Public Capital Inflows

Source: Primary data

Table 4.3. ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>11.191</td>
<td>.165</td>
<td>.685a</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1072</td>
<td>67.958</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1073</td>
<td>72862.578</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Public Capital Inflows

b. Dependent Variable: Financial Inclusion

Source: Primary data

Table 4.4. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>42.384</td>
<td>.868</td>
<td>-</td>
<td>48.848</td>
</tr>
<tr>
<td>Public Capital</td>
<td>-.026</td>
<td>.063</td>
<td>-.012</td>
<td>-.406</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Financial Inclusion

Source: Primary data
In table 4.25, the proportion of variance (R²) is 0.000, which is an estimate for how well public capital inflows predict financial inclusion. Therefore, from the results, public capital inflows do not completely predict financial inclusion (0.0%).

To determine the direction and strength of the relationship between public capital inflows and financial inclusion, the standardized beta coefficient is important. In the above table, the Beta Coefficient is negative, β = -0.012 indicating that a decrease in public capital inflows does not influence financial inclusion.

Therefore, from the above analysis as seen in the tables, the results of the regression showed that public capital inflows do not predict financial inclusion; P<0.001(R² = 0.000); F (1,1072) = 0.165 and β = -0.012.

In the table below, a further correlation analysis was run for all the independent variables which constitute public capital inflows (Official Development Assistance) against financial inclusion to determine if each of them as a relationship with financial inclusion.

**Table 4.5. Correlations**

<table>
<thead>
<tr>
<th>Public Capital Inflows</th>
<th>Pearson Correlation</th>
<th>Financial Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.685</td>
</tr>
<tr>
<td>N</td>
<td>1074</td>
<td>1074</td>
</tr>
<tr>
<td>Financial Inclusion</td>
<td>Pearson Correlation</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.685</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>1074</td>
<td>1074</td>
</tr>
</tbody>
</table>

Source: Primary data

From the above table, the correlation results between Official Development Assistance and financial inclusion show that the coefficient r = -0.012 and its level of significance p = 0.685 for a sample of N =1,074. This result shows that as official development Assistance increases, financial inclusion does not move in the same direction since the relationship is negative. Therefore, since the p value (p = 0.685) is more than the alpha value α = 0.05, (0.685>0.05), the null hypothesis (H₀) is retained/accepted and the alternative hypothesis (H₁) is rejected. This is because there is inconclusive evidence about the significance of the relationship between official development assistance and financial inclusion.

**Conclusions and policy recommendations**

The conclusions and policy recommendations arrived at are presented objective by objective in congruence with the questions and hypothesis of the study as shown below.

**Conclusion**

Level of public capital inflows.

The first objective of the study was to ascertain the level of public capital inflows to Uganda. The first research question was; what is the level of private capital inflows in Uganda? From the results in Table 4.1, it is therefore, concluded that the level of public capital inflows to Uganda from 2012 to 2016 was US$ 46,495,420,000.00. With loans contributing US$ 41,343,100,000.00 (89%) while grants contributing US$ 5,152,320,000.00 (11%). From the findings in Table 4.1, it is further concluded that loans are the biggest source of private capital inflow to Uganda.

Relationship between public capital inflows and financial inclusion the second objective of the study was to examine the relationship between public capital inflows and financial inclusion. The research question was; is there a relationship between public capital inflows and financial inclusion? And the hypothesis was stated as: There is no relationship between public capital inflows and financial inclusion. From the results in Table 4.2, it is therefore, concluded that since the p value (p = 0.685) is more than the alpha value α = 0.05, (0.685>0.05), the null hypothesis (H₀) is retained/accepted and the alternative hypothesis (H₁) is rejected. This means that the study did not get any statistical evidence to suggest a relationship between public capital inflows and financial inclusion in Uganda.
Policy recommendations

The recommendations from the study are presented objective by objective. From the study findings, the following recommendations are made:

Reduce the level of loans. Loan is a form of capital which attracts interest payment and is expensive for a developing country like Uganda. To reduce the level of loans to Uganda, the following could be done: Develop the size and quality of the Ugandan market to attract and retain investors who will pay different kinds of taxes to the government, Government agencies like Uganda Revenue Authority to ensure the tax is progressive and taxes the rich than taxing the poor who have little to pay, reducing the period of tax holiday for companies who are currently enjoying at the expense of the poor local populations.

Increase the level of grants. Grants and donations are the very cheap means to encourage more capital inflow to the Country. Donations from Charities, developed countries, foundations, clubs, individuals and governments should be encouraged as much as possible.

References


The Effect of Pension Funds on Emerging Economy of Ghana. A Case of Social Security and National Insurance Trust (SSNIT)

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Abstract

The article examines the effect of Pension Funds on the emerging economy of Ghana with the search light on the operations of Ghana’s flagship Pensions facility. In conducting the study, purposive sampling technique was employed to select senior officials of Social Security and National insurance Trusts (SSNIT) whose job descriptions hinge upon Pension fund investments, operations as well as monitoring and evaluations within the compliance enclave of the organization for their views on the objectives of the study. The questionnaire technique constitutes the main research instrument. The study noted that, like other nations of the world, Ghana feels it an obligation and responsibility to plan for and enable financial security for its elderly citizens and retirees and this is achieved through the establishment and nurturing of the pension fund. Growing the latter entails investing funds in stocks of corporations, buying government bonds as well as influencing infrastructural growth in the health, education and Security including housing sectors of the economy. The study recommended that taking cognizance of the long-term nature of the SSNIT’s Pension funds, the economy of Ghana will grow much faster if funds were invested in heavy Transport projects, more Utility projects and world class Communication projects. This will not only accelerate the rate of economic growth but also help ease pressure on government employing scarce tax revenue towards undertaking such badly needed developmental but capital-intensive infrastructure and social amenities.

Keywords: Pension schemes, Funding, Sustainability, Aging, Pension tiers.

Introduction

It is the obligation of every nation to institute structures for planning for the senior years of its citizens. This ambition of making provision for the aging population happens to be a global carefully thought-out goal of all countries irrespective of the magnitude of economic security or growth. As a result, African growing nations, sophisticated countries in Europe and North America as well as those emerging from communism to capitalism have all evolved some appreciable kind of pension systems with a common objective of designing a road map for ensuring financial security of their people and retirees (Holzmann, 2012).

Perhaps it might be worth noting that while growing nations in Africa, the East European countries, Asia Latin America and the Middle East are experiencing challenges in augmenting the sufficiency and coverage of their pension systems, the pension schemes of developed economies are being jeopardized by surprisingly low birth rate, longevity, bankruptcies, inordinate fiscal deficits and public debt problems (European commission, 2012). The industrialized nations, according to this source, continue to register lower and negative returns on pension investment portfolios owing to poor performance of stocks, and low return on bonds which are attributable to high unemployment and relatively lower interest rates (Della-Croce, Kaminker, & Stewart, 2011). Holzmann (2012) is also of the conviction that all such gloomy factors which contributed in no small way toward the failure of industrialized world to meeting its obligations under the pension scheme, could be traced back to the economic recession which began in late 2007.

According to Kariam (2011) the defined benefits or Pay-As-You-Go (PAYGs) plan under the pension schemes are all adversely affected by reduction in budgetary support together with pension contributions. There is therefore the need for better strategy for investing long term pension funds. Taking cognizance of the potential benefits of investing pension funds in growth sectors of the economy it behooves on stakeholders to ensure that such funds grow as anticipated so as to continue to help
address the financial needs of the senior years of its citizens. This article on investigating the effect of pension fund on the merging economy of Ghana will first examine the existing literature on the subject prior to highlighting the research methodology, discussing findings, making appropriate recommendations and drawing relevant conclusions. Prior to doing all that, it is essential to clearly establish the objectives of the article.

Aim and objectives of the study

The overall objective of the study is to investigate how Ghana’s Social Security Trust (SSNIT) is leveraging its pension fund to influence economic development of the country. Specific objectives include:

1. To examine critically the spectrum of SSNIT’s pension fund investment portfolio
2. To determine how SSNIT’s pension fund management activities are influencing economic development agenda of Ghana.
3. To identify other strategies for further strengthening SSNIT’s investment portfolio so as to register a better impact on the emerging economy of Ghana.

Review of existing pension fund regime in Ghana

Reviewed here-under are contemporary pieces of literature on the nature of Pension Funds, Ghana’s Pension fund regime and SSNIT as well as Economic growth activities of Ghana.

Nature of pension fund

According to Holzmann (2012), a pension is a fund into which a sum of money is added during an employee’s employment years, and from which payments are drawn to support the person’s retirement from work in the form of periodic payments. A pension may be a “defined benefit plan” where a fixed sum is paid regularly to a person, or a “defined contribution plan” under which a fixed sum is invested and then becomes available at retirement age. Pensions should not be confused with severance pay; the former is usually paid in regular installments for life after retirement, while the latter is typically paid as a fixed amount after involuntary termination of employment prior to retirement (Impavido, Lasagabaster, & Garcia-Huitríon, 2010).

Pension, in the opinion of Agnew (2013) is a payment a person receives upon retiring from work. In other words, it is an amount of money that a person receives regularly when he/she is no longer working as a result of his/her age or as a result of ill health. Pension schemes instituted are usually the result of arrangements between the employee and the employer (Della et al, 2011). Under the arrangement, the employee may be required to make some specified payments (usually a specified percentage of one’s salary and a specified payment by the employer on behalf of the employee) throughout the person’s working life in order to qualify for benefits upon retirement. This makes the pension scheme a contribution based programme. It is therefore appropriate for persons who are members of the scheme to become interested in the institution and maintenance of the scheme.

Ghana has experienced a series of pension reforms dating back as early as the year 1950 (Gockel and Kumado 2003). Before the establishment of a formal pension scheme as a means of providing social security to a people in Ghana, the extended family system was the major source of social protection for the Ghanaian populace. The extended family was the institution in Ghanaian community that provided social and economic support to various family members at appropriate times of need. It was, traditionally, a source of support when members became old and threatened by economic deprivation, disability and social isolation (Darkwa, 2007).

Ghana’s pension fund (SSNIT)

According to Ghana’s Pensions industry regulator, the National Pension Regulatory Authority (NPRA, 2010), Social Security Schemes had been introduced in Ghana, prior to independence. There had been the Workmen’s Compensation Ordinance (No. 52), which was the first legislative endorsement in social security passed in July 1940. The Pension Ordinance (No. 42) established a non-contributory pension scheme which was designed for loyal senior civil servants under the Chapter 30 of the 1950 British Colonial Ordinances (Darkwa, 2007). The scheme was a reward for those civil
servants who had clean appraisal report from their colonial supervisors for a minimum of ten years with a life time engagement free of civil unrest, did not question the status quo, and discharged their duties faithfully. This pension ordinance was later extended to their widows and orphans. After the colonial era, the government of Ghana sort to extend to provision of pensions to cover all private and public sector workers who were not covered by the CAP 30 schemes, the Social Security Act (No. 279) was enacted in 1965 (Agbrese, 2011).

Originally it served as a Provident Fund to provide lump sum benefits for old age, invalidity and survivor’s benefits. The Social Security Act, 1965 (Act 279) was repealed and in 1972 the Social Security and National Insurance Trust (SSNIT) was establishment under the NRCD 127 to administer the National Social Security Scheme. The new administration was mandated to convert the invested contributions of the Social Security Pension Scheme into long maturity low interest rate special government bonds. As a result of high inflation, lump sum benefits due to retirees were insignificant and as a result inadequate (Darkwa, 2007).

Kpessa (2011) argues that the importance of pension schemes in Africa for instance, have helped in the alleviation of demographic pressures, poverty amongst the elderly and provided support for households headed by grandparents. Simultaneously, Agnew (2013) also points out that pension schemes are sources of income security for the aged, the disabled, the invalid and the unemployed. Ghana and a few countries including Nigeria and the United States are no strangers to pension reforms. Although Ghana adopted several social protection schemes following the collapse of the extended family, there have still been problems with social security in the country under each of the programs or scheme adopted as mentioned in Kpessa (2010) and Kpessa (2011).

Generally, the presence of tax incentives induces employees desire to demand pension schemes. Tax rates on pensions implies that a proportion of workers’ pension goes to the government as tax revenue and reduces employees’ desire to enroll on pension schemes. A tax-free pension scheme would generally induce more workers to enroll. The level of returns on a particular pension scheme relative to other schemes and investment opportunities would also determine demand for that particular pension scheme. These among other reasons explain why the government of Ghana introduced the three-tier pension scheme (Darkwa2007).

In Ghana, prior to the enactment of the new pension law; the national pensions Act, 2008 (Act 766), the various types of pension schemes that were in existence in the country were the CAP 30 scheme, SSNIT pension scheme and the Ghana Universities Staff Superannuation (GUSS) scheme. Darkwa (2007) argues that CAP 30 was established to provide pension for pensionable officers in the civil service and members of the Armed Forces in the British West African colonies. CAP 30 provides old age benefits, disability benefits and dependent lump sum. The SSNIT pension scheme is a social insurance program providing social protection against socially recognized conditions, including poverty, old age, disability, unemployment among others. The SSNIT pension scheme offers three benefits which are old age, invalidity and survivors’ lump sum. The GUSS scheme was also established to attract and maintain high caliber staffs in the universities. The new pension scheme was launched on the 16th of September 2009 and its implementation began on the 1st of January 2010. The new pension scheme was introduced to cater for the shortgages of the old pension system in the country (Seyram, 2008).

The Administration of this new scheme fell in the hands of an independent corporate body, the Social Security and National Insurance Trust (SSNIT). The main difference between this new scheme and the previous one was the shift from a lump-sum payment to a monthly payment of retirement benefits. The contributions made by both employers and their employees under the old scheme were however maintained. Under the new scheme, participants must have demonstrated at least 240 months (20 years) of contribution to the scheme to qualify for retirement benefits. The scheme was designed for three main contingencies namely; old age/retirement, invalidity/disability and the dependents/survival’s benefits (Kpessa 2010).

The SSNIT and CAP 30 pension schemes were running parallel to each other until the promulgation of a new three tier pension model in 2008 (National Pensions Regulatory Authority 2012). Although the CAP 30 scheme has been annulled, the SSNIT scheme is still in operation and has an important role in the new pension scheme to be initiated in Ghana (Kpessa 2010).
Types of pension scheme in Ghana

In order to introduce some adequacy and parity into workers’ pension packages, Abebrese (2011) explains that the Social Security Act, 1991 (PNDC Law 247) was passed to transform the 1972 Scheme from Provident Fund to a Defined Benefit Scheme. The Act mandated SSNIT to shift its investment strategy from investments in special government bonds to investments in a broad portfolio. This was to help to generate commercial rate of return to balance the lower rate from the other portfolios and to improve on pension benefit received by beneficiaries (Abebrese, 2011). Notwithstanding, the SSNIT schemes were less preferred compared with the CAP 30 pensions. This was because of the lump sum benefits were not paid under SSNIT. This, in the opinion of Kpessa (2011) resulted in agitations and protests by some public sector workers on the SSNIT Scheme.

The current National Pension Act, 2008 (Act 766) was enacted to introduce a contributory Three-Tier pension scheme. This was to improved retirement benefits for all workers. The Act redefines pensions into the First Tier or Basic national social security scheme, Second Tier or Occupational pension scheme, and the Third Tier or Personal pension. The Act, under section (30) mandates SSNIT as the established trust to manage the First Tier or basic national social security scheme. Whilst it competes with other Trustees approved by NPRA, over the management of the Second Tier and Their Tier pension scheme (Abebrese, 2011).

The new 3 tier pension scheme

According to Darkwa (2007) in July 2004, the then President of Ghana John Agyekum Kufuor, established a Presidential Commission on Pensions (PCP) to address the concerns of Ghanaian workers with regards to some discrepancies in the benefit package for retirees under both the CAP 30 and SSNIT pension schemes. The commission headed Mr. T.A Bediako was tasked with the responsibility of creating a uniform pension scheme that would ensure retirement income security for all Ghanaian workers. The commission’s recommendations included the creation of a new contributory three tier pension scheme consisting of two mandatory schemes and a voluntary scheme. They also recommended that the CAP 30 scheme be done away with due to its “decentralized public sector pension management” and called for the SSNIT scheme to be restructured by revamping its management and administrative structures (Abebrese, 2011).

In order to give credence to the commission’s recommendations, a National Pensions Regulatory Board was established to regulate both public and private pension schemes in the country. Additionally, a National Pensions Bill was established to cater for the new contributory three tier pension scheme. The new scheme according to Kpessa (2011) is as follows;

The first tier

This represents a basic national social security scheme that is managed by Social Security and National Insurance Trust. It is mandatory for all employees in both private and public sectors but optional for the self-employed and informal sector worker.

The second tier

This is also a mandatory scheme for all employees. However, the main difference between this tier and first is that it is privately managed by registered Pension Fund Managers and Custodians who are regulated by approved Trustees licensed by the National Pensions and Regulatory Authority. Pension fund managers as per the National Pensions Act of 2008, are responsible for investing pension funds and assets in investments achieving the best return. Custodians are also charged with receiving contributions remitted by employers on behalf of trustees (National Pensions Act 2008).

The third tier

This describes a voluntary scheme that enables individuals to freely open provident funds and personal pension scheme which are managed by Pension Fund Managers. This tier is supported by tax benefit incentives to provide additional funds for workers who want to make contributions to enhance their pension benefits. It also allows individual to make additions or top-ups that are 16.5% of their
gross salary. This scheme is particularly designed to meet the contribution needs of workers in the informal sector of Ghana (National Pensions Act 2008).

The management of the first-tier pension scheme

As a government mandated body to manage the First-Tier social security scheme, the Act specifies the details of its mandate through the objectives, management and the extent to which management can execute its duties. The main objective of SSNIT is to manage the basic national social security pension. Its specific functions include:

- To operate the basic national social security pension scheme and other schemes as may be prescribed by law;
- To have a Fund into which shall be paid the contributions and any other monies as may be required under this Act;
- To be responsible for the general administration of the social security scheme and regulations made under and ensure the provision of social protection for the working population for various contingencies including old age, invalidity and death;
- To be responsible for the administration and investment of funds within the framework of general directives issued by the Board of Trustees and approved by the Authority;
- To collaborate with other complementary social protection schemes in respect of specified operational and administrative functions to achieve efficiency, cost savings and avoidance of duplication of functions;
- To have general control of the funds and investments of the social security scheme and the management of the Trust; and
- To perform any other functions that is ancillary to the objects of the Trust.

Management of the second-tier pension scheme

The Second Tier is managed independently of the first Tier by approved private corporate Trustees. Contributions by self-employed persons in the informal sector who are not covered under the mandatory scheme are credited with two separate individual subaccounts. The personal savings account and the retirement account. The proportions to be credited to each account are prescribed in the governing rules of the scheme. Trustees have the function of securing scheme registration, ensure that the investment of funds of the scheme is diversified to minimize investment risk. Trustees have to regularly report the performance of contributor’s investments to their members and contributors have the right to know how their contributions are being invested and its yield. Accrued benefits are to be preserved until retirement age but earlier benefits are allowed under certain prescribed conditions. An employee is paid lump sum money on termination of service, death or retirement. Contributors are allowed to use the lump sum benefit as collateral to secure mortgage for primary residence (section 103 of Act 766).

Management of the third-tier pension scheme

Like the Second Tier the management of the scheme is in the hands of authorized private corporate Trustees. There are no legal minimum contributions. Minimum limits are set by individual trustees and in agreement with contributors. The Act gives contributor the privilege to know how their contributions are being managed.

Investment portfolio of SSNIT

In the opinion of Abebrese (2011) unlike other forms of investment vehicles available to both individuals and institutions, social security pension is a special kind of investment where the current working population contributes to pay for those who are retiring and those already claiming their pensions. Like all funded pension schemes elsewhere, large amounts of surplus funds are accumulated that need to be invested. With the SSNIT Scheme under Law 247 of Ghana, investment policy is expected to be much more professionally designed and implemented as the Scheme was conceived to be self-sustaining. According Kpessa (2010), two things are required to achieve the professional ethos envisaged. Firstly, all restrictions on investments should be removed and secondly responsibility for investments should be invested in the SSNIT Board, largely free of direct Government interference.
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Theoretically, investment returns are to be above a minimum acceptable level in aggregate over the long term. Taking cognisant of the long-term nature of the liabilities, investments in long-term projects are to be undertaken as long as short-term requirements are met. 

Generally, SSNIT’s investment policy is guided by seven general principles, which according to Kpessa (2011) are, Safety of investments; Yield or rate of return, Liquidity, Maintenance of the Fund's monetary value, Diversification of portfolio, spread of investments by duration Harmonization with national objectives. 

With these guiding principles, Kpessa (2011) submits that the investment portfolio of SSNIT Funds comprised investments in fixed and non-fixed income investments made up as follows: 

Short-term government instruments, Government bonds, corporate loans, Student loans, Equity and Property. Generally, short-term investments make up the least share in the total, hovering around 5%. By the nature of SSNIT’s liability structure, Della et al., (2011) are of the view that this appears to be alright since SSNIT is matching maturity profiles. 

**Economic growth activities of Ghana**  

The economy of Ghana has a diverse and rich resource base, including exportation of primary and semi processed agriculture produce as well as the exportation of diverse and rich resources such as hydrocarbons and industrial minerals. These have given Ghana one of the highest GDP per capita in West Africa. Owing to a GDP rebasement, in 2011 Ghana became the fastest-growing economy in the world (Mensah 2013). The Ghanaian domestic economy in 2012 revolved around services, which accounted for 50% of GDP and employed 28% of the workforce. Besides the industrialization associated with minerals and oil, industrial development in Ghana remains basic, often associated with plastics (such as for chairs, plastic bags, razors and pens). 53.6% of Ghana’s workforce were employed in agriculture in 2013. Ghana embarked on a currency re-denomination exercise, from Cedi (₵) to the new currency, the Ghana Cedi (GH₵) in July 2007. The transfer rate is 1 Ghana Cedi for every 10,000 Cedis. 

Ghana is Africa’s second-biggest gold producer (after South Africa) and second-largest cocoa producer (after La Cote Divoire). It is also rich in diamonds, manganese ore, bauxite, and oil. Most of its debt was canceled in 2005, but government spending was later allowed to balloon. Coupled with a plunge in oil prices, this led to an economic crisis that forced the government to negotiate a $920 million extended credit facility from the IMF in April 2015 (Terkpors, 2016). 

The launch of crude oil production at the Jubilee oil field in 2011 combined with a strong performance of the gold and cocoa sector boosted Ghana's real GDP growth to 15% in 2011 and 7.9% in 2012. Ghana hopes that this growth will be sustained with the help of an expanding service sector. The economy continues to attract FDI, aided by the prospect of rising oil and gas production (Agnew, 2013). 

Although the country is experiencing rapid growth, Ghana is running a large fiscal deficit and a large **balance of payments deficit**. Despite growing revenues from the oil and gas sector the fiscal deficit jumped to 11.5% of GDP in 2012 as the government increased spending on public sector wages and subsidies before the 2012 election. Public debt level rose to 56% of GDP in 2012, up from 33% of GDP in 2008. Largely owing to high capital imports for the development of infrastructure and the oil sector the current account for Ghana has been in deficit for the last decade. External debt is also on the rise climbing from 34% of GDP in 2013 to 70.1% in 2016 (Ofuri-Atta, 2017). 

Ghana's export base is concentrated on commodity exports with gold, oil and cocoa accounting for 75% of total exports while the service sector increased its share of Gross Domestic Product from 54.6% in2015 to56.9% in 2016(Ghana’s Ministry of Finance,2017). 

A prolonged period of low world commodity prices would put further pressure on the country's external and fiscal accounts. In their report on the Ghana economy published in 2013, the IMF reported "the concentration of exports in three commodities—gold, cocoa, and oil—makes the economy vulnerable to terms of trade shocks." Indeed in 2014, Ghana had to ask for IMF support because of its unsustainable balance of payments deficit (Amissah-Arthur, 2014). 

Increasing wages and energy prices and the effects of a weakening currency that increases import prices has meant that inflation in Ghana has increased to a 3-year high of 11% in May 2013. Ghana's
currency has been one of Africa's worst performers in recent times, depreciating by a sizeable amount against the US dollar. Ghana's central bank has increased interest rates from 15 per cent to 16 percent, stepping up its efforts to halt the decline of the cedi (Amisah-Arthur, 2014)

Rapid growth has helped to lift per capita incomes in that Ghana has made great strides in reducing poverty to less than 30 percent of the population and has recently reached lower middle-income status. But Ghana's widespread relative poverty, illustrated by children hawking food on the streets at night to support their families, is equally striking. About 52 per cent of Ghanaians live on less than $2 a day, another 27 per cent on between $2 and $4. In between the two extremes is an “emerging market middle class”. The African Development Bank estimates that nearly one in five Ghanaians, or 4.6m people, is now either lower or upper middle class by its definition, with a per capita daily consumption of between $4 and $20. All these suggest that if the huge quantum of SSNIT pension fund were invested in the growth sectors of the economy both micro and macro-economic indicators will brighten up appreciably (Abebrese, 2011).

Research methodology

Information for addressing the objectives of the study emanated from 28 respondents who were drawn from SSNIT, the study area, as well as other government institutions like ministry of Finance, Central bank and statistical service of Ghana whose responsibility impinge upon the economic development of the country. Purposive sampling technique was employed to directly approach these officials for their views. Research instruments employed were both an interview guide and a questionnaire. Responses from SSNIT were accessed from the administered questionnaire while views from the other stakeholder institutions were obtained from the interactions hovering around the dictates of the questions on the interview guide. The latter and the questionnaire all had three distinct parts.

The first part sought to investigate the texture of SSNIT’s investment portfolio while the second part examined how SSNIT’s investments have been influencing the economic development of the country. The third segment attempted to identify strategies for improving upon how SSNIT could leverage upon its pension fund investment portfolios to further facilitate the developmental agenda of the country. The Statistical Package for Social Science (SPSS) aided the analysis of data captured from the field study. Secondary data come from official bulletins, company files as well of periodic publications of stakeholder institutions especially the Central Bank, Ghana statistical service and SSNIT.

Findings and discussion

This segment presents the findings of the study. These have been arranged in consonance with the stated specific research objectives.

Content of SSNIT’s pension fund investment portfolio

SSNIT files (2018) point to the fact that the spectrum of SSNIT’s pension fund investment portfolio include Equity/Stock, Property, (Real estates, Hotels etc.), and Government bonds. Other pension investments have been locked up in corporate loans, Short-term government instruments, Student loans, as well as Social responsibility project to enhance the living standards of the underprivileged in society.

The source further explains that SSNIT invests pension fund in equity shares of corporate profitable organizations, real estate properties, government bonds and corporate loans. Other investments go into short term government instruments, student loan scheme and other corporate social responsibility projects. Respondents pointed at equity shares in banks, mining companies and the telecommunication sector as industries where SSNIT has a chunk of investments. Writing on low returns on pension funds, Antolin et al., (2011) pointed out that pension fund managers must exercise some appreciable magnitude of circumspection in these investment decisions. These sources noted that managers should only deal with businesses that have proven track record in order to keep their responsibility to fund contributors alive. It is therefore very fitting for SSNIT to invest in safe ‘channels’ especially buying lots of shares, in some cases controlling shares in state owned banks.

According to Darkwa (2007) SSNIT used to own a bank in Ghana called Social Security Bank (SSB) but had to be divested when a strategic investor, Societe General of France submitted a convincing proposal to acquire 51% majority shares in SSB.
SSNIT files (2018) also show that SSNIT has considerable amount of investment in properties. Residential accommodation for SSNIT staff as well as other public sector employees is scattered all over the country. The Trust used to have a chain of Guest houses called catering Rest houses, in all the ten regions of Ghana. This kind of property investments according to Kpessa (2011) are not only meant to attract higher returns for the Pension fund, but also assist in the infrastructural development of the country. Darkwa (2007) recalls that as far back as 1974 i.e. 44 years ago in Ghana, SSNIT’s guest houses were the only hospitality centres in some parts of the country. Dorfman and Palacio (2012) also support investing pension funds in properties and add that the long-term nature of the pension scheme makes it logical for investing in long term assets. The source however noted with concern the high level of corruption associated with the maintenance of such commercial properties in developing economies which often adversely erode the anticipated returns on such pension fund investments.

It came out of SSNIT Files (2018) that the third most popular investment outlay of SSNIT’s pension fund has to do with buying government bonds. Antolin et al., (2011) see investing in government bonds as medium to long undertakings which are safe financial Assets with very enviable propensity to helping in meeting the objectives of instituting the pension trust. Returns on government bonds according to Salou and Yerman (2012) are virtually risk free and more importantly do not fluctuate as happens with returns on stocks or property.

SSNIT also grants corporate loans to reputable businesses, participates in buying short-term government financial assets like Treasury bills as well as facilitates the funding activities of the student loan project. SSNIT honours its corporate social responsibilities by helping to modernize the infrastructural base of schools, hospitals and other deprived communities.

**SSNIT investments and Ghana’s economic development**

The study investigated the effect of SSNIT investments on Ghana’s economic development. The results have been presented in table 1.

**Table 1. Frequency table on pension fund investment and Ghana’s Economic Development**

<table>
<thead>
<tr>
<th>Effect of SSNIT investment on Ghana’s Economic Development</th>
<th>N</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help establish business through buying shares on GSE</td>
<td>28</td>
<td>4.640</td>
<td>0.638</td>
<td>1</td>
</tr>
<tr>
<td>Invest in properties for various purposes</td>
<td>28</td>
<td>4.581</td>
<td>0.621</td>
<td>2</td>
</tr>
<tr>
<td>Strengthens government’s spending arm</td>
<td>28</td>
<td>4.500</td>
<td>0.638</td>
<td>3</td>
</tr>
<tr>
<td>Help corporate institution with loans</td>
<td>28</td>
<td>4.360</td>
<td>0.731</td>
<td>4</td>
</tr>
<tr>
<td>Helping to develop the energy sector</td>
<td>28</td>
<td>4.290</td>
<td>0.713</td>
<td>5</td>
</tr>
<tr>
<td>Financing recreational projects</td>
<td>28</td>
<td>4.112</td>
<td>0.802</td>
<td>6</td>
</tr>
<tr>
<td>Modernizes school infrastructure</td>
<td>28</td>
<td>3.965</td>
<td>0.943</td>
<td>7</td>
</tr>
<tr>
<td>Finance health improvement projects</td>
<td>28</td>
<td>3.816</td>
<td>0.986</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Field Data (2018)

It came out unequivocally from the study as shown in table 2 that Ghana’s SSNIT, as an institution, has really contributed immensely to the social-economic development of the country and indeed the growth of the economy cannot be complete without the role that SSNIT plays in transforming the economy. Ranking first in table 2 is the fact that SSNIT buys shares on the Ghana stock exchange (GSE) to help strengthen the operational existence of most listed companies. Company files (2018) show that the Trust constitutes the largest singular institutional investor on the GSE and the SSNIT can be said to be the main driver of trading activities on the GSE. Out of the 37 list companies, SSNIT has invested GH£2.7 billion (US$520 million) in 22 first grade companies. The Trust also holds significant amount of money in 54 unlisted companies. The trust’s equity investments are fairly spread across such key sectors of the Economy as financial, mainly banks and insurance companies, manufacturing, services such as hospitality, healthcare, transportation and Sanitation, Energy, notably power, oil and Gas as well as holding shares in Real Estate companies (SSNIT files 2018).
Investing pension funds on a reputable stock exchange according to Brainard (2005) is a worthwhile undertaking especially in situations where the listed company intends to expand its business horizon. Agnew (2013) also corroborates the importance of investing pension funds in long term equity holding projects and explains further that returns from such ventures often help in augmenting the financial base of the fund itself.

Ranking second in table 2 is the fact SSNIT has a huge quantum of its pension fund in various kinds of properties. According to company records, SSNIT embarked upon housing development projects over 40 years ago with the view to providing residential accommodation for its contributing public. The principle behind the housing project according to Company File (2018) was to ensure that some of the Pension fund investments was focused towards creating social benefits to workers while they were still rendering productive service to the country. The houses ranged from bed-sitters to one- and two-bedroom flats and were such that beneficiaries got decent and more affordable places to lay their heads. With fine environment to rest, workers then wield the sound minds to work harder towards increasing productivity to, as it were, develop the economy. It is regrettable to indicate that even with the uneconomic rents that the affordable houses go for, some beneficiaries accumulated monthly rent so much so that court action had to be resorted to, for sanity to prevail.

In all, Company File (2018) has it that SSNIT has 7,168 housing units across the length and breadth of Ghana. Workers in city centers, towns and sub-urban communities all benefited the SSNIT affordable housing project. The architectural designs of these houses also helped in no small measure towards beautifying the infrastructural base of these towns and sub urban areas. Close to 6,150 housing units are also in the pipeline at various stages of completion in Accra and the Ashanti kingdom to be sold out to workers on high purchase basis.

Returns from SSNIT’s Pension Fund’s Investments in properties really emanate from commercial properties. Remarkable amongst them are 10 high rise properties and six office complexes. Some of these properties such as World Trade Centre - Accra, Pyramid Tower, Ridge-Tower, Heritage-Tower, have really transformed the skyline of a prime area in Accra known as the Ambassador Hotel area. SSNIT has 100% share-holding in all these well patronized commercial properties. These structures have provided suitable office accommodation for multinational companies which are investing in the mining, Energy, financial and other sectors of the economy.

One segment of the property industry which has huge prospects in Ghana is student’s hostel business. With explosion in student populations at the universities, Government of Ghana sensed its limitation in providing residential accommodation for the students. SSNIT was therefore partnered to construct and manage fairly priced hostel services for the students through its subsidiary Ghana Hostels Limited.

It can be gathered from table 2 that SSNIT also invests in government bonds and another short-term financial asset. Such investments usually fill gaps in government’s anticipated revenue thereby strengthening its spending arm to fully cover its operational and other cost. Such arrangements help to avoid salary delays that could degenerate into social unrest and its concomitant of loss of productivity. Government also disburses some of these funds to defray arrears in respect of unpaid works certified for suppliers of contracts. SSNIT invests pension funds as loan to reputable private companies in the hotel industry, health delivery, transportation, shopping malls, and the airlines among others. Such loan facilities often help in expanding their operations thereby employing more hands to assist in reducing the unemployment burden facing the country. By expanding operations, these companies are expected to earn more profit and by extension pay more corporate taxes to facilitate government operations.

Helping to finance the energy sector does not only rest with SSNIT using some Pension funds to acquire equity stocks but also the Trust supports government efforts at providing adequate energy for both industrial and domestic purposes. Accordingly, company files (2018) indicate that SSNIT, through its subsidiary, Cenit Energy Limited, maintains a power plant of capacity 126 megawatts to help reduce challenges with electricity supply in the country. This new Pension fund investment strategy was also aimed at ameliorating risk within the person fund investment portfolio framework.

Taking cognizance of the fact the successful attainment of SSNIT’s core mandate hinges upon education, employment and health, the Trust continues to provide infrastructure for delivering healthcare in deprived areas as well maintain full first-class hospital projects to complement government efforts at the national, district, regional levels, in providing quality health care to the
citizenry. In areas where affordable houses have been built, SSNIT also constructs basic schools to serve these communities. From the foregoing it is obvious that this whole concept of Pension fund, to some extent, is to help accelerate the growth of an economy and therefore SSNIT is living up to expectation.

Conclusion and recommendation

Management of SSNIT’s Pension fund has carefully invested the facility in growth sectors of the economy. Business expansion, Education enhancement, quality healthcare, energy sector, real estate development etc. are all receiving financing attention from the pension fund. Nonetheless a lot more ought to be done in reviving the railway industry, damming regional water bodies to increase SSNIT’s participation in electricity supply as well as helping the communication industry with modern highway equipment to minimize e-commerce operational challenges. SSNIT’s pension fund is really an indispensable tool for the economic growth of Ghana.

Recommendations

The third objective of the study sought to identify further strategies for managing SSNIT pension funds so as to strengthen its pivotal role in the developmental agenda of the country. Based on information gathered from the field study the following recommendation are worth examining.

Reviving the railway transportation system to boost commerce

The railway transport system of the country has completely broken down resulting in pressure on road transportation. For the past ten years succeeding governments have all paid lip service to reviving this vital industry. It is the conviction of the study that just as SSNIT has successfully entered to the energy and real estate industries so could they adopt the railway rehabilitation work and operate it efficiently. This is a fee paying, more convenient transport system which is likely to break even in five years for handsome returns to be registered thereafter. Foodstuffs, cereals and other market ware can embark on the railway cargo systems at cheaper rate than road transport leading to these commodities being more affordable on the market for the lower income group who constitute majority of Ghanaian residents. The revived railway network can also facilitate movement of people.

More investments in electricity generation

Ghana currently has challenges in meeting its electric energy requirements, estimated at 2,000 megawatts. Independent Power Producers (IPPs) are on board trying to help meet this level of output. An IPP, Asogli power turns out 240 megawatts. SSNIT with its financial might is currently operating a plant with capacity 126 megawatts which is less than 7% of the national requirement and therefore woefully inadequate. Of the three traditional sources of generating electricity i.e. Gas, Crude oil and hydro, the latter is the cheapest. It is from this background that the study recommends hydro-electric power production to SSNIT. Ghana is endowed with regionalized water bodies which are all potential sources of cheap electric power. The Denso River in the Eastern region, Ankobra in the Western region, Kakum or Kwenyako in the central region etc., can all be dammed to generate super quantity of electricity even for export to the sub-region. The returns on such investment can be very promising than current earnings from properties.

Pension fund for developing communication industry

The role of effective communication systems in modern business administration cannot be overemphasized. It is becoming increasing very irritating when one has to wait for long hours trying to cash cheque or pull funds from ATM because of Telecom network service challenges. It is equally uncomfortable when one has to sleep in the dark because the local electricity supply vendor could not access the network service to facilitate operations. Perhaps it might be worth noting that most of those who sustain such mishaps are contributors towards the pension fund. It is hereby recommended that SSNIT’s management consider investing some Pension Funds in communication projects.

Management could either partner service provider or go it alone in launching powerful satellites, building towers and generally taking telecommunication network service to the next level. Some industry operators are struggling to move on to 4G system, SSNIT can easily help with such crossover.
This way, unnecessary delays associated with conducting bank transactions and other e-commerce services will be a thing of the past.

References


Prospects of Introducing Modern Technology into SME Businesses in Ghana

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Abstract

The prospects of introducing modern technology into the operations of Cottage and Small industries has been the focus of most governments in emerging markets due to the enormous benefits it accrues to the economy of nations. The study is aimed at determining the strengths and opportunities linked with introducing modern technology into these local industries. The findings and recommendations of the study will go a long way in identifying the vast prospects of economic benefit to the government and also to the other stakeholders involved. The problem of youth unemployment can be reduced by the introduction of modern technology in the cottage industry as discovered during the study. It is also envisaged that the study will also have some impact when it comes to enriching the body of knowledge on the subject of technology management introduction into cottage and small-scale enterprise businesses in Ghana. The study found out that, prospects for introducing modern technology in the cottage industries are very bright considering that a lot more output could be achieved to bring in more income to cottage groups like weavers, palm oil producers, Shea butter producers, soap and other beauty products producers etc. than the existing traditional methods. It also came out during the study that it is unlikely that the existing small cottage owners/workers would be able to fund the equipments needed for a smooth integration of technology into their businesses. The study concluded that the introduction of modern technology into the cottage industry business is likely to enhance the fortune of the industry as well as create more jobs and therefore stakeholders should liaise with the appropriate authorities including the Trade & Industry ministry and Employment & Social welfare ministry to ensure that the necessary structures have been put in place to enhance the smooth integration of modern technology into SME industry in Ghana.

Keywords: Cottage industry, Technology management, Prospects, Small industries, innovation.

Introduction

Cottage and small-scale industries have attracted the attention of many governments especially in emerging markets seeing it holds huge potential in raising the living standards of the poor in society. Improving the livelihoods of families is not the only reason for giving attention to this segment of people but also the benefit that the country stands to gain from the exports of the products which converts into the badly needed foreign exchange for economies. The important roles that cottage and small-scale business play in economies cannot be overlooked with glaring evidence from countries like India, China, Malaysia, Zambia, South Korea etc. just to name a few. These seemingly negligible industries have the potential to propel economies by their significant contribution to a country’s Gross Domestic production (GDP), earnings from exports and reducing youth employment which has become the bane of most governments in emerging markets.

In their submission, Kombo, Justus, Murumba & Makworo (2011), advanced the conception that small scale businesses including agriculture and rural family businesses have contributed greatly to the growth of Kenyan economy for example. They continued to argue that the sector contributes to the national objective of creating employment opportunities, training entrepreneurs, generating income and providing a source of livelihoods for the majority of low-income households in the country accounting for 12-14% of GDP (Republic of Kenya, 1982, 1989, 1992, 1994).

Findings will help to uncover the opportunities available for expanding these cottage and small businesses like the Shea butter, Jewelry and Kente Business through modern technology introduction
thereby helping to convince stakeholders to adopt the envisaged new technology to render the cottage and small business more lucrative for the unemployed youth and profitable as well.

**Conceptual definition**

Technology management according to Rothaermel & Hill (2005) involves the application of management skills to the discovery, development, operation, and proper use of technology. Technology managers help create value for their organization by using technology and other resources to solve problems and improve efficiency and effectiveness. Technology is informed by values at every point. Value decisions may be called for not only in relation to the specific design criteria (i.e. aesthetic, ergonomic and economic judgments, suitability for purpose and ease of manufacture) but also in relation to the rightness or wrongness of a particular solution in ethical terms. Chanaron, Jolly & Soderquist. (2002). submits that, although there is certainly a relationship between science and technology, there is, except in certain high technology industries, very little technology that could be classified as applied science. Technology is marked by different purposes; different processes a different relationship to established knowledge and a particular relationship to specific contexts of activity. Change in the material environment is the explicit purpose of technology, and not, as is the case with science, the understanding of nature; accordingly, its solutions are not right or wrong, verifiable or falsifiable, but more or less effective from different points of view. According to Pavitt (1990), technological enterprises are determined not by advances in knowledge nor simply by the identification of needs, but by social interests. Of the potential new technologies available at any one time only a few are developed and become widely implemented. In this way technology is shaped by society, by consumer choice, yet it could also be argued that technology shapes society - the technology of the motor car, for example, has shaped our environment and our whole way of life. The motivating factor behind all technological activity is the desire to fulfill a need. For this reason, all designs should be made or realized - whether that be through prototype, batch- or mass- production or some form of three-dimensional or computer model - if the need is to be truly fulfilled, the design is to be legitimately evaluated, and the design activity is to have been purposeful and worthwhile.

**Review of literature**

According to Rush, Bessant, Hobday, (2007), technology development seems to have benefited mankind in every sphere of endeavour. Scott (2000) also explains that, our social life, workplace, manufacturing systems, road traffic administration, transportation, just to mention a few, have all seen immense improvement as technology advances. Cost of doing business is getting increasingly reduced as a result of important break-through in technology. The use of computers and sophisticated machines is really reducing the number of physical human hands that ought to be engaged and this obviously means cut in labour cost and its attendant reduction in production cost. Customer satisfaction is also benefiting from the impact of technology. The management of human resource at work places has witnessed tremendous improvement under the advent of modern technology. In the opinion of Garcia & Calantine (2002), staffs pay system, employee attendance management have all been revolutionized under the aura of technology. Management function is perhaps where technology is seen to have greatly enhanced business administration. Modern Technology enables more efficient management of inventory, enhances communication and goes a very long way to integrate and streamline every facet of management function. This research assignment will discuss the impact of technology on the above areas in addition to analyzing ways through which technology enhances quality, effective management and minimizing lead time in modern under-takings. Prior to doing all that, there is the need to review literature concerning the concepts and definitions of technology management.

**Importance of technology on business**

Almost all businesses and industries around the world are using computers ranging from the most basic to the most complex of operations. Technology played a key role in the growth of commerce and trade around the world. It is true that we have been doing business since time immemorial, long before there were computers; starting from the simple concept of barter trade when the concept of a currency
was not yet introduced but trade and commerce was still slow up until the point when the computer revolution changed everything. Technology according to Anjum Z. and Hadia B. (2017) has had a large impact on the business environment in terms of telecommuting. With broadband access and computers today, as well as smart phones, employees can work out of their homes, saving the company money by not needing as physically large a space to operate. With video conferencing, business meetings no longer need to be face-to-face, saving on air fare and hotel reservations. Social networking according to Kropsu-Vehkaperä, Haapasalo, and Rusanen, (2009) affects the business environment. Employees are connected to social networks. This can be a double-edged sword, however. An employee might post something about the business publicly which should not be shared. In addition, employees need to understand what gets posted for the public to see can have an impact on the work environment, especially if the employee is posting negative comments about the work environment or other employees.

On the flip side, businesses can use social networks to monitor customer satisfaction. For example, if a customer is not happy with a product and he posts his feelings online, the company can contact the customer and try to resolve any problems. Since social networks have links to friends and family, seeing the company work hard to make things right with the customer might turn the potential loss of a customer into the chance to gain new customers. The impact of technology on a business isn't restricted to business use. A business is also affected when consumers use technology. At one time, the only way some people had to file their tax returns was through going to either a certified public accountant or a professional tax preparer, or doing taxes themselves. The tax code is complex and some people might not have felt secure in preparing their taxes on their own. However, accounting software evolved to the point where many people simply had to answer a series of questions and the computer would do the rest, including filing the information electronically. Pilkington & Teichert (2006) suggest that, the advancement of technology in the workplace has assisted management in creating a more functional work environment. Technology such as video-teleconferencing equipment, data tracking software, and personalized business software has made communication and data sharing between remote offices a breeze. At Bankers Life and Casualty providing potential clients with the most up-to-date benefit and pricing information is very important. Information Tech has revolutionized the phase of business around the world. Local businesses have become international due to a simple website. I.T. has helped businesses in advertising. I.T. has helped in customer service, huge corporations like Microsoft attend to customer needs through email and chat services. Networking internal and external in organizations has improved the working of businesses. Staff and clients likewise can get in touch with the managers for feedback, progress reports and extensions.

Advantages of technology to business

According to Levin & Bernard (2008), technology affects the way companies communicate and establish relations with their clients. In a fast moving and business environment, it is vital for them to interact with clients regularly and quickly to gain their trust and to obtain customer loyalty. With the use of Internet and online social networks, firms interact with consumers and answer all their queries about the product. Establishing effective communication with customers not only creates rapport with them, but it also creates strong public image. It allows business enterprises to reduce and to cut carbon dioxide emissions. With the use of technological innovations, business owners and entrepreneur understand their cash flow better, how to manage their storage costs well and enables you to save time and money. Technology allows employees communicate and interact with other employees in other countries. It establishes clique and prevents social tensions from arising.

Analysis of how technology reduces lead time in organization

In the view of Kropsu-Vehkaperä, Haapasalo, and Rusanen, (2009) lead time can be described as the duration between the point in time at which a customer places order and the point in time at which the final product or services is delivered. Swift delivery of order hinge upon the efficiency of inventory management with the use of technology especially the enterprise resource planning (ERP) software an organization is able to integrate its services so that order received from the sales department is automatically or spontaneously picked up by the production department for the necessary action.
Through technology supply chain stakeholders especially suppliers of raw materials are able to monitor the inventory position of a company so as to act swiftly as soon as the re-order level is attained. What this means is that product goes on smoothly.

**Rationale and Need for the study**

The findings as envisaged would help produce more affordable locally produced goods like the Kente cloth, neatly packaged Shea butter wares, other agricultural products on the market and this should positively influence the livelihoods of the society. With the envisaged cost reduction in production, a lot of more local production related businesses would be established to absorb more hands so as to reduce the huge stock of unemployed youth in Ghana and other emerging markets. Those in the export business are likely to raise more foreign currency as a result of selling more at competitive prices. Ghana’s foreign exchange reserve position is therefore likely to improve when the research findings are adopted for implementation.

**Objective of the study**

The main objective of the study is to ascertain the strengths and opportunities associated with introducing modern technology in the traditional way of running the cottage and small industries for example Shea processing and Kente weaving in Ghana. Specific objectives include:

i. To ascertain the strengths associated with introducing modern automated production technology in the cottage and small business of Ghana.

ii. To identify the opportunities emanating from introducing modern technology into the traditional way of production in Ghana.

**Identification/defining research problem**

According to a World Bank report in June 2017, micro, small, and medium enterprises (MSMEs) drive employment, economic growth, and entrepreneurship across the globe. The report continued to support the fact these MSMEs form a large part of the global economy and in emerging markets, there are between 365-445 million MSMEs, which contribute over 50% of total employment and up to 40% of national income. But unfortunately, many of the owners of these segment of the economy has either been ignored or forgotten. Most of them receive little to no support in any form from the central government. Due to this deficiency, the cottage and small businesses are not able to expand their businesses by introducing modern ways of scaling up their production. It is in the light of the above that the study seeks to explore the prospects and make available for decision makers to understand how to address the issue which has the potential of turning around the economy.

**Thesis statement/hypothesis**

Ĥ: The introduction of modern technology into the cottage and small business industry will greatly improve upon the profit curve of the entrepreneurs.

H₀: The introduction of modern technology will have very little effect on the business prospects of local cottage producers in Ghana.

H²: The strengths of introducing modern technology into small businesses operating in Ghana are enormous and will lead to higher turnover for the producer.

H₀: The strengths of introducing modern Technology in small businesses trail behind the associated weaknesses thereby making the move, a non-starter.

H³: The opportunities available for introducing modern technology into small and cottage businesses are very enormous and therefore the project is worthwhile.

H⁴: The opportunities in the cottage business are not promising and for that matter investing in modern technologies for the local industry will be a non-viable venture.

**Literature review**

**Technology and technology management**

Technology Management (TM) is a multi-disciplinary field that is bridging the sciences and engineering disciplines to the business disciplines (Barnes, 2005). Even though TM is closely related
to innovation, they are actually two different disciplines (e.g. technological innovation is different from marketing innovation) that are explained by scholars such as Phaal and Probert (2006). It is argued that technology affects wealth and rent creations of the firms and nations. Therefore, managing technologies especially for technology-intensive industries such as semiconductor and pharmaceutical is crucial in determining the success of the firms. There are many definitions of TM in literature, but the one that is well accepted in literature and TM publications referring TM as: a process, which includes planning, directing, controlling and coordination of the development and implementation of technological capabilities to shape and accomplish the strategic and operational objectives of an organization. Technology management is the set of policies and practices that leverage technologies to build, maintain, and enhance the competitive advantage of the firm on the basis of proprietary knowledge and know-how (Buchanan, 2012).

This is similar to Rush et al (2007) in which they treat technology as one type of knowledge resources that can be divided into tacit and codified technological knowledge. In addition, claims 'the efficient utilization of technological resources is a critical aspect of the management of techno-economic enterprises. The early concept of technology as information holds that the technology is generally applicable and easy to reproduce and reuse (Keller, 2002). However, Brady et al (1997) contend that the early concept of technology contradicts with a strand of literatures on international technology transfer which holds that “technology is conceived as firm-specific information concerning the characteristics and performance properties of the production process and product design”. They further argue that the production process or operation technology is embodied in the equipment or the means to produce a defined product. On the other hand, the product design or product technology is that which is manifested in the finished product.

Lee, Kozar, & Larsen, (2003) suggests that technology is mainly differentiated knowledge about specific application, tacit, often uncodified and largely cumulative within firms. Thus, based on this argument, technology is regarded as the firm’s ‘intangible assets’ or ‘firm-specific’ which forms the basis of a firm’s competitiveness and will generally release under special condition. Arthur & Rowe (2011) propose that technology can include information that is not easily reproducible and transferable. Based on this argument technology is seen as “tacit knowledge or firm-specific, secrets or knowledge known by one organization”. Technology as the intangible assets of the firm is rooted in the firm’s routines and is not easy to transfer due to the gradual learning process and higher cost associated with transferring tacit knowledge (Burgelman, Christensen, & Wheelwright, (2004). Valuable technological knowledge which is the intangible assets of the firm is never easily transferred from one firm to another because the technological learning process is needed to assimilate and internalized the transferred technology (Anderson 1997). Barnes (2005) also considers technology as firm-specific information concerning the characteristics and performance properties of production processes and product designs; therefore, technology is tacit and cumulative in nature. Burgelman et al. (1996) referred to technology as the theoretical and practical knowledge, skills, and artifacts that can be used to develop products and services as well as their production and delivery systems. Technology is also embodied in people, materials, cognitive and physical processes, facilities, machines and tools. Dodgson, Gann, and Salter (2008), argues that technology and knowledge are inseparable simply because when a technological product is transferred or diffused, the knowledge upon which its composition is based is also diffused. The physical entity cannot be put to use without the existence of knowledge base which is inherent and not ancillary. Benamati, Lederer, & Singh, (1998) define technology as the integration of the physical objects or artifacts, the process of making the objects and the meaning associated with the physical objects. These elements are not distinctive and separable factors but form a ‘seamless web’ that constitutes technology.

**Technology transfer**

The definitions and concepts of technology transfer have been discussed in many different ways based on the disciplines of research and according to the purposes of the research. Marler, Liang & Dulebohn, (2006), view technology transfer is often a chaotic, disorderly process involving groups and individuals who may hold different views about the value and potential use of the technology. According to them technology often has no definitive meaning or value. Researchers, developers, and
users are likely to have different perceptions about the technology. A review of literature on technology transfer reveals that technology transfer is a complex, difficult process even when it occurs across different functions within a single product division of a single company. Technology transfer is commonly acknowledged to be a complex process that needs time to evolve (Edler, Meyer-Krahmer & Reger 2002).

Nevertheless, the economic theories for example Solow’s (1957) growth model, have often treated technology as given that is embodied in products or processes; where technologies that resemble blueprint, machines, or materials are easily replicated and transferred. The literatures on technology transfer and international technology transfer are extensive and varied in perspective from various disciplines which include political science, economics, sociology, public policy, marketing and management of technology (Scott, 2000). The issues that have been investigated, among other, are technology transfer process, appropriateness of technology, cooperation and conflict between transfer countries, the success of technology transfer, and the social and economic benefits of technology transfer for both suppliers and recipient countries (Liao 2005).

Past literatures have referred to technology transfer as the transmission of know-how to suit local conditions, with effective absorption and diffusion both within and across countries. Other early researchers for example Low, Chen, & Wu, (2011) defines technology transfer as transmission of know-how (knowledge) which enable the recipient enterprise to manufacture a particular product or provide a specific service. As compared to the sale of machinery and equipment, the transfer of technology requires a sustained relationship between two enterprises over a period of time to enable the receiving enterprise to produce the product with the desired level of quality standards and cost efficiency. This is consistent with the earlier argument by Stam & Stanton (2010) who argues that technology transfer does not only transfer the technical know-how (knowledge) required to produce the product to the recipient but also the capacity to master, develop and later produce autonomously the technology underlying the products. In the context of developing countries, Hoffman and Girvan (1990) argue that technology transfer needs to be perceived in terms of achieving three core objectives: (1) the introduction of new techniques by means of investment of new plants; (2) the improvement of existing techniques and (3) the generation of new knowledge.

Since the term “technology transfer” provides many dimensions, it has often been used to describe the process by which ideas and concepts are moved from the laboratory to marketplace the transfer and knowledge and concept from developed to less technologically developed countries and the transfer of inventive activities to secondary users. Phaal, Farrukh, & Probert, (2006) suggest a broader definition by proposing that technology transfer involves an intentional, goal-oriented interaction between two or more social entities, during which the pool of technological knowledge remains stable or increases through the transfer of one or more components of technology.

**Technology adoption and diffusion theories**

Technology adoption is one of the mature areas of research in information systems. Carr (1999) has defined technology adoption as the ‘stage of selecting a technology for use by an individual or an organization while the term diffusion refers to "the stage in which the technology spreads to general use and application" (Rogers, 2003). Therefore, while the term adoption is used at individual level, diffusion can be thought of as adoption by the masses. With rapid strides being made in technology innovations in every conceivable domain, the issues related to technology adoption have gained increasing prominence in recent times. Huge investments are made by organizations and governments for introducing new technologies that have the potential of bringing a paradigm shift in the life-style of the users. However, these investments may not yield results if the innovations are not adopted by the intended users. Initial failure of diffusion of Electronic Health Record (EHR) systems in US and Enterprise Resource Planning (ERP) Systems are some of the examples of the technologies that failed to take off in spite of promising start (Addo & Helo 2011). More recent examples are that of cloud computing and e-Government that were promising in respect of the advantages they offered to the users but still have not been adopted by the users to the extent expected (Low et al. 2011). Several studies have revealed that technology adoption is not related to the aspects of technology alone but has evolved as a much more complex process involving dimensions of user attitude and personality social influence
trust and numerous facilitating conditions. It is necessary to understand the evolution of this research area in Information Systems and look at future research opportunities (Lichtenthaler, 2008).

**Adoption and diffusion models**

Adoption theory examines the individual and the choices an individual makes to accept or reject a particular innovation (Liao 2005). In some models, adoption is not only the choice to accept an innovation but also the extent to which that innovation is integrated into the appropriate context. Adoption theory, then, is a micro perspective on change, focusing not on the whole but rather the pieces that make up the whole (Roger, 2003). In contrast, diffusion theory describes how an innovation spreads through a population. It may consider factors like time and social pressures to explain the process of how a population adopts, adapts to, or rejects a particular innovation. Diffusion theory takes a macro perspective on the spread of an innovation across time (Kropsu-Vehkapera et al, 2009). There is no one model for understanding the processes in which an individual engages before adopting a new innovation. Historically, adoption is understood in terms of some kind of behavior change (Scott, 2000).

Adoption and diffusion of new health behaviors, like smoking cessation or weight loss programs, have been studied in the medical and healthcare fields. Additional models have come out of sociology education and computer science. Whereas the results of adoption theory are measured in terms of behavioral change, the predictors of that behavioral change can be understood through contextual, cognitive, and affective factors. Existing theories deal independently with these factors but no one theory accounts for all three (Roger, 2003). Rogers’s theory of innovation diffusion provides a foundational understanding of adoption theories. Rogers’s theory has been used broadly across disciplines to comprehend and predict change. Although Rogers’s theory is a critical foundation, it is not always easily applied to understanding adoption. Although several research studies seek to understand adoption process, only a few theories are widely used in the current literature. A review of the research in education revealed two primary theories of adoption applied in the current education literature. First, the Concerns-Based Adoption Model (CBAM) has been used to understand change in terms of technology (Luggen & Tschirky, 2003).

The CBAM has been used to understand teacher change in curriculum change and adoption of a consulting teacher model as well as specifically technology change and adoption. In contrast, the Technology Acceptance Model (TAM) and the Universal Technology Adoption and Use Theory (UTAUT) are originally based out of computer science specifically to answer questions about technology adoption (Sahlman & Haapasalo, 2009). They have also been applied to many educational settings including understanding adoption by student teachers, implementation of laptop-based testing, and adoption of online learning. Finally, both adoption and diffusion theories are referred to collectively as adoption-diffusion theory because the individual differentiation of the two is beyond the scope.

**Advantages of introducing technology into small businesses**

Technology change has been beneficial to both organizations and its employees. The adoption of technology innovations by organizations has exploded over the last few decades with global spending on technology across all industries reaching an estimated $2.6 trillion (Schilling 2008). This growth had been in large part to the use of the internet which has increased by over 200% between the years of 2000 and 2007 based on statistics from Internet World Stats. In general, technology change can bring increased efficiency, improved quality, assist in bringing products to market quicker and expand the skill set of employees’. Technology can also bring benefits such as improved communication, reduced costs and help foster new innovations. Additional benefits may be seen depending on the specific type of technology that is being implemented Luo, Hilty, Worley, & Yager, (2006). With organizations moving to things such as telecommuting, technology can increase participation and involvement with remote employees. Technology can expand the potential pool of participants that are working and collaborating together on projects through shared databases, on internal intranets and the internet. Technology solutions now allow the ability to overcome the limitations of remote employees providing the ability for individual participation and input from all over the world regardless of location. This benefit allows for employees to work at times that are more convenient for them but still provides for collaboration and communication across a team (Rothaermel & Hill 2005).
According to Agboola & Salawu (2010), new technology can also help organizations stay more in touch with their market. Rapid changes in the economic landscape of today’s business environment require action to meet customer expectations. Failure to stay current on customer needs and market changes could result in the loss of any competitive advantage an organization may possess. Additionally, keeping current on the latest technology could allow an organization to seize any possible opportunities that are not being filled by a competitor. Information Technology should help organizations understand their position in relation to their competitors, learn about customers, monitor relationships with suppliers, and control strategic objectives (Affeldt, & Silva 2013). The use of new technology can help make a business more agile and adaptable to the changes going on in their particular market. The addition of new technology can also benefit an organization by helping to shape its strategic vision as well as helping it to gain a competitive edge on their competition (Carr, 1999). Having a strategic vision will help to focus an entire organization on what they are trying to achieve and what their goal is. Doing so will create a competitive advantage that will lead to increased sales, profits and an increased market share. This benefit (strategic vision) also extends to the staff of an organization by communicating where it is going and how that technology is going to help them achieve the vision (Khalil & Bayraktar 1990).

Technology management and implementation strategies

Once an organization has selected and approved a new technology tool, it must be implemented and introduced to employees. Organizations failing to introduce their planned changes successfully can pay a high price that could lead to lost market position, credibility with stakeholders, decreased staff morale, and loss of key employees (Chanaron et al, 2002). When embarking on a technology change that will impact an organization, a great deal of thought must be put into the implementation of that change. Successful implementation of technology change, requires visionary leadership that has considered the benefit, consulted with influential leaders at all levels to identify unintended consequences, identified sources of resistance, and developed a detailed plan to foster the implementation over time (Luo et al 2006). Spending the time to carefully create a well thought out plan for implementation is the key to success. Thought should be put into demonstrating how the new technology will serve all staff and not just management. Failure to communicate this to users may cause the implementation effort to fail despite considerable time and effort spent on the roll out.

Staff impact – communication

The implementation of any new technology should be communicated to staff. Items such as status, benefits, training and expectations should be clearly provided (Carr, 1999). Along with the “what” of the change, the “why” should be emphasized to provide staff with an understanding of the changes that are going to occur and what will be expected of them. To do this effectively the nature of change should be defined and why it is important to the users and is helpful if this definition explains how the change will affect the individuals both personally and professionally (Cetindamar et al, 2006). This message can be provided in various ways depending on the organization and methods they have for communication. Information about the change can be provided through things such as email, newsletters, the company website, staff briefings or town hall meetings.

The communication about the changes should also be tailored to the different levels and roles within an organization as each will react different to the changes that are being made. Open communication between managers and employees is an important part of making a technology change and should be encouraged. Research has shown that employees want to hear about changes directly from their manager so it is vital that open communication take place between management and their employees (Dodgson, Gann and Salter (2008). Having an open dialog like this can help to get employee “buy in” and reduce the amount of resistance to the change being made. Getting people talking about the reasons for the change and allowing them to express their views will more than likely get the required backing from employees’ for the change that is going to be made. Additional benefits of this communication will allow staff to see how the change and new technology can improve their jobs.
Small and cottage industry and innovation

The textile industry for instance, according to Kadolph (2007) comprises a diverse and fragmented group of establishments that produce and/or process textile-related products like fibres, yarns, and fabrics that are further converted into apparel, home furnishings, industrial goods, and for technical application. Textile establishments receive and process fibres; transform fibres into yarn, or webbing in case of non-wovens; convert the yarn into fabric or related products; and dye and finish these materials at various stages of production (Sykas, 2005). The process of converting raw fibres into finished apparel and non-apparel textile products is complex. Conventionally, textile manufacturing is characterized by the use of technologies not only limited to advanced machinery for making textile products but also includes improvements on the production process itself. Application of techniques of industrial engineering, maintenance management and computer aided processes have improved the process further (Low, et al 2011). The continual improvement programmes like Gemba Kaizen has enhanced productivity and quality of products. An independent case study indicated that implementation of Gemba Kaizen management philosophy improved productivity of the company considerably, reduce material wastage and enhance overall profitability (Schraeder, Swamidass, & Morrison, 2006). Application of Enterprise Resource Planning in the manufacturing sector has led to improved levels of efficiency in operation, with basic manufacturing modules such as inventory, production planning, procurement, sales, and human resource being linked through an Information Communication Technology (ICT) backbone. The overall effect of the linkages is seamless flow of information and activities right from raw material procurement through to the finished products, and their delivery to the customer (Rogers, 2003).

By use of these technological concepts, the enterprises are able to achieve optimal production of high-quality goods at reduced production costs, thus ensuring customer satisfaction. However, the use of technological concepts finds limited applications in the textile cottage industries. Most cottage industries in the developing countries employ relatively old and or outdated technology in their production, with most production being done manually (Quartey & Abor 2011). There is little or no application of principles of product or process standardization, whereas in developed countries the basics techniques of production have advanced to automation and use of robotics. For the small scale industries to compete effectively within the market and have vertical linkages with big industries they have to improve on their level of productivity, standardize their products and monitor their quality. Textile cottage industries stand to gain immensely through establishment of outsourcing opportunities. For the textile cottage industries to outsource, they are required to put in place production strategies that allows for product quality and standardization in line with respective standard bodies existing within a country. The cottage industries can achieve these by adapting modern technology (Kadolph, 2007).

Technology and small scale (grass root) business

New technologies, according to Liao, (2005) had a great impact on all aspects of life and the global society and economy is undergoing a fundamental transformation. Society is changing and is becoming “knowledge society” more dependent on new technologies, with a new economy or “knowledge economy”; where knowledge and information are essential and the key factor of production and where ideas, processes, knowledge and information are growing share of trade in the knowledge economy (Low et al 2011).

Information and communications technology (ICT) represent an enormous opportunity to introduce significant and lasting positive change across the developing world (Affeldt, & Silva 2013). The rapid penetration of mobile access in particular has resulted in considerable improvements in the lives of the poor in both rural and urban contexts. All evidence suggests that this trend is going to continue, as the availability expands and the cost of access continues to decline. The breathtaking pace of penetration and uptake of mobile telephony and broadband Internet is supporting many new possibilities, products, and services; providing breakthrough ideas in agriculture, health, education, and access to finance; and helping local and international trade. According to Rothaermel & Hill (2005), it also provides new ways of communicating and lobbying, which transcends international borders, as shown by the role of mobile phones and the Internet in the waves of revolution that spread across Northern Africa in 2011.
In the information society environment successful enterprises produce high technology goods and services and transform human effort materials and other economic resources into product and services that meet customers' needs (Lai, 2007). In such society, in order to be successful, SME would need high quality information and must always provide superior value, better than competitors, when it comes to quality, price and services. SME are often seen as vital for the growth and innovation of economies and the long term of economic development of the countries depends on the promotion of SME sector. Behind this lies a common recognition that SME play an important and a key role in revitalization and development of national economy in many countries by providing various goods and services, forming a structure of division of labour and developing regional economies and communities (Arthur & Rowe, 2001). Furthermore, SME are considered key agents of social and economic growth and are increasingly becoming the most vital part of the economy since they play a key role in fostering growth, creating jobs and reducing poverty.

Globalization of world economy and technological developments in the two decades of twentieth century have transformed the majority of wealth creating work from physically based to knowledge based and has greatly enhanced the values of information to business organization by offering new business opportunities (Phaal, et al 2006). While, for the last two hundred years, economics has recognised only two factors of production: labour and capital, this is now changing. Information and knowledge are replacing capital and energy as the primary wealth creating assets. Information has become a critical resource, a priceless product and basic input to progress and development. Information has become synonymous with power. Therefore, accurate, rapid and relevant information are considered to be essential for SME (Pilkington, & Teichert, 2006).

SME would need as well as effective information systems to support and to deliver information to the different users. According to Carr (1999) such information systems would include technology that support decision making, provide effective interface between users and computer technology and provide information for the managers on the day-to-day operations of the enterprises. Information is needed for various purposes and serves as an invaluable commodity or product. Information is very important aspect of decision making in all levels of management in enterprises especially in competitive business environment and managers utilize information as a resource to plan, organize, staff administer and control activities in ways that achieve the enterprises objectives. The ability of SME’s to realize their goals depends on how well the organization acquires, interprets, synthesizes, evaluate and understands information and how well its information channels supports organizational processes (Chun, 2007).

Research methods

This chapter explains the method used to address the research problem identified in this study. It presents the research design, population and unit of analysis, nature of sample and sampling procedures, type of data and methods of data collection. Also, sources of data, reliability and validity of the research instrument, data collection procedure and data analysis procedure have been discussed in the chapter. Research design

Creswell (2013) has affirmed experiments, surveys, grounded theory, ethnography and case study as some research designs to help a researcher approach a study. A research design captures the philosophy of the research process including assumptions and values that serve as a rationale for the research and standards that the researcher uses for collecting, unionizing, and integrating the solicited data for unearthing research findings required at drawing research conclusion (Kumar, 2005; Kothari 2004). The quantitative descriptive method linked with the positivist paradigm was used in this study. Again, this research was an ex-post facto study in terms of the researcher’s direct control on the independent variables and quantitative as regard to its methods of analysis in achieving the study objectives (Yin, 2009). Following Creswell & Plano (2011) this research design was suitable for the fact that the researcher sought to explore the possibility of introducing modern technology in the cottage & small business industry in Ghana. This design ensured that variables were measured numerically via instruments that allow for data analysis through statistical procedures (Creswell, 2013).
Population of the study

A population is the totality of the objects under the investigation and from whom data was obtained (Zikmund & Babin, 2010). It is a set of all cases of interest that are within the reach of the researcher (Hennink, Hutter, & Bailey, 2011). With respect to this study, all identified cottage and small businesses in selected urban and semi-urban centers as well as officials of stake holder institutions like National Board for Small Scale Industries, (NBSSI), Vegetable producers & exporters, Ghana (VEGPEG) and Ghana Export Promotion Council.

Sample technique, sampling size and sampling procedures

Purposive sampling technique was employed to pick up 80 cottages and small businesses respondents and 60 staff of stake holder organizations

The sample size percentage was obtained by using Spiegel’s (1988) formula:

\[ n = \frac{f}{\varepsilon f} N \]

where \( n \) is the sample size percentage of each study area, \( N \) is the total of the sample percentage and \( f \) is the number of officials in each study area.

A sample is defined as a smaller unit or representation of an entire population. Booth, Colomb, Joseph & Williams (2008) have confirmed that the size of a sample and the way in which it is selected has implication for the confidence in the data and the extent to which generalization can be made in a research. Normally generalization about population in quantitative studies requires researchers to select large sample size to minimize the likely error in generalizing to population and vice versa. However, it is worth declaring that a sample usually depends on the population size, available resources, and degree of homogeneity or heterogeneity among the population and method of sampling (Kumar, 2005).

In a study like this, a sample depicts any well calculated representative group from which data was solicited for analysis, presentation, and interpretation (Zikmund & Babin, 2010). Reliance on a sample allows researchers to save time and money, gets more accurate information, and also obtains information that may not be otherwise available (Hennink et al, 2011). This study adopted purposive sampling to select its final respondents. The suitability of purposive sampling was justified on the grounds that the researcher wanted to identify specific weavers and officials with in-depth knowledge that should help meet the objectives of the study (Kothari, 2004).

Research instrument

Both interview guide and the questionnaire technique were employed as research instruments to pick-up the relevant information for the study. The use of the questionnaire afforded the respondents the flexibility of using their private leisure time to honor the dictates of the questionnaire. The use of interview guide to solicit information from some owners and workers was borne out of the fact that most of them could hardly read or write and for that matter could not do justice to the questionnaire.

Data sources

Data comprised both primary and secondary sources. In the case of primary sources, the data were accessed through respondents from the questions on the questionnaires and the answers recorded from the interview guide obtained from the operators of small businesses. Secondary source of data came from contemporary scholarly academic papers, relevant articles on technology integration, technology management grass root technology as well as cottage and small businesses in Ghana.

Data analysis

The study adopted the quantitative statistical data analysis technique under which general descriptive statistics through percentage tabulation and figures were used to present analysed data which were interpreted to achieve the objectives of the study. Data analysis primarily dealt with respondents’ demographics and issues relating to research questions to meet the objectives of the study. Specifically, elicited quantitative data was analyzed via SPSS (version 21). Data were first edited to ensure completeness, accuracy clarity and uniformity. Edited data were then entered in statistical technique (SPSS) to improve the quality of data for coding and thus actual analysis that categories responses into percentages that were presented with the help of well labeled tables and charts.
Validity and reliability of measurements

Following Creswell & Plano, (2011) the researcher established the quality of his research against the four criteria of reliability, construct validity, internal validity and external validity. A test of construct validity was carried out to ascertain if the researcher had succeeded in conceptualizing correct operational measures for the study (Yin, 2009). Internal validity aims to find cause for related events in causal explanatory research like this study. Again, external validity details the domain within which findings of this study can be generalized via replication logic. Validity in research implies accuracy of a research instrument, validity of research technique and validity of the research report. The reliability criteria ensured that future researches yield similar consistent results using the same tools and procedures that were used in this study (Winsome & Johnson, 2000). To ensure validity and reliability, the research questionnaire was drafted only after careful review of relevant literature on the research problem to account for all variables in the objectives of the study. The questionnaire was drafted under the guidance of the supervisor for this thesis. The supervisor made sure only relevant items were included. Besides, the questionnaire was pretested on 15 respondents to ensure its validity. The pre-test enabled the researcher to identify irrelevant and ambiguous as well as relatively difficult items and had them deleted, clarified and simplified respectively to suit the study needs. Likewise, simple language was used in the study’s instruments to facilitate easy understanding. Further, for consistency, views of respondents were weighed against that of available records in all instances. Moreover, only relevant data were collected to have consistent data as un-attended questions were deleted during data analysis. Finally, Cronbach alpha values were calculated where applicable to ensure reliability in the study’s instrument.

Ethical consideration

Creswell (2009) discussed how ethical issues may arise during a study and what researchers envisage during the writing process of a thesis. Creswell described measures that can be taken to reduce the likelihood for ethical issues to develop. Researchers need to assess potential for risk, such as physical, psychological, social, and economic and any legal harm (Creswell, 2009, p. 89). In order to ensure protection of participants, the researcher ensured these ethics. Ethical considerations dealt with moral standards that this researcher considered at all stages of the research. The researcher aware of the ethics associated with studies such as the current one took suitable steps to enlighten respondents on the relevance of the study and the need to sustain confidentiality by not presenting any form of identity on the questionnaire (Kumar, 2005). Silverman, (2013) stressed the importance of ethics in research. Ethical issues in data collection basically relate to respect, beneficence and justice as stated by the Belmont Report. Precise and easy-to-understand language were used to help draw subjects’ attention to the risks and benefits associated with their participation, as well as total assurance of respondents’ confidentiality (Kothari, 2004). Respondents were also informed of their right to opt out of the study at any point.

Data analysis and discussion

Demographic features of respondents

This segment presents the personal information of and stakeholders institution officials.

Gender and age of respondents

Findings on the gender and age distribution of respondents have been presented in table 4.1.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 30 years</td>
<td>10</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>31- 40 years</td>
<td>25</td>
<td>30</td>
<td>55</td>
</tr>
<tr>
<td>41 -50 years</td>
<td>20</td>
<td>16</td>
<td>36</td>
</tr>
</tbody>
</table>

Table 4.1. Frequency table on gender and age distribution of respondents
Table 4.1 – shows that there are more women in the cottage & small business than men. In fact, out of 140 respondents 76 (i.e.54.3%) are women while the remaining 64 (i.e.45.7%) are men. Table 4.1 also indicates that 55 (i.e.39.4%) respondents happened to be younger than 40 years suggesting that the younger persons holds that segment of the economy. It is difficult to explain why unemployment stock levels are high yet the youth especially the are the most engaged in the small businesses. Perhaps when modern technology is introduced a lot more youth will be attracted to this segment of the economy to bring the levels down. This presupposes that if these young professionals were properly motivated through career development activities and sound compensations packages, a lot more professional will learn more risk mitigation skills to help manage the small business sector of Ghana the short lives associated small businesses.

**Analysis of Issues Associated with Strengths of Introducing Modern Technology in the cottage and small Businesses.**

Presented and discussed here under are analyzed data and discussions in respect of respondents and officials from stakeholder’s institutions.

<table>
<thead>
<tr>
<th>Frequency table on importance of mobile technology to small businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response Type</strong></td>
</tr>
<tr>
<td>It makes contacts with customers much easier for business growth.</td>
</tr>
<tr>
<td>Other potential customer comes on board to do more business.</td>
</tr>
<tr>
<td>It’s is much easier to contact supplier, of raw material.</td>
</tr>
<tr>
<td>Financial institutions could easily pick up information for business growths.</td>
</tr>
<tr>
<td>Business and family matters turn to flow properly through use of phone.</td>
</tr>
<tr>
<td>Phone facilitate relationship with trade association,</td>
</tr>
<tr>
<td>Statutory payments are enhanced through phone application.</td>
</tr>
</tbody>
</table>

Source: Field Data (2018)

It is visible from table 4.6, - that out of 140 respondents interviewed 134 (i.e. 95.7%) respondents noted that the telephone technology really made it such easier for customers to contact them thereby enhancing their business prospects. One hundred and twenty-nine (i.e.92.1%) respondents also pointed out the telephone has made it a lot more-easier to contact suppliers leading to reduction in lead time and helping to produce more for more revenue and by extension more money. This finding is in consonance with views put forward by Selliling (2018) who researched into the impact of technology of grass root business. The source noted that appropriate technology has the propensity of enhancing relationship of producers on one side and customers and raw material supplier on the other side.

Sykas (2005) also adds that technology often change positively the face of doing business. It was the conviction of 121 (8641%) respondents that through the use of telephone other new customers were able to come on board leading business as the fact that family and business matters flow much easily. In the opinion of 120 (i.e. 85.7%) respondent telephone enables its financial institutions to pick up information much more rapidly to aid lending purposes. According to 133 (i.e. 95.0) respondents, one other benefit of telephone to small business has to do with the ease with which statutory payment are conducted. 134 (i.e.95.7%) respondents saw telephone technology as having their business members in
relating more positively with the trade association. Generally, the respondents saw technology as a good thing to aid manufacturing and business operations. This fact was confined by Cetindammar (2006) who studied the effect of technology on cottage industry operations and upheld the idea that technology really refines products and therefore adds value to the quality of products and services.

Table 4.7. Frequency table on respondents’ views on introducing technology

<table>
<thead>
<tr>
<th>Response Type</th>
<th>Frequency (Out of 140)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just as the telephone technology promoted my business relationship so will a new weaving technology enhance my operation.</td>
<td>136</td>
<td>97.1</td>
</tr>
<tr>
<td>A new weaving technology will make our wares neater and more attractive.</td>
<td>129</td>
<td>92.1</td>
</tr>
<tr>
<td>The new technology will help us to produce more in a short time.</td>
<td>134</td>
<td>95.7</td>
</tr>
<tr>
<td>New technology will enable us expand our operations and take on more people.</td>
<td>134</td>
<td>95.7</td>
</tr>
<tr>
<td>The envisaged new technology will help come up with new designs that should help expand our product profile.</td>
<td>130</td>
<td>92.8</td>
</tr>
<tr>
<td>Introducing technology will help conduct series of research that will help stabilize the industry.</td>
<td>134</td>
<td>95.7</td>
</tr>
<tr>
<td>By introducing technology, the industry will become very attractive for the youth to join the industry.</td>
<td>129</td>
<td>92.1</td>
</tr>
</tbody>
</table>

Source: Field Data (2018)

Findings of the study

Based on information gathered from the field, the following findings can be registered:

Usefulness of telephone technology to small businesses

The study revealed that some of the importance of phone technology to small and cottage business includes the fact that:

- It makes contacts with customers much easier for business growth.
- Other potential customer comes on board to do more business.
- It is much easier to contact supplier, of raw material.
- Financial institutions could easily pick up information for business growths.
- Business and family matters turn to flow properly through use of phone.
- Phone facilitate relationship with trade association,
- Statutory payments are enhanced through phone application

Benefit to government from introduction of technology into small businesses

It came out from the study that; government could benefit from technology introduction in cottage business which includes the fact that more jobs will be created to reduce the unemployment stock in the country. These businesses are likely to make higher profits leading to improvements in their purchasing power and invariably increase their contribution to the national GDP and with the small businesses becoming less stressful a lot more investors will come on board leading to paying more tax revenue to the state. Furthermore, improvement in foreign exchange reserve position of the country will lead to comfortable exchange rate with positive effect on macro-economic indicators like interest rate, inflation, etc. With more innovative machines coming through the ports as well as weaving materials, government agencies are likely to collect more import duty revenue to the state.

Strengths of technology introduction in small businesses

It came to light that, strengths of technology introduction in cottage business include:

- Businesses can save time and do more to raise more revenue.
There will be proper management of inventory.
Product will be neater with technology introduce.
Efficiency will be embraced to rake in more profit.
Generally, output will be increase to improve business fortune.
Technology will shorten lead time for receiving raw materials and delivery finished products to increase profit.

Opportunities in introducing modern technology in small & cottages business

The study gathered that, opportunities in introducing modern technology in small business includes the fact that;
- Price of products is likely to come down thereby making them affordable to a lot more people.
- Government of Ghana is likely to raise more foreign exchange to strengthen its spending.
- Production increasing revenue and profit accruing to weavers will increase.
- Cottage and small business will appear lucrative and therefore attract the youth into the industry.
- With supply chain activities increasing more jobs will be created to reduce the huge stock of jobless youth.

Summary, conclusion and recommendation

The objective of this study was to analyse the prospects of introducing modern technology into the operations of small businesses and cottage industries. Specific objectives include ascertaining the strengths associated with introducing modern technology into the small business segment of the economy of Ghana and also to identify the opportunities emanating from prudent management of the technologies. The importance of the study lies in fact that the findings and recommendations will go a very long way to enrich the body of knowledge on the subject of improving the operations of small production businesses in Ghana. Once the introduced technology is managed well, these businesses can explore the possibility of further enhancing prospects in the business through joint venture-ship and other business collaborative deals. The findings if implemented well will empower cottage and small businesses to raise more foreign currency as a result of selling more at competitive prices.

The study also featured the research design, population of the study, sampling technique, research, instrument, questionnaire distribution and data collection and data analysis. Purposive sampling technique was employed in selecting the respondents for the study while statistical Package for Social Science (SPSS) facilitated the analysis of field data. Findings of the study were presented and analysed and these were arranged in consonance with the order in which the research objectives of the study were indicated.

Conclusions

The study sought to explore the prospects of introducing new and modern technology in the cottage and small businesses in Ghana building upon the traditional way of production. The study concludes that it is highly feasible to introduce modern technology in the industry because the strengths of increasing industry revenue thereby raising the standard of living of the traditional cottage or small business is very high. A lot of opportunities also exist to increase the foreign exchange reserves of the country as well as creating more jobs to reduce to high unemployment levels amongst the youth. With prudent advice and management of the technology to be introduced, the prospects are very high and feasible.

Test of hypothesis

The first hypothesis that the introduction of modern technology in the cottage and small businesses business in Ghana will help increase the profit curve of the entrepreneurs is accepted and its null hypothesis H1.0 rejected. This is because it came out from the study that such technological innovation will not only result in more products and more revenue within much shorter times but also attract the youth to take up traditional vocations thereby strengthening the sustenance of the industries. The second hypothesis that the strengths of introducing modern technology are enormous and that these will lead
to higher turnover to existing traditional local businesses is also upheld and its null hypothesis i.e. $H_{2.0}$ rejected. This emanates from the fact that the introduction will attract lot investors whose activities could help raise income levels in the cottage and small trade. The third hypothesis that the opportunities in the cottage business are enormous and that introducing modern technology into the industry is accepted and its null hypothesis $H_{3.0}$ rejected because the study found out that the new technology will help create jobs to reduce unemployment stock as well as assist in augmenting the foreign exchange reserve levels of the country.

**Recommendation**

Considering the opportunities and strengths uncovered in the study, the following recommendations can be made: First and foremost, the government must make it a policy plan through the ID1F agenda to deliberately propel the economy through empowering the entrepreneurs of these small and cottage businesses by helping them to secure soft loans for expansion. This should be done by engaging both local and foreign partners to secure modern equipments which will be used in achieving this goal. For this to be achieved, Hoffman and Girvan (1990) argue that technology transfer needs to be perceived in terms of achieving three core objectives: 1) the introduction of new techniques by means of investment of new plants; (2) the improvement of existing techniques and (3) the generation of new knowledge. Finally, the government must actively engage private partners who will be willing to support this agenda knowing the enormous benefit this will bring to the economy.

**References**


“Assessing the Type of Advertising Influencing Consumers’ Behaviour of Telecommunications Firms in Ghana: A Case Study of MTN Ghana”

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Abstract

The purpose of the study was to assess the type of advertising influencing consumers’ behaviour to respond to offerings of MTN Ghana. The study adopted the survey design. Convenient sampling technique was used to gather data from a sample of 124 customers of MTN Ghana in Accra and Kumasi using a structured interview guide and data analyses carried out using SPSS version 20. The findings of the study reveal a steady growth of advertising of MTN Ghana. At another level, the study shows broadcast advertising ranked 1st, outdoor advertising ranked 2nd, print advertising ranked 3rd, public service advertising ranked 4th and celebrity advertising ranked 5th as the type of advertising employed by MTN Ghana to influencing consumers’ behaviour to respond to the company’s offerings. Based on the findings, the study recommends MTN Ghana to consider fostering strong laden-relationships with consumers to retain them. Also, the study recommends MTN Ghana strengthening the use of broadcast, outdoor and print advertising since they contribute significantly to influencing consumers’ behavior to respond to the company’s offerings. Notwithstanding, public service and celebrity advertising should not be ignored since they also contribute to influencing consumer behaviour to respond to the company’s offerings.

Keywords: advertising and consumer behavior.

Introduction

Background of the study

In today’s world of competitive business environment, advertising is taken as an important tool to gain customer attention and to give information on product. All around the world, billions of dollars are invested in advertisement of products and brands. In the year 2008 only, advertisement expenditure of US, UK and China was $ 158,547 million, $26,802 million and $57, 077 million respectively (Warc, 2009). According to statistics media, the money spent on advertising in Finland was 1313.1 million euro in 2012 and 1206.7 million euro in 2013 (Finnish Advertising Council, TNS Gallup, Ad. Intelligence 2014). Thus, Advertising spends across all media accounted for INR 300 billion in 2011, contributing to 41 percent of the overall M&E industry’s revenues (FICCI-KPMG report 2012). Researchers in the United States have estimated that by the age of 18 the average American will have seen around 350,000 commercials (Law 1994:28). Love them or hate them, you cannot avoid them. As countries and businesses are spending these huge amounts of money, there must be some main reason behind it. The main reason might be to increase sales or profits. According to Khan (2007), advertising has become very useful and have gained the status of an independent discipline and have grown at very fast speed where companies use it to differentiate their products. According to Kotler, it is vital that companies differentiate themselves from competitors by creating even more powerful, entertaining and innovative advertising messages, as well as sponsoring different events. In a similar vein Raymond Williams (1980) has called advertising ‘the magic system, …a highly organized and professional system of magical inducements and satisfactions functionally very similar to magical systems in simpler societies but rather strangely co-existent with highly developed scientific technology’.

In Ghana, the use of advertising by most businesses has increased drastically due to fierce competition. The telecommunications industry is one of such examples. Currently, there are five networks operating in Ghana, namely, MTN, TIGO Vodafone, Airtel, Glo (NCA, 2016). The National Communications Authority, (NCA) statistics 2018 showed that, the total cellular/mobile voice
subscriber base in Ghana as at January, 2018 stood at 23,534,581 with MTN Ghana, commanding 13,681,145 subscribers. The fierce and rivalry nature in the industry has compelled the firms to use competitive advertising as one of the means to woo consumers. They engage in advertising through various media, coming out with different themes of advertising almost every quarter. According to Kotler (2009), advertising is any paid form of non-personal presentation and promotion of ideas, goods or services by an identified sponsor through print media (newspapers and magazines), broadcast media (radio and television), network media (telephone, cable, satellite, wireless), electronic media (audio tape, video tape, video disc, CD ROM, webpage) and display media (billboards, signs, posters). The major aim of advertising is to create positive attitude towards the advertisement and the brand until the consumer purchases that product and through this positive attitude, it creates an emotional response in the mind of the consumer (Kotler 2009). It is believed that MTN Ghana advertises for this purpose. The study therefore assesses factors influencing consumers to respond to MTN Ghana’s advertisement.

Problem statement

The major aim of advertising is to increase purchases, reinforce attitudes, and to inform potential customers about a product (Wright and Crimp, 2000). However, it is not clear whether the use of a particular advertising leads to increase in sales or influences consumers’ behaviour. A report from Delta partners, titled “Ghana Telecommunications Market-perspectives on industry, economic and competitiveness” dated October, 2016, noted that market leader MTN alone paid GHC 1.218bn being 6.94% of government income for 2017 and 69.4% of taxes and levies from the telecom industry. As such, it is of no surprise that the number of mobile network providers in Ghana has increased over the years due to the industry’s lucrative nature. Telecommunication firms buy slots or airtime on the radio, television, newspapers, bill board spaces and other media for the purpose of advertising their products, with the hope of yielding expected returns in the volume of sales of the company.

There is a lot of debate as to whether the intensive use of advertising actually influences consumer behaviour. Surprisingly, Ghanaians have been made to love MTN as they see it as the funky network that everybody is on. MTN phone communication is meant to ease life and add flavour to it. However, it has turned out to be a nuisance to consumers in the past few years, fed-up subscribers of MTN Ghana have continuously and publicly complained of bad network and unsolicited marketing advertising messages from the company (Wafula, 2009). O. Annabel, a subscriber on the network, published her complaint in one of the daily newspapers of August 27, 2016. She said “I am really growing weary of all the unsolicited text adverts messages of all kinds.” Despite the intermittent interruption in the network, MTN still keeps intensify their advertisement and campaign to increase market share. For example, the market share of MTN Ghana rose from 46.43% in 2015 to 58% in 2017 (NCA, 2017). It is ambiguous, MTN with its bad network still increase its market share and whether any type of advertising, promotional is solely capable of influencing MTN subscribers’ behaviour. A number of other factors may influence consumers’ decision to buy MTN product (Bakamitsos and Siomkos, 2003) and this includes other marketing communication stimuli such as product quality, packaging, price, brand image (Williams, 2003). The problem is, what type of MTN adverts, is used to generate the desire level of favourable responses? Due to the afore-mentioned problems, it has therefore become prudent for this study to be conducted to assess the type of advertisement of MTN influencing consumers’ behaviour to response to their offerings.

Specific objectives of the study

In order to achieve the stated aim of the study above, the following objectives have been set.

1. To conduct incidences of trend analysis of MTN Ghana’s advertisement.
2. To examine specifically the type of advertising influencing consumers’ behaviour to respond to offerings of MTN Ghana.
3. To identify the underlying factor(s) influencing consumer behaviour to respond to advertising of MTN Ghana.
Significance of the study

The outcome of this study will help MTN Ghana to take advertising more seriously to give them a better exposure in the fast-growing competitive markets. Equally, the study should aid MTN in identifying that particular type of advertising influencing consumers’ behaviour to respond to their offerings in relations to that of their competitors. Again, the study would also serve as a reference material for students and marketing practitioners who would want to delve further in the area of advertising.

Scope of the study

This study focuses on the type of advertisement influencing consumers’ behaviour to respond to offerings of MTN Ghana. Unfortunately, the study assesses broadcast, print, outdoor, public service and celebrity advertising of MTN Ghana only. Also, the study is a mix method with a chunk amount of quantitative techniques and considerable in-depth qualitative techniques, so the study could not be expanded to cover large respondents across the regions of Ghana.

Limitations of the study

This study was limited to only one service firm, MTN Ghana due to time constrain. Another limitation was inadequate sample size. Two hundred (200) respondents were to be considered during questionnaire administration. However, it was observed that one hundred and twenty-four (124) numbers of questionnaires were successfully retrieved from the respondent. Finally, financial constraint is not left out since the researcher made lots of visits to MTN centers to capture responses from subscribers and also from some staff of MNT Ghana.

Literature review

Concept of advertising

According to Laver (2004) advertising is a device which first arrest the attention of the passer-by and then induces him to accept a mutually advantageous exchange. Williams (1988) focus on the institutionalization and professionalization of advertising on its commercial functions and its persuasive force. As a social critic, he locates advertising in a social context. For him, advertising belong to a particular historical moment. It is a part of modern capitalist society, and it distinguishes it from attention- grabbing devices in non-capitalist societies in other times and places. For Williams, advertising cannot be decoupled from the way it come into being and the work it does in society. He drew attention to sponsorship of art in modern times. His definition said advert is the official art of capitalist of society.

Randazzo (1993) examined advertising as a form of myth making. While myths are more than entertaining little stories about gods, goddesses, and heroic characters, the universality of myths the fact that the same myths recur across time and many cultures, suggest that they originate somewhere inside us. Advertisers sell products by mythologizing them, by wrapping them in our dreams and fantasies in advertising is not simply in the business of “selling soap” advertising turns product into brands by mythologizing them by humanizing them and giving them distinct.

Types of advertising

According to Manohar (2009) there exist various categories of advertising.

Broadcast advertising (Television and Radio)

Television

Despite the fact that the attention of advertising agencies is shifting towards digital media, TV is still playing significant role in communicating value to customers. According to Belch & Belch (2009), it is often considered to be perfect due to the mix of sounds, visual aspects and motions that help to create vivid perception in consumer minds. According to Kelley & Jugenheimer (2008), by using TV commercials advertisers gain ability to shape and control the message, its form and structure. An ad can induce whole array of emotions triggering certain feeling in consumer’s hearts. It
is possible to transmit dramatic, cheerful or inspirational message. Some products can be more successful when customers see it on screen with full representation. Kelley & Jugenheimer (2008) points out that TV is still a mass-commutation tool which helps to reach broad audience of all ages, genders, incomes, beliefs.

**Radio**

Though radio does not comprise visual elements as television, it is still believed to be one of the most efficient media types. Hollensen (2014) thinks that one of the reasons for that is their low cost. Placing commercials on radio requires not much budget as the time itself is not expensive compared to other media, and it includes lower production expenses. Cutting costs means that advertisers can increase the frequency of campaigns and rapidly bring awareness among listeners about a brand. Belch & Belch (2009) notice that radio audience tend to have close emotional bonds with radio and trust things said there more than in any other media channel. That environment makes people extremely receptive and sensitive.

**Outdoor advertising (Billboard and Kiosk)**

According to Kelley & Jugenheimer (2008, 82) outdoor advertising allows companies to cover a broad group of people in local markets. When properly executed, this media type can provide high level of reach. As the advertising cycle for placement usually runs for 30-day period customers are exposed to commercial more often, meaning that frequency level remains high. Worth mentioning that the outdoor ad is flexible in location terms. Advertisements can be placed anywhere with law permission. However, according to Wilson & Till (2011), many outdoor advertising locations can be banned due to changing legislation and public pressure. Indeed, country and local regulations are vital and can cause unpredictable results for campaign.

**Billboards advertising**

On-Premise Signs can act as billboards, rising above all other stores and buildings. Even if the sign is not huge it can be still captivating and recognizable (Moriarty et al., 2012). Donthu et al., (2003) in their research also assume that color, location and words are important in customers’ recall. Some companies invest in creating monuments or repair old ones to be associated with contributing to something new. Outdoor advertising can also be seen in the form of kiosk. In Russia for instance, this structure has just gained popularity as most posters used to hang in chaotic order on the streets.

**Kiosk**

Kiosks not only provide an easy outlet for companies’ products but also make for an effective advertising tool to promote the companies’ products. Organizing several events or sponsoring those makes for an excellent advertising opportunity. Companies can organize trade fairs, or even exhibitions for advertising their products. If not this, the company can organize several events that are closely associated with their field. For instance, a company that manufactures sports utilities can sponsor a sports tournament to advertise its products.

**Print advertising (Newspapers and Magazines)**

**Newspapers**

Newspapers and magazines have served as communication channels for more than 200 years. Local newspapers are important sources of advertising for many small companies and as well as the way for people to learn about new offers and opportunities. Print media in general has a big advantage of letting people process information at their own pace (Belch & Belch 2009). There is also always a chance to return to the interesting offer later. Kelley & Jugenheimer (2008) noticed that newspapers enable readers to control exposure to advertising compared with TV and radio. For example, there are certain types of service newspapers that include mostly advertising offers. Consumers buy them on purpose to monitor current offers and compare prices to find the best ones. Moriarty et al., (2012, 383) state that through newspapers advertisers can reach many diverse households in various
geographic locations. Moreover, since a great percentage of this media is read daily, high frequency rate can be achieved.

**Magazines**

Due to growing number of various magazines, there is a lot space for specialization, thus opportunities for companies to target their advertising campaign in chosen areas. Every lifestyle, interest, age group is present in certain magazine making it an attractive place for marketers. Moreover, Kelley & Jugenheimer (2008) claim that different media types can turn into marketplace. For example, magazine devoted to fashion and clothes appealing to certain targeted population can at the same time serve as a perfect advertising place for brands. Unlike newspapers, reproduction quality of ads in magazines is superior. The appealing color and form are attracting attention of readers and communicate a vivid message.

**Celebrity advertising**

Because credibility and attractiveness play an important role to improve the persuasiveness of a message, companies try to find sources that satisfy these two criteria (i.e., credibility and attractiveness) to present their messages to customers (Kahle & Kahle 2006). One of the sources used frequently in marketing, specifically in advertisements, is celebrities. A celebrity endorser is defined as “any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement” (McCracken 2009, 310). Because celebrity endorsement has become one of the most prevalent forms of advertising globally, several studies have examined the effectiveness of celebrity endorsements in advertising.

**Public service advertising**

Public Service Advertising (PSA) via mass media are public interest messages disseminated in the form of an advertisement communication and are easily apprehensible and persuasive to promote behavioral changes of the public towards a social issue. Public service advertising can act as a window to increase knowledge about a particular issue related to the public because it can play an important role as an informant or a carrier for the viewers to change their attitude. In addition, unlike commercial advertisements that mainly focus on creating "product images" and inducing "purchasing the product", public service advertising concentrates on actual behavioral change through information.

**Concept of consumer behaviour**

Consumer behavior is defined as the acquisition, consumption and disposition of products, service, time and ideas by decision making units. It is the body of knowledge which studied various aspect of purchase and consumption of products and services by individuals with various social and psychological variable of pay. Richens (2001) refers to the ways in which people use the product they buy i.e. where the product is consumed and when (in terms of what occasions the product might be used) and how the product is used. Loye (1998) indicate that convergence of attitudes across a number of different polar groupings within the social structure accelerate or hasten acceptance of an emergent consumer behavior pattern while divergence across different polar a consumer pattern.

Diamond (2002) holds that achieving organizational goals depends on knowing the needs and wants of target markets and delivering the desired satisfaction.

**Factors that influence consumer behaviour**

According to Engel (1986), consumer purchases are influenced strongly by: cultural factors, personal factors and psychological factors.

**Culture factors**

The set of basic values perceptions, wants, and behaviours learned by a member of society from family and other important institutions. Culture is the most basic cause of a person's wants and behaviour. Every group or society has a culture, and cultural influences on buying behaviour may vary greatly from country to country. Sub culture is also identified as a culture factor. This refers to group of people with shared value systems based on common life experiences and situations. Each
culture contains smaller subcultures a group of people with shared value system based on common life experiences and situations. Sub culture includes nationalities, religions, racial group and geographic regions.

**Personal factors**

It is shaped by: age and life cycle stage, family life cycle and occupation

Personal factors such as age and life cycle stage bring changes to the goods and services people purchase over their lifetimes. Tastes in food, clothes, furniture, and recreation are often age related. Buying is also shaped by the stage of the family life cycle.

Occupation: - A person's occupation affects the goods and services bought. Blue collar workers tend to buy more rugged work clothes, whereas white-collar workers buy more business suits. A company can even specialize in making products needed by a given occupational group. Thus, computer software companies will design different products for brand managers, accountants, engineers, lawyers, and doctors.

**Psychological factors**

Psychological factors include: motivation, perception, learning, beliefs and attitudes.

Motivation: - Motive (drive) a need that is sufficiently pressing to direct the person to seek satisfaction of the need

Perception: - The process by which people select, Organize, and interpret information to form a meaningful picture of the world.

Learning: - Changes in an individual’s behaviour arising from experience.

Beliefs and attitudes: - Belief is a descriptive thought that a person holds about something Attitude, a Person’s consistently favourable or unfavourable evaluations, feelings, and tendencies towards an object or idea

**Consumer behaviour theory and consumer decision model**

**Consumer behaviour theory**

Consumer behaviour and consumer decision making has long been of interest to researchers. Beginning about 300 years ago early economists, led by Nicholas Bernoulli, John von Neumann and Oskar Morgenstern, started to examine the basis of consumer decision making (Bray, 2008). This early work approached the topic from an economic perspective, and focused solely on the act of purchase (Loudon & Della, 1993). The most prevalent model from this perspective is ‘Utility Theory’ which proposes that consumers make choices based on the expected outcomes of their decisions. Consumers are viewed as rational decision makers who are only concerned with self-interest (Schiffman & Kanuk 2007). Where utility theory views the consumers a ‘rational economic man’ (Zinkhan & Hirschheim 1993), contemporary research on Consumer Behaviour considers a wide range of factors influencing the consumer, and acknowledges a broad range of consumption activities beyond purchasing. These activities commonly include; need recognition, information search, evaluation of alternatives, the building of purchase intention, the act of purchasing, consumption and finally disposal. This more complete view of consumer behaviour has evolved through a number of discernible stages over the past century in light of new research methodologies and paradigmatic approaches being adopted. While this evolution has been continuous, it is only since the 1950’s that the notion of consumer behaviour has responded to the conception and growth of modern marketing to encompass the more holistic range of activities that impact upon the consumer decision (Blackwell et al., 2001). This is evident in contemporary definitions of consumer behaviour: “consumer behaviour...... is the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires.” (Solomon & Bamossy, 2006).

(Schiffman & Kanuk 2007) take a similar approach in defining consumer behaviour: “the behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs” (p.3).
Consumer decision model

The Consumer Decision Model (also known as the Engel-Blackwell-Miniard Model) was originally developed in 1968 by Engel, Kollat, and Blackwell and has gone through numerous revisions; the latest publication of the model is depicted in Figure 1 below. It can be seen that many of the elements of the model are similar to those presented in the Theory of Buyer Behaviour (Howard & Sheth 1969), however the structure of presentation and relationship between the variables differs somewhat. The model is structured around a seven-point decision process: need recognition followed by a search of information both internally and externally, the evaluation of alternatives, purchase, post purchase reflection and finally, divestment. These decisions are influenced by two main factors. Firstly, stimuli is received and processed by the consumer in conjunction with memories of previous experiences, and secondly, external variables in the form of either environmental influences or individual. The environmental influences identified include: Culture; social class; personal influence; family and situation. While the individual influences include: Consumer resource; motivation and involvement; knowledge; attitudes; personality; values and lifestyle (Blackwell et al., 2001).

![Figure 1. Consumer decision model](image)

Source: (Blackwell, Miniard & Engel, 2001).

Entry to the model is through need recognition when the consumer acknowledges a discrepancy between their current state and some desirable alternative. This process is driven by an interaction between processed stimuli inputs and environmental and individual variables. After a need has been acknowledged the consumer embarks on a search for information, both internally through the consumers’ memory bank of previous experiences, and externally. The authors argue that the model is suitable for use in explaining situations involving both extended problems solving and limited problem solving by modifying the degree to which various stages of the model are engaged in by the consumer (LoudonDavid & Della, 1993). The depth of information search will be highly dependent on the nature of problem solving, with new or complex consumption problems being subjected to extensive external information searches, while simpler problems may rely wholly on a simplified internal search of previous behaviour. Information is said to pass through five stages of processing before storage and use, namely: exposure, attention, comprehension, acceptance and retention (Blackwell et al., 2001). The alternative consumer choices are evaluated by the establishment of beliefs, attitudes and purchase intentions. This process of evaluation is influenced by both the
environmental variables and the individual variables. Intention is depicted as the direct antecedent to purchase which is the only outcome tolerated by the model. Inhibitors are not explicitly depicted as mediating between intentions and purchase; however, the environmental and individual influences are again said to act on purchase. Situation is listed as an environmental influence, and while this factor is not clearly defined, it could include such factors as time pressure or financial limitations which could serve to inhibit the consumer from realizing their purchase intentions (VanTonder & Berner, 2003). Consumption is followed by post-consumption evaluation which serves a feedback function into future external searches and belief formation. Divestment is depicted as the final stage in the consumption process acknowledging that the product purchased is likely to be disposed of at some point post consumption.

The influence of advertising on consumer behaviour

The literature on advertising and consumer behavior has suggested that consumers’ processes in receiving, using, and retaining advertising information to assist their purchase decision making is very different for high- and low-involvement products (Assael, 2008; Bowen & Chaffee 2004; Krugman 2005; Muehling, Lacznik, & Andrews 2003; Slama & Tashchian, 2000; Vaughn, 2002; Zaichkowsky, 2006). Relevant to this study is the view that consumers are generally more highly involved and selective when making a purchase of durable goods than when purchasing nondurables because they are more concerned about reducing risk when purchasing durables. As a result, advertising tends to create a long “memory” effect in the minds of buyers because “thinking” is the key element in the hierarchy of effects (Vaughn, 2002). Consequently, consumers are supposed to remember past advertising and develop “goodwill” toward the advertised brands if their experience with the brand has been positive (Givon & Horsky 2010). It has also been suggested that the dynamic impact of advertising on sales can work indirectly through purchase reinforcement: Advertising gives consumers an incentive to make both an initial purchase and repurchase (Horsky & Simon, 2003). Thus, buyers tend to stick to the brands they have purchased before.

On the other hand, consumers often feel little involvement in buying nondurable products because they are frequently purchased, inexpensive, and have few differentiating attributes. Buyers may not search for information before purchasing a nondurable product, and it is difficult for them to form real attitudes or strong preferences toward a brand afterwards. In this case, consumers are a passive audience to advertising and pay little attention to ads before the purchase. Even if they catch product information in ads before buying the product, they may forget it quickly after the purchase (Krugman, 2005).

Empirical review

Sonkusare, (2013) conducted a study on the impact of television advertising on buying behavior of women consumers with special reference to Fast Moving Consumer Goods (FMGCs). The findings of the study showed that majority of consumers depend on Television advertisements in making their final decision regarding what to buy with regard to FMCGs. The author concluded that advertisements have great impact on buying behavior of women customers. Before purchasing any product customers/consumers collects information for their comparing alternative product options before making proper purchasing decision making activities hence advertising is mostly adopted to get information about FMCG products.

Kumar (2011) conducted a study on the impact of advertising on consumer buying behaviour with special reference to Nestle Limited in India. He found that advertising and sales promotion together with the image of the company influence the consumer buying decision. He also found that the quality and price of product also influence consumer purchase of a good.

Ayanwale et al., (2005) conducted a study on the impact of advertisement of Bournvita on consumer buying behaviour in Nigeria. They found out that advertising has major influence on consumers’ likeliness for Bounvita food drink.
Methodology

Research design

The study was a mixed methods approach, but specifically, a descriptive cross-sectional survey research, the data are collected at one point in time for a sample selected to represent a larger population was used for this study. According to Owens (2002), cross-sectional surveys make it possible for a group of respondents to be asked a set of questions at one point in time. In this study attempts were made to capture the attitudes of consumer towards advertising of MTN Ghana in the sample at specific time frames and this timeline made it vital in collecting bit by bit relevant data for the study as posited by Owens (2002).

Population of the study

A population is the aggregate of all the elements showing some common set of characteristics that comprises the universe for the purpose of the marketing research problem (Malhotra, 1996). In this study, all the telecommunication firms in Ghana were the population of the study. According to the National Media Commission, (2017) there are five telecommunications firms in Ghana. This document was retrieved from the online repository of National Media Commission (NMC). The target population was customers and marketing staff of telecommunication industry in Ghana. The reason for concentrating on these staff was that they are responsible for advertising and publicity of the telecommunication firms. They also have a greater understanding of advertising on consumer behaviour.

Sampling technique and sampling size

Sampling techniques are population reduction methods used to restrict data collection to a subgroup of a population since it is almost impossible to collect data from every single individual or units within a population in most cases. The study uses a non-probability sampling particularly a mixture of convenience and purposive sampling technique to achieve the set objective. This is in line with the work of other researchers (Amoah et al., 2007; Stanley & Thurnell, 2014).

Sample size

Sampling is the process of selecting a number of individuals for a study (Kothari, 2004). In this study, a sample of 124 customers of the telecommunication firms was conveniently selected and structured questionnaires were administered to assess the type of advertising influencing consumers’ behaviour to respond to offerings of MTN Ghana. According to Dillman (2000), a sample size of more than a hundred (100) is sufficient to provide a fair representation of the study population. Also, 10 marketing staff of MTN Ghana were interviewed to enrich study.

Sources of data

The main source of data for the study was the field survey. A close-ended structured questionnaire and in-depth interviews were used in carrying out the survey.

Pre-testing of instrument

In this study, the questionnaire was pre-tested using 15 customers from the insurance sector for the simple reason that the characteristics of the respondents were similar to those in the study. The final interview guide was not modified or changed and no changes were made to the items after the pre-test since the respondents could grasp the meaning of the items.

Distribution of the questionnaire

It took the researcher approximately 14 days to administer the questionnaires and conduct interviews. Averagely, each respondent took about 20 minutes to complete the questionnaire. The respondents (customers) were approached mostly on weekends after lunch whilst those of the marketing staff of the telecommunication were approached mostly on weekdays between 2:00 pm - 3:30 pm. The researcher adopted this method because most of the marketing staff were very active on weekends hence getting them is difficult compared to any other time adopted by the study. Also,
customers of the telecommunication industry are met in numbers during weekends. In essence, the study recorded a good response rate during these times.

Data analysis

All information received from the respondents via the data collection instrument was entered, coded and analyzed with the Statistical Package for the Social Sciences (SPSS) version 20. Data were presented by tables of frequencies and percentages which were computed for each item. Cronbach’s alpha coefficient analysis was done on the responses that were received from the respondents. The mean and standard deviation used to rank the responses of respondents.

Ethical consideration

Neuman (2003) defined ethics as what is or is not legitimate to do or what moral research procedure ought to be involved by the investigator. Kumekpor (2002) emphasized that the most important elements in the research enterprise are the respondents, and everything must be done to alleviate their fears and anxiety. To this end, the researcher explained the purpose of the study to participants and participants participated in their own volition without being coerced.

Overview of MTN Ghana

Launched in 1994, the MTN Group is a leading emerging market operator, connecting subscribers in 22 countries in Africa, Asia and the Middle East. The MTN Group is listed on the JSE Securities Exchange in South Africa under the share code: “MTN.” As of 30 June 2013, MTN recorded 201.5 million subscribers across its operations in Afghanistan, Benin, Botswana, Cameroon, Cote d’Ivoire, Cyprus, Ghana, Guinea Bissau, Guinea Republic, Iran, Liberia, Nigeria, Republic of Congo (Congo Brazzaville), Rwanda, South Africa, Sudan, South Sudan, Swaziland, Syria, Uganda, Yemen and Zambia. MTN’s brand is the most valuable in Africa, and is ranked in the top 100 brands worldwide. MTN’s shares constitute the biggest primary listing on the JSE – Africa’s largest stock exchange. MTN, the leading provider of telecommunications services in Africa and the Middle East, entered the Ghanaian market following the acquisition of Investcom in 2006. MTN’s overriding mission is to be a vehicle for Ghana’s economic growth and development, helping to promote Ghana’s strong development potential from the provision of world-class telecommunications products and services, through to innovative and sustainable corporate social investment initiatives (National Communication Authority website, December, 2018)

Background characteristics

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</tbody>
</table>
According to findings obtained from the administration of questionnaires to respondents, it was observed that 51.6% of respondents were males whereas 48.4% of the respondents are females. It can be concluded that there were more male respondents than females although this was not predetermined at the beginning of the questionnaire distribution.

As can be seen from the table above, the percentage of respondents who are between the ages of 30-39 years was 47.5% whereas those between the age of 40-49 years was found out to be 44.4%. It was revealed from the research also that 6.5% of the respondents are between the ages of 20-29 years whilst the age 50-59 years was 1.6%. The study showed that the majority of customers of MTN Ghana are in the age bracket of 30-39 years.

The findings showed that customers with doctorate degree accounted for the least group of respondents with only 3.2% of the total respondents. Professional qualification holders followed with 4.0%. This was followed by master’s degree holders who accounted for 41.1% of the population. Undergraduate holders accounted for the most with 51.6%. From the statistics above it is obvious that most customers of MTN Ghana are undergraduate.

It was part of demographic information to search for the number of years respondents have stayed with MTN Ghana. The results showed that 28.2% of the respondents have stayed with MTN Ghana for 6-10 years whereas 24.2% of the respondents have stayed with MTN Ghana for 1-5 years. The findings also showed that 20.2% of the respondents have stayed with MTN Ghana for 11-15 years. It can be observed that most of the customers have been with MTN Ghana for more than 6 years.

Table 2. Incidences of Trend Analysis of MTN Ghana’s Advertising

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Advertising Recorded</th>
<th>Amount of money spent (in Ghana Cedi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>320</td>
<td>35,000</td>
</tr>
<tr>
<td>2014</td>
<td>360</td>
<td>47,000</td>
</tr>
<tr>
<td>2015</td>
<td>440</td>
<td>70,000</td>
</tr>
<tr>
<td>2016</td>
<td>560</td>
<td>850,000</td>
</tr>
<tr>
<td>2017</td>
<td>700</td>
<td>980,000</td>
</tr>
<tr>
<td>Total</td>
<td>2,380</td>
<td>1,982,000</td>
</tr>
</tbody>
</table>

Source: Researcher’s field work, 2018
The statistics from Table 2 and Figure 1 above expounds the distribution of trend analysis of MTN Ghana’s advertising between 2013 and 2017. The five-year trend analysis depicts a steady growth of MTN Ghana’s advertising with 2017 witnessing the highest advertising with its attendant expenditure amounting 980,000 Ghana Cedi. The year 2015 recorded 440 number of advertising with its associated cost of 70,000. 360 number of advertising was recorded in 2016 with its attendants cost 850,000. The year 2014 recorded 360 number of advertising with the cost of 47,000 Ghana cedi. The modest year according to Table 2 and Figure 1 was the year 2013 with its attendant advertising cost amounting to 35,000 Ghana Cedi. This could be attributed to the low competition MTN Ghana was facing during the said year.

**Reliability statistics**

The Cronbach’s alpha coefficient analysis was done on the responses that were received from the respondents on the type of advertising influencing consumers’ behaviour to respond to offerings of MTN Ghana. Inferring from Tavakol and Dennick (2011), a Cronbach alpha coefficient value between 0.700 and 0.800 is acceptable for research. The internal consistency of the responses received from the respondents is thus valid. The result of the analysis is presented in Table 3 below.

Table 3. Reliability statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.742</td>
<td>5</td>
</tr>
</tbody>
</table>

The findings of the analysis on the type of advertising influencing consumers’ behaviour to respond to offerings of MTN Ghana revealed that; broadcast advertising (television and radio) (M =
4.77, S.D = 0.399) ranked first, outdoor advertising (billboards and kiosk) (M = 4.72, S.D = 0.112) ranked second, print advertising (newspapers and magazines) (M = 4.62, S.D = 0.057) ranked third, public service advertising (M = 3.98, S.D = 0.464) ranked fourth, celebrity advertising (M = 3.76, S.D = 0.243) ranked fifth as shown in Table 4 above.

Reliability statistics

The Cronbach’s alpha coefficient value of the responses that were received from the respondents was 0.811. Inferring from Tavakol and Dennick (2011), a Cronbach’s alpha coefficient value between 0.800 to 0.900 is good for research, hence the internal consistency of the responses is validated. Table 4.8 limns the reliability statistics of the responses received on the underlying factors influencing consumer behaviour to respond to advertisement of MNT Ghana.

<table>
<thead>
<tr>
<th>Table 5. Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>0.811</td>
</tr>
</tbody>
</table>

Source: Researcher’s field work, 2018

Table 6. Underlying factors influencing consumer behaviour to respond to advertisement of MTN Ghana

<table>
<thead>
<tr>
<th>Motivational Factors</th>
<th>Mean Statistics</th>
<th>S. E</th>
<th>S. D</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand image</td>
<td>4.76</td>
<td>0.042</td>
<td>0.134</td>
<td>1st</td>
</tr>
<tr>
<td>Product quality</td>
<td>4.73</td>
<td>0.039</td>
<td>0.154</td>
<td>2nd</td>
</tr>
<tr>
<td>Advertising message</td>
<td>4.32</td>
<td>0.057</td>
<td>0.119</td>
<td>3rd</td>
</tr>
<tr>
<td>Location of advertising message</td>
<td>4.52</td>
<td>0.040</td>
<td>0.147</td>
<td>4th</td>
</tr>
<tr>
<td>Frequency of the message</td>
<td>4.20</td>
<td>0.063</td>
<td>0.144</td>
<td>5th</td>
</tr>
</tbody>
</table>

Source: Researcher’s field work, 2018

Analysis of data on the underlying factors influencing consumers’ behaviour to respond to advertisement of MTN Ghana revealed that Brand image ranked first with a mean of 4.76 and a standard deviation of 0.134, Product quality ranked second with a mean of 4.73 and a standard deviation of 0.154, Advertising message ranked third with a mean of 4.32 and a standard deviation of 0.119, medium of the advertising ranked fourth with a mean of 4.52 and a standard deviation of 0.147, and Frequency of the advertising ranked fifth with a mean of 4.20 and a standard deviation of 0.144.

Allen & Seaman (2007) asserted that a five-point Likert scale with a confidence interval of 95% should be at least 3.50 to be considered significant. This implies that most of the respondents agreed on the variables given in the questionnaires as the underlying factors influencing consumer behaviour to respond to advertisement of MTN Ghana. Again, this assertion is buttressed by the fact that the standard errors (S.E) were small (that is, relatively close to zero), thus implying that the underlying factors motivating customers to respond to advertisement as chosen by the respondents were a true reflection of the study population. According to Altman and Bland (2005), the S.E is the standard deviation of the sampling distribution of the mean and also a degree of how likely a sample represents the population. Therefore, a large S.E relative to the sample mean implies that there is a lot of variations between the means and the samples while a small S.E relative to the sample mean implies that most sample means are similar to the population. Table 6 above presents the underlying factors influencing consumers’ behaviour to respond to advertisement of MTN Ghana.
Conclusions and recommendations

Conclusion

1. It can be concluded that MTN Ghana has more male customers than female customers although this was not predetermined at the beginning of the questionnaire distribution.
2. From the results of the study, majority (47.5%) of the respondents were within the age group of 30-39 years which denotes an active year group.
3. A little over half (51.6%) of the respondents are undergraduate whereas 41.1% of the respondents have master’s degrees. Also, it can be observed that 4.0% of the respondents are professional certificate holders while 3.2% have doctorate degrees. The results clearly indicate that all of the respondents have attained some level of education although the level of attainment varies.
4. The majority of the respondents had been with MTN Ghana for periods between six and ten years, while 24.2% had been with MTN Ghana for periods between one and five years. Also, it can be revealed that 20.2% had been with MTN Ghana for periods between eleven and fifteen years while 16.1% had been with MTN Ghana for periods between sixteen and twenty years. The least respondents had been with MTN Ghana for twenty-one years and above.
5. The results revealed a steady growth of MTN Ghana’s advertising with 2017 witnessing the highest advertising with its attendant expenditure amounting 980,000 Ghana Cedi. The year 2015 recorded 440 number of advertising with its associated cost of 70,000. 560 number of advertising was recorded in 2016 with its attendants cost of 850,000. Also, it was observed that the year 2014 recorded 360 number of advertising with the cost of 47,000 Ghana cedi. The modest year however was the year 2013 with its attendant advertising cost amounting to 35,000 Ghana Cedi. This could be attributed to the low competition MTN Ghana was facing during the said year.
6. The results of the analysis showed broadcast advertising such as television and radio ranking 1st with a mean of 4.77 and a standard deviation of 0.399, outdoor advertising such as billboards and kiosk ranking 2nd with a mean of 4.72 and a standard deviation of 0.112, print advertising such as newspapers and magazines ranking 3rd with a mean of 4.62 and a standard deviation of 0.057. Also, the study observed that public service advertising ranked 4th with a mean of 3.98 and a standard deviation of 0.464 and celebrity advertising ranked 5th with a mean of 3.76 and a standard deviation of 0.243 as the type of advertising employed by MTN Ghana to influencing consumers’ behaviour to respond to the company’s offerings.
7. Analysis of data on the underlying factors influencing consumers’ behaviour to respond to advertisement of MTN Ghana revealed that Brand image ranked 1st with a mean of 4.76 and a standard deviation of 0.134, product quality ranked 2nd with a mean of 4.73 and a standard deviation of 0.154, advertising message ranked 3rd with a mean of 4.32 and a standard deviation of 0.119, medium of the advertising ranked 4th with a mean of 4.52 and a standard deviation of 0.147, and frequency of the advertising ranked 5th with a mean of 4.20 and a standard deviation of 0.144.

Recommendations

1. MTN Ghana should focus on fostering strong-laden relationships with consumers in order to retain them. In the midst of strenuous competition, retention is the best bet. Retained customers become loyal and not much is spent on them. This will help reduce the already rising advertising cost.
2. Broadcast advertising (television and radio), outdoor advertising (billboards and kiosk) and print advertising (newspapers and magazine) should be strengthened to enable the company continue its market dominance.
3. There is the need for MTN Ghana to continue building strong brand image. Having strong brand image enhances the company’s credibility and gives the company competitive edge in the telecommunication industry.
4. MTN Ghana should as well focus on maintaining its quality of products. A quality product helps in building a good reputation with customers. Also, the company should focus on churning out good advertising messages. Successful advertising allows consumers to respond to the message.
5. More so, the company should identify the most efficient media for its advertising campaign in order to reach out to its consumers. Also, the advertising frequency should be intensified so that the positioning statement can create a positive impression on the hearts and minds of the target audience.

**Areas for future research**

Since advertising is not the only element influencing consumer’ behaviour, other elements could be explored in future studies to examine the level of influence on consumers’ behaviour.

**References**


[57]. Taylor and Weiserbs (1972) “The relationship between advertising expenditure and aggregate consumption”
Extending Ghana’s Pension Scheme to the Informal Sector for Small and Micro Business Operators within Accra Business District: Challenge and Prospects

Article by Victor Baah Danquah
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Abstract

The study examines the challenges and prospects for extending Ghana’s Pension Scheme to the Informal sector for small and micro business operators within the Accra business district. Information for addressing the objectives of the study comes from small business operators as well as officials of the Ghana’s Social Security and National Insurance Trust (SSNIT). Systematic Random Sampling technique has been employed in selecting small business operator’s respondents while purposive sampling technique was used in targeting relevant SSNIT officials for their views on the study. Both interview guide and the questionnaire technique have been used as research instruments while statistical package for social studies (SPSS) has been employed to assist with data analysis. Constraints put forward by the small business operators which have the potential of kicking against their integration into the pension scheme ranged from their low income which will breach regular monthly contribution, frequent prosecution of contribution defaulters, relatively small returns (sometimes less than 10%) on SSNIT investments and the apparent high operating cost of SSNIT. The study further found out that upon membership, small business operator will have access to housing schemes, enjoy monthly pension income after retirement, access first class medical attention and also make good friends of common interest when they join the well-organized Pension Associations. The study recommends to SSNIT to streamline its operations in respect of doing away with contribution default prosecutions, high penalty levies as well as create alternate convenient channels for receiving periodic contributions. This way the Trust will appear attractive and pension friendly for a good number of small and micro business operators to join with their employees.

Introduction

Globally Pension schemes provide avenues for setting aside funds to help rehabilitate the senior citizens or retirees. The concept thrives on the fact that energetic employees will eventually grow old and retire from active service and for that matter some arrangements ought to be put in place to ensure their continuous financial security and happiness of employee when they proceed on retirement. With most pension schemes the employee contributes a fraction of the monthly emolument while the employers virtually add twice as much to make up the total monthly contributions. Retiring ages differ globally yet the range is between 60 and 70 years. In Ghana the public sector as well as the formal sector private organizations, retire their employees at 60 years. In the judiciary service members of the bench i.e. the judges retire at 65. Reputable religious organisations like the Methodist church, Anglican, Catholic and Presbyterian Churches retire their clergy officially at 70 years. In the informal private sector, small and micro scale business operators often do not retire at any definite age. According to Afrane (2006) most of them go home at the on-set of terminal diseases like diabetes, acute high blood pressure, rheumatism, stroke etc. which often disrupts their physical mobility, vision or general wellbeing. Regrettably in such situations cost of treatment of such ailments might have eroded their working capital base so badly that there is virtually nothing to live on. Such retired small business operators often can no longer afford to reside in rented premises and for that matter return to their hometowns. Those with economically viable children live on the benevolence of their offspring while the less fortunate ones register with the government’s poverty alleviation fund i.e. Livelihood Empowerment Against Poverty (LEAP) for the meagre monthly stipends(USD 9.00) which hardly covers cost of drugs let alone feeding, clothing and maintaining them. The informal private sector small business operators ought to be assisted to enjoy formal retirement pension benefits. Some special
arrangement is necessary to integrate them unto Ghana’s official Pension Scheme and this constitutes the thrust of the study.

**Objective of the study**

The overall objective of the study is to investigate the challenges and prospects associated with extending Ghana’s Pension Scheme to the informal sector’s small business operators within Accra business district. Specific objectives include:

i. To investigate how small and micro business operators in Accra business district understand and appreciate the pension scheme concept

ii. To evolve a strategy for the smooth integration of the informal sector small and micro business operators unto the SSNIT pension scheme.

iii. To identify challenges that will confront small and micro business operators in Accra Business district as they join the SSNIT pension scheme and the way forward.

**Literature review**

Contemporary literature reviewed hereunder relate to importance and types of Pension Schemes, Management of informal sector in pension schemes as well as nature of small and micro scale businesses.

**Importance and types of pension scheme**

One of the key living concerns of mankind is being through the ages and economic security. Economic security, in the opinion of Rofman and Oliveri (2012) is composed of basic social security defined by access to basic needs infrastructure pertaining to health, education, dwelling, information, and social protection on one hand, and work related security on the other. All peoples throughout all of human history have faced the uncertainties brought on by unemployment, illness, disability, death and old age. These inevitable facets of life are said to be threats to one’s economic security (Boon, 2007). Pension schemes often help in alleviating the financial insecurity of retirees or senior citizens.

According to Agyeman (2011), Pension schemes and systems in Ghana have the primary focus on the provision of retirement income to the aged. The provision of supplementary income for injured or disabled persons who formally held employment positions and also the provision for beneficiaries of deceased working individuals have been a secondary focus of pension policy makers. Kpessa (2011) further defines Pension as a series of periodic money payments made to a person who retires from employment because of age, disability, or the completion of an agreed span of service.

Ampratioum (2011) also corroborates the fact that, retirement is a process that separates an individual from a job role or as termination of a pattern of life and a transition. The causes of the detachment or separation may be due to old age, poor health, social pressure or apathy. Many people chose to retire when they are eligible for private or public pension benefits, although some are forced to retire when physical conditions do not allow the person to work anymore (by illness or accident) or as a result of legislations concerning their position.

Globally the importance of social security schemes cannot be overemphasized. Dorfman and Palacios (2012) stressed the importance of social security schemes. Social security schemes provide important sources of finance for both the public and private sectors in most countries. SSNIT makes available to the government of Ghana long term loans for the financing of current and capital expenditures for national development. Furthermore, Whitaker (1998) posits that it would be ideal, if every member of a community could be protected by social security as that fosters solidarity.

Limited (2012) is of the opinion that pensions and social insurance programs aim to prevent a substantial loss in consumption power as a result of old age, disability or death and hence form an integral part of any social protection system. Besides, Rofman and Oliveri (2012) argue that social security schemes are programs instituted by the state to transfer the responsibility of social risks (disabilities, old age, victim of natural disasters, among others) to the state where the informal or traditional systems of social protection are insufficient or not properly working. Authority (2012) emphasized the advantages of funded pension systems in their OECD working paper. According to them, developing funded pension systems alleviates government costs by reducing government
expenditure levels. This thereby releases government funds to other key policy challenges and initiatives.

Types of pension schemes in Ghana

In Ghana the Pensions Act of 2008 has introduced two new pension tiers namely the tier 2 and tier 3 to operate in conjunction with the SSNIT pension scheme being operated (Agyeman, 2011). The addition of these two new tiers provides significant benefits for the Ghana workforce in general and not only the formal sector. Tier 2 is a mandatory defined contribution scheme to which every employee with employer backing contributes 5% of their gross salary. Tier 3 is also a defined contribution scheme; however tier 3 is a voluntary scheme and it is up to the employee or the employer if he/she wishes to contribute to this scheme. Only private pension houses manage these two new tiers.

Management of informal sector in pension scheme

According to Freiku, z (2011) the informal sector has been branded as the sphere of trade and commerce for individuals who have had very little or no formal education. The exemption of the informal sector from the tax structure stems from the fact that no reasonable estimates can be made in respect of how much can be obtained from the sector. These two factors are the most obvious and primary in the state of the informal sector in many countries (Tonks, 2005).

Tonks (2005) explains further that most studies on the informal sector undertaken since the early 1970’s have used a specific approach based on the production rationale of the sector itself mainly to guarantee the subsistence of the family group. Those who could get a job in the formal sector must certainly device a way of obtaining an income. The informal sector was seen as the result of manpower surplus in respect of employment in the formal sector (Kpessa, 2011). Within this approach solutions for the problems of the informal sector were usually sought in the sphere of employment and income policies. Argued by one school of thought that the solutions of the informal sector does indeed lie in certain income policies, such as educational grants towards of individuals in the informal sector, welfare benefits and so forth. According to Freiku (2011), there is that belief that the improvement in the standard of living by the free provision of certain social amenities such as hospitals and school for the informal sector will buffer the process of increasing the formal sector. This premise has been challenged over decades, and other constructive views raised. The formalizing of the informal sector has been discussed as the most optimal way in designing a fully engaged pension structure.

According to Rofman and Oliveri (2012), most pension systems provide at least basic protection against the risks associated with old age for formal-sector workers. However, most workers engaged in the informal sector, particularly in developing countries, are left out of the traditional pension systems. It has been estimated that between half and three fourths of non-agricultural employment in developing countries is informal, although the degree of informality varies across countries and regions.

In Ghana, the role of SSNIT in the management funds for the informal sector is managed by a separate social security scheme that is purposely tailored to suit the needs of workers in the informal sector of Ghana (Agyeman, 2011). This subsidiary, the SSNIT Informal Sector Fund was established in 2005 after research conducted by the Trust’s Research Department and a team from the World Bank revealed that the SSNIT pension scheme was not compatible with the informal sector. More specifically, the patterns of incomes in the informal sector were unpredictable and irregular for contributors to make monthly contributions towards the Trust (SSNIT Informal Sector Fund 2011).

Contributions under the Informal Sector fund are not fixed but are based on an “individual’s preference as well as his ability to pay which could be either, daily, weekly, monthly, annually or even when the contributor has some money to spare”(The Corporate Guardian 2009). Since its inception in 2005, the SSNIT Informal Sector Funds has been doing very well. Reports from “The Chronicle” indicate a steady growth in total contributions of about GHC 21, 495, 358.89 in 2011. This figure is due to a rise in the membership for the fund from 6,577 in 2005 to about 90,913 in 2011 (Freiku 2011). In the case of Ghana, the reason for low coverage of informal sector workers in the SSNIT pension was not due to a lack of understanding or distrust of management as Okine (2012) made it out to be, it was instead due to failure of the SSNIT scheme to suit the contribution needs of these workers.
The SSNIT Informal Sector Fund (SISF) was established by SSNIT as a subsidiary company to compete for the management of pension contributions from the informal sector (SSNIT; 2009). It acts as a fund manager and custodians for the informal sector pensions received. The scheme was designed to work in line with the statutory provisions of the regulatory body and not a government mandated body to oversee the activities of the informal sector pensions. SISF was said to be doing well and reports from the Business and Financial Times confirmed the willingness and rapid participation in enrollment (Okine, 2012).

Global picture on capital management of pension scheme contribution

Generally Pension funds are often invested in capital markets to make profit, thus to maximize or increase return and reduce losses and expenditure. They need a future economic recovery that is robust and lasts, because of the nature pension investments. Pension investments are long term normally ranging from ten to thirty years (Eme, 2011). Hence, fund investors are cautious not to take on too much short - term risky financial instruments, more long haul, reliable financial instruments are preferred in the management of pension funds. This is basically to make sure pension funds are not lost, whilst irrational investors take risky decisions. Capital management structures vary from country to country, in the United States, prior the recession, hedge fund managers, fund managers and even management of institutions could regulate and manage contributions and pool of funds with very little regulation (Ampratum, 2011). Companies and pension fund managers found themselves taken on risky but mouth –watering financial assets such as stocks and derivatives and loosing focus on the long - term goal of pension fund managers. Investors who put traded on Enron holding found themselves losing millions of retirement money and pension pools (Boon, 2007).

In the case of Chile and Cuba, with their profound history of wrong investment decisions, there is an illustration of the possible evolution as funds mature and tend to move towards riskier portfolios, even within the very conservative limits. As funds mature, the ideal is to turn towards other investment vehicles, which primarily have had better returns than traditional pension portfolios but with considerable risks (Dorfman and Palacios, 2012). In Ghana, under the new pension scheme, with the involvement of private pension trusts, there are more conservative approaches to pension fund investments, to ensure that decisions are made in the best interest of the contributor.

With the new pension scheme in Ghana, Okine (2012) observes that, Pension Trusts are devising new and innovative ways to go about investments efficiently. The diagram above shows the trust is in charge of the entire investment chain. The Trust in this case in responsible for the broad asset allocation that is how much of the pool of funds should be invested in fixed income, equity, debt etc (Kpessa, 2011). They also scan through various fund managers, and select one for each asset class, in the view of competition resulting in optimal returns. Pools of funds are not kept by the Pension Trust themselves but rather by an independent bank, which is solely responsible for holding cash assets. The separation of power under this system employed by a Pension Trust seems optimal in regards to conservation and growth of funds.

Nature of small and micro business Ghana

In the opinion of Mensah (2014) Small and Micro Size Enterprises (SMEs) continentally continue to play significant role in the socio-economic development of countries. Their influence in economic attainments in developing economies like Ghana cannot be over emphasized. Adjei (2012) indicates that in Ghana SMEs constituted 88% of registered companies in the records at the registrar General Department. SMEs also create a chunk of employment avenues of the country as well as provide training grounds for inculcating skills in the young graduates who turn out from the various tertiary institutions. SMEs, by their numbers, are further essential development partners in that they contribute huge tax revenue to strengthen the spending arm of the central government. It is therefore needless to even mention the enviable contribution that the SME sector to the GDP growth of the country (Okibo and Makanga, 2014). This presupposes that if the pension scheme in Ghana is well reformed to suit the convenience of the small business operators the pension fund could be hugely augmented for helping to fund more developmental projects.
Small and Micro-Scale Enterprises are at the centre of the development agenda of most countries. They are widely recognized as the drivers of growth owing to their capacity to generate employment and create wealth. According to Kumoda (2003) “projected economic growth will continue to elude the country unless resources are found to promote the growth of small and medium-scale enterprises (SMEs)”. Mensah (2014) also explains that, SMEs play a valuable role in job creation and make significant contributions to economic growth in developed and developing economies.

Development is expected to make the country move ahead socio-economically on many fronts. Areas that readily come into mind include financial resources improvements, housing development, more investment in enterprise sector, environment, agriculture, local government, health and transportation sectors and human and natural resources (Afrane, 2006). These are all areas where medium and small scale companies are making serious in roads and the contributions of all these and many others in productive terms provide what is normally referred to as Gross Domestic Product (GDP) that is, the total value of all goods and services produced in an economy in a year. SMEs can therefore be said to be a crucial sector if any meaningful gain is to be made in the growth rate of the GDP. Access to finance has been identified as a dominant constraint facing SMEs (Quaye, 2011).

Traditionally, Haron et al (2013) indicate that, commercial banks and other financial institutions have been known to be granting loans to every sector of the populace. Individuals, micro enterprises, small scale enterprises, large scale manufacturers, civil servants and even the central government do contract loans from financial institutions (Quaye, 2011). Nevertheless in recent times some players in the banking industry consider the SMEs as high risk zones and are therefore highly skeptical when granting loans to the sector. In the view of Afrane (2006) most of the bad debt in the books of banks emanate from their association with SMEs.

According to Cofie (2012), SMEs usually lack structured management skills for large business. Formal business structure is based on an organizational chart. This clearly stipulates the role that each official is expected to play. The chief executive officer (CEO) usually has a deputy or a general manager (GM) as his assistant. The GM also has sector managers or line managers in charge of Accounts, Marketing, production etc. as the functional heads. In the view of Ackah and Vuyor (2011), some SMEs often find such arrangement expensive and therefore it is usual to see the sole proprietor being in charge of everything resulting in gross mismanagement of the outfit. According to Akibo and Makanga (2014) top management members of most SMEs in Ghana have low educational background or are simply illiterates. Some small scale operators even do not understand why they should pay tax.

Adjei (2012) and Cofie (2012) all castigate SMEs for having weak capacity in that they fail to employ qualified and reliable accountants and therefore is no proper or adequate records kept. Aku (2008) explains that the concept of financial planning is completely absent from the vocabulary of most local SMEs.

From the fore-going it is obvious that when proper structures are created to attract the small and micro business operators unto the SSNIT scheme the pension fund can be hugely enhanced to help accelerate the socio-economic growth of Ghana.

Research methodology

The research design adopted was descriptive survey, aimed at asking a set of closed ended questions of a large number of individuals in order to quantitatively describe a phenomenon (Fraenkel & Wallen, 2009). The choice of this design was appropriate because the study sought the views of small and micro scale businesses operators in eight key market centres forming the Accra business district. These market places include Kaneshie, Agbobloshie, Okaisie, Adabraka, Osu, Dansoman, Nkrumah Circle and La dadelokoton markets. Each market was regarded as a stratum (plural strata) from which random sampling technique was employed to select ten (10) respondents. An orally administered questionnaire was used as the main research instrument. It is well documented that Ghanaians generally prefer to communicate in local languages and speak English less frequently (Opoku-Amankwa, 2009). Thus, questionnaires were orally administered with research assistants translating questions into local dialects for respondents, and filling out the questionnaires on their behalf.
The questions on the questionnaire were categorized into three. The first section dealt with issues relating research objective one on how the small and micro businesses understand and appreciate the concept of pension scheme.

The second segment of questions related to strategies for integrating the non-formal small and micro businesses in the Accra business district unto the national pension scheme. The third set of questions sought to identify challenges that confront small businesses in joining the national pension scheme. In all out of the 80 respondents slated for interview, 56 were available at the interview date representing 70% response rate. The study received serious setbacks at the beginning when the potential respondents were skeptical as to the rationale behind the research. The interviewee thought the Ghana Revenue Authority (GRA) was sponsoring the study and that it was an attempt to investigate their trading activities for increasing their tax liabilities. The researcher had to put in a lot of efforts in disabusing the minds of the prospective interviewees against any direct governments or GRA stake in this study.

Data was analyzed quantitatively with the aid of a software: Statistical Package for Social Science (SPSS) version 20. Descriptive statistics such as frequency, means, and standard deviation were used to make meaning out of the data collected.

**Findings and discussion**

The following paragraphs present the results of the investigations which have been organized in consonance with the specific objectives of the study.

**Small and micro business operators and the concept of pension scheme**

In order to encourage non-formal small business operators to join the national pension scheme, it was deemed appropriate to investigate how interviewees understand the idea of pension schemes. Table 1 shows the various responses obtained from them.

**Table 1.** Frequency table on respondents’ view on concept of pension scheme

<table>
<thead>
<tr>
<th>Response types : views on the Concept of Pension Scheme</th>
<th>N</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension scheme is an attempt at investing in future happiness.</td>
<td>56</td>
<td>4.25</td>
<td>.977</td>
<td>.955</td>
<td>1</td>
</tr>
<tr>
<td>Pension is a way of strengthening future financial security.</td>
<td>56</td>
<td>4.05</td>
<td>.999</td>
<td>.977</td>
<td>2</td>
</tr>
<tr>
<td>Savings for the future.</td>
<td>56</td>
<td>4.00</td>
<td>1.079</td>
<td>1.164</td>
<td>3</td>
</tr>
<tr>
<td>Pension helps to extend current happiness into the future.</td>
<td>56</td>
<td>3.77</td>
<td>1.307</td>
<td>1.709</td>
<td>4</td>
</tr>
<tr>
<td>Pension schemes help to reduce dependence on children in future.</td>
<td>56</td>
<td>3.43</td>
<td>1.059</td>
<td>1.122</td>
<td>5</td>
</tr>
<tr>
<td>Pension helps to reduce dependence on government benevolence.</td>
<td>56</td>
<td>3.26</td>
<td>.838</td>
<td>.702</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Field data (2018).

It is obvious from table 1, that the small and micro business operators within the Accra business district do have a very fair knowledge of the pension scheme concept. Ranked first was the most popular view that a pension scheme is an attempt to invest to ensure future happiness. This view is shared by Dorfman and Palocis (2012) who noted in their article on World Bank’s support for pension and social security schemes, that most senior citizens without pension benefits often become liabilities upon their families especially their children and this usually creates social friction in the family leading to isolation of such retirees without financial security. Baron (2007) also corroborates the view that Pension schemes have the propensity of making retiree somehow comfortable provided the senior citizen has relatively lighter responsibility in terms of dependency load especially payment of wards ‘ school fees. A good number of respondents also pointed out that pension schemes offer an avenue for strengthening future financial security. Agyeman (2011) conducted an analysis of Employee Pension returns in Ghana.
and concluded among others that pension schemes are really offering financial security for most retirees in Ghana.

The source indicated that with unemployment burden assuming frightening proportions amongst university graduates and trained paramedics, parents can no longer regard their children as future financial security. Pension scheme was also seen as savings for the future. In his article on retirement benefits in Nigeria, Nwejagu (2010) observed that most informal sector small traders regard pensions as ‘Susu’ i.e. savings for the future. This author explained that in their day to day livelihood, Nigerians employ the Susu system to set aside funds on daily basis for paying monthly rent, children school fees as well as procuring capital goods especially land. Structuring the pension scheme for small business operator along the lines of Susu, in the opinion of Nwajagu (2007) is a step in the right direction.

Dilating on Pension reforms in the developing economies, Ozo-Eson (2004) noted that extending pension scheme to the informal small and table top traders should be conducted on patterns that are familiar to them. The Susu pattern therefore forms an important vehicle for selling the pension scheme concept to this segment of potential pension fund contributors. The view, that pension scheme removes future poverty is supported by Okine (2012) as well as Rofman & Oliveri (2012). These writers all acknowledge the fact that poverty patterns amongst senior citizens have been greatly reduced with the advent of various Pension schemes. Ubhenin (2012) is of the opinion that the typical African man wants a large family and for that matter at pension age of 60, some retirees will still have school fees paying responsibilities. In such circumstances acquiring a property only becomes a mirage. Pension benefits come into bail out and lessen the burden of such retirees.

Other views expressed referred to Pension scheme as an avenue for extending current happiness into the future while others also saw pension scheme as a template for reducing one’s dependency upon children in the future. Government as a poverty reduction intervention often comes out with monthly stipends for the destitute in society. Views expressed pointed out that pension benefit reduces one’s tendency of relying upon government support like the Livelihood Empowerment Against Poverty (LEAP) programme in Ghana which does not go too far in terms of maintenance of the senior citizen.

Strategies for attracting small business operators unto SSNIT pension scheme

Details in table 2 are views on how to smoothly integrate small business operators unto the social security and national insurance Trust SSNIT pension scheme.

Table 2. Frequency table on strategies for attracting small business operators unto SSNIT

<table>
<thead>
<tr>
<th>Response types</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible contribution collection periods i.e. daily or weekly</td>
<td>56</td>
<td>4.114</td>
<td>0.916</td>
<td>0.942</td>
<td>1</td>
</tr>
<tr>
<td>Agents stationed on the markets to facilitate collections.</td>
<td>56</td>
<td>4.068</td>
<td>0.982</td>
<td>0.998</td>
<td>2</td>
</tr>
<tr>
<td>Periodic dispensation of statement of contributions made.</td>
<td>56</td>
<td>3.946</td>
<td>1.012</td>
<td>1.116</td>
<td>3</td>
</tr>
<tr>
<td>There should be no prosecution of defaulters.</td>
<td>56</td>
<td>3.769</td>
<td>1.125</td>
<td>1.241</td>
<td>4</td>
</tr>
<tr>
<td>Knowledgeable agents to swiftly address grievances.</td>
<td>56</td>
<td>3.701</td>
<td>1.136</td>
<td>1.314</td>
<td>5</td>
</tr>
<tr>
<td>SSNIT products should include loans to small businesses.</td>
<td>56</td>
<td>3.482</td>
<td>1.169</td>
<td>1.378</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Field data (2018)

It is clear from table 2 that one of the most effective means of getting small business operators unto the SSNIT scheme of Ghana is to put up a flexible contribution collection structure which will ensure that potential contributors could pay daily or weekly in consonance with their financial circumstances. In an article on reviewing pension processes in Nigeria, Ozor (2006) argued that the existing monthly contributions for the formal sector cannot be ideal for the small scale private business operators since incomes for such people do not flow monthly. Rofman & Oliveri (2012) also share the view that
extending the coverage of pension scheme to the informal sectors should entail making compromises on existing customer administration framework especially contribution collection frequency. Ranked second in terms of how to attract small businesses is the idea that there is the need to plant agency offices on the various markets so as to facilitate operations. Agyeman (2011) corroborates this view and made an analogy that the insurance companies have their agency offices at most lorry parks and this seems to have very positive influence on the mode of operations.

A good number of respondents noted that SSNIT should ensure that informal contributors receive contribution statements as frequently as possible. One serious setback of SSNIT’s operations, according to studies by Kumado and Gockel (2003) has to do with persecution of defaulting employees especially private sector operators. This scares a lot of potential contributors since the small business operator eventually had to borrow to meet court fines. One would have expected SSNIT to negotiate on such delayed payments rather than instituting a legal action against defaulters. It is therefore not surprising that potential small business operators want the SSNIT law on prosecuting contributory defaulters, repelled.

Respondents were also not happy about the penalty payment regime. It came to light that SSNIT currently takes 3% per day as penalty for delayed contribution, which works out to 1,000% per annum. Loans from the commercial banks for expanding business operations, attract not more than 35% per annum. The SSNIT penalty obviously is unreasonable and has the propensity of collapsing many small businesses in Ghana. In a paper on social security and economic development, Akintala-Bella (2004) noted that taking cognizance of the importance of the pension fund to the socio-economic development of the country, it is essential that all bottle necks are removed so as to widen the scope of contributors. The source specifically mentioned informal sector small business operators as one segment which could help augment the pension fund for national development.

Views also had it that there is the need to fill, the yet to be established, agency office vacancies with knowledge officials who could swiftly address the concerns and grievances of contributors. This point is supported by Kotler (2012) who reiterated the fact that increasing business prospects also depends upon well trained personnel who will act as good ambassadors for effective propagation of company’s goods as well as services. A good number of interviewees also argued that since SSNIT invests its pension fund, there is nothing wrong with the scheme investing in small loans to shore up their operations. This way the potential contributors believe that their businesses could make more income to enable them increase their contribution to better secure their future happiness.

**Challenges associated with small businesses joining pension scheme**

The study also created the structures to identify the challenges that small business will encounter if they joined the SSNIT Pension Scheme. The results have been presented in table 3.

**Table 3.** Frequency table on Challenge associated with small businesses joining Pension Scheme

<table>
<thead>
<tr>
<th>Response Type on challenges</th>
<th>N</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflexible contribution system</td>
<td>56</td>
<td>4.214</td>
<td>1.214</td>
<td>1.123</td>
<td>1</td>
</tr>
<tr>
<td>Irregular income of small business operators</td>
<td>56</td>
<td>4.128</td>
<td>1.136</td>
<td>1.312</td>
<td>2</td>
</tr>
<tr>
<td>Small return i.e. 10% or less on pension fund</td>
<td>56</td>
<td>4.014</td>
<td>1.096</td>
<td>1.412</td>
<td>3</td>
</tr>
<tr>
<td>High cost of SSNIT operations</td>
<td>56</td>
<td>3.949</td>
<td>0.945</td>
<td>1.156</td>
<td>4</td>
</tr>
<tr>
<td>Frequency prosecution of defaulting contributor</td>
<td>56</td>
<td>3.848</td>
<td>0.877</td>
<td>1.391</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>56</td>
<td>3.744</td>
<td>0.845</td>
<td>0.981</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Field data (2018)

It is obvious from table 3 that challenges and problems likely to be encountered when small businesses within the Accra business district eventually join government pension scheme of Ghana will include inflexible contribution system, irregular income of small business operators, Small Pension
fund return i.e. 10% or less on pension fund. High cost of SSNIT operations, and frequency prosecution of defaulting contributors. According to the respondents, pension scheme contributions are supposed to be made at a particular time within a month and this may disturb their operations. Others also cited the irregular nature of income of their businesses as a serious challenge since in some months, very little amounts of sales are made which will not allow them to honour contributions.

Other respondents appeared worried about the seemingly small returns i.e. 10% or less often declared on SSNIT Pension investment. This is disturbing because even government Treasury Bill yields 16% which is over and above the 10% investment return that SSNIT fund has been registering for some time now. Other respondents complained about the high cost of SSNIT operations especially the colossal salaries paid to stuffs and management members. Recent newspaper reports in the Ghanaian listed the CEO of SSNIT, the Governor of Bank of Ghana and the CEO of Ghana’s Cocoa board as three highest paid public servants whose monthly emoluments range from GH¢75,000 to GH¢80,000. This amount is about three times the salary of the president and four times the emolument of ministers and parliamentarians. If a chunk of the pension fund goes into workers compensation packages then it stands to reason, that in the near future, SSNIT could encounter serious challenges in paying pension benefits. SSNIT must certainly take a look at its operating cost as well as mend all procurement leakages so as to register a more acceptable return on pension funds.

Another challenge mentioned has to do with frequent prosecution of contribution defaulters at the law court. In the view of the respondents, the nature of their businesses might not allow them to be regular with their payment and should such circumstances attract legal sanctions then it is not advisable joining the scheme at all.

Various writers on pension returns in developing economies have criticized the low level of income associated with pension fund investment. Agyeman (2011) registered his disappointment over the abysmal performance on SSNIT investment over the years and wondered whether its investment portfolio are in the right direction. This source agreed that SSNIT has social responsibilities of building houses for contributors yet in his opinion, such residential accommodation should attracts very fair economic rates. Ozo-Eson (2004) also noted that Pension schemes in developing economies require reforms which must touch on the kind on investment that the pension funds are put into.

Generally the challenges identified are surmountable and for that matter stakeholders should strive to create structures to facilitate the integration of these small and table top businesses operators so as to increase the fund base for national development.

Prospects of small business joining SSNIT pension scheme

Having examined the challenges associated with integrating the informal sector small business operators in Ghana’s pension scheme, it is worthwhile looking at the prospects or benefits that these potential contributors can gain from joining the scheme. The results of such interaction have been presented in table 4.

Table 4. Frequency table on prospects of small business operators joining SSNIT pension scheme

<table>
<thead>
<tr>
<th>Response Type</th>
<th>N</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular monthly income after retirement.</td>
<td>56</td>
<td>4.528</td>
<td>1.312</td>
<td>0.942</td>
<td>1</td>
</tr>
<tr>
<td>Members have access to affordable housing scheme.</td>
<td>56</td>
<td>4.208</td>
<td>1.142</td>
<td>0.996</td>
<td>2</td>
</tr>
<tr>
<td>Members could act as guarantors for student loans.</td>
<td>56</td>
<td>4.146</td>
<td>1.089</td>
<td>1.125</td>
<td>3</td>
</tr>
<tr>
<td>Members could access quality health care.</td>
<td>56</td>
<td>3.960</td>
<td>0.979</td>
<td>1.165</td>
<td>4</td>
</tr>
<tr>
<td>Pension association members enjoy productive information.</td>
<td>56</td>
<td>3.816</td>
<td>0.911</td>
<td>1.241</td>
<td>5</td>
</tr>
<tr>
<td>Contributing to pension fund for developing Ghana.</td>
<td>56</td>
<td>3.785</td>
<td>0.848</td>
<td>1.286</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Field Data, (2018)
Views of respondents in respect of benefits to be gained in signing onto Ghana’s pension scheme have been reflected in table 4. Ranking first is the fact that the prospective contributors will receive regular income after retiring from active business. This statement is supported by Okine (2012) who pointed out that, the cardinal principle behind pension scheme has to do with ensuring financial security of retirees or senior citizens. It is therefore not surprising that very serious efforts are being made across the world to engage all manner of business people in pension schemes. Kpessa (2011) also supports the second ranked prospects i.e. membership of pension schemes entitles one to have access to affordable housing scheme.

In Ghana, company’s file (2017) speaks of well over 7000 housing units across the country which have been built for the benefits of contributors while 8,000 other structures are in various stages of completion to help solve the acute housing deficit facing Ghanaians. It also came to light that membership of the pension scheme could empower the contributor to act as a guarantor for a relative who is in the process of accessing students loan to undertake a tertiary institution programme. Perhaps it might be worth indicating that the SSNIT pension fund in Ghana finances the student loan scheme. By being a member of pension scheme in Ghana, contributors also have access to specialist health care at various well equipped modern medical centers established by the pension fund. Here members enjoy concessionary rates on all services ranging from primary health care to terminal diseases.

The study further revealed that upon retirements, contributors join pension association scattered throughout the country where productive pieces of information on health, aging, grand-children upbringing, nutrition and other social enhancement and longevity topics are discussed. Some of these members make friends and even find suitable old age partners to continue their life cycle. Recently in Ghana, Company files (2017) point to the fact that based on appeal made by the various executives of pension associations, the board of directors of the scheme decided to absorb the cost of treatment of certain ailment which was previously borne by the retiree. Again based on recommendation from the association, the minimum pension benefits were increased in consonance with the economic realities of the country.

Some interviewees also mentioned the fact that, by joining the scheme, they will be contributing towards the pension fund which goes a very long way to help with the socio-economic development of the country.

Recommendation

In the light of the challenges uncovered in the study, the following recommendations are worth considering by the SSNIT authorities of Ghana.

Establishing more agency offices at various market places

The study noted that potential small business operators may not be able to desert their businesses to make way for SSNIT offices to pay contributions and this could adversely affect the relationship between the contributor and the collector. It is hereby recommended that management of SSNIT endeavors to establish various offices across the main market places so as to facilitate the contribution payment system. Such agency offices will also help the contributors in paying their periodic premiums either daily or weekly depending upon their financial circumstances.

Better investment strategy for pension fund

The parliamentary subcommittee on finance recently criticized SSNIT board for the low returns on investment recorded over the years. This concern is really widespread and for that matter authorities of the pension scheme should develop better strategies for enhancing its investment portfolio. It is an opening secret that some financed houses are paying as much as 29% per annum investment income on long term fixed deposit, it is therefore difficult to understand why SSNIT continues to register low returns on investment. Perhaps management must take a serious look at its operating cost especially the unreasonable salaries allotted to themselves. If this high salary regime continues, it will not be surprising that contributors will push for liberalization of pension schemes just as motor insurance is no longer the preserve of state insurance company (SIC) but that public vehicles can be insured at any reputable insurance outfit.
Relaxing the law on prosecuting defaulters

Successful Modern businesses thrive on Know-Your-Customer (KYC) concept and for that matter one expects SSNIT officials to interact more with contributors to know their problems rather than using the law court to punish defaulting contributors who obviously have cash flow challenges. SSNIT must work closer with contributors and forget about this concept of using the law to intimidate contributors. Contributors who eventually get badly affected by such court action often close down their businesses and ask employees to seek their daily bread from SSNIT. Prosecuting the defaulter is the not the best of actions and only scares away the potential small and table top business operator. Consequently, more acceptable means could be adopted to encourage free flow of contributions to the fund.

Abolishing penalties associated with delayed payment in contributions

The study revealed unequivocally that Ghana pensions scheme charges defaulting contributor 3% per day as penalty and this works out to over 1000% per annum. This the respondents point out is not only reprehensible but totally unacceptable especially where loans contracted from commercial banks for expanding operations, even at a yearly interest rate do not exceed 30%. As a matter of urgency, if SSNIT really wants to woo the informal sectors operator especially small and table top businesses into the pension scheme, then the penalty regime must be struck out entirely. It is advisable for management to investigate the impact of this penalty principle on the operations of small businesses within its pension scheme enclave. Again the KYC system must be adopted and penalty arrangement abolished.

Conclusion

Taking cognizance of the important role pension funds play in the lives of developing economies like Ghana, it stands to reason that every effort must be made to increase the contribution base so as to augment the pension fund for social development. Bringing on board the informal sector, small and table top operators will certainly boost up the revenue base of the pension scheme. However, certain administrative structures like compulsory monthly payment, penalties in respects of delayed payments and court actions against defaulters must all be examined closely and reformed so as to attract this large segment of small business operators who control huge amount of funds that can be harnessed to better position the SSNIT pension fund and help uplift the living standards of Ghanaians.

References

“Assessing the Effects of Pricing Strategies on Sales Performance of Street Hawkers in Ghana”

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Abstract

The purpose of the study was to assess the effects of pricing strategies on sales performance of street hawkers in Ghana. The study adopted the survey design. Data were gathered from a purposively selected sample of 198 traders at their hawking sites using a structured interview guide and data analyses carried out using SPSS version 20. The findings of the study reveal product bundle pricing and psychological pricing strategies used by hawkers. The majority of the hawkers have not been able to increase performance. It is recommended that the hawkers should be educated on the various pricing strategies available and when to apply them. Products which add value and satisfy the needs of consumers should be encouraged.

Keywords: Hawking, pricing strategies, sales performance.

Introduction

Background of the study

Street hawking on the streets of Accra, Ghana is characterized by traders selling various types of goods, which may consist of: fruits and vegetables, newspapers, cosmetics, jewelry, watches, ladies' bags, wallets, second hand clothes to shining of shoes on the streets, highways, sidewalks, avenues etc. The Encarta 2009 edition defines a street hawker as a person who engages in the selling of merchandise on the street or from door to door. Street hawkers and street vendors were one of four categories of informal workers identified by the 1993 International Conference of Labour Statisticians in their efforts to address the “place of work” of informal workers (Becker, 2004).

Street hawkers essentially transform streets into arenas of economic activities in a bid to earn a living (Becker, 2004). Street hawkers are found virtually in all major cities of the developing world; they are present in Cartagena in Colombia, Quito in Ecuador (Bromley, 1998; Jimu, 2003), Dhaka the capital of Bangladesh, Bangkok in Thailand (Bhowmik, 2005), Lagos in Nigeria (Oyefara, 2005), Nairobi in Kenya (Kamunyori, 2007), Zomba in Malawi (Kayuni and Tambulasi, 2009) among others. In recent times the debate has shifted to the hikes in the volume of street hawkers and the associated congestion of public space. Particularly, the swelling numbers which has become a subject of intense discussion is attributed to the mass rural – urban migration, and the non-existent job vacancies in the formal sector to absorb the influx of migrants (Dickson and Benneh, 1988).

In Ghana, the issue of street hawking has also enjoyed immense attention both within the media and in academia, due to the ever-increasing numbers of street sellers in almost all major cities of the country (Asiedu and Agyei Mensah 2008). Concerns expressed include the street congestion they contribute to, the negotiation for power and the resultant friction that ensues between these street hawkers and city authorities (Nduma, 1990 and Jimu, 2005). However, street hawking in the major cities of Ghana and particularly in Accra is not a recent phenomenon (Asiedu and Agyei-Mensah, 2008), although the spatial configuration and its impact on city dynamics has intensified since the dislocations in the Ghanaian economy in the 1970s and further entrenchment by structural adjustment, economic recovery program and globalization in the early and late 1990s. The major economic downturn that hit the Ghanaian economy led to the implementation of the Economic Recovery and Structural Adjustment Programme in the 1980s, resulting in massive layoffs of formal sector workers (Asiedu and Agyei-Mensah, 2008) which saw poverty levels in the Greater Accra region risen from 5.2% in 1998/1999 to 11.8% in 2006 (GSS, 2007).
Given that the Ghana Government has no backup plan to savage local economy, many nationals thinking of daily survival sees street hawking as an immediate avenue for meeting one’s daily survival needs. Circumstantial evidence suggest that Accra’s daytime population exceeds five million, most of the inflows originate from the city’s outlying towns and villages, and converge at the city centers to engage in commercial activities including hawking but return home after the day’s economic activity closes (Asiedu and Agyei - Mensah, 2008). Street hawking in the Metropolitan City of Accra occur in different parts of the urban landscape. Hawkers employ various media to display their goods which may include: wheel burrows, handcarts and bicycle seats. Others display their goods on the ground, over a mat or gummy bag, whilst others carry their commodities on their heads, hands and shoulders. There are also others who hang their goods on walls, trees and fences.

**Problem statement**

Hawkers adopt different pricing strategies with the hope of yielding profitable results both in the long and short term of their business operations. In the research work of Ruiliang (2009), it was stressed that there is the need for optimal pricing which takes in place the competitive landscape to be adopted in order for sales objectives to be met. Street hawkers most of the times are found selling similar products that other hawkers in the same vicinity are selling but in spite of this each and every hawker has a way of attracting people to buy his or her products. However, the informal nature of their trade has made it to a large extent, difficult to assess if they put into practice any pricing strategy that has academic roots. This may be so because there is very little academic information concerning how hawkers’ trade and the strategies, they adopt in pricing their products. There are many forms of pricing strategies which can be used by street hawkers which include psychological pricing, demand-based pricing, value-based pricing among others. However, the usage of any of these pricing mechanisms is based on the product and street hawk in question but there is very little information also regarding the types of actual pricing strategies that the street hawkers are using. This research therefore seeks to reveal the strategies related to pricing which are currently being implemented by street hawkers and its effects on sales performance.

**Specific objectives of the study**

In order to achieve the stated aim of the study above, the following objectives have been set.

1. To investigate the current pricing strategies used by street hawkers
2. To explore the sales performance of street hawkers
3. To determine the relationship between bundle pricing and psychological pricing strategies on sales performance of street hawkers in Ghana.

**Significance of the study**

The outcome of this study, if adopted, will assist first the traders in diverse ways, including adopting the right kind of pricing strategies to increase sales. The study will also be beneficial to government, to look critically at the activities of street hawkers and how to rationalize their operations. Given the limited academic literature on street hawkers and their pricing strategies, the findings from this research can serve as empirical literature for other researchers that will be conducting research in a similar area.

**Scope of the study**

Investigating the effects of pricing strategies on sales performance of street hawkers in Ghana can be quite involving and demanding. The study therefore was restricted to only hawkers within the Greater Accra Municipality

**Limitations of the study**

The researcher encountered some limitations in the research work and they are as follows. The first was inadequate sample size: it was stated in the study that two hundred (200) respondents were to be considered during questionnaire administration. However, it was observed that one hundred and ninety-eight (198) numbers of questionnaires were successfully retrieved from the respondents instead
of the original stated sample number. The unwillingness of some respondents to give accurate information needed came to bear as they believed any information; they provide may be used against them. Secondly, illiteracy on the part of the hawkers posed a challenge since the hawkers thought the information was for tax purposes. A lot of time was therefore spent in trying to convince them that the study was just for academic work. The respondents were therefore limited to those who were willing to participate in the study. The findings, even though are generalized, may not entirely reflect traders in other administrative capitals of Ghana.

Theoretical literature

Pricing theory

Price theory is concerned with explaining economic activity in terms of the creation and transfer of value, which includes the trade of goods and services between different economic agents (Tellis, 1986). According to Friedman (1990), it is the explanation of how relative prices are determined and how prices function to coordinate economic activity. The author further outlined two reasons why we must understand pricing theories.

The first reason to understand price theory is to understand how the society around you works. The second reason is that an understanding of how prices are determined is essential to an understanding of most controversial economic issues while a misunderstanding of how prices are determined is at the root of many, if not most, economic errors. According to Nagle and Holden (1995), a market economy is coordinated through the price system. Costs of production ultimately, the cost to a worker of working instead of taking a vacation or of working at one job instead of at another, or the cost of using land or some other resource for one purpose and so being unable to use it for another are reflected in the prices for which goods are sold.

The value of goods to those who ultimately consume them is reflected in the price’s purchasers are willing to pay. If a good is worth more to a consumer than it costs to produce, it gets produced; if not, it does not.

Pricing as a strategy

According to Dudu and Agwu, (2014) ‘among the four Ps, price is the only income generator and it is the value attached to a product. Furthermore, price is the amount of money charged for a product or service. It is the sum of all the values that customers give up in order to gain the benefits of having or using a product (Kotler et al., 2010). Baker (1996) noted that price is the mechanism which ensures that the two forces (demand and supply) are in equilibrium. According to Stanton, (1981) price is simply an offer or an experiment to task the pulse of the market. It is the monetary value for which the seller is willing to exchange for an item (Agbonifoh & Elimimian, 1999). Ezeudu, (2004) argues that price is the exchange value of goods and services. Schewe, (1987) defines price as what one gives up in exchange for a product or service.

It is one of the most important elements of the marketing mix as it is the only one that generates revenue for the firm unlike the others that consume funds (Dudu & Agwu, 2014). Lovelock (1996) suggested that pricing is the only element of the marketing mix that produces revenues for the firm, while all the others are related to expenses. Diamantopoulos (1991) also argued that, price is the most flexible element of marketing strategy in that pricing decisions can be implemented relatively quickly in comparison with the other elements of marketing strategy. It is capable of determining a firm’s market share and profitability. Kellogg et al., (1997) point out “If effective product development, promotion and distribution sow the seeds of business success, effective pricing is the harvest. Although effective pricing can never compensate for poor execution of the first three elements, ineffective pricing can surely prevent those efforts from resulting in financial success”.

Typically, pricing strategies that are investigated in the marketing literature consist of analyzing aggregated prices (Tellis, 1986). For consumer goods, this is applicable unlike the several types of disaggregate pricing strategies that are utilized to promote products as favorably as possible (Eliashberg & Jeuland., 1986). These consumer products usually have small prices that are paid up at once. Disaggregate pricing means paying in bits for instance reframing a $500 expense into $1.40 a day expense diminishes the enormity of the expense, and therefore, eases the decision process for the
consumer. This however does not apply at all to consumer goods therefore appropriate pricing strategies which are aggregate must be adopted to ease the decision-making process of consumers. Traditional pricing strategy by definition is incapable of harmonious associations, but it needs to become a more socially conscious, collaborative exercise. Bertini and Gourville, (2012) stressed that businesses should look beyond the mechanics of just fixing prices they feel is suitable for a product having estimated cost and profit still relevant but no longer sufficient and recognize that harmonization of the way they generate revenue can open up opportunities to create additional value.

**Pricing strategies**

Forman and Hunt (2005) identifies that there are 13 strategies of pricing among which include the following: Bundle pricing, Psychological pricing and Penetration pricing. Hinter and Huber (2008) inform that a company’s rate of profitability and retention levels are highly affected by pricing.

**Bundle pricing**

Bundling strategy as a selling tactics for complementary items is applied by sellers to increase their sales rates. Indeed, bundling is a practice of selling several items in a package at a discount. Among researchers who investigated the bundling strategy, McCardle et al. (2007) surveyed the effects of bundling item on optimal order quantities, bundle prices and the system profit. They found that bundling product is more profitable than selling individually. Gurler et al. (2009) and Bulut et al. (2009) presented stochastic revenue management models for two deteriorating items under a bundle strategy in order to maximize the expected profit. They observed that

**Psychological pricing**

Psychological pricing has been used by marketers over the years to influence buying behaviour of consumers (Estelami, 2003). Psychological pricing is the practice of structuring and presenting prices to appeal to consumers’ emotions and to influence their decision-making processes (Pride & Ferrell, 2007). Pricing is more than just about numbers; it is a play on perception. To a large extent, it is the customers’ perception of price that makes them buy a product and not the actual money price. In many cases, the psychology of pricing and price perception is more important than the actual price of the product or service; and businesses that understand the role psychology plays in their pricing strategies can come out as winners (Hosken & Reiffen, 2004).

**Penetration pricing**

According to Kerin et al., (2004); Lamb et al., (2004), it is referred to as setting a low initial price on a new product to appeal immediately to the mass market. It is the opposite of skimming. The company could penetrate the market with low price and high promotion. This strategy brings the fastest market awareness and results in increased or large market share. For a firm to enjoy this strategy it must have manufacturing or a sustainable competitive advantage that would result in company’s unit.

The firm can also penetrate the market with low price combined with low promotion (Lamb et al., 2004). It works better in high price elastic market. It also works better in minimum promotion elastic and a competitive market. When the aim of the company for its new product is to set a low price so as to attract large number of buyers and a large market share, it is using penetration pricing (Kotler et al., 2001). Here the firm also has two alternatives as discussed above.

**Street hawking and economic activities**

Economic disparities existing between countries have the tendency of creating population drift. The more economically developed countries tend to pull people from relatively less developed countries in search of economic opportunities (Dickson & Benneh, 1988). For instance, a conservative estimate shows that the number of economic migrants from Mexico who moved to the United States of America (USA) in search of economic opportunities were about 12 million people in 2007. However, the number dropped to 11.6 million in 2008 and subsequently to 11.5 million in 2009 due to economic recession that affected the USA economy (Jordan, 2009).
Similarly, national economic disparities in countries have been a key factor to rural-urban migration and perhaps the existence of primate cities globally and Africa in particular.

The concept of primacy relates to urban hierarchy in which the leading city in a country or region becomes disproportionately larger than any surrounding region. The proponents of primacy argued that the phenomenon occurs when the largest city is at least twice the size of the next largest city as well as more than twice the population density of the second. Some examples of primary cities in Africa include Lagos (Nigeria), Cairo (Egypt), Kinshasa (Congo DR), and Accra (Ghana). The regional economic disparities between towns (cities) in Africa have made these primary cities centers for economic opportunities and personal fulfillment. Hence any countryside dweller who seeks to better his or her life immediately thinks of moving to the city. Taking Ghana for example, Accra is the dominant city with its population almost twice that of Kumasi, the second largest city.

Accra hosts all government ministries and departments, has the only international airport in Ghana, boasts of almost all business head offices where hiring and firing takes place, contains all foreign embassies and above all the headquarters of financial institutions. This has created a situation where citizens requiring jobs would have to travel to Accra. Similarly retiring civil servants seeking end of service benefits would also have to make a number of trips to Accra no matter where one lives in Ghana. A direct result of the concentration of opportunities in Accra is a constant influx of immigrants from the countryside seeking economic opportunities. These economic migrants move to Accra in hopes of good jobs, better pay, good housing and a more exciting lifestyle.

Even though street hawking has been featured in the news media for some time now, research from academic circles is less well represented (Bromley, 1998). Hays-Mitchell, (1994) and Jimu, (2005) noted that most investigations into this subject area have been in studies of informal manufacturing (Asiedu & Agyei-Mensah, 2008). This creates a gap in knowledge regarding the spatial dimension and modification of the urban landscapes by street hawking.

Extent of street hawking in Ghana

In Ghana, street hawking is of serious concern due to increasing numbers of people selling and the resultant friction that ensues between street hawkers and city authorities (Iyenda, 2005; Gyamfi, 2000). The swelling numbers of street hawkers is attributed to the massive rural-urban migration, lack of formal sector required skills and the non-existence of job vacancies in the formal sector to absorb the influx (Dickson & Benneh, 1988).

Of particular interest is the urbanization process that leads to the swelling numbers of street hawkers in developing countries, particularly in Africa. As Landau (2007) points out, migration is an inexorable response to regional economic inequalities. Migrants to urban centers move with the intention to work, however upon reaching an urban center, they find formal job opportunities are limited. They therefore turn to other alternatives such as street trading. This mode of urbanization is problematic for urban managers in such countries. It is generally observed that street hawkers often work outside the law, especially those associated with tax liabilities, labour codes and zoning regulations (Jimu, 2005). As a result, there exists an essential conflict between hawkers and city managers in their aim to ensure adherence to city management regulations. Lund et al., (2000) makes the case that despite the services provided by street hawkers to the general public, their efforts are not viewed as lawful and beneficial by authorities. Vishwanath, (2001) in his examination of the activities of street hawkers in Bangkok reported that raids and evictions are the usual tools of the city managers in dealing with street traders.

Mitullah, (2003) suggests that the availability of an acceptable site of operation is a pre-condition for compliance with various statues relating to business operations.

Most street vendors in Africa have no authorized sites of operation, which leads to the inevitable confrontation between street vendors and city authorities. The authorities are often reluctant to allocate hawking sites, especially within the Central Business District (CBD). In the cases of Nairobi and Kampala, a study found that hawkers had been allocated vending sites outside the CBD which they rejected based on the argument that those locations were not accessible to customers.

Agbo, (2010) observed that in Abuja, Nigeria, street traders have always been victims of persistent raids carried out by city authorities. The reason has always been the desire to make Abuja an
exceptionally neat capital city compared to modern cities anywhere in the world. In South Africa, Nesvag, (2000) noted that street traders were particularly harassed by the apartheid regime as part of the strategy of preventing Africans from taking control of public space.

Empirical literature

In Paul et al., (2013) study, related price strategies and price setting methods was done using survey designed technique and testing hypothesis on 95 respondents, the result showed that price strategies and price setting are related because strategies are implemented through price setting methods.

Howard and James (2013) based their study on the effect of decision context on perceived risk in pricing strategies and attribution theory where more than 100 business managers were used and findings suggest that when pricing are dominated by an uncontrollable environmental factor, managers themselves tend to select pricing strategies with external orientations to avoid risk. Kostis and George, (2011) conducted a study on new industrial service pricing strategies and their antecedents where data were collected through a mail survey from 129 transportation and 48 information technology companies. Moreover, 20 in-depth personal interviews were conducted in the initial phase of the research and concluded that skimming pricing and penetration pricing relate to the company's corporate and marketing strategy and the service characteristics, while market conditions influence the adoption of pricing similar to competitive prices. Similarly, Anna et al., (2012) conducted a study on the relationship between customer value and pricing strategies by selecting 129 samples of washing machine models which assessed through the conjoint analysis technique. The output was then regressed on the market prices of the products and the result revealed that the alignment between price and value for the customer is limited, only one of the two subsamples presented had positive impact among the variables.

Methodology

Research design

Several forms of research approaches have been identified namely mixed method, qualitative and quantitative approaches (Crowell, 2009). A quantitative study was employed for this study. Bhattacherjee (2012) indicated that quantitative method ensures objectivity in interpretation of responses through a standardized measure. Also, the study adopted a cross-sectional survey since data were sent and retrieved from respondents within a particular period of time.

Population of the study

A population is any group of individuals that have one or more characteristics in common that are of interest to a researcher (Best & Kahn, 2007). The targeted population of the study includes all street hawkers in the Greater Accra Municipality. There was no sample frame since the population of traders who used hawking as the only marketing strategy had not been registered and so information on them was not available. The study area was zoned into four, namely: i) Ress Junction/Madina market; ii). Kwashieman/Lapaz Street and the surrounding areas; iii). Odorkor/Kanasheie Market; iv). Graphic Road/Accra Central.

Sample size and sampling technique

Sampling is the process of selecting a proportion of the target population to represent the entire unit. Therefore, Polit and Beck, (2010) indicated that, it is more practical and economical to work with samples rather than with large target population. In this study, purposive sampling technique was employed. Purposive sampling because the study targeted traders who only hawk with their wares. The main goal of purposive sampling was to focus on particular characteristics of a population that were of interest, which would best enable one to answer the stated research questions (Lund Research, 2012). At the end of the exercise, 198 respondents who were willing to participate in the study were interviewed. Care was taken to ensure equal numbers of respondents from the four locations.
Instruments for data collection

Interview guide was used to collect the primary data for the study. The interview guide was based on the objectives set for the study. The interview guide consisted of five sections (A to E) and had both open- and close-ended items.

As Best and Khan, (1995) described it, the reliability of an instrument is the degree of consistency that the instrument or procedure demonstrates whatever it is measuring, and does so consistently. The interview guide was completed after a review and also two other lecturers and a colleague had checked for consistency.

Pre-testing of instruments

The instrument was pre-tested using 30 traders at Agbogbloshie market, close to Accra Central Market for the simple reason that the characteristics of the respondents were similar to those in the study area. The final interview guide was not modified or changed and no changes were made to the items after the pre-test since the respondents could grasp the meaning of the items.

Data collection methods

Data collection techniques

Two weeks was devoted to each of the four area zones and on each day, several locations in the zone were visited. Attempts were made to interview the traders who were found at any particular time and at specified locations. The reasons for the interview were first explained to them and then their consent sought before any interview started. The interview lasted for eight weeks duration. i.e., from August 8th and ended on the 12th of October 2018. Approximately, it took about 30 minutes to interview each respondent.

Data analysis

All information received from the respondents via the data collection instrument was entered, coded and analyzed with the Statistical Package for the Social Sciences (SPSS) version 20. Regression analysis was used to examine the effect of pricing strategies on the other variable sales performance. Under this analysis, pricing strategy is the independent variable whereas sales performance is the dependent variable.

Ethical consideration

The respondents were not coerced into participating in the research but their consent was sought after explaining the issues involved to them and ensured their anonymity and confidentiality relative to the study. All the respondents approached were given the permission to deny their participation without any explanation. Hence, all those who took part in the study did so volatorily. An appeal for respondents’ co-operation and informed consent was obtained and they were also assured confidentiality of any information they provide.

Background characteristics of respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (N=198)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34</td>
<td>37.4</td>
</tr>
<tr>
<td>Female</td>
<td>124</td>
<td>62.7</td>
</tr>
<tr>
<td>Age in years (N=198)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>64</td>
<td>32.3</td>
</tr>
<tr>
<td>26-35</td>
<td>90</td>
<td>45.5</td>
</tr>
<tr>
<td>36-45</td>
<td>34</td>
<td>17.2</td>
</tr>
<tr>
<td>45 &amp; above</td>
<td>10</td>
<td>5.1</td>
</tr>
<tr>
<td>Educational background (N=198)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>46</td>
<td>23.2</td>
</tr>
</tbody>
</table>
According to findings obtained from the administration of questionnaires to respondents, it was observed that 37.4% of the respondents are males whereas 62.6% are also females. It can be concluded that there were more female respondents than males although this was not predetermined at the beginning of the questionnaire distribution.

As can be seen from the table above, the percentage of respondents who are between the age of 18 and 25 years was 32.3% whiles those between the age of 26 and 35 years was found out to be 45.5%. It was revealed from the research also that 17.2% of the respondents are between the ages of 36 to 45 years whiles 5.1% are also above 46 years. It can be observed from the findings that majority (77.8%) of the respondents are within the age bracket of 26-35 years which denotes an active year group.

It was part of demographic information to search for the educational background of the respondents. The results showed that 23.2% said they have been able to obtain basic education whereas 38.4% said they have secondary education as their most recent form of education. The findings also showed that 25.3% said they have technical or vocational education whereas 13.1% said they have been able to acquire tertiary level of education. It can be observed that all of the respondents have attained some level of education although the level of attainment varies.

**Hawking practices of respondents**

Respondents were asked a series of questions bordering on number of years respondents have been selling in the streets, types of products hawkers engaged in, pricing strategies and locations of hawking.

<table>
<thead>
<tr>
<th>Number of years in hawking</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>48</td>
<td>24.3</td>
<td>24.3</td>
<td>24.3</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>68</td>
<td>34.3</td>
<td>34.3</td>
<td>58.6</td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>40</td>
<td>20.2</td>
<td>20.2</td>
<td>78.8</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>42</td>
<td>21.2</td>
<td>21.2</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>198</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Research Field Data 2018

The respondents were asked to indicate the According to 24.2% of the respondents, they have been selling on the streets for less than one year and 34.3% also said they have been doing so for one to three years now. The findings further showed that 20.2% of the respondents have been hawking for three to five years and 21.2% have also been selling on the streets five to ten years. It can be concluded from the findings therefore that most of the respondents have been selling on the streets for more than a year.

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinks/Sachet</td>
<td>46</td>
<td>23.2</td>
<td>23.2</td>
<td>23.2</td>
</tr>
<tr>
<td>Water</td>
<td>56</td>
<td>28.3</td>
<td>28.3</td>
<td>51.5</td>
</tr>
<tr>
<td>Chewing gum/Toffees</td>
<td>54</td>
<td>27.3</td>
<td>27.3</td>
<td>78.8</td>
</tr>
<tr>
<td>Toys/Accessories Others</td>
<td>42</td>
<td>21.2</td>
<td>21.2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>198</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Field Data 2018
As can be seen from the table above, 23.2% of the street hawkers said they have been selling drinks and sachet water whereas 28.3% said they have been selling chewing gums and toffees. It was found out that 27.3% said they have been selling toys and accessories whiles 21.2% said they have been selling other products on the streets but these products were not specified.

**Table 4.** Bundle pricing helps me in selling more of my products

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>24</td>
<td>12.1</td>
<td>12.1</td>
<td>12.1</td>
</tr>
<tr>
<td>Agree</td>
<td>104</td>
<td>52.5</td>
<td>52.5</td>
<td>64.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>16</td>
<td>8.1</td>
<td>8.1</td>
<td>72.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>38</td>
<td>19.2</td>
<td>19.2</td>
<td>91.9</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>16</td>
<td>8.1</td>
<td>8.1</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>198</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Field Data 2018.

In examining the effect of bundle pricing of sales performance of street hawkers, more than half (52.5%) of the respondent’s asset it helps them sell more, (12.1%) strongly agree while (8.1%) were neutral. Also, the study shows that (19.2%) of the respondents disagree while (8.1%) strongly disagree. It can be concluded that bundle pricing helps the street hawkers in selling more of their good as intimated by majority of the respondents.

**Table 5.** Psychological Pricing makes me attract more Customers

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>32</td>
<td>16.2</td>
<td>16.2</td>
<td>16.2</td>
</tr>
<tr>
<td>Agree</td>
<td>98</td>
<td>49.5</td>
<td>49.5</td>
<td>65.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>12</td>
<td>6.1</td>
<td>6.1</td>
<td>71.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>46</td>
<td>23.2</td>
<td>22.2</td>
<td>94.9</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>10</td>
<td>5.1</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>198</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Field Data 2018.

The research revealed that 16.2% said they use pricing methods that play on the minds of customers and this is what is described as psychological pricing. It was observed also that 49.5% agreed to use psychological pricing but 6.1% neither agreed nor disagreed to using this pricing method. 23.2% disagreed to this statement and 5.1% strongly disagreed that they use psychological pricing.

**Table 6.** Have been able to increase sales performance recently

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>45</td>
<td>22.7</td>
<td>22.7</td>
<td>22.7</td>
</tr>
<tr>
<td>Agree</td>
<td>120</td>
<td>60.6</td>
<td>60.6</td>
<td>83.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>15</td>
<td>7.6</td>
<td>7.6</td>
<td>90.9</td>
</tr>
<tr>
<td>Disagree</td>
<td>18</td>
<td>9.1</td>
<td>9.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>198</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Field Data 2018.

In evaluating the sales performance of street hawkers, the research sought to find out the extent of their sales on the streets. It was observed that 22.7% strongly agreed that they have been able to increase their sales performance recently whiles 60.6% agreed to this statement. It was observed that
7.6% gave neutral responses and 9.1% disagreed that they have been able to increase their sales performance in recent times. It can be seen that majority of the street hawkers have been able to increase their sales performance recently.

Table 7. Effect of Location on Sales

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>12</td>
<td>6.1</td>
<td>6.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Agree</td>
<td>72</td>
<td>36.4</td>
<td>36.4</td>
<td>42.4</td>
</tr>
<tr>
<td>Neutral</td>
<td>24</td>
<td>12.1</td>
<td>12.1</td>
<td>54.5</td>
</tr>
<tr>
<td>Disagree</td>
<td>58</td>
<td>29.3</td>
<td>29.3</td>
<td>83.8</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>32</td>
<td>16.2</td>
<td>16.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Field Data 2018.

According to 6.1% of the street hawkers, they strongly agreed that the location where they sell their wares affects their level of sales and it was also found out that 36.4% agreed to this statement as well. The findings revealed that 12.1% provided neutral responses and 29.3% disagreed as can be seen from the findings presented in the table above. It was found out that 16.2% strongly disagreed.

Simple regression analysis

The objective of regression analysis is to predict a single dependent variable from one or more independent variables. When the problem involves a single independent variable, the statistical technique is called simple regression. Also, when the problem involves two or more independent variables, it is a multiple regression. In this study, the use of only one single independent variable that is bundle and psychological pricing to test the dependent variables (sales performance) required the use of a simple regression.

Relationship between bundle pricing and psychological pricing strategy on sales performance

Table 8. Summary of Simple Regression Analysis of the relationship between bundle pricing and psychological pricing strategy on sales performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>β</th>
<th>R2</th>
<th>T</th>
<th>F</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundle &amp; Psychological</td>
<td>2.524</td>
<td>537</td>
<td>14.190</td>
<td>88.861</td>
<td>000**</td>
</tr>
<tr>
<td>Pricing -&gt; Sales Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result from the linear regression analysis in Table 8 above revealed a significant positive relationship between bundle pricing and psychological pricing and sales performance (β = 2.524, t=14.190, p=0.00). This means that the effect of bundle pricing and psychological pricing resulted to an increase in hawkers’ sales performance. Hence, the relationship between these two pricing strategies and street hawkers’ sales performance is significantly positive.

Conclusions and recommendations

Conclusions

1. It can be concluded that there were more female hawkers than males’ hawkers although this was not predetermined at the beginning of the questionnaire distribution.
2. From the results of the study, majority (77.4%) of the respondents were within the age group of 26-35 years which denotes an active year group. This implies that, hawking demands a lot of energy and to be able to adopt hawking as a marketing strategy, one must be an active person.
3. The majority of the respondents had been hawking goods in the street for periods between one and three years, while 24.3.6% had been hawking for less than a year.

4. The results reveal that 23.2% of the street hawkers had been selling drinks and sachet water whereas 28.3% had been selling chewing gums and toffees, 27.3% had been selling toys and accessories whiles 21.2% had been selling other products on the streets but these products were not specified. It can also be concluded that 27.3% of the respondents had been selling on the streets to take care of family, 29.3% do so as a means of employing themselves, 13.1% sell on the streets to keep themselves busy, 6.1% also sell on the streets as a means of salesmanship. The findings revealed that 24.2% said they sell on the streets to support themselves financially.

5. It was observed that more than half (52.5%) of the respondent’s asset that bundle pricing helps them sell more, (12.1%) strongly agree while (8.1%) were neutral. Also, the study shows that (19.2%) of the respondents disagree while (8.1%) strongly disagree. It can be concluded that bundle pricing helps the street hawkers in selling more of their good as intimated by majority of the respondents.

6. The data reveals that (49.5%) of the respondents agreed using psychological pricing to take advantage of their customers while 16.2% strongly agreed to the statement. The data also showed that 6.1% of the respondents neither agreed nor disagreed, 23.2% disagreed while 5.1% strongly disagreed to the statement. Clearly, this can be concluded that psychological pricing is being observed by the street hawkers.

7. It was also concluded that more than half of the respondents (60.6) agreed that they have been able to sell more on the street recently, 22.7% strongly agreed to the statement while 7.6% neither agreed nor disagreed to the statement. Also, 9.1% of the respondent disagreed to the statement.

8. The data reveals that (42.5%) of the respondents agreed that the location where they sell their wares affects their level of sales, (45.5%) of the respondents disagreed and (12.1%) of the respondents remained neutral. It can be concluded that location does not really influence the sales of hawkers.

9. The study results show that the relationship between pricing strategies such as bundle pricing and psychological pricing and sales performance of street hawkers is positive ($\beta= 2.524$, $t=14.190$, $p=0.00$). This means that when bundle and psychological pricing strategies are employed, the sales performance of street hawkers will also increase.

**Recommendations**

1. The hawkers should be educated on the various pricing strategies available and when to apply them
2. The hawkers should only sell those products which satisfy the needs of consumers in the streets.
3. Both bundle and psychological pricing strategies should be encouraged since it helps in increasing sales of the street hawkers
4. Since location plays a significant role in hawkers’ sales, identification of appropriate street should be the goal of the hawkers to help improve sales
5. There is the need to formulate strategies that will fight the socio-economic challenges that the hawker is grappling with which may include: taking steps to offer them education / training in diverse vocational occupations.
6. The government should regularize the operations of hawkers since it serves as a possible avenue of employment.

**Areas for future research**

Future studies should be carried to find out the future aspirations of street hawkers.
References


Yield Analysis and Adaptation for Bacillus Thuringiensis (BT) and Non-Bacillus Thuringiensis (BT) Cotton Varieties in the Kingdom of Eswatini

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Abstract

Cotton in Eswatini contributes 2.1% of the country’s Gross Domestic Product owing to low cotton yield due to high pest pressure. Eswatini farmers grow Alba QM 301 a conventional non Bt variety which is affected by bollworm. Cotton is no longer profitable and farmers are quitting the industry, yet it is the only source of livelihood in drought prone areas of Eswatini. Countries like India and South Africa have replaced conventional cotton with high yielding Bt or genetically modified cotton. The study analyses yield and adaptation of Bt cotton under rain fed condition. Bt cotton hybrid was evaluated under field condition for adaptation and yield performance in 2016 and 2017 season. Two Bt cotton varieties JKCH 1947 Bt and JKCH 1050 Bt were tested against the local variety Alba Plus QM 301 and JKC 724 both Non Bt (NBt). JKCH 1947 recorded significantly higher seed cotton yield per ha of 3070 kg/ha on the first year. It was closely followed by JKCH 1050 with a yields of 2955 kg/ha. The number of bolls per plant was also significant higher compared the control. Alba Plus QM 301 and JKC 724 both Non Bt (NBt) recorded the lower yields of 2066 and 821 kg/ha respectively, under the same condition with less number of bolls per plant. Similar observations were recorded on the second year. JKCH1947 and JKCH 1050 recording 1765kg/ha and 1865kg/ha respectively. A similar trend was observed on the number of bolls per plant, higher number of bolls were recorded in JKCH 1050 Bt followed by JKCH 1947 Bt. Alba Plus QM 301 NBt and JKC 724 NBt recorded fewer boll in both years. All varieties showed good adaptability to local environment with good plant stand.

Keywords: Bt cotton, rain fed conditions, seed cotton.

Introduction

This paper is about introducing genetically modified cotton in the Kingdom of Eswatini. Discussions in the paper are guided by management processes of introducing a new product or new technology in a market. In the Kingdom of Eswatini, agriculture plays a major role in the economy; it’s a major source of food, and also employs more than 60% of the country’s population (ISAAA, 2014; Thomson, 2012). Eswatini’s agriculture is mainly dependent on sugar cane, cotton and forestry. Cotton is the second biggest cash crop after sugarcane in Eswatini. It is an important cash crop for most Swazis who live on drought prone areas and smallholder farmers who are reliant on the crop for their livelihood (Central Bank of Swaziland, 2013). Eswatini farmers are still entirely reliant on conventional hybrid cotton seeds. Hybrid cotton seeds have long been used in the industry as the sole means for cotton production.

Genetically modified cotton is a variety of cotton that has been modified through a biotechnological process in order to achieve a higher yield. Bollworm resistant, Bacillus Thuringiensis (BT) cotton is the most popular genetically modified cotton seed used throughout the world. Genetically modified cotton was first introduced in the early 1990s and has since been adopted by major cotton producing countries such as the USA, India, China and South Africa (James, 2011). The genetically modified cotton seeds are engineered via a biotechnological process to reproduce the soil bacterium Bacillus Thuringiensis in a crystal form in order to exterminate certain types of insects and pests which damage the cotton crop and reduce farmer’s yields (Craig et al., 2008). The new genetically modified seed has outstripped its traditional hybrid counterparts in terms of yield (Brookes & Barfoot, 2013). In Eswatini, the cotton industry is currently facing a decline in production and this has affected the textile industries which relied on Eswatini cotton as their main source of inputs. Most textile industries have closed due to the shortage of cotton. The few textile factories that are operational survive through importing cotton supplement locally depressed supplies for the daily operations. The government of
Eswatini has to revive the cotton industry by introducing a new product in the market. The purpose of this paper is to analyse yield and adaptability of genetically modified cotton in Eswatini. The paper will compare two Bt cotton varieties against the locally grown conventional cotton variety by evaluating the agronomic characteristics of the varieties under condition of the in the Kingdom of Eswatini.

The cotton industry in Eswatini is currently facing many challenges. The country’s largest cotton ginnery which is under the stewardship of the Swaziland Cotton Board (SCB) and located at Big Bend, has a capacity to handle 25 000 metric tons of cotton. Currently, a mere 10% of the ginnery’s capacity is being utilised owing to unavailability of inputs and decreased cotton production, among other reasons (Mavuso, 2014). The cotton industry is solely dependent on conventional hybrid cotton seeds. This product has been used by all cotton farmers for the past two decades (Cotton Board, 2014). However, the hybrid cotton seed has reached their decline phase and this is characterised by a rapid decrease in the yield of this product. The decrease in cotton production threatens the 90 ginnery employees’ jobs at the Big Bend ginnery (Cotton Board, 2014).

Hybrid cotton that is currently grown by Eswatini farmers is no longer producing high yield as it used to do in the past years. The product has reached a decline phase which is characterised by high production cost, low yields, and heavy pesticides application requirements. From a management point of view a product in decline phase needs to be phased out and replaced because it will be fool hardy to rejuvenate the product (Kotler, 2012). Cotton acreage has drastically been reduced from 20,000 hectares to merely 3000 hectares (Cotton Board, 2013). Correspondingly, the number of cotton farmers in Eswatini has also decreased from 9000 to 3000 in the last 6 years (Cotton Board, 2013). The sector has a potential capacity to create employment directly and indirectly through the textile industry, ginning, spinning, and weaving of fabric respectively, has gone down. This has been aggravated by labour migration from rural areas to the cities (Thomson, 2012). The country has to find strategies of filling the demand gaps created by dwindling cotton production over the years and cheaper technology to continue producing enough cotton to meet increasing demand. Opportunities that are not utilised when they arise will always be taken up by one’s competitors (Bryman, et. al. 2014). It is the researchers’ conviction that the introduction of genetically modified cotton seed is one of the viable options to tackle the cotton industry’s prevailing challenges. There is an urgent need to test the Genetically modified (Bt) technology under local condition and adopt genetically modified (Bt) cotton technology to replace hybrid cotton seed.

In an effort to address the problem in the cotton industry of Eswatini it was essential to conduct agronomic trials of genetically modified (Bt) cotton and test its adaptability under Eswatini soil and weather conditions. This study aimed analyzing yields and the agronomic traits of two Bt cotton hybrids, JKCH 1947 Bt and JKCH 1050 Bt against a popular control variety Alba Plus QM 301(non Bt) NBt and an inbred JKC 724 NBt for yield potential and adaptability. The field experiment was conducted over 2 year, 2016 and 2017 season.

Materials and methods

Field experiment was conducted at two years on the same site in Eswatini during 2016 and 2017 planting season. The trials focused on agronomic and yield performance of two Bt cotton hybrids (JKCH 1947 Bt and JKCH 1050 Bt), inbred (JKC 724 Non Bt) developed and owned by JK Agri Genetics Limited and the control was a locally grow conventional variety (Alba Plus QM 301 Non Bt). The Lowveld Experimental Station (LES) is located in the Lowveld region (26° 57.95S, 31° 31.52E; 89m asl), with mean temperatures ranging between 26.4 to 30.5°C and annual rainfall of 450 mm. The soils are M-series, which are sandy loam, well drained and fertile (Murdoch, 1968). The experiment used a randomized complete block design (RCBD) with six replications. Gross plot size of experiment was 4 rows of 6 metres length planted at an inter-row spacing of 90 cm and 25 cm between plants. Whereas, the net plot constituted of 2 middle rows with each row having 20 plants thus a total of 40 plants for the net plot.

Observations were recorded on six randomly selected plants from each variety per replication for the characters viz., plant height (cm), no. of lateral branches, no. of lateral branches (≥ 4 bolls), days to 50% flowering, no. of damaged bolls, no. of bolls/plant, damaged bolls (%), 50 bolls dry weight (g), ginning out turn (%) and cotton yield (Kg/Ha). Out of all the bolls per plant, fifty bolls were randomly
selected and weighed using a digital balance. Thereafter, the seed cotton yield per plot was estimated after picking the cotton from the whole plot and adding the weight of the collected bolls. The values were up scale from kg/plot to kg/ha for each cotton strain and replication. Field management was done general agriculture practice in the cotton industry of Eswatini. Multiple foliar sprays were applied on control variety Alba Plus QM 301 NBt and inbred JKC 724 NBt to manage cotton bollworm infestation. No foliar sprays were applied on Bt cotton hybrids.

**Statistical analysis**

All data were expressed as mean with standard deviation. Agronomic and yield traits data from the cotton varieties were pooled and analysed using one-way ANOVA. Analysis of variance was performed by using the ANOVA procedure of the SAS software (version 9.3 for windows). Significant differences between varieties agronomic and yield traits means were determined by Fischer’s Least Significant Difference Test at the level of p≤0.05.

**Results and discussion**

**Table 1. Year 1 agronomic traits of Bt and Non-Bt cotton results**

<table>
<thead>
<tr>
<th>Cotton Variety/Hybrid</th>
<th>Plant Height (cm)</th>
<th>No. of Lateral Branches</th>
<th>No. of lateral Branches (≥ 4 bolls)</th>
<th>Days to 50% Flowering</th>
<th>No. of Damaged Bolls</th>
<th>No. of bolls/plant</th>
<th>Damaged Bolls (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alba Plus QM 301 NBt</td>
<td>83.4a</td>
<td>9.5a</td>
<td>2.5b</td>
<td>106.5a</td>
<td>20.5a</td>
<td>58.8b</td>
<td>35.6</td>
</tr>
<tr>
<td>JKC 724 NBt</td>
<td>48.1b</td>
<td>7.7b</td>
<td>3.0ab</td>
<td>110.5a</td>
<td>16.2a</td>
<td>56.2b</td>
<td>29.0</td>
</tr>
<tr>
<td>JKC 1947 Bt</td>
<td>87.7a</td>
<td>9.4a</td>
<td>3.8ab</td>
<td>84.8b</td>
<td>6.7b</td>
<td>92.0a</td>
<td>7.6</td>
</tr>
<tr>
<td>JKC 1050 Bt</td>
<td>78.0a</td>
<td>9.8a</td>
<td>4.2a</td>
<td>86.3b</td>
<td>6.1b</td>
<td>90.2a</td>
<td>6.6</td>
</tr>
</tbody>
</table>

1Means with the same letters within the same columns are non-significant with Fischer’s Least Significant Differences (LSD) test.

**Table 2. Year 1 yield components of Bt and Non-Bt cotton results**

<table>
<thead>
<tr>
<th>Cotton Variety/Hybrid</th>
<th>50 Bolls Dry Weight (g)</th>
<th>Ginning Out Turn (%)</th>
<th>Cotton Yield (Kg/Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alba Plus QM 301 NBt</td>
<td>283.3a</td>
<td>44.7a</td>
<td>2066b</td>
</tr>
<tr>
<td>JKC 724 NBt</td>
<td>207.2b</td>
<td>40.8c</td>
<td>1173b</td>
</tr>
<tr>
<td>JKC 1947 Bt</td>
<td>311.5a</td>
<td>43.1b</td>
<td>3070a</td>
</tr>
<tr>
<td>JKC 1050 Bt</td>
<td>294.7a</td>
<td>43.3b</td>
<td>2955a</td>
</tr>
</tbody>
</table>

1Means with the same letters within the same columns are non-significant with Fischer’s Least Significant Differences (LSD) test
**Table 3.** Year 2 agronomic traits of Bt and Non-Bt cotton results

<table>
<thead>
<tr>
<th>Cotton Variety/Hybrid</th>
<th>Plant Height (cm)</th>
<th>No. of Lateral Branches</th>
<th>No. of lateral Branches (≥4 bolls)</th>
<th>Days to 50% Flowering</th>
<th>No. of Damaged Bolls</th>
<th>No. of Bolls/Plant</th>
<th>Damaged Bolls (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alba Plus QM 301 NBt</td>
<td>131.0a</td>
<td>12.52a</td>
<td>2.56c</td>
<td>158.6b</td>
<td>1.0a</td>
<td>41.2b</td>
<td>2.4</td>
</tr>
<tr>
<td>JKC 724 NBt</td>
<td>89.0b</td>
<td>11.03a</td>
<td>2.36c</td>
<td>165.4</td>
<td>1.2a</td>
<td>37.3b</td>
<td>2.7</td>
</tr>
<tr>
<td>JKCH 1947 Bt</td>
<td>148.0a</td>
<td>12.58a</td>
<td>3.67b</td>
<td>101.5c</td>
<td>0.3a</td>
<td>65.5a</td>
<td>0.5</td>
</tr>
<tr>
<td>JKCH 1050 Bt</td>
<td>131.0a</td>
<td>12.92a</td>
<td>5.39a</td>
<td>106.1c</td>
<td>0.5a</td>
<td>67.2a</td>
<td>0.7</td>
</tr>
</tbody>
</table>

1Means with the same letters within the same columns are non-significant with Fischer’s Least Significant Differences (LSD) test
Table 4. Year 2 yield components of Bt and Non-Bt cotton results

<table>
<thead>
<tr>
<th>Cotton Variety/Hybrid</th>
<th>50 Bolls Dry Weight (g)</th>
<th>Ginning Out Turn %</th>
<th>Cotton Yield (Kg/Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alba Plus QM 301 NBt</td>
<td>220.3a(^1)</td>
<td>45.7ab</td>
<td>1337b</td>
</tr>
<tr>
<td>JKC 724 NBt</td>
<td>172.2b</td>
<td>44.0b</td>
<td>821c</td>
</tr>
<tr>
<td>JKCCH 1947 Bt</td>
<td>226.8a</td>
<td>46.3a</td>
<td>1765a</td>
</tr>
<tr>
<td>JKC 1050 Bt</td>
<td>218.8a</td>
<td>47.3a</td>
<td>1817a</td>
</tr>
</tbody>
</table>

\(^1\)Means with the same letters within the same columns are non-significant with Fischer’s Least Significant Differences (LSD) test.

Early flowering was observed in hybrids JKCCH 1947 BT (85 days) and JKCCH 1050 Bt (86 days) compared to the control variety Alba Plus QM 301 NBt (106 days). Damaged cotton bolls were prominent in Alba Plus QM 301 NBt (35.6%) compared to minimum damaged bolls in JKCCH 1947 Bt and JKCCH 1050 Bt almost (7.0%) each (Table 1). Industrially acceptable ginning out turn percentage (GOT%) ranged between 43.1 to 44.7% in cotton varieties except JKC 724 NBt with 41.0%. Yield indicated that out of the four varieties tested, JKCCH 1947 Bt (3070 Kg/ha) and JKCCH 1050 Bt (2985 Kg/ha) produced significantly superior seed cotton yield compared to control variety Alba Plus QM 301 NBt (2066 Kg/ha) on the first year. The same trend was observed on the second year. The lowest yielding variety was inbred JKC 724 NBt (1173 Kg/ha). Bigger boll size was observed in JKCCH 1947 Bt (312 g/50 bolls) followed by JKCCH 1050 Bt (295 g/50 bolls) and Alba Plus QM 301 NBt (283 g/50 bolls) (Table 2). Agronomic performance of Bt cultivars may vary substantially from their non-Bt counterparts (Jenkins et al., 1997).

Significantly higher number of bolls were recorded in JKCCH 1050 Bt (67.0) followed by JKCCH 1947 Bt (66.0) compared to Alba Plus QM 301 NBt (41.0). The hybrids Bt varieties JKCCH 1947 Bt and JKCCH 1050 Bt (106 days) were significantly faster in boll formation taking (102 days and 106 respectively). Alba Plus QM 301 NBt took the longest time of 159 days. Control entry Alba Plus QM 301 NBt (% boll damage 2.4%) had more boll damage compared to minimum boll damage in JKCCH 1947 Bt (0.5%) and JKCCH 1050 Bt (0.7%) (Table 3). Industrially acceptable ginning out turns (%) was observed in JKCCH 1050 Bt (47.3%), JKCCH 1947 Bt (46.3%) and control variety Alba Plus QM 301 NBt (45.7%). JKC 724 NBt exhibited a low GOT% (44.0 %). Based on the weight of 50 bolls per variety, Hybrid JKCCH 1947 Bt (227 g/50 bolls) had bigger boll size followed by Alba Plus QM 301 NBt (220 g/50 bolls) and JKCCH 1050 Bt (218 g/50 bolls). Significant differences were again observed on yield of the four cotton varieties trials on the second with JKCCH 1050 Bt (1817 Kg/ha) and JKCCH 1947 Bt (1765 Kg/ha) compared to control variety Alba Plus QM 301 NBt (1337 Kg/ha). The lowest yield was observed in inbred JKC 724 NBt (821 Kg/ha) (Table 4).

Discussion

Yield is dependent on many component characters, such as boll weight, number of bolls per plant and harvest index. Bt cotton hybrids produce increased seed cotton yield over their non-Bt counter parts and check hybrids. Bt cotton hybrids recorded more than 100% increased seed cotton yield over non-Bt and control hybrids (Anon, 2002).

The Increased yield is attributed to the Bt-genotypes in JKCCH 1947 Bt and JKCCH 1050. Bolls in the Bt hybrid varieties were protected, while only those that survived the pest pressure were harvested under the local Alba Plus QM 301NBt and the inbred JKC 724 NBt. The two Bt-genotypes eliminate shedding of bolls due to bollworm infestation. Alba Plus QM 301NBt and the inbred JKC 724 NBt suffered from significant boll worm damage. This culminated to the higher seed cotton yield on Bt- genotypes over the local checks.

Since cotton is grown under rain fed condition, the number of days to flowering became is important to cotton producers. The earlier the cotton flowers it the earlier is the maturity time and exposure to heat unit required for crop maturity compared to late flowering varieties. This contributed to high-yielding ability, JKCCH 1947Bt and JKCCH 1050Bt in both years of experiment. Bt hybrids recorded significantly higher yield than the corresponding non-Bt hybrids. Early-maturity and high-yielding ability is double
benefit to the rain fed farmers. The early maturity provides farmers with drought escape toward climate change. Quick trait will help the hybrids to escape from terminal moisture stress in the season. This makes the cultivar to be preferred under rain fed areas (Hofs et al., 2006).

Numbers of bolls per plant play a vital role in determining final yield of a cotton variety. This is influenced directly or indirectly by the growing conditions and its genetic ability to perform in the given environmental condition (Luqman et al., 2015. The statement by Luqman et al. 2015 clearly correspond to the observation of this study where in both years, the Bt cotton cultivars expressed a higher mean number of bolls per plant compared to the local variety and the Non Bt hybrid in both locations. The results obtained from the field trials corroborated those of a trial by Sudha et al. 2011 in Govankoppa village in India.

Conclusion

This study analyzed the yield performance of two Bt cotton varieties in Eswatini over a period of 2 years based on rain fed conditions. Cultivation of hybrid Bt cotton did not only give a significantly higher yields but also realized significantly reduced insecticidal usage, hence giving security to farmers about the cotton yield. The study conducted over two year’s clearly depicted good adaptability of both Bt (JKCH1050 and 1947) cotton hybrids to Eswatini environment. The varieties were early maturing and high-yielding. Adoption of these Bt varieties can help empower Swazi cotton farmers to embrace and benefit from product of modern biotechnology. It is therefore concluded that the two Bt varieties (JKCH1050 and 1947) be released to farmers for commercial growing.

Recommendation

It is recommended that the kingdom of Eswatini commercialize the growing of Bacillus thuringiensis cotton to cotton growers.

It further recommended that further studies be conducted on the four regions of Eswatini on the performance and adaptation of this technology.

References


[17]. (www.cantool.net)

[18]. (www.cantool.net)

[19]. (www.cantool.net)

[20]. (www.cantool.net)
To Determine the Relationship Between SMEs Growth and their Marketing Activities/Practices: A Case Study of Furniture Industry in Kabwe-Zambia

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Abstract

The way the SMEs have been doing their business has some connections with the capacity to embrace marketing activities that have made some of them to become big companies. The importance of SMEs and their contributions to the national development cannot be ignored and these are in form of job creation, paying taxes and poverty reduction. SMEs enable an entrepreneurial culture to be cultivated in a society. The major problem that this study examined was the relationship between SMEs growth and marketing practices/activities of these SMEs in the furniture industry in Zambia.

SMEs have the advantage of being able to use unutilized resources by involving different groups of people such as youth and women and act as an engine to achieve the economic vision of Zambia of being a semi-industrial country by the year 2025.

The SMEs that are in the furniture industry are the manufacturers and traders of furniture products in Kabwe, Zambia. The general research problem that the research investigated was to find out the types of marketing activities/practices that the SMEs were using and their effect on the growth of their enterprises.

The methodologies applied in this research include a combination of descriptive study (cross-sectional survey) and explanatory embedded literature search and case study. The research findings serve as tools to take actions to stimulate marketing practices of SMEs in Zambia.

Some recommendations about the contributions and importance of marketing activities/practices to the SMEs have been made to various sectors of the economy that have some significance influence on the growth of SMEs in Zambia.

Keywords: Small and Medium Enterprise, Marketing Activities, Growth, Entrepreneurship, Performance.

Introduction and background information

Introduction

Marketing, in combination with other variables like limited access to capital, lack of an enabling environment, low level of technology, and improper managerial attitude and skills have in many occasions itemized as some of the challenges that have affected the performance of Small and Medium Sized Enterprises (SMEs), that is according to Hultman, et al (2001). These challenges have been mentioned before by the government and other stakeholders as hindrance to the SMEs contribution to the national economy in the country. However, during the last two decades, several measures have been taken and one of them is the creation of conducive environment in which these SMEs supposed to conduct their businesses. It has also been noted that it was not only financial resources that were lacking amongst these SMEs but there were many other factors such as skilled human resources that is the employees and the owners of the enterprises. According to Ngobo (1995) there have been some considerable efforts in many African countries to encourage the SMEs to continue to doing business so that they create more jobs and reduce unemployment levels, provide income and contribute to the national development. According to Chijorgi and Cassimam (1997) some of the reasons for preferred to support the SMEs included easy of formation, low capital requirements, flexibility and mobility. Despite the important role that SMEs play in the national development, they appear not to be performing well and register some growth in their businesses in the country. According to Balunywa (1997) studies undertaken in most developing countries also have mentioned the non-availability of finance and modality of getting the finance as some of the challenges plus poor managerial skills and disabling environment. In addition, other challenges have been pointed out such as lack of proper of
finance management, not able to find suitable locations for their enterprises, inadequate control strategies of inventory, low level of technology, and inability to make the entrepreneurial transition (Kibera & Kibera, 1997). Moreover, one of the more serious problems leading to SMEs being unsuccessful is the question of marketing and lack of market information (Matambalya, 2001). According to Brodie et al, (1997) marketing activities in most SMEs has been an issue that has been debated by many stakeholders. The general research problem therefore to be investigated can be stated as: What marketing practices/activities do SMEs use and what is their effect on the growth and performance of these enterprises?

Also, there has been a focus on improving innovation and technical skills (Mahemba, 2003). According to Mtazindwa (1997) most of the factors have been mentioned by many stakeholders but very few have taken interest to understand how the SMEs carry out marketing of the products and services that they provide to customers. According to Siu and Kirby (1998) the basic marketing principles are supposed to be applicable to both small and large enterprises.

Some scholars argue that current theories on how SMEs carry out marketing activities cannot be relied upon because they do not provide a lot of information on this particular topic especially on growing their enterprises. According to Bagachwa (1997) conditions under which SMEs are operating in cannot be compared to the ones that big companies are operating in and from which most of the theories on this topic are generated. According to Carson (1990:11), the theories that explain how the SMEs carry out marketing has not been seriously tested to obtain accurate results. There is need therefore to have more knowledge on the importance of marketing processes in the SMEs growth. This particular study has been carried out to find out the linkage between the growth of SMEs and their marketing processes in the furniture industry in Zambia.

This research was carried out at selected SMEs that are based in Kabwe town, central province of Zambia that are in the furniture industry. Resolving of this particular problem may enable many SMEs to increase their marketing related activities and enhance their growth particularly in the furniture industry in the country. This research therefore focused on finding out the marketing practices/activities that SMEs in the furniture industry were using to inform and attract customers to buy their products.

**Statement of the problem**

SMEs are the most rapidly growing sector of the economy in Zambia. The SMEs have been increasing in Zambia since 1991 after some economic changes and policies were made to liberalize the economy. According to Bagachwa (1994) the non performing public sector encouraged individuals to set up small enterprises that have since been trying to promote growth and development, offer employment and also allow many people to earn income.

SMEs have no financial capacity to carry out marketing practices that are being done by large firms. These enterprises are in most cases run and managed by owner/manager who do almost everything for the enterprise and also the management of the enterprise and the marketing decisions are not the same as the ones that done by big enterprises. The problem which the study addressed was finding out the marketing practices/activities that the SMEs in the furniture industry in Kabwe town were using and also if they stimulated growth.

**Research objectives**

In order to find out the marketing practices/activities that the SMEs in the furniture industry were using, the study will seek to achieve the following objectives:

i. To find out marketing practices/activities that the SMEs were using.
ii. To explore the relationship between SMEs growth and the use of marketing practices.
iii. To analyze the impact of the marketing practices of the SMEs in the furniture industry on their business growth.

**Research questions**

The achievement of the stated objectives was done by providing solutions to the research problem and that was made possible by addressing the research questions stated below:

i. What marketing practices/activities do SMEs in the furniture industry use in Kabwe, Zambia?
ii. Is there any relationship between SMEs growth and the marketing practices that they were using in the furniture industry?

iii. What is the impact of the marketing practices of these SMEs on the growth of their businesses?

**Significance of the study**

The study investigated the marketing practices/activities that the SMEs in the furniture industry are using and also evaluated whether these practices are working to the SMEs advantages. The study is also significant in that it also examined whether these practices have any bearing on the performance and growth of the sector. The contributions of this research to the furniture industry will benefit the SMEs very much in rethinking the way they have been marketing their products.

It is also hoped that the findings will provide insights to the government and other stakeholders about the environment in which SMEs were conducting their businesses and why they have been using such marketing practices/activities for many years.

**Limitation of the study**

The major constraints that was encountered during the research was inadequate time for data collection because most of the SMEs were based in different locations and also were not very willing to provide data that the researcher had requested from them. In some cases, the Directors/Owners were not found at their enterprises and were only seen after several visits. The transport costs involved in this research study were relatively high because of the distances that were covered in order to reach these SMEs.

**Literature review**

This review presents empirical evidence that has been collected and analyzed from previous studies and also theory that has impact on this particular study. The literature has assisted the researcher to comprehend the problem and anticipate solutions to the SMEs marketing practices.

The SMEs in Zambia conduct their businesses as strategies to enable many people have an income for survival in both urban and rural parts of the country. According to MCTI (2009) SMEs have a lot of difficulties that prevent them from developing their enterprises and furthermore contributing towards the decrease of poverty levels plus sustainable national improvement.

It is commonly acknowledged that the essential standards of marketing can be used in all types of enterprises, that is, either large or small ventures (Siu and Kirby, 1998: 40). According to Siu and Kirby (1998) researchers have investigated how marketing in SMEs is conducted for many years and found out that the study was not an easy one because this particular sector does not market its products/services in the same way as large firms. The marketing practices in SMEs have mostly been done using the created business links with other SMEs (Gilmore et al, 2001: 6-11) or a blend of exchange, relationship, association and network marketing (Brodic et al. 1997: 388). It has been noted of late that the utilization of Internet advertising or web-based business has turned out to be mainstream in a wide range of organizations including SMEs (Chaffey et al. 2000). Siu and Kirby (1998) point out that observational proof has been created in a specially appointed way as a result of a general nonappearance of an efficient way to deal with the subject. As indicated by Siu and Kirby (1998) inadequate information about showcasing in private venture remains an issue of real concern and there is requirement for related learning and comprehension on how advertising is accomplished.

Research on small enterprises and their marketing practices has been to a great extent restricted to clarifications of conduct seen in other small ventures (Huang and Brown, 1999). As indicated by Hogarth-Scott et al. (1996) it is sketchy whether small companies need to work on advertising at all to endure and develop their business. As per the investigation by Hogarth-Scott et al. (1996) on the SMEs, entrepreneur/managers were regularly generalists, not showcasing skills and knowledge of marketing experts that deal with complex advertising speculations which may not be ideal for small enterprises and most likely would not help in the comprehension of how these small firms advertise their business. It was likewise intriguing to take note that SMEs conduct marketing activities that sometimes they do not realize that they are marketing their services and products. The upper hand of small firms depended on quality and administration, while those contending on price were in the very aggressive markets with next to zero item separation and low section boundaries.
Another competitive advantage for small ventures was on product differentiation while others were searching for specialty markets (Hogarth-Scott et al. 1996). This specific investigation showed that advertising contributed positively to small company achievement and proprietor/manager can provide direction and think strategically. This view is upheld to some degree by the prior work of Rice (1983) where plainly there was a distinction on how large businesses come up with strategic plans compared to small companies. This distinction was because of the size of information gathered about the outer business condition by little organizations contrasted with expansive organizations and how this information was breaking down. Small ventures gathered significantly less information contrasted with substantial organizations. As indicated by Rice (1983) businesspersons expected to accumulate enough data to enable them to settle on choices at a reasonable dimension of plausible achievement. Hannon and Atherton (1998) noticed that the dimension of key familiarity with proprietor/managers seems, by all accounts, to be emphatically affected by the individual skill of the proprietor/supervisors and the sort, vulnerability and intricacy of the business. From the exploration that was completed in Georgia, USA demonstrated a connection between arranging complexity and execution in 253 private companies that were researched by Rue and Ibrahim (1998:24-30), and their outcomes plainly demonstrated that those SMEs with more noteworthy and advanced planning and marketing had more noteworthy development in their businesses revealed by administrators. They proposed that small companies with a refined arranged planning process receive the rewards of these endeavors in the long haul. Likewise Perry (2001) recommended that SMEs utilizing refined and advanced planning processes may improve their odds of survival and achievement.

Marketing Orientation

However, academics have not yet agreed on the value of a marketing orientation and how it is associated with the success and performance of companies (Henderson, 1998). According to Pelham (2000) companies that embrace marketing orientation and use it as a business strategy have ended up performing much better. On the other hand, Pelham (2000: 55-64) facets that some organizations have managed to thrive in their business without using this notion but have put more emphasis on technical or production capabilities. Henderson (1998) alternatively says that marketing orientation does not exist and if there are such ideas marketing orientation can only account for 10 percent of business performance. Literature has additionally seen confusion concerning the proper terminology to make use of as authors use “market orientation”, “advertising orientation”, “consumer led” or “market-led” interchangeably (Harris and Watkins, 1998). Harris (1998:225-227) contends that considering that market orientation may also be seen as a form of tradition, the impediments to advertising and marketing orientation are categorized centered on a modern-day organizational culture framework. As a result, Harris (1996: 40) pointed out that barriers to market orientation will also be labeled as assumptions, values, and symbols. Denison and McDonald (1995) factor out that reviews have constantly proven that corporations that are marketing oriented, or equipped practitioners of advertising, performed better in terms of return-on-investment (ROI) and market share.

Marketing in SMEs

Siu (2000) showed that most of the Chinese small businesses doing well prioritized marketing, especially strategic marketing planning compared to other business activities of their overall business management approach, though many of these businesses were more oriented in either sales or production.

In the late 1980s and 1990s, poor implementation of basic marketing among small businesses was highlighted as the main obstacle to effective marketing in UK businesses according to Denison and McDonald (1995).

Brooksbank et al. (1999) raised questions about marketing developments in SMEs and questioned the extent to which standard marketing practice models were being applied to smaller businesses. Interestingly, 32 per cent of samples from Brooksbank et al. (1999) indicated that had diversified whilst 42 per cent had moved away from their original market. The business environment in which SMEs operate is dynamic, and a variety of successful approaches and strategies can well be credited. Siu and Kirby (1998) identified four marketing approaches for small businesses: The Stages / Growth model; the Management Style approach; the Management Function model and the Contingency approach.
The stages/growth model

The stage / growth model suggests that any model of small business marketing must take into account the stages of business development (Siu and Kirby, 1998) though does not elaborate how the transformation occurs or account for the effects of different owner managers on the variability of marketing skills.

The management style approach

The management style approach has recognized the small company's limitations and constraints in terms of resources and capabilities. This approach provides a useful explanation for the poor marketing development in small businesses; unfortunately, the approach also is unable to elaborate the actual marketing practices that small enterprises use to attract customers.

The management function approach

The management function approach has also recognized that marketing is an important business function as well as an essential concept in the growth and survival of small firms, but many owners / managers simplify and misunderstand marketing as the 4Ps or interpret marketing as advertising. This approach has been vigorously criticized and has been adopted by few small businesses (Simpson et al. 2005).

The contingency approach

The contingency approach has recognized that there are different factors affecting the marketing performance of the small business and that there is no universal set of strategic choices that are optimal for all businesses without taking into consideration their resources or business environment in which the business is being conducted. This approach occurs between two extreme views that state that universal marketing principles exist and apply to all firms, or that each small business is unique and needs to be analyzed separately (Siu and Kirby, 1998).

Different marketing practices/activities for SMEs

There are many theories on the SMEs marketing but there is no single theory that can be applied to all SMEs. The marketing concepts may be the same but the implementation process may vary in each firm. According to Hill and Wright (2001) marketing practice in SMEs is dependent very much on personal contact networks and is often driven by the particular way the owner-manager conducts his/her business. Hence, as indicated by Gilmore et al. (2001) marketing in SMEs is probably going to be random, casual, free, unstructured, unconstrained and fit in with industry standards. Gilmore et al. (2001) demonstrated that because of systems administration among these SMEs there was substantially more correspondence between the SMEs proprietors/directors and their rivals than is generally mentioned in the literature and also the contending firms in this industry do offer each other much help. Similarly, small enterprises conduct their marketing through networking with clients usually by building a strong relationship with one or two key individuals in those enterprises. The situation becomes bad in the event that those individuals who networked with the clients leave the enterprise then the relationship with the enterprise and those customers would cease (Gilmore et al. 2001; Hill et al. 1999). Hence according to Gilmore et al. (2001) the owner/managers of small businesses understand very well that creating and maintaining relationships (or relationship marketing) were very important to the business’s success and that has made them to invest more of their resource such as time and effort in maintaining good relations with regular customers. According to Gilmore et al. (2001) the coming up and the maintenance of effective networks among the SMEs was to enable them maximize marketing opportunities and ensuring the business survival and growth. It can be noted therefore that marketing is an essential business function for any enterprise but its role within the enterprise and its importance with regard to the business environment in which the business is being conducted has a complex relationship (Moller and Anttila 1987).

Definitions of important terms

Small and medium enterprise

These are enterprises that are still growing in the formal or informal sector that employ 11 to 50 persons for small enterprise and 51 to 100 persons for medium enterprises. These enterprises are also
defined by their total fixed investment and sales turnover. They are usually engaged in manufacturing and processing, trading and service industries. In Zambia for instance these enterprises are the ones involved in fabrication, building construction, textile, agro-industries, leather, printing, motor vehicle works and furniture construction.

**Growth performance**

In Zambia just like in many countries in the world growth performance of SMEs is measured by using various variables such as sales turnover, capital employed, and employment growth. However, as stated earlier there are challenges in applying some of these measurements in small businesses due to the way these enterprises are managed. Some weaknesses may be noted if the theories and practices that literature talks about applied without seriously considering the business environment in which the enterprise is operating. The level societies develop in any nation is a very significant issue that needs to be understood and addressed when defining factors that are related to growth performance of small businesses. According to Mahemba (2003) the rate of development of variables such as economic, technological, and marketing affects the way business enterprises perform certain activities in different countries and the ability to grow. The definition of growth also has more to do with the level of development an enterprise has attained in a specified period of time.

**Marketing activities**

These are actions that are performed by business firms to enable customers to have an insight about a product or service that is being offered. These activities include planning, pricing, market research, promoting, positioning and distributing something of value or want for exchange that would eventually satisfy individual and organizational objectives Mbura (2001). According to Stanton (1989) marketing activities directs the flow of goods and services from the producer and/ or seller to the consumer or end users.

**Research Methodology**

**Research design**

This research is set up as a combination of a descriptive study and an explanatory embedded literature search and case study. The descriptive study adopted a cross-sectional approach in which all respondents are studied at one point in time (Churchil, 1996; Dillon et al, 1993). This is opposed to a longitudinal study where data sources are revisited. Often, the cross-sectional approach is preferred over longitudinal methods because it allows flexibility in terms of time and financial constraints, which is the case in this study. This method also allows the analysis of relationship between variables, given that the sample was the representative of the population under study. For this research, a convenience sampling method was used to select units for the survey, based on geographic proximity and ease of personal contact. The pilot survey was carried out through personal interviews with owners/managers of some SMEs in the furniture industry. The questionnaires were administered by the researcher.

**Sample size and sampling procedure**

The targeted population for this research is SMEs in the furniture industry based in Kabwe town, Central province. For this particular research, simple random sampling was adopted to select the unit for analysis from Kabwe town. The sample will be made of 30 SMEs within Kabwe that are in the furniture industry. These were chosen at random to participate in the research. Purposive sampling method was used. According to Cohen, (2000), purposive sampling enables a researcher to use cases that will best enable him/her to answer the research question(s) and meet his/her research objectives. And according to Stringer, (2007), Purposeful sampling is that which consciously selects people on the basis of a particular set of attributes.

**Data collection**

Data collection methods reflect the design of data collection instruments, and how data have been collected from the respondents and administered. In this case, the study combines both primary and secondary data as described above. In order to obtain primary data, a structured questionnaire was designed with a few open-ended questions (unstructured questions) to allow owners/managers of
SMEs to express in details regarding their feelings about the subject in question. The questionnaire was designed to cover all the research concepts as they are described in research problem, objectives and questions.

Data analysis instruments

Both qualitative and quantitative tools of analysis were applied to the responses depending on the type of measurements as well as data obtained from both primary and secondary sources. According to Zikmund (2000), the choice of the statistical technique for data analysis depends on the type of question to be answered and the scale of measurement.

Research findings and discussions

Introduction

This section of the research analysed the key issues concerning the marketing activities of SMEs in the furniture industry in Kabwe town of Zambia. The propositions that are linked with the SMEs have been thoroughly investigated, analyzed and the findings presented. Other relevant issues that have been investigated during the study are also presented.

Responses on how long the enterprises have been in business

The findings indicated that 11 SMEs representing 31% of the total SMEs under the study have been in business for over 10 years, 16 SMEs representing 44% have been in business for more than 5 years and 9 SMEs representing 25% have been in business for less than 5 years. This therefore shows that the majority of these SMEs have been in this business for more than 5 years.

Responses on the type of business the SMEs were involved in

The responses show that 27 SMEs representing 75% were in manufacturing and selling furniture and 9 SMEs representing 25% of the SMEs were in buying and selling furniture. The finding therefore shows that the majority of the SMEs were in manufacturing and selling business.

Responses on whether the SMEs have registered any significant business growth

The responses show that 5 SMEs representing 14% have registered a small growth whilst 31 SMEs representing 86% have not registered any growth in their businesses. The findings show that the majority of the enterprises have not registered any growth despite being in business for many years.

Responses on the relationship between business growth and location

The responses indicate that 36 SMEs representing 100% of the SMEs agreed that there was a positive relationship between business growth and the location of the enterprises in the furniture industry. The findings therefore show that location played a significant role in determining a SMEs’ chances of growth. Those SMEs found in central business areas had a greater chance of growing their businesses compared to similar firms located in townships where no much business activities were carried out.

Responses on whether the SMEs in the furniture industry were using any marketing activities

The responses indicate that 12 SMEs representing 33% of the SMEs agreed that they use marketing activities sometimes, 9 SMEs representing 25% were not sure whether what they do is also part of marketing activities and 15 representing 42% indicated that they do not carry out any marketing activities. The findings show that the majority of these SMEs in the furniture industry do not market their businesses.

Responses on the type of marketing activities that the SMEs were using

The responses indicate that 8 SMEs representing 22% do advertise their products on the local radio station and also use a combination of other marketing activities, 9 SMEs representing 25% do market their products by working closely with their customers who help in marketing them to new customers and 19 SMEs representing 53% indicated that they do not carry out any marketing activities. The findings therefore show that very few SMEs in the furniture industry in Kabwe do market their
products and use local radio stations.

**Responses on whether the type of marketing activities the SMEs have adopted have some impact on their performance**

The findings revealed that the SMEs who used radio and the combination of other marketing activities performed better followed by the ones that worked closely with their customers and lastly the ones that do not use any marketing activities. This finding therefore indicates that marketing activities have some impact on the performance of an enterprise.

**Responses on whether there is a relationship between business growth and marketing activities they were using**

The findings indicate that 28 SMEs representing 78% agreed that there was a relationship between enterprise growth and marketing activities that the enterprise was using, 5 SMEs representing 14% were not sure whilst 3 SMEs representing 8% disagreed that there was relationship between enterprise growth and marketing activities. The findings therefore indicate that there is a relationship between business growth and marketing activities the enterprise uses.

**Responses on whether a good business location could market an enterprise**

On the good business local, all the 36 SMEs Owner/Manager representing 100% indicated that a good business location was a key to all types of businesses including the furniture business. This therefore show that the SMEs that were located in the central business area appeared to be doing very well compared to the ones that were located far from town. This also indicates that a good business location acts as a marketing tool for the enterprise.

**Responses on whether the SMEs were using the internet marketing or e-commerce**

On whether the SMEs were using the internet marketing or e-commerce, the findings were that none of the SMEs that took part in the survey have used the internet or e-commerce in their businesses for marketing purposes.

**Responses on whether the SMEs have registered any growth**

The findings from the 36 owners/managers of the enterprises indicated that the most growth was observed in those SMEs that adopted marketing activities with 11 SMEs representing 31%, followed by 3 SMEs representing 8% that have not used any marketing activities but have registered growth. Meanwhile, 6 SMEs representing 17% had adopted marketing activities but did not show any expansion whereas 16 SMEs representing 44% of the SMEs had neither adopted marketing nor shown expansion in their business. This of course raised many questions as to why 8% of SMEs had been expanding without the use of any marketing techniques. The only possible explanation could be that some of the SMEs had no idea of what marketing was all about despite them undertaking marketing related activities and also explains why most of them indicated that they did not use any marketing activities in their businesses. It is also possible to assume that their products could be of superior quality and in a way able to market the SMEs. On the 17% that had embraced the marketing activities but did not register growth, the explanation is that marketing activities are not the only factors that are required for enterprise growth.

**Conclusions and recommendations**

**Conclusions**

This research study was aimed at determining the relationship between SMEs growth and marketing activities of SMEs in the furniture industry. Thirty-six (36) SMEs that are in the furniture industry were selected as cases for this particular study. The research has found that there is a relationship between enterprise growth and marketing activities of the SMEs in the furniture industry.

The SMEs growth or improvement was found to be there amongst the firms that had adopted marketing activities in the furniture industry. However, there were some SMEs who claimed to have been performing well even though they were not using any marketing activities but their growth was statistically not significant. Some of these SMEs were doing slightly fine due to their conducive business location which in a way was marketing their activities.
It was also found out that some SMEs in the furniture industry were using some marketing activities without knowing that they were using them, this was because they did not understand what was involved in marketing activities.

**Recommendations**

The main aim of this research was to explore marketing activities and ascertain the relationship between these activities and the growth of SMEs in the furniture industry in Kabwe. The following are the recommendations:

The SMEs in the furniture industry should embrace marketing activities and use them to attract customers if there are to grow their business. Marketing activities have the potential to inform customers about the enterprise’s location and the products/services that it is offering.

SMEs in the furniture industry should find central locations that are highly patronized by customers to operate from.

The government should subsidize the cost of marketing for SMEs as on their own some cannot manage because the cost is on a high side for them to afford.

SMEs in the furniture industry should start using internet marketing or e-commerce to market their products/services in the country. Internet marketing is cheaper compared to other marketing activities.

Research should be carried out to determine the relationship between marketing activities and growth of the SMEs that are in different sectors of the economy.

**References**

[1]. Balunywa, W; (1997), Entrepreneurship and SMEs in Uganda, Makerere University Business School, Kampala.


[34]. PhD dissertation, Michigan State University, East Lansing, Michigan
Nation Building Proposed Topic: “The management of Guava farming to create a more sustainable and productive Jamaican economy”

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Abstract

The purpose of this research is to learn the benefits guava farming in the development of the agricultural sector and to a greater extent the Jamaican Economy. Many countries have used guava farming to increase the exports of their local produce. As a government worker in Jamaica that works with the HEART Trust NTA which is the National Training Agency for the Government, I play a major role in Labour market research and working with Agricultural Agencies such as the RADA and Agricultural institutions such as Ebony Park Academy which after speaking with farmers at both entities have shown me the potential of Guava farming to boast the nation’s Gross Domestic Product and help the socio-economy of the country. We have used the mix method of collecting data which involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies.

Introduction

Background of the problem

Over the years Jamaica has become sluggish in creating new avenues for growth and development of the economy. As economies develop, agriculture tends to fall in relative importance in contribution to gross domestic product (GDP). Jamaica is one of the most productive islands in the Caribbean, known for its opulent resources; such as land, climate and custom which provides Jamaicans the ability to create quality products. Jamaican sugar cane has high demands internationally and so does the blue Mountain coffee. On the other hand, the economic growth of Jamaica faces many challenges: high crime and corruption, large-scale unemployment and underemployment, and a debt-to-GDP ratio of more than 120% (CIA-the World Facts Book).

It has already been proven that the agricultural sector is as one of Jamaica’s prime sector for economic growth and development. Agriculture employs approximately one-fifth of the Jamaican workforce (CIA-World Facts Books). Stimulating growth in the agricultural sector will act as a catalyst for growth in other sectors such as tourism and manufacturing. In past years the agriculture sector has declined in providing steady growth and development and this is evident considering the current economic situation of Jamaica. According to the Scientific Research Council (SRC), there are some crops that Jamaica has the potential to maximize production to increase demand locally and compete on the international scale. With advances in technology comes the evolution of a dynamic and changing marketplace. For Jamaica to successfully compete in the global market it has to efficiently produce quality products (goods and services) at international standards. Producing quality products is a necessary ingredient for global competitiveness and economic growth. Hence, Jamaica should also invest in agro-processing. According to www.practiceaction.com, agro-processing is turning primary agricultural products into other commodities for market. Agro-processing projects aim to increase income and access to food for the poor, by establishing small-scale, appropriate and sustainable processing businesses that are flexible, require little capital investment and can be carried out in the home without the need for sophisticated or expensive equipment. The overall potential of agro-processing is huge. It can reduce wastage, enhance food security, improve livelihoods for low-income groups and empower women. As a result of that, this research proposal seeks to explore the agricultural
sector to identify an agricultural product that the researchers believe has the capacity to contribute helpfully to Jamaica’s economy.

There are many tropical and sub-tropical fruits that have the capability to blossom on the domestic and international markets, if they are properly produced; fruits such as pineapple, papayas, oranges, apples and grapes have proven this. Thus, the researchers believe that the Psidium Guajava, more popularly known as “Jamaican Guava” or just “Guava” has the same or even better ability to thrive from just being used or consumed as a simple fruit to being developed into economical and medical products through agro-processing. Guava trees are found almost everywhere in Jamaica, however not all parishes have a high production of this fruit. St. Thomas, Manchester and St. Elizabeth are being sought as having this fruit in abundance.

Guava is a native to Central America. It originates from the area between Mexico and Peru. The Spaniards took it across the Pacific to the Philippines and the Portuguese introduced it from the West to India. It is now a pantropic species found in Asia, Africa, the Pacific, South America and the Caribbean. The guava is a hardy tree that adapts to a wide range of growing conditions. It can stand a wide range of temperatures; the highest yields are recorded at mean temperatures of 23-28 deg. C. In the subtropics quiescent trees withstand light frost and 3.5-6 months (depending on the cultivar) of mean temperatures above 16 deg. C suffice for flowering and fruiting. It fruits at altitudes up to 1 500 m and survives up to 2 000 m. Guava is more drought-resistant than most tropical fruit crops. For maximum production in the tropics, however it requires rainfall distributed over the year. Many Jamaicans have a Guava tree in their backyard and might not be aware of the many benefits that can be derived from not only the fruit but also the leaves and bark of the tree. Therefore, the researchers are proposing that Jamaican farmers, distributors and manufacturers assess the many economical and medicinal benefits the guava has, in order to create various by-products to increase demand of the fruit locally and internationally which in turn will assist in the enhancement of the health and wealth of Jamaica’s economy.

**Rationale**

Jamaica has the potential to grow guava in bulk to create a local and international demand which in return will contribute significantly to the competitiveness and economic growth of Jamaica. This research also seeks to explore the medicinal purposes of the fruit and the feasibility of preserving it in Jamaica for agro-processing and economic purposes.

**Statement of the problem**

There are many countries that utilize Guava for several purposes. The utilization and demand of the fruit presents an opportunity for Jamaica to enhance economic growth by making a tactical investment in Guava farming. Guava is a popular fruit in many international countries and is recognized by few countries in the Caribbean. The Guava should not just be recognized as a mere fruit but, it should be recognized for its health benefits and the many by-products that can be derived from it, such as food, cosmetics, and broiler feed and possibly pharmaceutical supplements.

**Significance of the study**

The fact that Jamaica has to compete with international markets, the country should capitalize on an agricultural product that has the ability to cater to the health and economic well-being of the Jamaican people. This study will investigate the health and economic benefits of the Psidium Guajava, a potentially profitable fruit that not only can be eaten as a fresh fruit but can constitute many by-products. The Psidium Guajava also has several health benefits but it is not fully capitalized on. The researchers hope to find valuable information to assist in increasing the awareness of the product both economically and medically.

**Alternative hypothesis**

- A large-scale production of Guava will enhance Jamaica’s economy.
- *Null Hypothesis*
- A large-scale production of Guava will not enhance Jamaica’s economy.
• **General Objective:**
  - To improve the economy of Jamaica through a large-scale production of Guava.
• **Specific Objective:**
  - Using Guava to its full potential to supply local and international markets

**Research questions**

1. How will the cultivation of Guava on a large-scale assist in Jamaica’s economic growth and development?
2. What resources are there in Jamaica to produce Guava on a full scale?
3. Are there available markets to accommodate the exportation of Guava?
4. What are the by-products that can be derived from Guava to support or contribute to Jamaica’s domestic market?
5. Is Guava readily available for convenient use to the Jamaican people?

**Research objectives**

1. To discover possible ways in which Guava can aid in Jamaica’s economic growth and development.
2. To explore the health benefits of Guava.
3. To explore the accessibility and preservation of Guava yearly to the Jamaican population.

**Limitations of the study**

It is always possible that future research may cast doubt on the validity of any hypothesis or the conclusions from a study. Every study no matter how well it is conducted has some limitations. The proposed research will be no different.

1. Time constraints of the semester require less time that may be ideal for an extensive study.
2. Resource constraints forced me to select three parishes for the study. Therefore, results are only related to those areas.
3. The personal interview method of data collection requires the respondents to recall from their memories about cultural operations of guava cultivation. Hence, the findings may be subject to memory lapses of the respondents.
4. Agricultural consultation was limited to the Rural Agricultural Department Agency (RADA) in Mandeville and the Ebony Park Academy.
5. The research is mainly focused on starting Guava farms in the parishes selected, thereby Jamaica would be able to produce our own by-products for local market, as well as be able to export Guavas to other countries.
6. The research is focused on Jamaica tapping into the Guava export markets and competing with other countries that are already exporters of Guavas.
7. This research was dependent on secondary information from mainly other countries that currently participate in large scale farming of Guava.

**Delimitations of the study**

1. The proposed research is somewhat limited in its scope. The description of a problem is not the purpose of the research but more so its purpose is to explore and understand how Guava production can aid in building Jamaica’s economy.
2. The proposed research will be conducted in three parishes; St Elizabeth, St Thomas, and Manchester.
3. This research will not be focusing in debt on the financial aspect of the development.

**Literature review and theoretical considerations**

**The psidium guajava: description**

The Psidium Guajava is native to the Caribbean, and is a part of the Myrtle family of plants. Its skin is thin, light yellow and blushed with pink (Life plus Vitamins). Guavas emit a strong, sweet, pungent fragrance, it may be round, ovoid, or pear-shaped, 2 to 4 in (5-10 cm) long, with 4 or 5 protruding floral remnants (sepals) at the apex; and thin, light-yellow skin, frequently blushed with pink. Next to the skin
is a layer of somewhat granular flesh, 1/8 to 1/2 in (3-12.5 mm) thick, white, yellowish, light- or dark-pink, or near-red, juicy, acid, sub acid, or sweet and flavorful. The central pulp, concolorous or slightly darker in tone, is juicy and normally filled with very hard, yellowish seeds, 1/8 in (3 min) long, though some rare types have soft, chewable seeds. Actual seed counts have ranged from 112 to 535 but some guavas are seedless or nearly so. When immature and until a very short time before ripening, the fruit is green, hard, gummy within and very astringent (Morton, 1987). A small tree grows to 33 ft. or 10 in high, with spreading branches, the guava is easy to recognize because of its smooth, thin, copper-colored bark that flakes off, showing the greenish layer beneath; and also because of the attractive, "bony" aspect of its trunk which may in time attain a diameter of 10 in or 25 cm. The leaves, aromatic when crushed, are evergreen and slightly irregular in outline; 2 3/4 to 6 in (7-15 cm) long.

Varieties of guava

According to www.tradewindsfruit.com, the following are the most common varieties of guavas that are available:

- **Beaumont Red** - The most popular commercial variety in Hawaii. It produces very large, green and sometimes slightly yellow fruits with a pink flesh. Some fruits can weigh up to a pound.
- **Mexican Cream** - Medium sized, yellow skinned guava with spicy, cream-colored flesh
- **Pear** - Medium sized, pear shaped guava with yellow or greenish tinged skin. Flesh is orange-pink, well-flavored, usually with few seeds.
- **Red Indian** - Medium sized, yellow fleshed fruit, sometimes with a red tint. Flesh is red, sweet, with many seeds.
- **Red Malaysian** - Red colored guava, with pink-red flesh. This variety is unique not just for its fruit, but it’s for its foliage, which is tinted a deep red color. The flowers are bright pink. The Red Malaysian guava is often grown for ornamental purposes as well as fruit.
- **Ruby** - Red-fleshed guava with small, but sweet fruit.
- **South African** - Yellow skinned, pink fleshed guava with medium sized fruit.
- **White Indian** - Small to medium sized fruit with white flesh.

Health benefits of guava

Many Jamaicans are not aware of the medical benefits that can be obtained from Guava. Guava contains many nutrients that contribute to a healthy lifestyle. According to Parimin S.P., in every one hundred grams of fresh ripe Guava is 0.9 grams of protein, 0.3 gram of fat, 14 grams of carbohydrates, 12.2 mg of calcium, 28 mg of phosphorus, 1.1 mg iron, 25 the vitamin A, 0.02 mg vitamin B1, 87 mg of vitamin C (five times more than orange and other citrus) that lie in its skin, firm flesh and central pulp, 86 gram of water, with a total of 50 calories (Penebar Swadaya, 2007). Research done at Singh Medical Hospital and Research Centre (Morrabad, India) showed that guava can lower levels of total blood cholesterol and triglycerides and blood pressure in hypertensive patients. According to the study, guava consumption of 0.5 to 1 kg/day for four weeks, the risk heart disease can be reduced to 16 percent. The guava was also found of lycopene, a carotenoid substance (a pigment important in plant) which has antioxidant activity, so that the whole body is protected against attacks of several types of cancer. Guava is also saturated, sodium free and are high in fiber (Life plus Vitamins). Studies have proven a lower risk of cancer among people who eat more fruits and vegetables rich in dietary fiber, carotenoids and vitamin C.

According to www.organicfacts.com the following are a list of illnesses that can be reduced by regular consumption of Guava.

- **Diarrhea & Dysentery**: Astringents (compounds that make your gums feel tighter and fresh after you chew guava leaves or eat a raw guava or use some toothpaste) in the Guava binds up loose bowels in diarrhea. These astringents are alkaline in nature and have disinfectant and anti-bacterial properties, thus help cure dysentery by inhibiting microbial growth and removing extra mucus from the intestines. Guava is also beneficial in gastroenteritis due to reasons stated above.
- **Constipation**: The dietary fiber in guava is known to reduce constipation. Its seeds, if ingested whole or chewed, serve as excellent laxatives. These two properties of guava help forming bowels, retaining water and clean your intestines and excretory system thoroughly. It is said that single
constipation can lead to seventy-two types of ailments. It is absolutely true. Every way to your total health goes through proper digestion and more importantly, proper excretion. Guava ensures both of these.

- **Cough & Cold:** Juice of raw and immature guavas or decoction of guava-leaves is very helpful in giving relief in cough and cold by loosening cough, reducing mucus, disinfecting the respiratory tract, throat and lungs and inhibiting microbial activity due to its astringent properties. The vitamin-C and iron are proven to be preventive against cold and viral infections. In some areas in India, roasted ripe guava is used as a remedy against extreme cases of cough and cold and congestion.

- **Skin Care:** Guavas can help improve your skin texture and avoid skin problems more than the best of beauty creams or skin toner gels can do. This is chiefly due to the abundance of astringents in its fruits (more in immature ones) and in leaves. You can benefit from it either by eating the fruits (this help tighten your muscles apart from your skin) or by washing your skin with the decoction of its immature fruits and leaves. It will tone up, tighten the loosened skin, and keep your skin glowing and free from aging, wrinkles and other disorders.

- **High Blood Pressure:** Guava helps reduce cholesterol in blood and prevents it from thickening, thereby maintaining fluidity of blood and reducing blood pressure. Studies have shown that food stuffs which lack fiber (such as refined flour) add to blood pressure, due to quick conversion to sugar. Guava, being very rich in fiber and hypoglycemic in nature, helps reduce blood pressure.

- **Weight Loss:** Guava is very helpful for those who want to lose weight without compromising with their intake of proteins, vitamins and fiber. Guava, being very high in roughage and very rich in vitamins, proteins and minerals, but with no cholesterol and less digestible carbohydrates, is very filling and satisfies appetite very easily. Just have a medium sized guava in the lunch and you will not feel hungry till night. But ironically, it helps gaining weight in lean and thin people. This is probably due to its richness in nutrients, which keeps your metabolism right helping proper absorption of nutrients.

- **Scurvy:** As mentioned before, Guava outdo many other fruits, including orange and other citrus fruits, when it comes to concentration of vitamin-C, whose deficiency causes scurvy and which is the only remedy to it.

- **Dengue fever:** Guava juice helps with dengue fever to purify the blood. It helps to keep the parasites out of the blood so that the blood platelets do not drop, with lower chance of getting malaria.

- **Other Benefits:** Guava helps control diabetes, protects prostrate, its lycopene reduces the risk of cancer, the juice of the leaf’s cures toothache, swollen gums & oral ulcers, heals wounds when applied externally, convulsions, epilepsy, and bacterial infections. The bark and leaves are also used in childbirth to expel the placenta.

**Cultivation of guava on a large scale to assist in Jamaica’s economic growth and development**

Economic growth in Jamaica is driven by three primary industries: services, which comprise 65% of GDP, manufacturing and mining, 28%, and agriculture, 7%. In spite of its relatively small contribution to GDP, agriculture, which is very labor intensive, absorbs 21% of the country’s employed labor force, provides primary products for agro-industries, such as rum manufacture, and accounted for just over 20% of exports (valued at US$276 million) in 2004. (Agricultural Development Profile, 2006).

Agriculture has the potential for expanding aggregate output and value-added but is now at a cross roads with an overall decline in public sector activity and quietly resurgent private interest, in a number of sub-sectors. Therefore, cultivating guava in Jamaica on a full scale can benefit the country’s economy. International demand for fruits shows related growth due to the important place fruits occupy in the diet of either American or European consumers who associate healthy eating habits to fresh fruit and vegetable consumption. There are a number of countries such as U.S.A, and China and many others who import guavas for other reasons such as resell of the fruit, medicinal, and vegetative. If these countries are targeted then exportation will contribute significantly to Jamaica’s economic growth and Gross Domestic Product (GDP).
There are many unemployed individuals in Jamaica’s population. According to The World Fact-book in 2011 Jamaica’s unemployment rate was 12.7%. The production of guava on a large scale in Jamaica will be a means of creating jobs for the many who are unemployed. Job creation is equivalent to wealth creation thus contributing to growth of Jamaica’s economy. Producing and exporting guava will influence the sale of other Jamaica products and will capitalize on the brand Jamaica because it is synonymous with excellent goods and services. Individuals will not just see guava but they will recognize Jamaican products and will be more inclined to buy our produce because of the value in the brand Jamaica. This will in turn interest investors to make significant investments in Jamaica, again contributing positively to Jamaica’s economic growth, competitiveness and development.

Pakistan is one of the largest producers of guava in the world. Based on an article entitled Guava exports reach Rs1 Billion, published by Shahid Shahon, on the website known as International the News, Guava exports of Pakistan have reached Rs1 billion, which could further be increased if value addition through processing plants is undertaken. Pakistan’s guava production increased from 19,000 tons in 1958 to 552,000 tons in 2008 with an annual growth rate of 6.9 percent. Mexico has also become one of the largest producers and exporters of guava to America earning profits that are growing yearly. This information provides us with the necessary foundation to know that guava can be highly profitable if exported through the right channels to a market that can accommodate it. According to the gleaner in an article entitled, Canco Expanding Export Markets into Canada, published by the gleaner November 10, 2010, it is implied that Guava is mostly used and exported as it pertains to processed products as only processed Guava products are the main focus of the article, but research has shown that the guava fruit (not being processed) can also be very profitable on international market, in fact, most of Pakistan’s and Mexico’s exportation is not processed guava products but the fruit itself. This form of exporting guava would be less costly to produce while being highly profitable on the international market allowing the country to receive huge amounts of foreign currency to help boost the economy. If this is implemented, then farmers will also benefit by being able to gain access to job opportunities while this market grows. We could also open small manufacturing companies that could produce goods and services that are created from guava so that more jobs can be created in the country which leads to economic growth. One may argue about the age of the article but there has not been much development of Guava exports from 2010. It is a known fact, that guava is used to create products mostly focusing on Jams (in Jamaica); however, there are many byproducts that can be created from guava but are not being produced. According a survey and a promotional exercise of the product of a variety of byproducts of guava, persons found the items to be very tasty and some of these products were seen as possible substitute products for many items on the market both local and international. Therefore, the profitability of these processed guava products locally and internationally is very high. Guava has great potential which can help to sustain economic growth. Pakistan and Mexico have shown great evidence of this; therefore, we should use the evidence to our advantage.

Resources to produce guava on a full scale in Jamaica

A resource is a source or supply from which benefit is produced. Typically, resources are materials or other assets that are transformed to produce benefit and, in the process, may be consumed or made unavailable (Britannic Encyclopedia). The cultivation of guava requires a number of resources, both natural and manmade, that are crucial for full scale cultivation as well as the successful growth of the plant. Jamaica has unmatched comparative advantage for growing guavas due to its warm less humid tropical climate, plentiful rainfall and vast opportunities for irrigation. The guava thrives in both humid and dry climates. In India, it flourishes up to an altitude of 3,280 ft (1,000 m); in Jamaica, up to 3,906 ft (1,200 m); in Costa Rica, to 4,590 ft (1,400 m); in Ecuador, to 7,540 ft (2,300 m). It can survive only a few degrees of frost. Young trees have been damaged or killed in cold spells at Allahabad, India, in California and in Florida. Older trees, killed to the ground, have sent up new shoots which fruited 2 years later. The guava requires an annual rainfall between 40 and 80 in (1,000-2,000 mm); is said to bear more heavily in areas with a distinct winter season than in the Tropics (Morton J, 1987). The guava tolerates and can withstand strong prevailing winds or winds of hurricane velocities. Its root system is a fine mat supporting the tops and requires a tremendous horizontal wind force to uproot the
tree. In addition, the guava wood is strong and flexible and pliable, enabling the tree and its branches to bend in a whip like fashion in a strong wind.

Extensive land is available for estate type guava growing organized around an out-grower set up. Guava has its' greatest potential in parishes of Manchester, St Elizabeth and St Thomas which has the land capacity to plant enough guava for local and international consumer. The guava seems indiscriminate as to soil, doing equally well on heavy clay, marl, light sand, gravel bars near streams, or on limestone soil which is found in Manchester; and tolerating a pH range from 4.5 to 9.4. It is somewhat salt-resistant. Good drainage is recommended but guavas are seen growing spontaneously on land with a high-water table–too wet for most other fruit trees. Braes River in St Elizabeth has a high-water table which is ideal for the cultivation of this crop.

According to the Ministry of Agriculture and Fishery, Jamaica has a vast amount of natural resources, especially those of soil, water, plant and animal diversity, vegetation cover, renewable energy sources, climate, and ecosystem services which are fundamental for the structure and function of agricultural systems and for social and environmental sustainability. Nevertheless, the resolution of natural resource challenges will demand new and creative approaches by stakeholders with diverse backgrounds, skills and priorities (Green Facts). Capabilities for working together at multiple scales and across different social and physical environments are not well developed. For example, there have been few opportunities for two-way learning between farmers and researchers or policy makers. Community-based partnerships with the private sector would be a first step in the development of guava cultivation; this would represent a new and promising way forward. Man power which are human resources are also available, this can be assumed based on the high unemployment rate in Jamaica, and if full scale production of pineapple was to be done in Jamaica then this would create jobs for a lot of unemployed persons.

**Guava production**

**Post harvesting**

Just after harvesting, the unwanted fruits are sorted out and healthy lot is marketed. The fruit are packed in wooden boxes or bamboo baskets and transported to the market or processing unit. Fruit should never be packed in Hessian bags as it may cause considerable damage to the fruits even in short-distance transport. For long–distance transport, a layer of cushion material (dry grass, paddy straw, paper-wool etc.) should be used at the bottom of the container. Refrigerated transport can reduce the spoilage of fruits. Siddiqui et. al. (1991) stated that fruit positioned in the natural posture with the pedicel end vertically upward during transport showed better keeping quality than fruits kept in reverse or horizontal position.

**Marketing**

In the process of production of guava, marketing plays a vital role. Marketing is a part and parcel of production. It is an important stage where the producer converts his labor and other inputs used into cash and is at this stage that he will be in a position to find out whether his investment on the enterprise is rewarding or not. In the process of marketing the producer has to incur various marketing costs. These costs are determined by the producer’s performance and efficiency of different marketing functionaries which in turn influence the returns to the growers (Byresh T, 2007).

There are a numerous marketing channels that can be made available for local farmers:
1. Producer ➔ Consumer (direct sale)
2. Producer ➔ Cooperative ➔ Consumer (cooperative sale)
3. Producer ➔ Commission Agents ➔ Wholesalers ➔ Retailers ➔ Consumer (middle-men sales)

**Storage**

The shelf life of guava fruit at ambient condition is relatively short due to rapid development of fungal rot. However, fruits may be stored for a few days to adjust the market demand (AGRISNET).
Fruits can be stored for 2-4 weeks at relatively low temperature coupled with high humid condition as follows:

**Recommended storage condition of guava**

<table>
<thead>
<tr>
<th>Temp. (°C)</th>
<th>RH (%)</th>
<th>Duration (weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10</td>
<td>90</td>
<td>2-3</td>
</tr>
<tr>
<td>10</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>85-9</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Pre-harvest sprays of Calcium Nitrate (1.5%) and Alar (75 Ppm) are effective for minimizing physiological weight loss during storage and maintaining eating quality and marketability of fruits more than 8 days. Wrapping of fruits with newspaper is also found to be effective to enhance shelf-life of fruits by about 3 days.

**Packaging**

Packaging is important, and serves multiple functions: guide for usage and handling, marketing display and the information carrier for chain actors and consumers. Especially for fresh product, the package protects the product against physical, chemical and biological decay (ESCAP, 2008). Longer shelf life can be achieved with optimal packaging. Still, a lot of fruit products are on display in supermarkets with no packaging on the items. Products that have a limited shelf life, like pre-cut fruit (guava), definitely benefit from individual packaging during the whole chain and until the moment of consumption moment. In traditional packaging a plastic film is used to create a gas barrier, so optimal CO2, O2 and H2O levels can be achieved at the equilibrium stage. The gas diffusion characteristics of the film are specified by the product.

**Available markets to accommodate guava exports from Jamaica**

Consumer demand for tropical and sub-tropical fruits is potentially great as evidence by the widespread acceptance of such fruits as avocado, papayas, mangos and pineapple. According to the Division of Research and Industry at the University of Miami, some forty years ago these fruits mentioned were virtually unknown in some areas and were just known as luxury fruits in others. The acceptance of these fruits shows that tropical fruits such as Guava have potential markets when they are made readily available to consumers. Before a new fruit is introduced on the market, proper information should be gained concerning its appropriate harvesting, packaging and shipping.

According to an article posted December 28, 2011 on www.fruitsportal.com, Mexico’s guava exports to the U.S. have increased by a modest 5% from January to September 2011, compared with 2010’s 28% surge, according to government statistics. The Ministry of Agriculture, Livestock, Rural Development and Fishing (SAGARPA) said since 2008 when Mexico was given export access to the U.S., volumes have climbed from 839 metric tons (MT) to more than 4,300MT for 2010, representing 400% growth. Agribusiness promotion undersecretary Ernesto Fernández Arias, said guava sales to the U.S. in 2008 accounted for 38% of the Mexican market, growing to 90% in 2010. He also added that in 2010, 22,000 hectares of land was devoted to growing guava delivering 305,000MT with Aguascalientes, Michoacán and Zacatecas producing 90% of the national total. According to United Nations Food and Agriculture statistics, Mexico is one of the top four countries for producing guavas and is the largest grower in Central and South America. Other countries where Mexico exports the fruit are Canada, Guatemala, Japan, France and Poland. The Guavas exported is used commercially to produce jams, concentrates and purees. This proves that there are numerous markets that Jamaica can dominate exports by producing the best quality, fresh Guavas.

Guavas offer supplementary advantages for a whole utilization; one such advantage includes the guava pulp use by many juice manufacturing companies. There is a growing demand of Guava pulp in local and international markets. Guava nectar is used in tropically themed alcoholic drinks. The consumption of guava also has health benefits, it is the most therapeutically used plant in the Philippines because of the many nutrients it contains, vitamins A, B and C, iron, antioxidants, carotenoids, calcium, carbohydrates, fiber, niacin, phosphorous, protein and potassium (www.slurrpy.com). Guava also is a valuable component for anti-aging skin care as it contains moisture retaining B vitamins which help
prevents the oxidation process of the cell. India, Brazil, Pakistan and Mexico are the major producers of

Guava in the world; however, Mexico and Pakistan are the main exporters of the crop. Thus, there is an

opportunity for Jamaica to increase in growth and development by being competitive and taking

advantage of available Guava export markets.

Guava by-products

Guava has great potential for extensive commercial production because of its ease of culture, high

nutritional value and popularity of processed products. Currently, there are a few by-products that are
derived from Guava such as jam, jellies, paste, juice, baby foods, puree, beverage base, and syrup. How-
ever, there are still other by-products that Jamaica can capitalize on from this tropical fruit. In an
article published, Thursday September 1, 2011 in the Gleaner, there is proof that Jamaica can capitalize
on the production of Guava and thus, using guava for agro-processing purposes. According to the
article, “Guava sauce is the new kid on the block, a new innovative product that's 100 per cent Jamaican.
It is great for making gravy, salad dressing and a flavorful addition to barbecue sauce”. Jamaican
gourmet guava sauce is the first product in the Beechwood Products brand. The line was initiated by
the Women’s Resource and Outreach Centre (WROC) to encourage the production of alternative crops
for agro-processing. In the article, Marketing Officer Alexis McDavid and WROC board member
Kathleen Goldson-Clarke stated that guava is a very resilient crop found in abundance in the parish of
St. Thomas where they get their guavas to produce the sauce which is manufactured by CANCO Ltd.
They additionally stated that Guava is the best alternative for ex-banana farmers to produce on a large
scale. With this said, the researchers are proposing to produce some products as well, that is guava tart
bread and guava cheese cake. Testing will be done on a sample of the population to make a genuine
decision on the success this product would have on the local market.

There is also consideration of producing guava duff which is already popular in the Bahamas
(researchers believe guava duff will be better utilized as a Jamaican brand product): guava wine and
guava flavored tea bags. A study done by A. A. El-Deek, M. A. Asar, S. M. Handly, and A. A. Abdalla,
in the Poultry Production. Department, Faculty of Agriculture, Alexandria University, in Alex. Egypt,
states that there is a possible utilization of guava in broiler finisher diets. The biggest impediments to
livestock production in developing countries are the high cost of feed ingredients. Guava pulp having
so many vitamins could possibly be added to the broiler feed for chickens after it has been processed.
Hence, the researchers are proposing this as another by-product to support the local market. Guava has
a distinctly sweet odor. It is being used in other countries in cosmetic products. Subsequently, the
researchers would suggest that Jamaica could also capitalize on cosmetic by-products from the fruit that
could contribute to the domestic market. Some of these cosmetic products such lotions, shampoos and
conditioners, facial or bath soaps, facial masks, and toothpaste could be produced by some of our local
manufacturers.

Availability of guava to the Jamaican people

The psidium guajava usually grows wild in Jamaica; many people fail to recognize the many uses
which guava has because of the perception of the fruit as just another wild fruit. The availability of

guava to the Jamaica people is a question that can be answered by most people back yards and small
farms because many persons have a wild guava tree growing somewhere near their house. Guava is
available to the Jamaican people and even if we were to plant it on a large scale, we would still be able
to acquire land to do so. According to a farm by the name of, guava has great potential and can be grown
in large abundance in parishes such as Manchester, St Elizabeth and St Thomas because they have the
right soil type and there would not be any problem to acquire land to plant the guavas for local and
international consumers. St. Thomas already has guava plantations because local farmers in St. Thomas
turn to guava production because of low banana production.

Methodology

This research proposal examines how the cultivation, production and creation of by-products from
guava can be used to upsurge the well-being of individuals and to positively stir economic growth and
development of Jamaica in the right direction. The researcher seeks to increase Guava farming and
introduce new by-products thereby allowing individuals to become more aware of the health and economic benefits of guava. This chapter is vital to describe the methods selected to gather information needed for the completion of a research of this magnitude. The researcher will demonstrate how the data or information gathered will be retrieved, stored, analyzed, and use to the maximum benefits of this proposal. Researchers will also present the findings in the following chapter.

Research design

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (Sagpub, 2006).

Furthermore, this project utilized the use of both primary and secondary data. However, it is rooted in a qualitative economic growth and stability position of the Jamaican economy that recognizes the importance of locating the research within a particular social, cultural, and historical context. It also takes seriously the social construction of these contexts and the identities participants construct within them.

Qualitative research seeks out the ‘why’, not the ‘how’ of its topic through the analysis of unstructured information (Zikmund et. el). A qualitative evaluation is utilized for this research project leveraging subjective methods such as interviews, research and observations to collect substantive and relevant data. These interviews were conducted with practicing diplomats from RADA and a retired agricultural engineer from Manchester. This qualitative approach was valuable due to the varying experiences of the diplomats in Jamaica and other country cultural situations. Recent research on intercultural communication and instructional design was consulted to validate collected data.

Sampling

The general population for this study would be composed of individual consumers, local farmers, and rural agricultural officials. The researchers would choose to survey individuals with a vast knowledge of Guava and some of its already marketed by-products and also potential growers. For the results to be truthful, researchers strive to cover a sample size of one hundred (100) persons. Respondents will be gathered within the parishes of Manchester, St. Thomas, and St Elizabeth. Individuals will be chosen by chance. Non-probability sampling is the technique the researchers decided on using. This means that individuals will be selected based on the researcher’s personal assessment or convenience. Of the one hundred (100) questionnaires that will be distributed, forty (40) will be distributed to farmers, ten (10) to Rural agricultural officials and fifty (50) to consumers.

Data collection sources and procedures

The sources that will be used in the data collection process will be in the form of documents, individuals and observations to provide information for the valuation of this research proposal. Secondary data which was used for prior researches will also be used as a tool for gathering information. These secondary data will be retrieved from the internet, magazines, newspaper and governing bodies in Jamaica that provide statistics on aspects of the proposed study. We will source information from individuals by means of interviews using telephone or face-to-face and also the distribution of questionnaires. The information will be easily analyzed because of the vast amount of data that will be gathered through these methods. The researchers will go into the parishes of Manchester, St Thomas and St Elizabeth in search for farmers who currently grow and sell Guavas to local manufacturers. Some of these farmers might also be consumers of the fruit. The researchers will conduct one-on-one interviews with the farmers to hear their personal views of what they think of using guava to produce original Jamaican by-products. The interview with the Rural Agricultural Development Authority (RADA) was done in a face-to-face conversation with Mr. Winston Miller, acting deputy agricultural officer at the Mandeville branch. A second interview was done face-to-face with Mr. Trevor Peart a
champion farmer and retired agricultural engineer from Kendal, Manchester. Observations will be based on the natural resources favorable to growing Guava on a large scale in Jamaica such as our climatic conditions, our soil types and also from the quantity of Guava already being grown in St. Thomas.

**Data analysis procedure**

Data analysis procedure will be provisional as the researchers will use different methods to bring out details of different viewpoints of the respondents. The analysis will clarify and explain the many benefits of guava. It will also shed some light to better understand the proposal and to gather meaning that may apply to the understanding of the issues or concerns associated with Guava. This will equip the researchers to reach the goal of identifying key information needed to develop the guava in a way that will be beneficial to the society. Data analysis will involve the use of graphs.

**Presentation of Findings**

Information collected for this proposed research will be presented verbally and non-verbally at the request of Texila American University.

**Data presentation**

One hundred (100) respondents were selected as a sample of the population of farmers, consumers, RADA officials and prospective consumers in Bellefield, Manchester, Braes River, St. Elizabeth and St. Thomas to obtain the results for this research. The research was both qualitative and quantitative in nature as it seeks to investigate Guava faring on a large scale. The respondents were selected based on simple random sampling and convenience. Most of the questionnaires prepared for customers were receive because they were collected on the spot. The farmers who responded were few, about 15 of the 40 questionnaires prepared for the farmers were done.

The demographic profile of the consumer respondents showed that 28% of the respondents were males and 72% signified females within the various age groups. The collected questionnaires were analyzed and tallied and the useful information was used to create this research proposal.

**Farmer analysis**

![Farmers awareness of Guava Farming](image)

**Figure 1.** Illustrates that 10% of the farmers in Manchester and 22% of the farmers in St. Elizabeth are aware of the many benefits that Guava has and that it could be profitable to invest in guava farming. St. Thomas farmers are the most aware with 68% claiming that they already knew of the many possibilities existed with Guava.
Consumer analysis

Figure 2. Shows that 28% of consumer responding to the survey were males and the remaining 72% were females.

Figure 3. Shows the consumers taste and preference in consuming Guava. Most consumers prefer to consume Guava as juice with 56% of the respondents stating this. Others prefer to consume it as jam (18%), fruit (16%), and jelly (10%) respectively.
Figure 4. Shows consumers responses for the creation of new by-products from Guava. 36% of the respondents are intrigued by the creation of vitamin tablets due to the fact that Guava contains all the vitamins, with vitamin C being five times more than that found in citrus, and it also contains other nutrients. Guava Tart Bread (26%), Guava Cheesecake (20%) and cosmetic products (18%), respectively.

Figure 5. Shows the consumer responses to the ailments that can be cured by regular consumption of Guava. Most consumers were aware that Guava can be eaten for Constipation. 66% of the respondents proved this, while others are aware of guava curing high blood pressure (18%), diabetes (14%), scurvy (1.6%) and weight loss (0.4%) respectively.

Final Review of the proposed study

Analysis of research findings

It can be concluded from the findings that the majority of farmers in Manchester and St. Elizabeth have never thought of the possibility of producing guava on a large scale to make additional income. However, in St. Thomas most of the farmers who were briefly interviewed stated that their main source of income came from being banana farmers, but they soon turn to Guava when the banana market
became stiff, they realize that companies such as CANCO Ltd were willing to purchase their Guavas to produce by-products such as jam and also other Juice companies in Jamaica such as Tru Juice. The Women’s Resource Outreach Centre (WROC) also obtains their guava to make the beechwood brand Guava sauce product from farmers in St. Thomas. The farmers also stated that their additional income has been favorable. Majority of the farmers were not aware of the many health benefits that they can be obtain from the fruit, the leaves, or the bark of the Guava tree. After speaking with Mr. Trevor Peart, a retired agricultural engineer and champion farmer, it is evident that Guava has potential to add to the enhancement of the economy. Although Guava is known to have two seasons, Mr. Peart added that Guava can be sustained year-round in Jamaica, depending on the amount of water being used and no chemicals, just organic fertilizer. He also stated that if farmers want sustainability when growing certain crops like Guava, they should practice agronomy, using the fallen leaves from the trees to make mulch. Additionally, the Guava tree unlike other fruit trees is very flexible; therefore, it would be able to bend towards the wind if there is a natural disaster such as a hurricane. According to Mr. Peart, Jamaica imports Guava jelly and jam from Mexico, so there is a market if farmers start Guava farming. It was shown that consumers eat Guava as a mere fruit, using the jam on bread or biscuits or just drinking the juice, however majority of the consumers surveyed consume guava juice more than any other by-products. Some consumers agreed that they would consume Guava as dietary supplements or as a vitamin tablet since it has five times more vitamin C than citrus. Consumers also agreed to use cosmetic products made from the Guava. Due to this result it can be deduced that proposing that the cultivation of Guava be increase here Jamaica to be used in agro-processing products is feasible as consumers are embracing the idea.

It is evident that the only health benefit that most people were aware that the Guava could provide is the relief from constipation. Since conducting the surveys most consumers are now intrigued by the fact that Guava has so many other health benefits and consumers are readily accepting it as a fruit that Jamaica can export. Base on this research the researchers understand that there is a market for Guavas internationally and that many Jamaican farmers are not producing Guava on a large scale. Thus, the researchers hereby proposed that farmers increase the production of Guava and that manufacturers in Jamaica should explore the many benefits of the fruit and seek to introduce new products from the fruit to supply the local and international markets. Cosmetic companies should also capitalize on the skin care products that can be by-products of Guava to meet the demands of customers and enhance the country’s economy.

Discussion and Recommendations

Discussion

The Researcher now believes that the demand for Guava is present internationally. Since local farmers weren’t aware of the possibility of Guava farming providing additional income, the researcher also proposes that a research of this magnitude will help to inform the farmers about the benefit of Guava farming. The researcher also can conclude that a large-scale production of Guava means that there will be many by-products; as a result, the production of Guava will generate sales and revenue for the Jamaican economy. This will be a significant contribution to Gross Domestic Product (GDP) as investment spending increases; when investment spending increases businesses, manufacturing, and the agricultural sector will expand giving rise to additional income and employment. A decrease in the unemployment rate will increase consumer spending. If more people become employed, the standard of living will also rise. The Psidium Guajava and its by-product will be exported. Thus, the market will expand through exports by the generation of revenue through foreign exchange.

It my intention to continue investigation into Guava farming and to use this project to inform local farmers of the benefits and potential gains associated with exporting Guavas internationally and selling locally to manufacturing companies. This will ultimately improve the country’s overall economic growth and development by providing employment and strengthening the country’s GDP.
Recommendations

The researcher recommends that farmers participate in large scale farming of Guava and manufacturing companies should use guava from these local farmers to create by-products thereby contributing to the development of the nation.

According to the research carried out the researcher realized that most persons know the Guava fruit but are not aware of most the health and economic benefits it has; this is a result of the fact that many farmers along with the Rural Agricultural Development Authority (RADA) does not embrace the health or economic benefits of Guava. The Guava is a valuable and exquisite fruit that can be used to boost the agricultural sector. I am therefore recommending that RADA capitalize on this opportunity to extensively educate the Jamaican population about cultivating Guava on a large scale and exploring the health benefits to improve the vigor of our people and increase the standard of living in the country.

Guava and its by-products are demanded and Jamaica has the opportunity to create means and ways to meet the demands of our people and the international market. The researcher gathered that persons are willing to consume guava by-products and are willing to buy products made from the fruit; therefore, it is recommended that Guava farming be done on a large scale, and be made into supplements, cosmetic products and food items. This will aid the country’s development since Jamaica has the right resources to plant Guava trees in abundance. The production of Guava can be done not only for the local market but also for the international market; this will bring foreign currency into the country, bridge trade cap, adds to Jamaica’s GDP and eventually enhance the country’s economic growth and development.

It has already been proven that Jamaica has the resources to plant Guava on a large scale; resources are available in terms of land, water, man power and encouraging climatic conditions. Nation building will be accomplished with the implementation of this proposal. Jamaica needs to take advantage of existing resources in order to take the country out of its current economic situation.

Summary and Conclusion

Jamaica has been a predominantly agrarian economy since time immemorial. However, agriculture continues to be the mainstay of our economy even today, as it contributes 5.8 per cent of the gross domestic product (GDP) (world facts book) and providing nearly a quarter of the country’s employment (Encyclopedia of Nations). Therefore, this research proposal is aimed to give individuals a new perspective on tropical fruits such as Guava. It will demonstrate how Jamaica can capitalize on existing resources and use inactive farm lands for large scale production of guava for the purpose of exports and to support the domestic market. The researchers understand that guava and its by-products are not being exported from Jamaica and barely sold on the local market. That’s why the researcher has decided that the farming of guava on a large scale is needed to provide a consistent supply to the local market and also to the export markets which in return will be very beneficial to Jamaica’s economy.

Jamaica is already well known for its diversity of soils and tropical climate. Therefore, the island is advantageously placed for producing practically all variety of tropical and sub-tropical fruits. Guava (pisidium guajava) is one of these fruits. It belongs to the family myrtaceae. As mentioned before, the fruit is richer in many respects like protein, vitamins, carbohydrates and minerals etc. The researcher believes that guava can be made available throughout the year. In Jamaica it is predominantly grown in all parishes; however, the researchers believe that parishes such as Manchester (Bellfield), St Elizabeth (Braes River), and St Thomas is more susceptible to guava cultivation.

In conclusion, the proposed research aims to educate farmers, manufacturers and consumers that many possibilities exist by undertaking the production of Guava on a large scale. Producing Guavas for fresh fruit consumption, jam, jelly and juice is insufficient, due to the fact that this is already being done and especially since Guava has the potential of creating far more by-products. Therefore, the researcher proposes that a large-scale production of Guava will target local and international markets for its remedial purposes and to create awareness and popularity of guava farming which would increase consumption of guava. Investing in the large-scale farming of Guava in Jamaica would be profitable. It would contribute meaningfully to the Jamaica’s economic development and growth, adding significantly to the GDP, increasing employment, increasing exports, reducing Jamaica’s import bill and allowing the country to be more competitive.
References


Effects of ICT Incorporation Lapses in the Electoral Process of Cameroon

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Abstract

The undisputable benefits of Technology implementation in the electoral systems of advanced democracies like those of Europe and the United States of America, have been applauded and heralded by the international community. But since the year 2012 when Cameroon set out to incorporate Technology in its electoral processes, the fruits are insignificant as the system is plagued by a fleet of electoral Information and Communication Technology (ICT) challenges. This paper investigates the ICT gaps and their consequences on the electoral outcomes in the country.

The findings reveal that a fragile electoral ICT implementation system accounts for the poor sensitization and civic education, inappropriate constituency delimitation, mediocre voter registration, uncertain voter verification and voting, rudimentary vote counting and computation, and unsatisfactory dissemination of elections results in the country.

To address these shortcomings, this article proposes a comprehensive ICT-enhanced electoral system that incorporates training elections officers on the techniques of electoral digital technology, procurement of the crucial ICT devices, and setting them up in the respective field branch offices.

Keywords: ICT, ELECAM, Technology, Election, E-voting, EMB, Cameroon.

Introduction

For many years, elections in several countries have been marred by electoral malpractices, rigging and manipulations of all sorts, which all gained grounds on account of the absence of well-organized electoral management methods and techniques. The hand-written electoral registers, hand-produced voters’ cards, manual vote-counting tallying sheets, and manually drafted elections reports rendered the electoral operations cumbersome, doubtful and conflict-prone.

In recent decades, most Election Management Bodies (EMB) around the world have instituted reforms some of which are now considered best practice to improve the management and conduct of elections. Some such include: the use of information and communication technology, professionalization of the organization, adoption of more transparent and inclusive processes, amendments to legal framework and improvement of relationships with external stakeholders (Jega, A.M. - 2012). Specifically, the introduction of ICT in electoral management has resulted in greater efficiency, credibility and acceptability of election outcomes.

ICT is a field of work and study that includes technologies such as the desktop and laptop computers, software, peripherals, and connections to internet primarily for information processing and communications functions. ICT involves the use of computer software and hardware to process information for both private and public use (Statistics Canada, 2008). The use of ICT in election has curbed the incidents of multiple registrations, which had been one of the main political tools for rigging elections by unscrupulous and savage elements. (Nwagwu, 2016).

In Cameroon, a plethora of newspapers and reports have highlighted gross inadequacies in the implementation of ICT infrastructure and techniques in electoral administration by the Elections Management Body (Elections Cameroon or ELECAM). The recurrent public protests against the Results of the October 7th 2018 Presidential Elections and the fierce law-suits against the ruling government, prompted this research to verify if the irregularities in electoral outcomes were not a function of poor implementation of the Information Technology infrastructure and strategies, paying particular attention to the case of Bui Division in the North West Region of Cameroon.
Materials and methods

This study made use of Observation and Secondary data source. The research explored Administrative Reports, Evaluation Reports and Operational Records produced by the Team leaders and Support Staff of the different Elections Management Office Branches of Bui Division in Cameroon. It also utilized comparative data from the Online Database called ‘ICTs IN ELECTIONS DATABASE’ produced by the International Institute for Democracy and Electoral Assistance (International IDEA). The documents were consolidated and their data analyzed to derive the premises and conclusions.

Literature review

On the basis of their scientific findings, most researchers advocate the incorporation of ICT Techniques in the administration of elections and elections-related activities. According to Wilson and Lawan (2015), advances in Information and Communication Technologies have transformed nearly all, if not all areas of human endeavours. ICT has become an enabler of change, it does not bring change on its own rather; it serves as a facilitator of change bringing about a stable political system (Olugbenga, 2001). Adamu (2017) asserts that there is no single operation in the electoral process that cannot be computer-aided or even be completely taken over by ICT if the country in question is willing to digitalize.

The adoption of ICT and electronic technology into the electoral process, its usefulness notwithstanding, still suffers some setbacks occasioned by poor or erratic power supply, malfunctioning, unskilled personnel, mass illiteracy, and election fraud using electronic voting (Njoku, Amaefule, Nwandu, & Jibiri - 2018). Nevertheless, many government agencies in the developing countries have taken progressive steps towards the web and ICT use, adding coherence to all local activities on the Internet, widening local access and skills, opening up interactive services for local debates and increasingly, the participation of citizens (Aurigi, 1997).

It is however observed that the potential for e-government in developing countries remain largely unexploited. Human, organizational and technological factors pose great challenges to effective and sustained electronic governance. It is further noted by Allen et al (2001 cited in Wikipedia), that governments in the developing world can effectively exploit and appropriate the benefits of ICT, but e-government success entails the accommodation of certain unique conditions, needs and obstacles. To Chidubem (2018), this sheer confidence in ICT adoption appears robust and seemingly genuine, but it must be noted that the use of ICTs in the conducting of elections in rural communities actually contributes to the disenfranchisement of rural voters and weakens the integrity of the electoral process.

Ideal standards of ICT in electoral management

International IDEA (2019) stipulates that ICTs can quickly galvanize several procedures in the electoral cycle, such as voter registration, casting the vote, processing of results and many other processes. The application of ICTs based on well-identified needs and the adoption of a proper implementation strategy, results in gigantic benefits.

Having partnered with governments in their electoral processes, granting capacity building programs to staff of Electoral Management Bodies (EMBs) and facilitated ICT implementation schemes across many countries in the globe, International IDEA has elaborated some best practices or principles for the implementation of ICT for electoral management. Coined as ‘Ideal Standards of ICT in Electoral Management’ in this article, these principles are:

- The EMBs need to develop a Voter registration system using biometric technology.
- Biometric data needs to be used in voter identification at polling stations.
- Electronic voting (E-voting) needs to be instituted to facilitate balloting.
- Official results need to be processed by an Electronic Tabulation System.
- The EMB needs to provide individual online voter registration/polling assignment checks.
- The country should publish the statistical overview of voter lists online.
- Election results, seat allocation, parties and candidates should be published online.

To concretely evaluate trends in various countries, International IDEA has created a dynamic online database that unveils facts on the application of ICT in the five aspects of Electoral Management, namely: Voter registration and identification, Electronic voting, Processing of Election results, Usage of open source software in election administration, Online data publication by Election Management Bodies, for countries around the world including Cameroon.
Table 1. Application of ICT in the five aspects of electoral management in Cameroon

<table>
<thead>
<tr>
<th>1</th>
<th>Voter registration and identification</th>
<th>in Cameroon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type of technology used for collecting registration data</td>
<td>Digital voter registration kits/computers, off-line</td>
</tr>
<tr>
<td></td>
<td>Is biometric data captured and used during registration?</td>
<td>Yes, both fingerprint scans and photos</td>
</tr>
<tr>
<td></td>
<td>Is the biometric data used in voter identification at polling stations?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Is technology used for identifying voters at polling stations (electronic poll books)?</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Electronic voting (E-voting)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is e-voting currently used in any elections with EMB participation?</td>
<td>No, e-voting is not used currently</td>
</tr>
<tr>
<td></td>
<td>If e-voting is NOT currently being used, what is the current status of e-voting in general?</td>
<td>E-voting has never been used</td>
</tr>
<tr>
<td>3</td>
<td>Processing of results</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are official election results processed by an electronic tabulation system?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>In the last national election, how many days did it take for the EMB to establish final results?</td>
<td>17 days. (Too long. A negative)</td>
</tr>
<tr>
<td></td>
<td>In the last national election, how many days did it take for the EMB to announce certified results?</td>
<td>17 days. (Too long. A negative)</td>
</tr>
<tr>
<td>4</td>
<td>Usage of open source software in election administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does the country use open source software in electoral processes?</td>
<td>Using open source systems have never been considered</td>
</tr>
<tr>
<td></td>
<td>Key reasons for or against using open source systems?</td>
<td>Not specified</td>
</tr>
<tr>
<td></td>
<td>Type of open source systems have been considered or used</td>
<td>Not applicable</td>
</tr>
<tr>
<td>5</td>
<td>Online data publication by EMB (Elections Cameroon)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does the country provide individual online voter registration/polling assignment checks?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Does the country publish the statistical overview of voter lists online?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Does the country publish full voter registers at the polling station level online?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Does the country publish full voter registers at the national level online?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Does the country publish the lists of parties and/or candidates registered for elections online?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Does the country publish the election results online?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Does the country publish seat allocation data online?</td>
<td>Yes, not machine readable</td>
</tr>
<tr>
<td></td>
<td>Does the country publish candidate/party financing reports online?</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: International IDEA Online Database

In quantitative terms, Table 1 above presents twenty (20) characteristics/questions of Cameroon’s electoral system according to International IDEA. Eighteen (18) of the questions are answered in ‘Yes’
or ‘No’ format. We have ‘13 No’ and ‘5 Yes’. Analytically, Cameroon’s ICT electoral system is far below acceptable standard as it scores only 5 on 18 (5/18) which is 27.7%.

**ICT infrastructure in ELECAM, bui division**

<table>
<thead>
<tr>
<th>Branch Office</th>
<th>Number of Staff</th>
<th>Number of Biometric Kits</th>
<th>Number(^{0}) of Office Computers</th>
<th>Internet Connections</th>
<th>Calculation of Election Results/Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divisional Office</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>Yes / Wifi</td>
<td>Computer/Excel</td>
</tr>
<tr>
<td>Elak Council</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>None</td>
<td>Calculators</td>
</tr>
<tr>
<td>Jakiri Council</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>None</td>
<td>Calculators</td>
</tr>
<tr>
<td>Kumbo Council</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>None</td>
<td>Calculators</td>
</tr>
<tr>
<td>Mbiam Council</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>None</td>
<td>Calculators</td>
</tr>
<tr>
<td>Nkor Council</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>None</td>
<td>Calculators</td>
</tr>
<tr>
<td>Nkum Council</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>None</td>
<td>Calculators</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
<td><strong>14</strong></td>
<td><strong>10</strong></td>
<td><strong>/</strong></td>
<td><strong>/</strong></td>
</tr>
</tbody>
</table>

Source: Archive of ELECAM Bui Divisional Branch Office

In Table 2 above, the total number of staff is 36, 14 Biometric Kits, and 10 office computers. On an average note, this implies that at least 2 staff are entitled to a Biometric Kit. This depicts a situation where human skills are idling due to lack of working tools. Besides, Councils do not have Internet Connections and staff use just calculators for election results and other electoral operations. Such rudimentary conditions would likely only slow down productivity and produce mediocre output.

**Discussion and findings**

A critical observation of the facts above reveal that colossal work needs to be done in Cameroon as concerns implementing ICT in its electoral process. An examination of the usage of ICT in electoral management in the country can be done in the six major phases of the Electoral Process: (1) Sensitization and Civic Education; (2) Constituency Delimitation; (3) Voter Registration and Data Capture; (4) Voter Verification and Voting; (5) Vote Counting and Computation; and (6) Result Dissemination.

**Sensitization and Civic Education** are fundamental components of the electoral process. Citizens need to be schooled on why and how they should participate in elections. The use of the Internet, Websites and popular social media like Facebook, Twitter, Instagram, WhatsApp, YouTube and special mobile applications to disseminate voter education messages in real-time and cost-effectively would invariably yield fruits to the electoral process. Unfortunately, none of these communication avenues are utilized by the election’s officers of Bui Division, as observed in the aforementioned documentation.

**Constituency Delimitation** is the equitable and balanced segmentation of communities into units for electoral representation in the body politics (Umar Pate, 2008). Constituency boundaries deliberately carved in favor of one political candidate or group, thereby disadvantaging others would definitely produce unrealistic and unfair electoral representation and outcomes. This risk can be averted by applying ICT solutions like digital mapping, digital charts, Global Positioning System (GPS) and GIS Satellite Footprints. A perusal of the operational records in the various Electoral Offices reveals that boundary delimitation is based on estimates and not on digital or GPS device.

**Voter Registration and Data Capture** are indispensable prerequisites for free and fair elections. Voter registers hold the accurate identities of potential voters and this is achieved by digitally capturing the biometric data of willing persons who are twenty (20) years and above, in Cameroon. By our research documentation, the Election Management Offices of Bui Division possess and utilize Biometric Kits for this purpose. However, only fourteen (14) biometric kits are allocated to the thirty-one (31) staff in the six Branch offices. This implies that two staff are entitled to a biometric kit, meaning that a kit operator has to standby and wait for his/her collaborator to finish before they can work. Ideally, thirty-one (31) biometric kits would have been allocated to the thirty-one (31) staff so that they serve Bui Division’s population of about 322,000 inhabitants.

The validity of **Voter Verification and Voting** on Election Day is determined by the quality of ICT solutions. Double or multiple voting incidences and other rigging tricks can be eradicated or minimized.
by a Voter Verification and Voting System that is digitally enabled. This involves the use of electronic recoding machine, optical scanning system, use of smart cards and card readers at the polling stations. Categorically, the Elections Administration Offices of Bui Division do not have any of these devices and most staff have never even heard about such. In fact, voter verification and voting are manually conducted.

**The Vote Counting and Computation** operations of an elections is remarkably facilitated by the Results Management System. The manual tasks of vote counting, tallying, calculations with calculators and hand-recording of results is always sluggish, prone to errors and even manipulations. But a Results Management System would incorporate software with analytical potentials of consolidating voting data and processing them in easily readable formats. The speed, accuracy and flexibility of such technology enhances electoral credibility and integrity. Regrettably, the Elections officials in this Division are not in possession of this facility; consequently, they utilize the manual methods for vote counting and recording.

Having organized the Elections and obtained the Results, it is important to publish or disseminate them for the consumption of the general public – especially the electorate, the candidates and the stakeholders at various levels. This **Results Dissemination** phase would give an official statement of the general outcome of the elections, thus avoiding tendencies of destructive rumors which can generate unnecessary post-election conflicts. Results Dissemination can appropriately be done on the local webpage of Electoral Management office of Bui Division. Strangely, in this jurisdiction, no such webpage exists and none of the Branch offices has any Internet Connections.

**Conclusion**

This article reveals the observation of acute inadequacies of ICT implementation in Electoral Management particularly in Bui Division and Cameroon on general terms. There is a gross lack of modern electoral materials that eventually culminates in the near absence of ICT application in electoral operations in the Division. Poor sensitization and civic education, inappropriate constituency delimitation, mediocre voter registration, uncertain voter verification and voting, rudimentary vote counting and computation, and unsatisfactory dissemination of elections results, characterize the country’s electoral system. Thus, the irregularities in electoral outcomes were a function of poor implementation of ICT infrastructure and strategies. These challenges necessitate concrete action that would transform and modernize the entire political set up, in order to ensure genuine representation of the people’s choices as a fundamental standard of true democracy.

**Recommendations**

To salvage the deplorable ICT implementation as it is now, some recommendations are advanced: We propose that Cameroon’s EMB would design a realistic ICT Implementation Strategic Plan and Operational blueprints that galvanize effective action in its administration of electoral affairs. This involves intensively training elections officers on the techniques of electoral digital technology, procuring the necessary ICT devices, and setting them up in the respective field branch offices.

**References**


Employee Motivation Incentives and Their impact on the Organization's Productivity

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**Abstract**

This article presents literature on employee motivation incentives and evaluates their impact on organizational productivity. The article aims at explicitly highlighting the effect of incentives on different elements that influence organizational productivity. A qualitative analysis of literature was employed to consolidate literature that informed the study. The findings indicate that incentivizing the organization's activities undertaken by human resources helps in improving organizational productivity. The results showed that incentives increase productivity by enhancing the following elements: employee work performance, employee engagement, innovation and creativity, organizational commitment and job satisfaction. This finding will provide useful information to organizations when designing incentive schemes and analysing their functions and general impact.

**Keywords:** Employee motivation, incentives, organizational productivity, motivators.

**Introduction**

Improvement of organizational productivity is one of the principal functions of the top management in any institution. Radically, organizational productivity is enhanced and determined by a variety of elements such as; corporate culture, communications, systems and tools, training and development, motivation and incentives, planning and programmes, control and reporting, staffing, structure, process, strategy, goals and objectives (Cording et al., 2014). However, a growing body of literature suggests that employee motivation is fundamental (Becker et al., 2018).

Contemporarily, the focus on employees has increased due to the fact the different trends such as globalization, automation, organizational culture changes have become rampant. Such changes have also altered characteristics of employees; hence, organizations ought to adapt their human resource management strategies (Caliskan & Isik, 2016). One of the critical facets of contemporary adaptation is employee motivation.Motivation is undertaken to ensure the commitment of human resources and other members is enduring. As a human psychological trait, motivation influences the level of engagement in a person’s behaviours (Hennessey et al., 2015). In general, motivation involves imparting on individuals in a way that the impact can act as a primer to exceptional performances. Employee motivation encourages individuals to adopt purposive behaviours and have the desire to put in an effort and achieve specific goals and objectives. This level of motivation, a variety of dynamic factors are considered as well as an appreciation of different theories of motivation.

Motivation refers to the force that encourages individuals to garner their objectives. The concept can be extrinsic where motivations are harnessed from outside the person or intrinsic where motivation is derived from the person instead of external influence. The positive results associated with motivation have led organizations to continuously sought to motivate their employees and in tandem, increase their productivity. Lack of employee motivation can dictate the failure of an organization; thus, it is imperative for organizations to devise new methods of employee motivation depending on employee characteristics. If suitable arrangements are used, productivity generally increases, and when different strategies are employed, negative results such as high employee turnover and low performances are witnessed (Deci and Ryan, 2014). From this perspective, this research will seek to evaluate employee motivation Incentives and their impact on the organization's productivity.
Definition of employee motivation

There is no standard definition of employee motivation. Naile & Selesho (2014), define employee motivation as imparting purposeful behaviours that can propel employees towards the primary goals of the organization. Lazaroiu (2015), defines employee motivation as the provision of the steering force to employees so that they can pursue professional and organizational goals and objectives.

Reasons for employee motivation

Homberg et al. (2015), posit that organizations engage in employee motivation to enhance job satisfaction because of the lack or presence of motivation influences satisfaction. Job satisfaction is an essential facet in employee motivation as it affects the quality of work and the willingness to work. Fernandez & Moldogaziev (2015) argue that job satisfaction is pegged on the capability of individuals to benefit from specific motivators such as recognition, promotion, personal growth, and success. Hence, employee motivation is undertaken to improve job satisfaction. Employee motivation is employed to increase employee loyalty. Iqbal et al. (2015) explain loyalty itself is an example of commitment where employees are willing to sacrifice their self-interests and further the company’s objectives. Thus, employee motivation strategies are used to demonstrate that mutually beneficial partnership is being adhered to whereby employee’s sacrifices are dully recognized and compensated. Organizational commitment is also a fundamental element that provides an impetus for employee motivation. This commitment is commonly fostered through rewards in that “the rewards one receives from an organization and the experience one has while achieving the reward impacts the extent of the attachment an employee has toward an organization” (Smith, 2015). Employee motivation is vital in augmenting the willingness to remain at a particular institution and desire to achieve its goals.

![Diagram](image)

**Figure 1.** The interaction between intrinsic and extrinsic motivators with employee loyalty and commitment, adapted from, Smith (2015)

The need to achieve organizational goals also underpins the need for employee motivation since motivated employees have the desire to garner these goals. Furthermore, employee satisfaction and promoting a healthy human resource is identified as an important reason to motivate employees. Most organizations use incentives to foster physically and mentally healthy workforce by catering for their psychological needs. Employee motivation is used to provide socialization and promote the tenets of
teamwork and collaboration at the workplace. Additionally, employee motivation is employed to recognize the inputs and achievements of human resource as a method of satisfying their esteem needs. Lastly, the practice is used to guarantee the financial security of employees.

**Incentives and types of incentives**

Faisal et al. (2015), define incentives as things that motivate a person to undertake specific actions whether through cooperation or as an individual. There are different types of incentives employed in workplaces to motivate employees. These are;

**Offering incentive plans**

These plans are used to motivate employees through mutual benefits. It takes different forms depending on its suitability as an organization. Firstly, bonus pay is typically employed to encourage employees in production; marketing and sales professions where the organization offers bonuses after predetermined goals are achieved. Performance units are incentive plans where the top management is rewarded after the company achieved predetermined financial milestones. Thirdly, Poole (2017), advances that profit sharing incentive plan is also used to motivate employees. In such programs, pre-taxed profits are distributed among employees depending on set parameters such as position held within the organization, longevity of the employee at the organization, performance metrics and amount of services delivered. Lastly, the incentive plan can offer stock options to workers that wish to invest in the organization.

**Financial rewards**

Money is a primary element in addressing social/security and physiological needs. Hence, financial incentives are given to employees as rewards for hardwork and instil the motivation to achieve more. These incentives are offered through the provision of cash prizes to employees to motivate them to achieve specific goals or reward them for making such goals. These incentives are calculated as percentages of sales closed or can be fixed amounts. They have actualized through organizations bonus-programs or profit sharing. The financial rewards can also come in the form of spot bonuses. They are commonly used to reward aspects such as teamwork, regular attendance, innovation, service excellence, and job performance. Another strategy involves offering pay and benefits to employees to encourage employee loyalty and commitment. However, Garbers & Konradt (2014), argue that employee motivation is achievable through the use of monetary rewards under certain levels although extended use can potentially erode teamwork and cohesiveness. Additionally, financial incentives are limited in efficacy when job dissatisfaction in evident or when employees are self-actualized. Hence, incorporation of nonfinancial incentives is essential.

**Non-financial incentives**

The human resources are the most valuable resource in an organization; hence, motivating them towards personal and organizational goals is essential. For an organization to encourage employees, non-cash-based incentives are employed in the creation of value to the worker. Firstly, organizations can provide, work environment that is diverse, inclusive, safe and productive for workers such that job satisfaction levels are high. Creation of a positive atmosphere at work helps in fostering knowledge sharing, eliminations of conflict, setting goals and soliciting employee input; these elements are vital in enhancing employee motivation.

Employee motivation is also enhanced through recognition and rewarding of employees for their achievements by honouring them publicly and encouraging their contributions towards the company. According to Shaw & Gupta (2015), praising employees and recognizing them helps in fostering enjoyable working environments; this helps in inspiring employees towards achieving and creating value for the company. Rewards and recognition are also essential in employee motivation as it enhances initiative, creativity, and innovativeness in employees. Employee motivation is increased by elevating the promotion potential of employees through constant feedback, provision of training and development opportunities, helping employees fulfil career goals and keeping them informed about the company. Job enrichment to add more challenges, scope and responsibilities motivate employees
as they seek to accomplish their own career goals. Furthermore, employee empowerment and autonomy are essential motivators given that it inspires the acquisition of positive skills and confidence in subordinates.

**Team incentives**

These are incentives offered to teams when they complete team initiatives. The incentives are afforded to groups relative to their performance and predetermined performance goals. However, Babcock et al., (2015) argue that such incentives lead to uneven workload distribution and limit healthy competition among employees as recognition and reward of top performers is forgone, and teamwork is prioritized.

**Impact of incentives on organization productivity**

Incentives are essential in instituting higher employee engagement which is significant in augmenting organizational productivity (Saks & Gruman, 2014). Fundamentally, engaged employees are characterized by their willingness to protect the interests of the organization as well as an enthusiasm to work. The concept of employee engagement is covered under behavioural, emotional and cognitive perspectives which are similarly exploited by incentives. Higher organizational productivity is achieved by curing employee disengagement stemming from issues such as; negative organization culture, poor management, lack of upward mobility jobs, lack of engaging jobs, limited employee benefits, inadequate salaries, the strain on mental well-being and poor working conditions. Long-term employee engagement which is related to increased organizational productivity is attained by injecting incentives in HR management. Targeted benefits and rewards such as profit-sharing, work environment improvement, flexible scheduling, training, and development are promulgated to improve employee engagement which translates to increased organizational productivity.

Innovation and creativity are important in increasing organizational performance and productivity. As such, irrespective of the type of change, whether, it is corporate, technological, process or product innovation will positively impact on the productivity of the company. This innovation and creativity are commonly driven by implementing incentives for innovation. Incentivising innovation aspects such as collaboration and teamwork help in increasing organizational productivity as a result of an increased change. For instance, the incentive of recognition has been highlighted as an essential element in the establishment and sustaining a productive innovation community which translates to increased productivity. Additionally, increased productivity emanating from innovation is underpinned by the incentive of creating an appropriate working environment that facilitates development and exploitation of intellectual property. Furthermore, Faisal et al., (2015) advance that organizational productivity is achieved through incentive fuelled innovation by reinforcing creativity through performance related incentives and rewarding macro-innovation.

According to Lee & Steers (2017), organizational commitment is an essential element in increasing organizational productivity. Organizational commitment is defined as, “the Emotional attachment that an employee felt for an Organization to adopts characteristics or perspective of the organization” (Khan et al., 2016). To achieve this commitment, offering intrinsic and extrinsic incentives to employees is fundamentals. Organization productivity increases by minimizing negative aspects of HR such as turnover, absenteeism, lateness, withdrawal behaviour and resistance to change by using incentives to in still organizational commitment. Additionally, organizational commitment achieved through incentives improves organizational productivity by augmenting employee job performance, employee engagement, job satisfaction, and employee welfare.

A study conducted by Imran et al. (2015) showed that organizational productivity correlates with job satisfaction which is harnessed from incentives. Ali et al. (2016) advance that incentives such as profit sharing and performance-related pay routinely increase job satisfaction among employees. This feeling of happiness emanating from incentives is derived from higher worker optimism and rewarding environments which are associated with high organizational productivity. As such, Edwards (2016) advances that, increased job satisfaction is directly correlated to 6.6% increase of organizational productivity while a study conducted the University of Warwick indicated that jobs satisfaction accounts for 12% increase in organizational productivity. These increases in productivity
are induced by incentives which increase the dedication to work, the drive to succeed and improve in creativity.

According to Oswald et al. (2015), the use of performance related-pays (PRP) as an incentive increases the intensity of work in the workplace. A research study conducted by (Lucifora, 2015), indicates that performance-related incentives increase the labour productivity of employees by 5% and organizational productivity by 9% by stimulating employees to work optimally and influencing the recruitment process to highly talented employees. Additionally, these incentives increase productivity as employees view PRP as positive and reasonable trade-offs that require them to contribute towards the institution's success. Apart from this, organizational productivity is increased by incentives due to selective employee sorting where high-productivity workers are selected, hired and retained. Lastly, PRP incentives that are underpinned by an equitable distribution mechanism increases organizational productivity by enhancing trust in management, organizational commitment, and job satisfaction.

However, it is imperative to note that incentives can lead to poor performance in an organization. Garbers & Konradt (2014), argue that the use of incentives leads to stress, overwork, complaints on the distribution of pay and contentious behaviours. For instance, the use of financial incentives to award individuals in a team may lead to individualism and increased competition as employees seek individual recognition and reward; this precedent affects employee well-being, collaboration as well as limiting organizational productivity. Reduced productivity is associated with employees working to further their course as well as leading to a lack of trust in the management in cases where profit-related incentives are used; this reduces the productivity of an organization.

Conclusion

The objective of this article has been to evaluate the subject of incentives and assess its impact on organizational productivity. Fundamentally, there are different forms of incentives such as; financial and non-financial incentives, intrinsic and extrinsic incentives and individual or team incentives. Application of these incentives generates various effects with increased organization productivity being a necessary result of incentivizing the workplace. From the analysis, it is shown that incentives improve organizational productivity by impacting positively on the critical determinants of organizational performance. The determinants impacted upon by incentives to increase organizational productivity are; employee work performance, employee engagement, innovation and creativity, organizational commitment and job satisfaction. Leveraging these determinants and augmenting them with incentives leads to increased organizational productivity. However, literature has given caveats on the use of incentives because it can lead to individualism, entitlement to financial rewards and poor motivation of employees during recessions. In general, offering incentives to human resources is vital in improving organizational productivity. Hence, the organization ought to leverage the plethora of incentive schemes and strategies as an option of boosting productivity.

Reference

The Impact of Public Sector Barriers on Small and Medium Enterprises (SMES) Supplying in the Mining Global Value Chain in Zambia. A Case of Selected SMES in the Mines

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Abstract

The global value chain approach has become a useful strategy to reduce poverty in the mining area by forming linkages among various players. This approach gives an opportunity to all stakeholders to participate in any suitable activity along the value chain. Once SMEs enter the value chain, they supply and earn sustainable income. Unfortunately, the mining value chain in Zambia has become restrictive due to many public sector barriers such as tax, registration, standards, financial and licensing protocols. The main objective was to determine the impact of public sector barriers on SMEs participation in the mining value chain. The global value chain literature focusing on barriers of entry was reviewed to give insight on how these barriers affect SMEs participation. A random sampling was conducted among the SMEs from the mining area to determine the extent to which tax, registration, financial, technology, standards and licensing barriers impact on SME participation in the mining value chain and which barrier ranks highest. The findings show that public sector barriers greatly affect SME inclusion in the mining chains. In the hierarchy, registration processes, followed by financial, technology, and tax barriers respectively affect SMEs inclusion. The study concludes that public sector barriers greatly affect SME participation while specifically licensing and standards have a lesser effect. The study recommends a review of government policy and enhance economic empowerment to SMEs for them to participate in selling to the mines.

Keywords: Barriers of entry in the mining global value chain, Mining Global Value chain, small and medium enterprises.

Introduction

The mining sector has become a lucrative sector in engaging local SMEs to participate in the mining global value chain. The global value chain (GVC) covers the full range of activities performed by various firms to bring a product from its inception to the end user and beyond (OECD, 2013a). The cost-benefit analysis of participating in the mining global value chain has become crucial for researchers and policy makers, and it has become apparent that most governments promote the engagement of SMEs in the chains (IFC, 2002). In South America as well as Malaysia, research show that there are beneficial effects for SMEs to participate in the mining value chain (IFC, 2002 (Ata et al., 2013) as they earn sustainable income. The engagement of SMEs to the mining value chain largely depends of various support such as public and private support (SELA, 2012). Unfortunately, public barriers such as tax, registration, standards, technology, finance and licensing barriers are not clear on the extent to which they affect the SME inclusion in the mining value chain and which one among them exert more pressure and has been ranked highly. A survey carried out on the Zambian SMEs in most of the economic sectors (Chibwe, 2008:10-11) reveals that SMEs continue to stagnate in growth due to inherent barriers including public barriers such as tax, licensing and registration process. In the mining sector SMEs continue to be marginalized and unfortunately are unable to supply to the mine despite the presence of supplier development programme that is aimed at nurturing them to meet mining requirements (Barrick, 2013; Barrick, 2015a; Chibwe, 2009). Further, the Mines and Minerals development Act No.11 of 2015 whose aim is to provide policy support (Fessehaie,
2011) does not provide necessary backing towards SMEs to meet international requirements. Most studies worldwide which can be a benchmarking point for Zambia show that the SMEs who gainfully acquire public support and meet international requirement are accepted to supply to global value chains and earn sustainable income (Kaplinsky, 2013, Dunn, 2014) through remunerated jobs (Kowalski et al., 2015). Regrettably, the Zambian SMEs continue to live in poverty as they cannot supply to the mines due to many barriers such as tax, registration, standards, technology, finance and licensing barriers but there has not been a study to examine the impact of these barriers on SMEs participation and which of the barrier’s rankings highest.

**Problem definition**

The problem in the study is the poor participation of SMEs in the mining value chain due to tax, registration, standards, financial and licensing barriers, and the study examines the extent to which these barriers affect SMEs inclusion and which among them ranks highly. The mining value chain in Zambia has for a long time been marred with many public barriers for SMEs to enter and supply (The World Bank & Ukaid, 2011). Elsewhere in the world such as in Canada and Malaysia, public barriers have been addressed and henceforth greater participating of SMEs in the value chains (Ata, Shukla & Singh, 2013, UNCTAD, 2010)

**Rationale**

Zambia will continue to face economic, social, and political burden of poverty unless radical changes are applied to fight it (CSO, 2012; UNDP, 2013a). Global value chains therefore have become key areas that SMEs may engage with the market as these chains bring together different actors in producing goods and services (Kaplinsky, 2010). The mining sector in Zambia has continued to exhibit untold public barriers of entry despite facilities that may enhance SME inclusion such as Zambia bureau of standards for standard setting, economic empowerment commission for financial empowerment, and mining suppliers’ development programme for skills development of SMEs. The rationale in this study is therefore to evaluate the impact of public barriers on SMEs inclusion so that necessary policy intervention is taken to address the problem.

**Research objective**

The objective of the study was to examine the impact of public sector barriers on SMEs participation in the mining value chain in Zambia.

**Theoretical proposition**

Tax, registration and licensing protocols act as barriers that SMEs encounter to supply the mining value chain. Arising from the theoretical proposition, three specific hypotheses were developed.

i) Tax requirements negate SME participation in the mining global value chain

ii) Registration requirements negate SME participation in the mining global value chain

iii) Licensing requirements negate SME participation in the mining global value chain

iv) Standards requirements negate SME participation in the mining global value chain

v) Financial capital requirements negate SME participation in the mining global value chain

**Literature review**

In this study, global value chain (GVC) theory is being used to gain insight in the relationship between private sector production and trade on the one hand and inclusiveness of the mining global value chain on the other. The theory specifically focuses on the role of GVC in linking various players for a win-win situation as well how identifying barriers that affect the inclusion of SMEs in the mining global value chain for them to supply and earn sustainable income and poverty reduction
There are a number of public sector obstacles that SMEs face in entering GVC. While Standard barriers may be imposed by public and private sector organizations (Cattaneo et al., 2013:21-27), public sector barriers include tax, registration and licensing

**Standards barriers**

Standards have become key elements of the well-functioning of the GVC, and lead firms rely on them to reduce the complexity of these transactions as they place new demands on the value chains. These standards establish products and process specifications so that wide range of global suppliers deliver according to requirements of developed-country markets, and failure to meet these standards may lead to exclusion from the GVC. In GVC, Standards could be public and private with a dominance of voluntary standards imposed by lead firms who are either buyers or producers. On one hand when public standards are inadequate, they may raise the cost of local production or create unnecessary obstacles to trade and on the other hand excessively low or badly enforced standards minimize backward linkages, and spill-over effects of FDI and offshore production in a country. This would mean that inputs may be imported to meet standards of lead firms and local tasks are confined to basic manufacturing. Excessive high local standards for intra-GVC transaction are burdensome and may constitute unnecessary obstacles to trade. It is important to note that the retail sectors may be divided into three phases in respect to standards. The first phase is where local producers do not meet retailer’s standards and most products are imported; second phase is where local producers adjust to the standards of the retailer and local producers replace imported one, and a third phase is where the best local products that meet international standards are exported and distributed by retailers abroad (Mitchell et al., 2009: 21; Kaplinsky, 2010:2; Cattaneo et al., 2013:20-23; Tijaja, 2013:2-9). In the case of standards set by lead-firms seeking to reduce costs and increase flexibility, this may involve the definition of minimum levels of permitted defects. Thus, in the auto sector, permissible levels of defects which suppliers must achieve have been progressively reduced from 10,000 parts per million to less than 400 parts per million. In the food-retailing sector, the product standards which are tested will include pesticide residues (Kaplinsky, 2010). In a relatively new development, Walmart is increasingly focusing on green-standards, including on the carbon content of products which its sources from its supply chain. In general, these product standards are unambiguous and require single-point verification at the end of the production process. In the case of process standards, they are more complex because they typically involve the documentation of procedures involved throughout the production process rather than measuring a single outcome (as in the case of a product) (Kaplinsky, 2010). For example, the International Standards Organization (ISO) quality and environment standards (respectively the ISO9000 and ISO14000 series) require the documentation of practices and outcomes at various stages of the production process. Unlike product standards, they do not set the levels which must be achieved, but only require that these levels be checked and documented (Kaplinsky, 2010).

**Tax barriers**

Inflexible laws are a menace to SMEs as they form barriers to entry in global value chains. In cases where the domestic law is inflexible or deficient in domestic services and infrastructure, countries are forced to offer offshore status to foreign firms that are part of GVC and export most of the production. There are incentives in offshore services such as tax cuts, reduced administrative and legal constraints and special customs procedures. However, offshore-onshore dualism has some major drawbacks and raises questions about compatibility of some incentives with WTO agreements. In addition, offshore production creates obstacles in association with domestic onshore rules with best international practices and minimizes the positive externalities of participation to GVC by cutting backward linkages (Cattaneo et al., 2013:24). In addition to inflexible laws, Non-tariff measures (NTMs) have become obstacles affecting a country's participation in the GVC irrespective of the governance structure of the chains. Another inflexible law which is inhibiting SEM growth is the tax structure which does not adequately address the needs of SMEs, and create a greater burden to the tax-payers and ultimately affecting the final consumer due to the shifting ability of tax. Mnewa and Maliti (2008), stressed that most SMEs fail to maintain their growing profitability
due to inflexible policies such as tax. Since SMEs are the backbone of economic growth and contribute significantly to employment creation and GDP, (UNIDO, 2009), it is crucial that most the tax policies be innovative to favor SMEs’ growth and productivity. Most tax policies unfortunately raise serious concerns about the issues of aligning the tax system to the specific requirements of a particular country’s growth need. This means that it has to balance both short-term and long-term impact on SMEs growth. While Taxation is largely one of the main sources of revenue for the government to finance its public expenditure, the method of implementing the tax policy and the amount of tax required to be paid by SMEs is burdensome as it exists as a barrier to their productivity. Tax policy debates and decision making has become a critical issue to the public and private business as well as the economy at large owing to the varied impact it has on each of these entities. Tax policies worldwide are treated as one of the hindrances of expanding SMEs in the world.

Registration and licensing barriers

The regulation of various activities of the SME sector is a crucial function of the government worldwide. The activities under which the private sector is operating must be governed by sound policies, laws and regulations to ensure to ensure free and fair competition as well as decent and productive work of all stakeholders. The aim of the regulation is reducing the regulatory constraints on SMEs growth and productivity (Kanbur & Venables, 2005). In addition, regulation of the business is about practicing good governance to enable good legal and regulatory frameworks that effectively and efficiently meet the objectives of business development, economic growth and job creation. A lot of questions arise regarding regulation or legislation processes such as “When is the government imposing too much regulation? When do SME feel that regulation is constraining the growth and productivity of SMEs? When is regulation becoming a red tape? And how may identify areas where regulatory compliance costs are most troublesome for firms: How may we review the regulations in order to identify opportunities for streamlining these processes, make them more efficient and less costly both in terms of real costs and opportunity costs for firms. It is true that some administrative procedures may have been relevant at some point in time, but have become redundant and barriers as they do not meet the intended objectives. These regulations are regarded as Red Tape since they yield sub-optimal and undesired outcomes. In addition, there are Compliance Costs which are regulations giving rise to direct and indirect costs for the firm when it has to comply with administrative procedures, certificates, specific licences, completing tax and VAT return forms etc. Some are real costs in terms of compulsory fees and rates and others are opportunity costs because of time consuming procedures, which a business owner needs to spend time on. The different types of compliance costs can have significant implications for the businesses but also for their consumers to whom the costs may be passed on.

Upgrading as a barrier

There is a growing concern in the world economies over the economic gains of participating in global supply chains that they do not necessarily translate into good jobs or stable employment and, in the worst case, economic upgrading may be linked to a significant deterioration of labor conditions and other forms of social downgrading. A major question has been asked as to what conditions can participating in GVCs contribute to both economic and social upgrading in developing as well as developed countries and firms? (Gereffi, 2005:171; Lee et al., 2011:3-5; Gereffi, 2013:9-10). In the GVC framework, there are four types of upgrading (product, process, functional and chain upgrading) which firms may adopt to help ‘climb the value chain’ from basic assembly activities using low-cost and unskilled labor to more advanced forms of ‘full package’ supply and integrated manufacturing. These upgrading trajectories may also be adopted when firms face competition pressures, require performance improvement, quality improvement, technology improvement, and learning opportunities (Humphrey & Schmitz, 2000:2-8; Humphrey, 2004; UNIDO, 2004; UNCTAD, 2010; OECD, 2013). Process upgrading may mean firms transforming inputs into outputs more efficiently by introducing superior technology or re-organizing the production system to improve efficiency (Humphrey & Schmitz, 2000; Gereffi & Furnandez-Stark, 2011). The investment in technology
may result into efficiency and effectiveness in processing and improve cost reduction for a unit of output, and increase output volumes. Once process upgrading is done in firms, the efficiency for internal processes are better than rivals within links and between links in the chain (Kaplinsky, 2000; Caspari, 2003; Mitchell et al., 2009; UNCTAD, 2010). Product upgrading has been described as improving quality standards (Mitchell et al., 2009). Others such as Humphrey & Schmitz (2000) and Gereffi & Furnandez-Stark (2011) have shown that product upgrading is moving into more sophisticated product lines and moving into product lines which can be defined in terms of increased unit values respectively. UNCTAD (2010) converse that there are many benefits that local SMEs derive from product upgrading with their lead firms through the distribution channels, brand name, and after sales services in the value chain. Functional upgrading means acquiring new functions to increase the skills. It seeks to increase the value added through the mix of various activities which are conducted in the value chain by firms. It also involves moving the locus of activities to different links in the value chain such as from the manufacturer to the design. The process may also mean acquiring new function in the chain through design and marketing (Humphrey & Schmitz 2000; UNCTAD, 2010; Gereffi & Furnandez-Stark, 2011). Cattaneo et al., (2013) and Gereffi & Furnandez-Stark (2011) identify another form of upgrading called chain or inter-sectoral upgrading which corresponds to the move from one industry to another but related industry. Gereffi (1999) and Zhang (2009) stress that chain upgrading may mean applying the competence acquired in a particular function of a chain. In the upgrading trajectory, there has been concerns on the ability or inability of countries and firms to upgrade themselves. However, novel as regards the upgrading process have been introduced in the post-Washington Consensus era. Firstly, the growing interest by international organisation such as WTO and OECD to establish new metrics of value-added trade that clarify the extent to which successful export-oriented economies use domestic or imported inputs to fuel their growth. Secondly, the global economic crisis of 2008–09 and economic diversification through shifting end markets appears to be reconfiguring the growth opportunities for GVCs in ways that may shift their orientation toward the domestic markets of large emerging economies and toward more regionally oriented, rather than global, supply chains (Gereffi, 2013:11). Other issues to address from the literature on GVC is about product and process upgrading, and Gibbon (2003:18) contends that it is difficult to differentiate the type of upgrading in organic processes that generate new category of products. In addition, Kaplinsky & Readman (2001:34) underscore the hierarchy of upgrading processes in SMEs starting from process upgrading to product upgrading, to functional upgrading, and chain upgrading while Gibbon (2003) stress that before upgrading can take place, it is important to identify the opportunities available. Humphrey and Schmitz (2002) also spot some problems of "lock-in" effect in upgrading of chains that are characterized by quasi-hierarchy relationships. In these relationships, firms narrow their scope of production to the specific area of specialization, and in some cases, they are "locked-in" by global buyers whom they have a strong relationship although diversification as proposed by Humphrey (2003) addresses the lock-in problem. Another concern is when firms in developing countries concentrate on production leaving out specialized issues of designing, logistics, market requirements to lead firms (Humphrey, 2005), the danger is that they have a limited understanding of market requirements, and opportunities which would trap them in chain activities with low skills and low returns (Humphrey, 2004). Further, Humphrey, (2004:12) emphasizes that upgrading and learning comes with investment support, and efforts from concerned firms. Gibbon and Ponte (2005) highlight the difficulties faced by suppliers in functional upgrading as they are blocked by lead firms. Instead, lead firms encourage suppliers to undertake process and product upgrading.

**Capacity and innovation**

Lack of innovation and capacity building are limiting entry of SMEs into GVC. Capacities and productivity have continued to be tipping points for foreign investor’s decisions and lead firms. Since a country does not require to develop an integrated industry to participate in international trade, GVC therefore make it easier to reduce constraints. World bank (2010) cited by Cattaneo et al., (2013) stress that given the predominance of flows in the new paradigm, adaptability to lead firms' request, responsiveness,
and capacity to innovate are key factors. Determinants for a country's participating in the GVC may include; capacity for scale of production, availability of services necessary to support production and market integration, education and skills of the workforce matching the needs of global producers and buyers, and capacity for innovation in its multiple dimension, environmental sustainability (Cattaneo et al., 2013:27), cheap and reliable energy, finance and trade support, telecommunication, and transports. According to OECD (2013a:25) export restrictions can affect functioning of GVC and increase costs. There is a negative effect on trade protection especially when parts and components cross borders. Trade facilitation, standards, and certification measures enhance smooth operations of value chains and alleviate burdens on goods that require crossing boarder many times.

**Methodology**

In the quest to improve understanding of the barriers that SMEs face to supply to the mining global value chain in Zambia, a positivist paradigm was adopted. The adoption of this approach is in line with the epistemological orientation in the normative paradigm where hypotheses have to be tested by empirical approaches (Bryman, 2015) and the results have to be objective through scientific methods (Creswell, 2014; Saunders et al., 2009). In response to the main proposition, a cross-sectional survey research was utilized to obtain quantitative data and estimate a population covariance matrix that was compared with the observed covariance matrix with a view to minimize the difference between the estimated and observed matrices.

**Selection of respondents**

The respondents selected were the SMEs who are members of the mining suppliers and contractor’s association of Zambia. These are easily accessible during their monthly, quarterly, and yearly meetings. There are over a thousand (1,000) members of the association who are the main players in the mining global value chain. During the study, the internal consistency as appraised by the Cronbach’s alpha (Aloiniet al., 2013) was used to measure reliability. Saunders et al., (2009) affirms that the internal consistency of a measure reveals the similarity of the items in the instrument that is used to tap the constructs. The Cronbach alpha of minimum 0.7 was considered as ideal (Creswell, 2011).

**Data collection**

A random sampling was conducted among the SMEs from the mining suppliers and contractor’s association of Zambia. 350 SMEs participated as respondents to provide data to ascertain the impact of public barriers on SME participation in the mining value chain. A total number of 350 respondents were sampled from the mining suppliers and contractor’s association of Zambia who successfully answered questionnaires. A 5-point likert scaled questionnaire was developed to capture quantitative data. The scale was ranging from strongly agree (5), Agree (4), undecided (3), disagree (2) and strongly disagree (2). The Likert Scale questions gives a universal method of collecting data and it is easy to understand as well as draw conclusions, reports, results and graphs from the responses (Saunders et al., 2009). In addition, the 5-point scale most recommended and used by researchers and reduces the frustration level of respondents and increase response rate and response quality.

**Data analysis**

A structural equation modeling was performed using EQS to carry out the Reliability test, Analysis of variance and regression coefficient

**Reliability test**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>N of Items</td>
</tr>
<tr>
<td>714</td>
<td>7</td>
</tr>
</tbody>
</table>
An extract from SPSS on reliability test show a test of 0.714 which is good. Saunders et al., (2009) stressed that Cronbach’s alpha is used as a measure of internal consistency. While Kothari, (2004) has the same opinion, he stressed that the reliability test measures how well a set of variables or items measures a single, one-dimensional latent aspect of individuals.

**Analysis of variance**

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SUM OF SQUARES</th>
<th>DF</th>
<th>MEAN SQUARES</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGRESSION</td>
<td>120.828</td>
<td>6</td>
<td>20.138</td>
<td>17.576</td>
<td>0.000</td>
</tr>
<tr>
<td>RESIDUAL</td>
<td>392.989</td>
<td>343</td>
<td>1.146</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>513.817</td>
<td>349</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An extract from the EQS 6.4 output from structural equation modeling on ANOVA test show that overall, Tax, licensing, registration, standards, financial and technology barriers are predictors of Inclusion of SME in the mining global value chain. The p-value is less than 0.05. This means that Tax, licensing, registration, standards, financial and technology barriers sit statistically Significant to determining inclusion of SMEs and therefore are a significant predictor of inclusion of SMEs in the Mining global value chain.

**Multiple R and R Squared**

Dependent Variable = INCLUSIO  
Number of obs. = 350  
Multiple R = 0.4849  
R-square = 0.2352  
Adjusted R-square = 0.2218  
F (6, 343) = 17.5764  
Prob > F = 0.0000  
Std. Error of Est. = 1.0704  
Durbin-Watson Stat.= 1.7296

An extract from output of EQS for structural equation modeling above show Multiple R-value of 0.4849 and R-Square of 0.2352. This means that in terms multiple R, the correlation between Tax, licensing, registration, standards, financial and technology barriers is 0.33 while R-Square of 23.52% indicate that Tax, licensing, registration, standards, financial and technology barriers account for 23.52% of the variance in Inclusion of SMEs. This means that we cannot account for 76.48% of the inclusion of SMEs.

**Regression coefficients**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Ordinary STD. Error</th>
<th>Hetero-Scedastic STD. Error</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.540</td>
<td>0.225</td>
<td>0.246</td>
<td></td>
<td>6.254</td>
<td>0.000</td>
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<td>-0.097</td>
<td>-1.715</td>
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<td>0.006</td>
<td>0.099</td>
<td>0.921</td>
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<tr>
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<td>0.437</td>
<td>7.657</td>
<td>0.000</td>
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<td>Technolo</td>
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<tr>
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<td>-0.036</td>
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<td>0.679</td>
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</table>
The regression analysis show that licensing and standards barriers is statistically significant predictor of SME inclusion tax, registration, technology, and financial barriers are not statistically significant predictors of SME inclusion in the global mining value chain.

**Conclusion and recommendations**

The study shows that there is a significant relationship between license and standard barriers with inclusion and their p-values are all less than 0.005. Registration processes with the highest p-value of 0.921 followed by financial barriers of 0.679, technology barriers of 0.3 and tax barriers 0.087 respectively have shown that they are not significantly related to inclusion. This means that these factors greatly affect inclusion of SMEs in the mining value chain in their hierarchy. The study concludes that registration processes, financial barriers, technology barriers and tax barriers rank highest in terms of barriers of entry into the mining value chain. While licensing and standards are barriers, their effects tremendous.

The study recommends that the government of the republic of Zambia empower the SMEs with financial support through Citizens Economic empowerment commission, Empowers the SMEs with standards through Zambia Bureaus of standards, reduce tax burden through good incentives from tax rebate from Zambia revenue authority and create a one stop show for registration and licensing processes.

**References**


Factors Undermining the Effectiveness Development of Human resources in Organizations

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Abstract

Human resource development is an important function in organizations as it provides the framework to help HR to augment their abilities, knowledge and organizational skills. Implementing HR development initiatives involves undertaking planned and systematic activities which aim to augment the HR skills as a strategy to meet contemporary and future work demands. However, several factors such as; lack of finances, poor employee evaluation, organizational policies, poor change management and leadership, lack of finances, lack of human resource planning, conflicts and disputes undermine the effective development of human resources in organizations. Given that HR development is function of HRM, adoption of robust leadership and management to limit the adverse effects of factors that undermine HR development.

Keywords: Human resource development, change management, human resource planning.

Introduction

Human resources are fundamental elements in the organizational productivity; they actively enable companies to leverage their capital to achieve different goals and objectives. The human resources also utilize their abilities, knowledge and skills to generate revenue for the company. With this significance, Armstrong & Taylor, (2014) assert that human resource management (HRM) is essential in enhancing the productivity of the human resources in a company. As such, HRM refers to the processes employed by the company to leverage its human resources through strategic and administrative roles.

Typically, HRM entails a range of functions such as; worker protection by providing safe working environments, aligning human resource policies with the legal requirements, training and development of HR, benefits and compensation administration, retention of employees, developing workplace policies and undertaking hiring activities. In general, Storey, (2014) argues that human resource functions among to human resource development such that the activities continuously add value to the human capital.

Human resource development is an important facet in human resource management due to advantages associated with it. Swanson et al., (2001) observe that HR development leads to addressing of issues concerning workers. It uses its strategic planning tool to addressing the dynamic requirements of employees in line with changing needs of the job markets. This entails addressing issues such as improving health plan, enhancement of retirement pans, making work arrangements flexible and improving benefit packages. HR development also involves building capacities that are fundamental to gaining a competitive edge by addressing employee commitment, loyalty and talent. Furthermore, human resource development entails building commitment of employee in the institution.

Typically, building commitment involves providing challenging jobs to employees and harmonizing the recruitment process with the needs of the organization. Werner & DeSimone, (2011) advance that teamwork in HR improvements also constitutes HR development; this commonly involves collaboration between supervisors, managers and human resource professionals in the assignment of roles and aligning the capabilities of human resources with their preferences and business priorities.

Lastly, human resource development involves training and development of employees to continuously improve their productivity and skills and coordinating their subsequent benefits. While
the strategies employed in human resource management and more importantly, HR development focus on improving human capital and organizational productivity, its implementation is marred by a plethora of factor. This article will outline the key factors that undermine human resource development.

Factors that undermine effective human resource development

Poor change management and leadership

As defined by Cameron and Green (2015), change management refers to leveraging of resources, tools and knowledge as well as application of systematic approaches to handle changes instituted in an organization. Change management is typically underpinned by robust leadership. Essentially, leaders steer change management by setting standards for accountability, connection and clarity regarding the implementation of new strategies. Furthermore, leadership is important in change management as it helps in instilling new mind-sets, communicating and aligning the vision as well as increasing the agility of the company. Hornstein, (2015) advances that new strategies are successfully adopted in the organization when leadership and change management are in mesh and treated as priority by the company.

This relationship extends to human resource development given that the process typically promulgates new strategies and initiatives that are applied to or adopted by the human resources. Hence, lack of change management and poor leadership critically undermines human resource development.

Firstly, some initiatives of HR development involve successful cultural change initiatives such introduction of new technologies, changing the profile of employee populations, decentralization and empowerment of the workforce and changing HRM strategies. These changes require leadership and change management skills as guides failure with which the organization culture will lead to increased resistance to change that in turn undermines HR development. Secondly, some HR development initiatives lead to significant changes in the organization leading to changed work environments, responsibilities and transitions.

While these changes are aimed at improving HR development, their implementation is undermined by negative effects associated with change. Hayes, (2018) assert that poor change management leads to customer losses, diminished product quality, reduced morale and impacts on workflows. Poor change planning undermines HR development as it stifles the agility and effectiveness of implementing policies that seek to improve the capability of human resources.

Lastly, change management is important in transitioning human resources by limiting the level of resistance to changes. Under the Kotter’s 8 Step Change Model, successful implementation of change leads to sustainability of new measures put in place as well as articulating organizational culture and new behaviors that advance HR development (Guérin et al., 2015). Hence, poor change management critically undermines HR development by increasing resistance to new strategies of HR development.

Lack of finances

Implementation of human resource development and HRM activities require financial resource inputs. Brewster, (2017) posits that meeting HRM goals and objectives and performing daily activities in the department are dependent on the financial health of the company. However, acquisition of money or forming working relationships between HR department and finance department is commonly difficult. This poor relationship typically arises from conflict regarding the mandate of the departments in the company. Owing to the conventional perspectives and goals of these departments, disbursement of finances to run HR activities is common. Apart from lack of disbursement from the finance department, liquidity problems in the company can lead to limited finances. The financial limitation will undermine human resource development initiatives by curtailing their full implementation.

Lack of human resource planning

According to Chaneta (2014), human resource planning refers to the sustained processes of systematic planning aimed at leveraging the human resources. Essentially, the process involves
identifying contemporary and future needs of employees such that they develop their human capital. Collings et al. (2018), indicate that human resource planning is important in instituting human resource development by leveraging technologies and tools such as behavior science, policy, management information systems (MIS) and social media to improve human resources.

Lack of human resource planning critically restricts the scope human resource development objectives and strategies. Firstly, poor planning leads to inconsistent assessment of contemporary capacities of human resources and establishing their skill catalogues. Consequently, HR development plans regarding future development plans, responsibility addition and improvement of skillsets is limited.

Secondly, poor HR planning limits the credibility and comprehensiveness of forecast reports regarding the projected needs of HR and external challenges that can limit HR development such that the strategies based on the forecasts are inadequate.

Thirdly, HR Planning is important when undertaking gap analysis which aims to outline the gaps between desired HR position and the current position. With poor gap analysis, HR development initiatives such as hiring and employee retention, balancing forecasted labour supply and demand, building new skills and identifying current limitations will be undermined.

**Organizational policies**

Organizational policy or human resource policies are written guidance the handling of various HR issues. Policies are fundamental in the implementation of HR strategy in the most practical and effective manner. Additionally, they underpin human resource development initiatives by asserting transparency and consistency to be observed by managers and employees as well as creating a receptive organizational culture for HR development activities (Greene & Kirton, 2015). In organizations where the policy capacity is insufficient, comprehensive development of human resource development is undermined.

Unfavourable Policies that focus on availing capital and financial resources to the HR department limit HR development because it is resource intensive adventure. Lack of robust policy provides weak institutional frameworks with which responsibilities of human resource development depend on as well as undependable internal practices that control the management of intellectual and human capital of the institution. Poor policies also limit the practicability of building people-centered approach and administrative system that can comprehensively develop human resources.

Inadequacy in policy also undermines human resource development by reducing the professionalism of HR management through poor administration and lack of administrative reform which are fundamental factors when fostering human resource development.

**Conflict and disputes**

According to Folger et al. (2015), all organizations deal with issues which predispose the human resources to conflicts and disputes. Essentially, when employees work together with different work styles, differences in goals and with different interactions, conflict is likely to emerge.

This emergence occurs at different levels that is; within the individual, individual and the organization, employee and employee, employee and team or team and team. Some contributors to conflict are; personal situations that adversely impact on team work performance, work performance evaluation, actions of the supervisor, changes in the workplace, overstepping authority, leadership problems, confidentiality issues, inadequate resources, work scheduling, workload allocation, ethical concerns, lack of information, questioning of perceptions, gender/race/personality differences, testing of values and poor communication. When such situation arise, it is imperative that measured, comprehensive and timely conflict management strategies are employed.

Informal and formal conflict management approaches are employed to resolve such disputes. When these approaches are success and conflicts resolved, greater productivity and creativity normally result. However, poor conflict resolution and perennial conflicts and disputes at the workplace undermine human resource development. Essentially, conflicts and disputes limit strategies put in place to improve collaboration and team work as well as employee motivation improvement. Strategies targeting employee behavior improvement are also constrained because disputes and
conflicts exacerbate inappropriate behavior. Employee engagement initiatives and development strategies that foster inclusion and diversity are adversely affected by disputes and conflict because they foster polarization and fictionalization among employees. Conflicts also lead to poor employee health, low job satisfaction, poor decision quality and reduced quality of work life leading to poor human resource development.

**Lack of employee evaluation**

Employee evaluation or performance appraisal is important in determining the employee’s performance at work. Conventionally, this is undertaken once a year with subsequent results used for other HR functions such as layoffs, pay rise and promotion. DeNisi and Smith, (2014) posit that typical performance appraisals help in identifying limitations in knowledge and skill of employees and their strengths at the workplace. The results are then consolidated and employed in human resource development.

Thus, lack of employee evaluation or poor performance appraisals critically limit the application of needed improvements in employee development. Iqbal et al., (2015) advance that poor appraisals lead to poor motivation in employees thus limiting human resource development programs related to employee motivation and engagement. It also constrains the application of appropriate performance management especially when HR managers seek to review, monitor and plan on the contribution of individual employees and collective contribution of the HR to the organization.

Poor results from employee evaluation activities also limit the support that staff may need to perform their duties better especially their needs in training and development. In terms of employee retention, poor evaluation can provides minimal legal support for vicarious liability and employee dismissal; this can culminate into legal challenges that undermine human resource development activities.

**Conclusion**

Human resource development is an important facet in HRM. However, a variety of factors such as poor change management, lack of finance, poor employee evaluation, conflict and disputes, poor organization policies, lack of HR planning undermine the efficiency of human resource development activities. The issues highlighted collectively point at poor leadership and management in the organization which brings about or exacerbates the factors that undermine HR development.

It is imperative to note that HR development is fundamental in developing the abilities, knowledge, organizational and personal skills of employees. It helps in motivating employees, organization development, succession planning, mentoring and performance management in the organization which makes it a highly significant facet when improving organization productivity. It is therefore imperative to institute comprehensive management and leadership practices that offset the impact of undermining factors as well as preventing their manifestation which negatively impacts on HR development.

**References**


Influence of Demographic Factors on Individual’s Investment Decisions in WA Municipality, the Upper West Region of Ghana

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Abstract

"Investment is the obligation of a person's resources to earn income in the form of benefits, pensions, dividends, bonuses, capital appreciation, stock purchase, obligations, and savings certificates in the post office and policies, all of which are certainly investments in the financial sense". Among other elements, investor behavior is also influenced by demographic characteristics; including age, sex, marital status, experience, and knowledge of financial management, level of income and educational level. The case study analysis assesses two main areas of concern. The qualitative and quantitative research methods made use of questionnaires that constituted data collection tools. Both primary and secondary data constituted the data sources for this study. A sample of 300 investors in the municipality of WA was selected using convenience sampling where snowballing was considered. The data collected were quantified using descriptive statistical tables. The SPSS version 25 software was also used in the analysis. The study proved that demographic factors affect investment decisions. It also concluded that, the educational level of respondents was a weak indicator of investment decisions and therefore, does not determine the investment decision for individual investors. The study concluded that the most common investment methods investors invest in are fixed deposits in banks and life insurance policies. It is recommended that individual investors take into account the asymmetry of information, which is the largest contributor to the investor's indifference that leads to investment decisions.

Keywords: Influence, Demographic Factors, Investment Decisions.

Introduction

Investing, as I understand is the process of giving up something now for the prospect of getting something in the future. De Long, Shleifer, Summers, and Waldmann, (1990), define investment as "the allocation of financial resources to assets that are expected to yield some positive gains or returns over a period of time." Fama, (1980), claimed that, the total investment process is the mechanism of bringing on-board suppliers (those with more funds) with applicants (those who need funds). Financial institutions often combine suppliers and demanders, and these financial institutions act as financial intermediaries in the financial market. Mishra and Suar, (2010), also claimed that investment is the calculation of current funds or other income for future benefits. In the financial sense, "investment is the guarantee of the individual's resources to profit in the form of interest, pension, profits, premiums or interest, appreciation of the value of their wealth, purchase of shares, debt securities, post office savings certificates and insurance documents, all of which are investments in the financial sense" (Mishra & Suar, 2010).

In the current economic scenario, money is the main cause of all happiness and individuals begin to invest for a safer life and a brighter future (Cumming, Dannhauser, & Johan, 2015). They also claimed that, on the contrary, the most important dilemma is that investors are puzzled in various areas. There are many savings opportunities available in the investor's financial market which can be invested in bank deposits, corporate bonds and bonds, post office savings plans etc., where, there is low risk combined with low yield (Cummins, 2000).

Traditional financial principles assume that investors are persuasive and that people unreasonably choose between choices and that, they act realistically while making savings decisions (Simon, 1979). To a large extent, many researchers have found that individual investors sometimes make illogical decisions about their savings (Barber & Odean, 2013). Barber and Odean, (2013), further claim that
the various influences affect the behavior of depositors during the process of individual financial management and among other factors, investor behavior is also influenced by demographic characteristics. Different research papers appear to ensure that demographic factors influence the choice of investment and show opposing results from one country to another and from one region to another (Sadiq & Ishaq, 2014).

The main objective of this paper is to examine the degree to which the demographic factors affect the decision-making process of the investor in the municipality of WA in the upper west region of Ghana. This is because most people have lost their money to financial institutions and “susu” (traditional savings and micro credit) schemes, especially in the municipality of WA.

**Literature review**

Headen and Lee, (1974), examined the effects of financial market performance and the prospects of buyers in buying ordinary life insurance and made sure that the demand for life insurance is inflexible and positively influenced by the diversity of ideas from buyers; interest rates play a role in the short and long term. Truett and Truett, (1990), explored the diversity of growth in consumption of life insurance in Mexico and the United States within the proportionate period between 1964 and 1984. They offered greater flexibility than demand for life insurance in Mexico with low-income levels. Age, education and income have had a major impact on demand for life insurance in both countries.

Jambodekar, (1996), conducted a pilot study to assess the awareness of mutual funds among depositors and to identify the sources of information that stimulate the purchasing decision and the factors that motivate the selection of a particular fund. The study reveals that income schemes and open schemes are more desirable than growth plans and closed schemes during prevailing market conditions.

Geetha and Ramesh, (2011), conducted a study entitled "People's investment pattern" to analyze a group of people’s investments in Bangalore. After exploring and clarifying the data, it was ascertained that depositors in Bangalore were more alert to the different investment methods and associated risks. All age groups have given greater attention to capital investment, with the exception of those over 50 years’ old who have expressed interest in insurance, fixed deposits and tax savings. In general, investors who invest in capital are those who monitor the stock market personally on a regular basis and on a daily basis. However, those who invested in mutual funds are watching the stock market weekly or periodically. In Bangalore, too, investors are more alert about the many investment paths and associated risks. But in Bhubaneswar, investors are more traditional by nature and want to invest in those less risky ways, such as bank deposits, mail savings, small savings, etc.

Bhushan, (2014), studied the effect of demographic and behavioral makeup on the choice of savings among Indian investors and proved that mutual funds were prevalent among experts, students and self-employed. Retirees have shown their aversion to risk as not being financed by mutual funds and capital. It has also been shown that the more education, the greater the level of understanding of investment multipliers. Graduates and presidents have the standards required to invest in stocks, as well as investment funds.

Nagpal and Bodla, (2009), examined the characteristics of respondents' way of life and their impact on investment preferences. The study revealed that investors' lifestyle essentially determines the risk tolerance of investors. The study showed that despite the remarkable growth in the stock market, individual investors prefer less risky investments, i.e. fixed deposits in banks, life insurance policies, postal services, Public Provident Fund and NSC.

Bhushan and Medury, (2013), studied 1,463 Indian households and put depositors' hobby among major groups of financial assets, such as equity investment, indirect investment through various types of mutual fund schemes, and other types of investment, such as the Exchange trade gold fund, fixed deposits of banks and Public savings schemes. The study provides motivational data on how investors' attitudes towards different types of investment are related to their profits and their performance, diversification of their portfolios and general characteristics of the market parameter as perceived by investors themselves.

Bhushan and Medury, (2013), also investigated "gender differences in investment performance among employees" and found that women were more traditional when investing and risk-taking.
Therefore, women must be offered financial products that are appropriate in terms of risks and performance characteristics. For this, product designers and marketers of these financial products must understand the gender differences in the investment behavior of individuals.

The investigative framework for this research is illustrated in Figure 1 below.

**Gender**

Among other demographic factors, gender is the first factor of discrimination and categorization (Bajtelsmit & Bernasek, 1996). Due to the role of emotional variables, the risk claim varies between men and women (Loewenstein, Weber, Hsee, & Welch, 2001). In comparison with a male investor, the stores are more risk averse in various activities such as financial decision making (Graham, Stendardi Jr, Myers, & Graham, 2002). They also affirmed that male investors have more confidence in their investment decisions, have more financial knowledge, wealth and tolerance for risk. Some studies have shown that there is no significant gender impact on risk tolerance during financial decisions (Sadiq & Ishaq, 2014).

**Age**

The investment event or individual shareholder selection process also depends on their age (Pasewark & Riley, 2010). Researchers such as Wang and Hanna, (1997), found that risk aversion is relatively low with age when other variables remain constant. Older people are more at risk than young investors (Kuzniak, Rabbani, Heo, Ruiz-Menjivar, & Grable, 2015). Korniotis and Kumar, (2011), confirm that the young investor cannot accurately assess their work performance compared to the older ones. A divergent view of some researchers such as Sadiq and Ishaq, (2014), has shown that it has increased the age of investors and has led to a reduction in risk tolerance.

**Education**

The third demographic component, which increased tolerance of financial risks during the selection process, was education (formally acquired academic training) (Sung & Hanna, 1996). Sung and Hana (1996) reported that the level of education acquired and tolerance of risk had a positive relationship. Some researchers found contradictory results, and explored the lack of an important relationship between education and decision-making, as well as risk tolerance (Sung and Hanna, 1996).
Marital status

Marital status is also an effective factor influencing decision making for investors (Joo & Pauwels, 2002). Single individuals are more vulnerable than married people because married individuals have responsibilities for themselves and their dependents (Waite, 1995). Some studies have not been able to establish a statistically significant relationship between marital status, financial decision and tolerance of risk (Sapienza, Zingales, & Maestripieri, 2009).

Income level

The applicant's income level is also an element that distorts behavior towards investment (Sadiq & Ishaq, 2014). Sadiq and Ishaq (2014), argue that a person with a greater wealth has greater risks. They also stated that people with higher incomes tend to risk more than low-income people. Researchers such as Wang and Hana (1997) found that risk tolerance increases with increased income levels. Depositors deposit their money in a more volatile portfolio consisting of more stocks that are volatile when they have a higher income level (Barber & Odean, 2001). The higher level of income represents the ability to bear losses, so wealthy people want to increase the level of risk (Sadik and Ishaq, 2014).

From a divergent point of view, such as Sung and Hana (1996), income levels have nothing to do with financial decision and risk tolerance.

Methodology

Specifically, a case study exploration was used to evaluate two primary areas of interest: 1. the impact of demographic elements on investor’s choice process in the WA municipality of the Upper West Region, Ghana. 2. The utmost desired investment portfolios amongst the investor community. The strategy used for this work was exploratory, with both qualitative and quantitative approach since the data collected would be converted into numerical value for better interpretation. The target population was the individuals selected from the WA Township in the upper west Region of Ghana using convenience sampling. The sample was composed of 300 investors in the WA Municipality of the Upper West Region Ghana, using convenience sampling where snow balling was considered. Both primary and secondary sources of data were used in this study. A survey questionnaire was used to acquire information from the target individuals of the WA Municipality. The data gathered was analyzed quantitatively by using descriptive statistical tables and percentages where correlation and regression were considered. Statistical package for social sciences (SPSS) version 25 software was also used in the analysis.

Analysis and discussion

The researcher needed to know the gender, Age distribution and Educational level of respondents and this is represented in table 1

Table 1 Gender, Age, Education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
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<tr>
<td>Gender</td>
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<tr>
<td>Male</td>
<td>174</td>
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<tr>
<td>Female</td>
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<td>24</td>
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<td>30-39</td>
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<td>43</td>
</tr>
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<td>99</td>
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<tr>
<td>Total</td>
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Table 1

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<th>Education</th>
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<tr>
<td>Secondary education</td>
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<td>33</td>
</tr>
<tr>
<td>College education</td>
<td>61</td>
<td>20</td>
</tr>
<tr>
<td>University education</td>
<td>84</td>
<td>28</td>
</tr>
<tr>
<td>Illiterate</td>
<td>56</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Researcher’s fieldwork April 2019

From table 1, the total respondents were 300. 174 out of 300 were males representing 58% responds rate. The remaining 126 were females representing 42%. This therefore shows that majority of respondents were males.

From table 1 also, the total respondents were 300. 74 out of 300 were between the ages of 20 to 29 representing 24% responds rate. 128 of the respondents were between the ages of 30 to 39 representing 43% response rate. The remaining 99 respondents were between the ages of 40 and above representing 33%. This therefore shows that majority of respondents were between the ages of 30 to 39.

Again, from table 1 above, the total respondents were 300. 99 out of 300 were secondary school graduates representing 33% responds rate. 61 respondents attained college education representing 20% response rate. 84 respondents were university graduate representing 28%. The remaining 56 respondents were illiterates representing 19%. This therefore shows that majority of respondents were secondary school graduates.

Table 2. Marital status

<table>
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<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
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<tr>
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<td></td>
</tr>
<tr>
<td>MARRIED</td>
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<tr>
<td>SINGLE</td>
<td>175</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100</strong></td>
</tr>
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</table>

Table 3. Sufficient financial management knowledge

<table>
<thead>
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<tr>
<td>YES</td>
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<td>18</td>
</tr>
<tr>
<td>NO</td>
<td>247</td>
<td>82</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Researcher’s fieldwork April 2019

From table 2 above, the total respondents were 300. 125 out of 300 were married representing 42% responds rate. The remaining 175 respondents were singles representing 58%. This therefore shows that majority of respondents were single.

The researcher again needed to know if respondents have sufficient knowledge in financial management and this is represented in table 3.

From table 3 above, the total respondents were 300. 53 out of 300 respondents have sufficient knowledge in financial management representing 18% responds rate. The remaining 247 respondents claim they do not have sufficient financial management knowledge and this also represent 82% response rate. This therefore shows that majority of respondents have no sufficient knowledge in financial management.

The researcher again needed to know the level of work experience in the field of finance by respondents and this is represented in table 4
From table 4 above, the total respondents were 300. 60 out of 300 respondents were experience in the field of finance representing 20% response rate. The remaining 240 respondents do not have experience in the field of finance representing 80% response rate. This therefore indicates that majority of respondents were not experience in the field of finance.

The researcher again wanted to know the number of years of respondents in the field of finance and this is represented in table 5 below.

From table 5 below, the total respondents were 300. 64 out of 300 respondents were experience in the field of finance between 1 to 3 years representing 22% response rate. 4 of the respondents also claim their number of years of experience in the field of finance was 4 years and above representing 1% response rate. The remaining 232 respondents do not have experience at all in the field of finance representing 77% response rate. This therefore indicates that majority of respondents were not experience in the field of finance.

The researcher again wanted to know the average income level of respondents and this is represented in table 6 below.

From table 6 above, the total respondents were 300. 56 out of 300 respondents claimed their average income was between 500 to 1000 Ghana cedis per month representing 19% response rate. 108 of the respondents also claim their income was between 1100.00 to 1500.00 Ghana cedis per month representing 36% response rate. 108 of the respondents also claim their income was between 1600.00 to 2000.00 Ghana cedis per month representing 36% response rate. The remaining 28 respondents claimed their income was 2100.00 Ghana cedis and above per month representing 9% response rate. This therefore indicates that majority of respondents’ income per month were GHS1100.00 to GHS1500.00 and GHS1600 to GHS2000.00.

Linear Regression for the Effect of Demographic factors on individuals’ investment decisions.

A linear regression model was carried out in order to indicate the effect of each demographic factors as dependent variables on investment decision by individuals as an independent variable as shown in the Tables below.
Table 7. Effects of gender on investment decisions

<table>
<thead>
<tr>
<th>Model</th>
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<td>7.697</td>
<td>.000p</td>
</tr>
<tr>
<td>Residual</td>
<td>64.621</td>
<td>294</td>
<td>.220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73.080</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: GENDER
b. Predictors: (Constant), Public Provident Fund, Invest in Fixed Deposit (Treasury Bill), Investment in Stock Market, Life Insurance Investment, Invest in Mutual Fund Investment

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.638</td>
<td>.283</td>
<td>9.325</td>
</tr>
<tr>
<td></td>
<td>Investment in Stock Market</td>
<td>.083</td>
<td>.028</td>
<td>.175</td>
</tr>
<tr>
<td></td>
<td>Invest in Mutual Fund Investment</td>
<td>-.014</td>
<td>.026</td>
<td>-.038</td>
</tr>
<tr>
<td></td>
<td>Invest in Fixed Deposit (Treasury Bill)</td>
<td>-.163</td>
<td>.044</td>
<td>-.204</td>
</tr>
<tr>
<td></td>
<td>Life insurance investment</td>
<td>-.148</td>
<td>.049</td>
<td>-.181</td>
</tr>
<tr>
<td></td>
<td>Public Provident Fund</td>
<td>.027</td>
<td>.023</td>
<td>.075</td>
</tr>
</tbody>
</table>

Researcher's field work April 2019
a. Dependent Variable: Gender

The results of regression model as shown in Table 9 indicated that, the coefficient is taken in to consideration to know the slope and intercept from charging relationships. The unstandardized coefficients are the slope and intercept in the model unit. In trying to predict the level of effects of demographics on investment decisions, it gives an intercept of 2.638. This means that its gives each model 2 standard deviations above the mean. The regression equation can be written as 2.638+.0.83 *investment in stock market -.014*mutual fund investment -.163*investment in fixed deposit -.148*life insurance investment+.027*public provident fund.

From table 7, there was a strong positive relationship between investment in stock and gender since the significant level was 0.004 and less than (0.01). The findings indicated that stock investment .004 is of significance on gender, since this value is statistically significant that means gender is a good predictor in investment decision, stock investment. Thus, in the standardized coefficient, if gender increases by one unit, the decision to invest in stocks will increase by .175 units. It is also found that there was a positive but weak relationship between investment decision, mutual fund investment and gender since the significant level .589, was greater than (0.01). Fixed deposit also indicates a strong positive relationship on gender of investors with a .000 level of significance. Life insurance also indicated a positive relationship on gender of respondents with .003 significance level. Public provident fund indicates a weak positive relationship with .248 significance level, which is greater than .01. The researcher concluded based on the findings of this study that there is a positive relationship between investment decision (stock investment, fixed deposit and life insurance) and gender of individual investors.

Table 8. Effects of age on investment decisions

<table>
<thead>
<tr>
<th>ANOVAa</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>18.165</td>
<td>5</td>
<td>3.633</td>
<td>7.046</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>151.581</td>
<td>294</td>
<td>.516</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>169.747</td>
<td>299</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Age
b. Predictors: (Constant), Public Provident Fund, Invest in Fixed Deposit (Treasury Bill), Investment in Stock Market, Life Insurance Investment, Invest in Mutual Fund Investment.

| Coefficients* |
|---------------|---------------|---------------|---------------|
| Model         | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
| (Constant)    | 1.672          | .433           | 3.859 | .000 |
| Investment in stock market | -.169          | .044           | -.235 | -3.883 | .000 |
| Invest in mutual fund investment | .181          | .039           | .324 | 4.632 | .000 |
| Invest in fixed deposit (treasury bill) | .079          | .068           | .065 | 1.163 | .246 |
| Life insurance investment | .039          | .075           | .032 | .525 | .600 |
| Public provident fund | -.097          | .036           | -.177 | -2.710 | .007 |

a. Dependent Variable: Age

The results of regression model as shown in Table 10 indicated that, the coefficient is taken in to consideration to know the slope and intercept from charging relationships. The unstandardized coefficients are the slope and intercept in the model unit. In trying to predict the level of effects of age of investors on investment decisions, it gives an intercept of 1.672. This means that its gives each model 1 standard deviation above the mean. The regression equation can be written as this 1.672-.169 *investment in stock market +.181*mutual fund investment +.079*investment in fixed deposit+.039*life insurance investment+.097*public provident fund.

From table 8, there was a strong positive relationship between investment in stock and age of respondents since the significant level was 0.000 and less than (0.01). The findings indicated that stock investment .000 is of significance on age of respondents, since this value is statistically significant, that means age is a good predictor in investment decision, stock investment. It is also found that there was a strong positive relationship between investment decision mutual fund investment and age since the significant level .000 was less than (0.01). Fixed deposit also indicates a weak positive relationship on age of investors with a .246 level of significance. Life insurance also indicated a weak positive relationship on age of respondents with .600 significance level. Public provident fund indicates a strong positive relationship with .007 significance level, which is greater than .01. The researcher concluded based on the findings of this study that there is a positive relationship between investment decisions; stock investment, mutual fund and public provident fund and gender of individual investors.

Table 9. Effects of marital status on investment decisions by investors

| ANOVA* |
|--------|-------|---------|------|-----|
| Model  | Sum of Squares | Df | Mean Square | F | Sig. |
| Regression | 8.427 | 5 | 1.685 | 7.684 | .000 |
| Residual | 64.489 | 294 | .219 | | |
| Total | 72.917 | 299 | | | |

a. Dependent Variable: MARITAL STATUS
b. Predictors: (Constant), Public Provident Fund, Invest in Fixed Deposit (Treasury Bill), Investment in Stock Market, Life Insurance Investment, Invest in Mutual Fund Investment

<table>
<thead>
<tr>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Investment in stock market</td>
</tr>
<tr>
<td>Invest in mutual fund investment</td>
</tr>
<tr>
<td>Invest in fixed deposit (treasury bill)</td>
</tr>
<tr>
<td>Life insurance investment</td>
</tr>
<tr>
<td>Public provident fund</td>
</tr>
</tbody>
</table>

a. Dependent Variable: MARITAL STATUS

The results of regression model as shown in Table 9 indicated that, the coefficient is taken in to consideration to know the slope and intercept from charging relationships. The unstandardized coefficients are the slope and intercept in the model unit. In trying to predict the level of effects of marital status of investors on investment decisions, it gives an intercept of 2.483. This means that it gives each model 2 standard deviation above the mean. The regression equation can be written as this:

\[ 2.483 - .093 \times \text{investment in stock market} + .005 \times \text{mutual fund investment} - .051 \times \text{investment in fixed deposit} - .184 \times \text{life insurance investment} + .098 \times \text{public provident fund}. \]

From table 9, there was a strong positive relationship between investment in stock and marital status of respondents since the significant level was 0.001 and less than (0.01). The findings indicated that stock investment .001 is of significance on marital status of respondents, since this value is statistically significant that means marital status is a good predictor in investment decision stock investment. It is also found that there was a weak positive relationship between investment decision mutual fund investment and marital status since the significant level .854, was greater than (0.01). Fixed deposit also indicates a weak positive relationship on marital status of investors with a .246 level of significance. Life insurance also indicated a strong positive relationship on marital status of respondents with .000 significance level. Public provident fund indicates a strong positive relationship with .000 significance level, which is greater than .01. The researcher concluded based on the findings of this study that there is a positive relationship between investment decisions stock investment, mutual fund and public provident fund and marital status of individual investors.

**Table 10. Effect of level of education on investment decision**

<table>
<thead>
<tr>
<th>ANOVAa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: HIGHEST LEVEL OF EDUCATION

b. Predictors: (Constant), Public Provident Fund, Invest in Fixed Deposit (Treasury Bill), Investment in Stock Market, Life Insurance Investment, Invest in Mutual Fund Investment

<table>
<thead>
<tr>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Investment in Stock Market</td>
</tr>
</tbody>
</table>
Invest in Mutual Fund Investment & .009 & .059 & .011 & .155 & .877
Invest in Fixed Deposit (Treasury Bill) & -.144 & .101 & -.080 & -1.421 & 156
Life Insurance Investment & .002 & .113 & .001 & .018 & .986
Public Provident Fund & .127 & .053 & .157 & 2.382 & .018

a. Dependent Variable: Highest Level of Education

The results of regression model as shown in Table 10 above indicated that, the coefficient is taken in to consideration to know the slope and intercept from charging relationships. The unstandardized coefficients are the slope and intercept in the model unit. In trying to predict the level of effects of level of education of investors on investment decisions, it gives an intercept of 3.138. This means that it gives each model 3 standard deviation above the mean. The regression equation can be written as this 3.138-.327 *investment in stock market +.009*mutual fund investment -.144*investment in fixed deposit+.002*life insurance investment+.122*public provident fund.

From table 10, there was a strong positive relationship between investment in stock and level of education of respondents since the significant level was 0.000 and less than (0.01). The findings indicated that stock investment .000 is of significance on level of education of respondents, since this value is statistically significant that means level of education is a good predictor in investment decision stock investment. It is also found that there was a weak positive relationship between investment decision mutual fund investment and level of education since the significant level .877, was greater than (0.01). Fixed deposit also indicates a weak positive relationship on level of education of investors with a .156 level of significance. Life insurance also indicated a strong positive relationship on marital status of respondents with .986 significance level. Public provident fund indicates a strong positive relationship with .018 significance level, which is slightly greater than .01. The researcher concluded based on the findings of this study that there is a positive relationship between investment decisions stock investment, mutual fund and public provident fund and level of education of individual investors.

Table 11. Effects of financial management knowledge on investment decision

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1.531</td>
<td>5</td>
<td>.306</td>
<td>2.138</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>42.105</td>
<td>294</td>
<td>.143</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>43.637</td>
<td>299</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Predictors: (Constant), Public Provident Fund, Invest in Fixed Deposit (Treasury Bill), Investment in Stock Market, Life Insurance Investment, Invest in Mutual Fund Investment

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>I</td>
<td>(Constant)</td>
<td>1.832</td>
</tr>
<tr>
<td></td>
<td>Investment in stock market</td>
<td>-.074</td>
</tr>
<tr>
<td></td>
<td>Invest in mutual fund investment</td>
<td>.028</td>
</tr>
<tr>
<td></td>
<td>Invest in fixed deposit (treasury bill)</td>
<td>.012</td>
</tr>
<tr>
<td></td>
<td>Life insurance investment</td>
<td>-.006</td>
</tr>
<tr>
<td></td>
<td>Public provident fund</td>
<td>.006</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Sufficient Financial Management Knowledge

The results of regression model as shown in Table 11 above indicated that, the coefficient is taken in to consideration to know the slope and intercept from charging relationships. The unstandardized
coefficients are the slope and intercept in the model unit. In trying to predict the level of effects of knowledge in financial management of investors on investment decisions, it gives an intercept of 3.138. This means that it gives each model 1 standard deviation above the mean. The regression equation can be written as this $1.832 - 0.074 \times \text{investment in stock market} + 0.028 \times \text{mutual fund investment} + 0.012 \times \text{investment in fixed deposit} - 0.006 \times \text{life insurance investment} + 0.006 \times \text{public provident fund}$.

From Table 11, there was a strong positive relationship between investment in stock and level of knowledge in financial management of respondents since the significant level was 0.002 and less than (0.01). The findings indicated that stock investment .002 is of significance on knowledge of financial management of individuals; since this value is statistically significant that means knowledge in financial management of individual investors is a good predictor of investment decision, stock investment. It is also found that there was a weak positive relationship between investment decision mutual fund investment and knowledge in financial management of investors since the significant level .175, was greater than (0.01). Fixed deposit also indicates a weak positive relationship on knowledge in financial management of investors with a .727 level of significance. Life insurance also indicated a weak positive relationship on knowledge in financial management of investors with .875 significance level. Public provident fund indicates a weak positive relationship with .740 significance level, which is greater than .01. The researcher concluded based on the findings of this study that there is a weak predictor and weak positive relationship between investment decisions and knowledge in financial management of investors.

**Table 12. Effects of monthly income of respondents on investment decision.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>32.682</td>
<td>5</td>
<td>6.536</td>
<td>9.400</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>204.438</td>
<td>294</td>
<td>.695</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>237.120</td>
<td>299</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the regression model as shown in Table 12 indicated that, the coefficient is taken into consideration to know the slope and intercept from charging relationships. The unstandardized coefficients are the slope and intercept in the model unit. In trying to predict the level of effects of level of education of investors on investment decisions, it gives an intercept of .113. This means that it gives each model no standard deviation above the mean. The regression equation can be written as this $.113 - 0.026 \times \text{investment in stock market} + 0.116 \times \text{mutual fund investment} + 0.014 \times \text{investment in fixed deposit} + 0.359 \times \text{life insurance investment} + 0.039 \times \text{public provident fund}$.
From table 12, there was a weak positive relationship between investment in stock and monthly income level of respondents since the significant level was .609. The findings indicated that stock investment .609 is of weak significance on monthly income level of respondents, since this value is a weak statistically significant, that means monthly income level of respondents is weak a predictor in investment decision, stock investment. It is also found that there was a strong positive relationship between investment decision mutual fund investment and level of education since the significant level .011, was slightly greater than (0.01). Fixed deposit also indicates a weak positive relationship on monthly income level of respondents with a .856 level of significance. Life insurance also indicated a strong positive relationship on monthly income level of respondents with .000 significance level. Public provident fund indicates a weak positive relationship with .351 significance level, which is greater than .01. The researcher concluded based on the findings of this study that there is a positive relationship between investment decisions and monthly income level of respondents.

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in Stock Market</td>
<td>300</td>
<td>1.00</td>
<td>5.00</td>
<td>2.1167</td>
<td>1.04564</td>
</tr>
<tr>
<td>Invest in Mutual Fund Investment</td>
<td>300</td>
<td>1.00</td>
<td>5.00</td>
<td>3.3433</td>
<td>1.34840</td>
</tr>
<tr>
<td>Invest in Fixed Deposit (Treasury Bill)</td>
<td>300</td>
<td>2.00</td>
<td>5.00</td>
<td>4.6567</td>
<td>.62189</td>
</tr>
<tr>
<td>Life insurance investment</td>
<td>300</td>
<td>1.00</td>
<td>5.00</td>
<td>4.7167</td>
<td>.60355</td>
</tr>
<tr>
<td>Public provident fund</td>
<td>300</td>
<td>1.00</td>
<td>5.00</td>
<td>3.9767</td>
<td>1.37930</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Researcher’s fieldwork April 2019

From Table 13 above, the standard deviation measures the concentration of data around the mean. More deviation, lower standard deviation therefore, the standard deviation is affected by extreme values (low or very high numbers in the data set). This is because the standard deviation depends on the distance from the center. This means that the small standard deviation means that the data set is close to the mean of the data set, on average, and the large standard deviation points out that the values in the data set are far from mean, on average.

From the findings in table 13 above, the respondents indicated stock investment as most preferred investment avenue to invest in. This is largely as indicated by a mean of 2.1167, standard deviation of 1.04564 minimum value 1 and maximum value of 5. Standard deviation of 1.04564 is close to the mean of 2.1167 on average. This therefore indicates that stock investment is not the most preferred investment avenue by investors.

The findings also revealed that, mutual fund is not also the most preferred investment avenue by investors. This is indicated by a mean of 3.3433, standard deviation of 1.34840. Standard deviation of 1.34840 is close to the mean on average. This therefore indicates that mutual fund is not the most preferred investment avenue by investors.

Again, from the table fixed deposit is indicated as a most preferred investment avenue by investors as indicated by a mean of 4.6567, standard deviation of .62189. Standard deviation of .62189 is far away from the mean on average. This therefore indicates that fixed deposit is a most preferred investment avenue by investors.

The respondents also indicated life insurance as the most preferred investment avenue to invest in. This is indicated by a mean of 4.7167 and standard deviation of .60355. Standard deviation of .60355 is far away from the mean on average. This therefore indicates that life insurance is the most preferred investment avenue by investors.

The results also revealed that public provident fund is not a most preferred investment avenue by respondents. This is indicated by a mean of 3.9767 and a standard deviation of 1.37930. Standard deviation of 3.9767 is close to the mean on average. This therefore indicates that public provident fund is not a most preferred investment avenue by investors.
From the study, it can therefore be concluded that, fixed deposit and life insurance are the most preferred investment avenues by respondents.

**Summery and discussion of results.**

The findings to this study are summarized below:

1. Majority of respondents were males.
2. Majority of respondents were single.
3. Majority of respondents were secondary school graduates.
4. Majority of respondents were secondary school graduates.
5. Majority of respondents have no sufficient knowledge in financial management.
6. Majority of respondents were not experience in the field of finance.
7. Majority of respondents were not experience in the field of finance.
8. Majority of respondents’ income per month were ghs1100.00 to ghs1500.00 and ghs1600 to ghs2000.00.
9. There is a positive relationship between investment decision (stock investment, fixed deposit and life insurance) and gender of individual investors.
10. There is a positive relationship between investment decisions (stock investment, mutual fund and public provident fund) and gender of individual investors.
11. There is a positive relationship between investment decisions stock investment, mutual fund and public provident fund and marital status of individual investors.
12. There is a positive relationship between investment decisions stock investment, mutual fund and public provident fund and level of education of individual investors.
13. There is a weak predictor and weak positive relationship between investment decisions and knowledge in financial management of investors.
14. There is a positive relationship between investment decisions and monthly income level of respondents
15. Fixed deposit and life insurance are the most preferred investment avenues by respondents.

The findings to this study are discussed below:

**The effect of demographic factors on investor’s decisions in WA municipality of the Upper West Region Ghana.**

The study first objective was to investigate the effects of demographic factors on investors’ decisions in WA municipality of upper west region of Ghana. The study established that, there is a positive relationship between investment decision (stock investment, fixed deposit and life insurance) and gender of individual investors. There is also a positive relationship between investment decisions (stock investment, mutual fund and public provident fund) and gender of individual investors. The study again established that, there is a positive relationship between investment decisions stock investment, mutual fund and public provident fund and marital status of individual investors. There is also a positive relationship between investment decisions stock investment, mutual fund and public provident fund and level of education of individual investors. Again, there is a weak predictor and weak positive relationship between investment decisions and knowledge in financial management of investors. There is also a positive relationship between investment decisions stock investment, mutual fund and public provident fund and marital status of individual investors. There is also a positive relationship between investment decisions and monthly income level of respondents. This confirms Headen and Lee (1974), study that age, gender, marital status, and income level affect investment decisions: life insurance, time deposits, mutual funds, and public savings. Sadik and Ishaq, (2014), study also posits that, the level of education obtained and tolerance of risk have a positive relationship however, there are also conflicting results in this study, which explore the fact that there is no significant relationship between education and decision-making.

**The most preferred Investment Avenue by investors**

The second objective was also to examine the most preferred investment avenue by investors in the Wa Municipality of the upper west region of Ghana. The study therefore confirms the study conducted by Nagpal and Bodla, (2009), which concludes that investor lifestyles often determine the ability of investors to take risks. Nagpal and Bodla (2009) found that despite the phenomenal growth...
in the stock market, individual investors prefer less risky investments, i.e. life insurance policies, fixed deposits in banks, post offices, PPF and NSC.

**Conclusion**

From the study, it can be concluded that demographic factors affect investment decisions. The study established that gender, age, income level, marital status and financial management knowledge have a positive relationship with investment decisions; life insurance policies, fixed deposits, mutual fund, stock investment and public provident fund. This means that, the demographic factors determine the extent to which individuals invest in the avenues above. It is also concluded that educational level of respondents was a weak predictor of investment decisions and hence does not determine investment decision of individual investors. The study finally concluded that the most preferred investment avenues investors invest in includes fixed deposit with banks and life insurance policies.

**Recommendations for practice and future research**

From this study, the researcher recommends a few approaches.

From the study, demographic factors affect investment decisions hence it is recommended that individual investors should be mindful of information asymmetry, which is the biggest contributor of investor apathy that leads to investment decisions. The regulatory bodies to aid investors in making a better-informed investment decision should therefore disseminate investment information.

Also, for future researches it is recommended that the study be verified among other regions of Ghana to ascertain the effects of demographic factors on investment decisions by individual investors.

**Acknowledgement**

I give all acclaim and appreciativeness to God Almighty for giving me such a prodigious strength, persistence, valor, and ability to complete this paper. Even though any learning bustle is a lonely personal, it necessitates help, sustenance and encouragement of others to be successful. ‘‘Just as an eagle could not ascend without the imperceptible force of the wind’’, I could not have arrived at this place without all the imperceptible hands that provided us that strength. I would like to present our humble indebtedness and gratitude to all the people who made this drive possible especially TAU. I am beholden to those who expressively and unknowingly were so supportive and significant in the trying moments.

**References**

Greener Pastures or Banished to Slavery: The Case of Zimbabwean Migrant Workers in Botswana and South Africa (2000-2018) in the context of ILO Standards and Peoples’ Rights

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Management, Texila American University
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Abstract

The socio-economic and political impositions within African states in general and Zimbabwe in particular at the start of the new millennium have forced a host of workers into sundry parts of the world to prospect for better opportunities. Southern African countries of Botswana and South Africa, owing to their relatively sturdy economies and comparatively dependable human rights records, played the major hosts to the bulk of these migrant workers. Hordes of workers (of skilled, semi-skilled and general) flocked to the borders to escape their conditions back home. However, such a drift in search of the so-called ‘greener pastures’ met with varied outcomes. The paper documents the state and dynamic circumstances of these migrant workers in South Africa and Botswana in the 21st Century. It analyses how this state of affairs has impacted on migrant worker’s livelihoods. The paper analyses the pertaining situation of migrant workers vis-a-vis the internationally accepted labour standards. The research also focuses on the effectiveness of Workers’ Unions (or lack of) meant to represent their needs.

Keywords: Migrant Labour, International Labour Organisation, slavery, greener pastures.

Introduction

In the year 2000, following violent land seizures of mostly white commercial farmers in Zimbabwe by largely radical ZANU (PF) supporters, there was a bizarre free-fall of the economy. This plummet was aggravated by consequent violent elections, political persecution of perceived opponents of the ruling ZANU (PF) party and a series of ruinous economic policies designed to keep President Mugabe in power. These factors and others led to closure of businesses, capital flight and disinvestment. Unemployment meteorically rose to incredible levels of 90% by 20081. (www.indexmundi.com). These factors in turn triggered an unprecedented wave of emigration not seen since independence as workers sought to find so called greener pastures elsewhere in the region and abroad. Migrant workers found ready refuge in countries such as South Africa and Botswana. These countries were ready to absorb this labour force in their critical sectors where they themselves were experiencing shortages. As the labour market became flooded by these Zimbabwean migrant workers, it became convenient for many employers to exploit the situation. Many migrant workers found themselves having to sign sham contracts, earning very low wages/salaries, enduring very long working hours and facing deportation at the end of the month before they could get their wages/salaries. All this is against international labour standards. In addition, there has been a great dearth of unionism by workers to tackle this scourge.

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1 Data include both unemployment and underemployment; true unemployment is unknown and, under current economic conditions, unknowable
Background to migrant labour in southern Africa

Migration is a phenomenon existent in all human societies. In the past, groups of pastoralists moved perpetually in search for better fields and water sources for their people and periodically in relation to the rain fall. Continuous interactions, on a regional scale, of exchange and conflict linked the nomadic populations of merchant and pastoralist with more settled populations. (Guillano: 2018). Migrant labour in Southern Africa can be dated back as far back as the early colonial years when the Europeans introduced a monetary economy. (Austin: 2010). With the advent of the cash economies in Southern Africa, economic, social and political relationships were altered and the need arose for people to engage in survival modes. It was also spurred on by taxes demanded from Africans in cash and in need of money people migrated to find work. According to Guillano (2018), modern Southern African historians agree that the phase between the last three decades of the 19th century and the first decades of the 20th century represent the period of the incorporation of the region within the capitalist world economy. Arrighi (1979) noted that;

This process has different interlinked realms. It implied, on one hand, the transformation of the productive sphere and thus of its relations of production, in such a way as to create production activities integrated in the international division of the labour, and on the other hand, the alteration in the sphere of the governance so as to structure state institutions that worked as an integral part of the interstate system. This economic and politic incorporation represented the main cause of the dissolution of African polities and the disintegration of the productive autonomy of African peasants.

At a sub-regional meeting which was organized by the UN’s International Labour organisation, a warning was posed that unless governments, employers and trade unions cooperate in fixing migration policies, the labour situation in Southern Africa may get worse before it gets better. (ACTRAV Info: 2002)) That workshop further noted that acute unemployment problems coexisting with irregular labour migration, unmet social protection demands as unprotected migrant workers return home for retirement, a rise in xenophobia, a massive brain drain and a general deterioration of local working conditions were identified as potential threats should migration policy inertia prevail in the sub region in the next five year. (ACTRAV Info: 2002).

Conceptual framework

Migrant labour as a concept refers to people that move from their places of origin to other places in search of wage labor or any other kind of job. Economic Migration can be classified either as voluntary or as forced migration. Voluntary migration is the free movement of migrants looking for an improved quality of life and personal freedom. (Waugh: 2003). This can either be in search of employment, trade and economic expansion, better climate better social amenities etc. Forced migration is when the migrant has no personal choice but has to move due to economic or social imposition or due to a natural disaster.

Since 1919, the International Labour Organization has maintained and developed a system of international labour standards aimed at promoting opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and dignity. (www.ilo.org). In today’s globalized economy, international labour standards are, at least theoretically an essential component in the international framework for ensuring that the growth of the global economy provides benefits to all.

Standards are adopted by a two-thirds majority vote of the ILO’s constituents and are therefore an expression of universally acknowledged principles. At the same time, they reflect the fact that countries have diverse cultural and historical backgrounds, legal systems, and levels of economic development. (www.ilo.org).

This paper characterizes migrant labour in Southern Africa, at least theoretically, not only as a consequence of the capitalist mode of production but also as a result of the social relations of production that developed in Southern Africa, underpinned by various political, foreign and local pressures. Practically, though, migrant labour is largely a consequence of bad governance by the petty
bourgeoisie class that took over power from the colonialists and sequestrated power for personal gain and not the development of their countries.

Migrant labour witnessed in Southern Africa at the turn of the 21st century exposes similarities with that propagated by colonial administrations. This migration has been carefully planned, implemented and sustained by developing predator states within southern Africa. (Ochola: 2010). As this research will show this process is located within the picture of the primitive accumulation of capital starting from Marx’s characterization of free labour. In addition, it will show how other forms of subsumption of labour to capital (unfree) were set up, through the manus longa of the state, to sustain the process of reproduction of capital. (RC Bush & G Martiniello - inventati.org). It is the contention of this research that the non-enforceability of International Labour standards because of the obvious and historical non-binding of international statutes, as a result of the supremacy of concepts of sovereignty, territorial integrity and self-determination, has resulted in the worsening of conditions under which international migrants work.

21st Century migrant labour in southern africa

As a consequence of the warped economic policies in many Southern African countries, human rights violations, political persecution and destructive policies of primitive accumulation as seen in Zimbabwe, massive migration has been unavoidable. Such actions and policies resulted in skewed economic conditions which only helped force workers out of their work places for presumably better conditions.

As an international rule, peoples of the world are free to traverse the world in search of opportunities outside their own borders. It is however notable that “The rules of the global economy should be aimed at improving the rights, livelihoods, security, and opportunities of people, families and communities around the world.” (ILO: 2004). There are various forms of labour pertaining in Southern Africa ranging from professional white-collar work, to skilled technical work through to general work both outdoors and domestic work.

Much of South African and Botswana economy is not owned by the indigenous people. To a larger extent, people of Indian descent, Chinese, European and American entrepreneurs dominate the Batswana economy. In particular, Chinese employers have been noted as exploitative. Indian entrepreneurs’ own businesses that range from educational institutions (High Schools, Technical Colleges, Universities and other businesses as Motor Vehicle garages, surgeries, food outlets etc.). The Chinese dominate the clothing industry, owning clothing warehouses and retail outlets. They are also contracted in the areas of the construction industry that include roads and house construction. Batswana people employ foreigners largely to work on their cattle posts and farms. This is because they are not prepared to take up these menial and general jobs as they regard them as primitive, but also there is a national perception that Batswana people are lazy – this has not been tested though. This stereotype however has thus far influenced the job configurations in the country with menial work almost exclusively set aside for foreigners, particularly Zimbabweans.

Of very important note is that much of their manpower is derived from neighbouring countries particularly, Zimbabweans, Malawians, Zambians, Nigerians, and Kenyans. Zimbabwean laborers have been very popular for their hard work, professionalism and the wide-ranging skills they have.

A review of the migrants’ working conditions

The pitiable circumstances of migrant workers anywhere in the world and particularly in Southern Africa are widely documented. In South Africa alone, their conditions are dire. Zimbabwean migrants in Botswana and South Africa, whether documented or undocumented, are vulnerable. The situation of Zimbabweans in Limpopo province shows two aspects of the problem:

Salaries are not commensurate with qualifications. According to Marx, the only asset that a worker has is his/her labour. That is all they can sell for their living. It is therefore practically informative that as migrant workers navigate the borders; they seek increased salaries commensurate with their abilities. This is in conflict with capital needs. Historically the capital mindset is to maximize profit with the lowest wage bill possible.
Migrants have no bargaining strength. Particularly at the turn of the 21st century when migrants crossed borders in flight from worse conditions back home, it has not been easy to bargain for higher wages/salaries but Employers have offered a ‘take-it-or-leave-it’ arrangement, aware of the glut of migrant labour on the market to choose from. In the process workers have suffered the humiliation of taking up jobs they are over-qualified to do, and being paid a small amount.

In the case of Botswana, research shows that many employers use a ‘divide and rule’ strategy to nip any industrial action in the bud. Salaries are surreptitiously imposed and, in many cases, for the same job, workers are offered varying salaries. For instance, in the teaching field, where teachers’ salaries are not based on experience, qualification or aptitude but on need for control, manipulation and exploitation. A case in point is the information gleaned from one of institute of information technology; John Mukumbe pointed that the Information Technology department had their salaries increased while workers in the Business department were unceremoniously dismissed for asking for the same. Many examples exist.

Working hours and ill-treatment of workers, just like in colonial times is rife in Botswana and South Africa. Most of the employers are very aware that the migrant workers are likely to abscond or just ‘walk-away’ from their premises if they find other jobs. To guard against such eventualities, employers increase the working hours for workers so they can be restricted to those work places. Furthermore, from interviews carried out, Tichaona Mashindi a pre-school teacher in Mochudi, reported that they were ill-treated and made to believe that they were unemployable elsewhere. Muungani Sarudzai, a computer technician at a college in Gaborone pointed out that “simple mistakes at work are magnified to impress on the worker that they are not worth what they think they are”.

The negotiation of contracts in most workplaces is an illegal and exploitative practice. The contracts are knit in such a way that it leaves the worker more vulnerable to exploitation and indiscriminate dismissal. According to one Diva Gono, a University lecturer in Gaborone, in his contract his employer, had the power to “dismiss you any time the employer thinks you no longer serve the purpose for which you are employed and they may not give you any notice”. However, “you must give 3 months’ notice if you intend to leave, or forfeit one month’s salary in case of an abrupt decision to leave”.

Labour legal issues

The legalities of working in both Botswana and South Africa just as in all other countries require that one obtains proper work documentation before one can start work in any sector. A miscellany of factors resulted in many people being employed without having proper documentation. These factors include but are not limited to a colossal migrant labour movement into Botswana (both legal and illegal); critical shortage of manpower especially in private sectors; need by employers to furtively slash wage bills; the scramble and demand for the hardworking but undemanding and docile Zimbabwean migrant worker and also the bureaucracy by the concerned government departments which could not expedite the documentation processes.

The above factors have put an overbearing burden on to the migrant worker whose major objective is to immediately find work and make ends meet. It is within this context that many migrant workers hurriedly and grudgingly signed otherwise ‘quasi legal’ contracts which always impinged on their labour rights and their rights as residents (legal and illegal) in the duration of their contracts.

Once in this situation the migrant worker found themselves without any bargaining power with the employer. In one account an employee feared to be reported and handed over to authorities for lack of proper documentation while on the other hand they feared to lose their job. It therefore meant the employer could dictate the salary/wage and the working conditions especially the working hours. In some instances, information was collected from Zimbabwean migrant workers who mentioned that they would be forced to undergo 10-hour working day without a wage/salary increment within the life of a contract. This is against international labour laws.

On the farms and cattle posts, pervasive ill-treatment of migrant workers was reported. There were cases of ill-treatment at the end of the month so that many people ran away before they could get their wages. In most cases such workers are illegal migrants. Farai Shuro, one farm worker in a remote area
in Botswana, reported that he was beaten up by the employer and tortured until he decided to run away before he could get his salary. Other methods of ill-treatment are food poisoning, reporting migrant workers without immigration permission at the end of the month and false criminal accusations.

This is worsened by the labour laws and bureaucracy of the governments which makes it difficult for most of the qualified and unqualified people to work. An example is Botswana where the Ministry of Education gives private schools very short-term teaching permissions but takes a long time to renew them. In the end the labour commissioners come to harass them at the work place.

**Children and migrant labour**

Children have been other major victims of the economic, political and social problems in their countries and therefore have been forced to migrate to find refuge and earn an income. This explains the upsurge of, as yet undocumented child labour that continues to plague the countries of Southern Africa. Although children are clearly affected by labour migration, they have tended to be ignored in the migration discourse. A focus on children provides an unusual lens for considering migration dynamics…” (Hall: 2017).

Children are considered the weakest members of society and studying the impact that migrant labour has on them will help one to understand the deeper impact of migrant labour and ILO rights. Children are affected in various ways. Firstly, when one of their parents migrates to work abroad and secondly when both parents have to migrate abroad in search of greener pastures, thirdly when the child has to travel with either of the parents or both when they migrate and lastly when the child because of the difficult circumstances has to migrate to seek employment abroad.

When families migrate across borders without legal documents, they are referred to as migrants in an irregular situation. Upon arrival at destination, their children are often excluded from basic social services, such as education, and health care, thus increasing the risk of child labour. (Glind: 2010) Also, some children experience the right to housing, education and health care during the asylum process, but become illegal and lose these rights if their family’s case is rejected. The then-undocumented children are pulled out of school and forced into hiding, thus risking involvement in child labour. (Glind: 2010)

The South African case raises a lot of issues about children who independently migrated and found themselves working in mines and farms under very appalling conditions. Although the majority of child migrants move with their families, significant numbers also move independently. A 2008 World Bank Report. (McKenzie: 2008). Based on censuses from 12 destination countries showed that a considerable number of migrant children were living without their parents. Also, girls are slightly more likely to migrate independently compared to boys and the likelihood that a child will migrate independently increases substantially with age. (Yaqub: 2009).

There is more research that can be done about Zimbabwean child labour in South Africa after Apartheid.

**Ways of adapting to the conditions**

I contend that the Zimbabwean migrant workers in Southern Africa, particularly in Botswana and South Africa failed to organize themselves under the system which so clearly violated their international rights as workers. I should emphasize here that not all Zimbabwean migrant workers in these countries were ill-treated by their employers. On the contrary examples exist of migrant workers who, because of their qualifications and experience found themselves living luxuriously. However, organization along trade unionism lines is, in this paper, viewed as a way of improving and ensuring that work conditions continued to improve for the Zimbabwean migrant worker regardless of what privileges one might have.

In the face of difficult and controlled working environments this paper emphasizes that forms of resistance are concealed from view, as Phimister and van Onselen (1978) point out ‘in the nooks and crannies of the day-to-day work situation’ rather than overtly displayed. This paper focuses on
desertion, absorption of pressure or what can aptly be called ‘developing a thick skin at the work place, and loafing’ as the methods of resistance or rather of showing disenchanted at the workplace.

In southern Africa, not all migrant labourers are black. White, Indian and Chinese labourers receive comparatively better working conditions as opposed to their black counterparts. For them salaries are always higher in comparative terms, and they generally are respected in the workplace as compared to their Black Zimbabwean counterparts. Preference is given to them, and better services such as office space, housing, salaries and other smaller workplace incentives.

Because of fear of losing their jobs, Zimbabwean migrant labourers have developed a system where they pretend all is okay at the work place. The idea was to try hard and find another job which offers better conditions as compared to their current job while they hold on to their current job. The only way therefore to fix the employer was to desert for another job and never come back to the first job. Desertion became a common expression of dissatisfaction by those employed in the education system, particularly in private institutions, between 2000 and 2010. This, however, was not without its consequences. For those who were fortunate to have proper work permits this meant they could not get a release letter to allow them to move on to another job. If such a scenario occurred one had to endure working with a disgruntled employer.

Desertion is a system whereby a worker simply abandons, or just walks away from the work premises and never comes back. This method had its results. It had a destabilizing factor on the affected institution and presented uncertainty especially in areas where many Zimbabweans were employed. Employers were left guessing who else would desert. This panic mode had a positive effect on those left behind on the job. In the hope of retaining some professionals, employers would then improve the working conditions of those remaining though this was done clandestinely in most cases and only areas viewed as critical were got incentives. On the downside of it, employers would stop employing Zimbabweans as they’d think they couldn’t rely on them.

For most professionals, moonlighting became a very viable option in face of workplace hardships. Those in the education system resorted to private lessons and in other trades such as engineering, mechanics, etc. they resorted to doing extra jobs (piece works) after work or during their spare time.

**Trade unionism**

ILO standards promote collective bargaining and help to ensure that good labour relations benefit everyone. Freedom of association ensures that workers and employers can associate to efficiently negotiate work relations. Combined with strong freedom of association, sound collective bargaining practices ensure that employers and workers have an equal voice in negotiations and that the outcome will be fair and equitable. Collective bargaining allows both sides to negotiate a fair employment relationship and prevents costly labour disputes. (ILO: 2004).

It is rather shocking that since attaining its independence from the British in 1966, Botswana has had one of the weakest trade union movements in Africa. This has been as a result of an assortment of factors: firstly is because Botswana has a very narrow economy that is mostly dependent on extraction of diamond and beef production; secondly Botswana has relied heavily on expatriate labour which is unwilling to create a movement that will provoke a generally good employer; thirdly there is a very small local population, about only 2.3 million people most of whom are supported by the government.

This is not to suggest that moves at initiating worker solidarity have not been identified. Tea-talks, workers’ sporting outings, social welfare groupings Money-rounds and money-lending committees have been moves towards worker solidarity. However, in most cases such associations perceived to be bringing solidarity among workers have been ruthlessly dealt with. Such groups have been infiltrated by employer’s spies, and the organizers fired to send a clear message to would-be organizers. Within the migrant workers community, trade unionism has therefore been shunned in order to protect their jobs.
Conclusion

It is clear that the working conditions of the Zimbabwean migrant worker in Botswana have not been easy but have been a struggle for survival. In the process his/her labour rights and human rights have been abused with impunity. The situation has been worsened by a politically wobbly environment back home. Personal development by the worker has been difficult under these circumstances but some have managed to acquire assets and construct houses back home. However, with the prospect of a permanent political settlement, many migrant workers have expressed the hope of better working conditions - or better still - taking up better jobs back home; though others have remained skeptical.

References

[7]. Hall K, Fragmenting the family? The complexity of household migration strategies in post-apartheid South Africa. Children’s Institute, University of Cape Town, 2017.
[9]. Interview with Diva Gono, a University lecturer in Gaborone.
[10]. Interview with Farai Shuro, a farm worker in a remote Tshabong area of Botswana.
[11]. Interview with Muungani Sarudzai, a computer technician at a college in Gaborone.
[12]. Interview with Tichaona Mashindi a pre-school teacher in Mochudi.
Roles of Media in Man-made Disasters: A Case of Protracted Conflict in South Sudan

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Abstract

Since the attainment of independence of South Sudan, a protracted conflict did ensue between two factions sparked off by political reasons. Since then, the conflict disrupted the socio-economic and political lives of the citizens and a spillover effect was even felt in the neighboring countries. At the epicenter of the conflict lies the issue of media reporting and how the conflict was handled because depending on how it was handled, it either led to reduction of tensions or heightened tensions. This research delves into the role of the media in the protracted conflict. The objectives of the research include: To evaluate the extent to which media has assisted in mobilizing support for peace agreements; to analyze strategies employed by the media in propagating cessation of conflict in Sudan; assess the media’s level of success in sensitizing people about conflict prevention and to determine the extent to which government censorship impacted on the rights of journalists. The theory of Peace Journalism was hinged on the study to argue for how conflicts can be managed by the media. The study adopts a descriptive Survey Design; this involved targeting media organizations, both national and international media through the use of questionnaires and documentary evidence. It was expected that the study would be important to local media in South Sudan, the government and international organizations including the international press.

Keywords: Protracted Conflict, Peace Journalism, Censorship, Manmade Disasters, Emergency Management, War Journalism.

Introduction

Conflicts, warfare and conflict resolution in the modern society have been to a very large extent influenced by the media. Media has enabled the faster spread of information, whether true information or propaganda. This is because of the easy coverage and mobility that the modern media is characterized with. In fact, according to White (2016), in contrast with people of earlier ages, people around the world today know much more about major developments in international relations, thanks to the development in information technology, which is aided by the media. Therefore, some scholars like Allen & Schaer (2016) have posited that media coverage, especially television, has had an increased influence on conflict management, especially since the collapse of the Soviet Union in the early ‘90’s.

Closely intertwined with the media are man-made disasters and especially conflicts. These modern conflicts are more complex and multidimensional than ever before. Because of the complexity of these conflicts, traditional mechanisms of settling them may not be useful owing to the fact in some places, that they involve organized crime that tends to exacerbate state fragility and undermine state legitimacy, which has led to the internationalization of civil wars. Examples of these types of conflicts exist in Syria where violent extremism has increasingly been commonplace (The UN commissioned paper, 2015). In fact, the standpoints that the media covers this conflict are dependent on whether it is pro American or anti America. This kind of reporting has a direct impact on the conflict at hand; it can either create emotions or justifications for certain acts between the protagonists. According to Chamberlain (2018), media coverage of the Israeli- Palestinian conflict has been a bone of contention; at times, truth is usually concealed or exaggerated to suit the intentions of the media station. According to Chamberlain (2018), some media organizations have often been associated with errors, bias and significant omissions.

Consequently, the media has found itself at crossroads; on one hand, it has been employed as an important means of warfare used by governments, military and leaders in all ages everywhere and on
the other hand, the media has been misused for propaganda purposes. However, if well used, the media has great potential to promote peace building in the context of conflicts (Deane, 2013). The power of media influence in conflict was witnessed in the Vietnam War. During the war, US involvement saw a significant growth in information technology posed by discovery of television. This episode saw the media uncovering the intricate details of the war. In so doing, it was discovered that in that war, the U.S. government and military had often lied to the public on the concrete details of its progress. In fact, the coverage of the conflict led the public to accept a possibility that all U.S. foreign policies might have been characterized by deception (Praeger, 1994).

When it comes to the African continent, the media has also been an influential instrument in the conflicts that have faced the continent. A case in point was during the Rwandan genocide in the mid 90’s where the Rwandese Radio, ‘Television Libre des Milles Collines’ (RTLM) was one of the examples of media that helped promote conflict by encouraging the Hutu population to exterminate the Tutsi terming them as ‘cockroaches’ that must be eliminated to ensure peace in Rwanda (UNDP, 2016). The conflict resulted in the massacre of almost 1,000,000 Tutsis and the displacement of many others (ibid). More recently, the social media played a resounding role in mobilizing people against the governments of Libya, Tunisia and Egypt. These events demonstrated the enormity and centrality that the media can play in not only conflicts, but also in mobilizing masses to attain a common goal.

Like other African countries, South Sudan has never been immune from armed conflict. The country secured her independence in 2011 from Sudan. However, no sooner did it get independence than conflict erupted. In fact, by December 2013, the longtime political rivalry between President Kiir, and Riek Machar, led to civil conflict that resulted in the death of thousands of people and displacement of more than 2 million from their homes, with many of them fleeing to neighboring states (Muchie, 2013). The protracted conflict in Sudan is multifaceted; not only has it got to do with the long standing economic disparities, political exclusion and social and cultural deprivation in the distribution of political and economic power between the center and the peripheries but also it has also been blamed on negative ethnicity, cultural identity and religion (Omwenga, 2017).

As indicated above, the media has a role to play in disaster management especially in the context of protracted conflicts, like that of Southern Sudan. However, sufficient empirical evidence to confirm or reject claims that media promotes or prevents conflict is lacking. Besides, there is over reliance on anecdotal evidence to illustrate the media’s positive impact on disaster management (Schoemaker & Stremlau, 2014). This poses the need to examine, analyze and expose the role of the media in conflict situations, especially in South Sudan.

Media use during the second Sudanese Civil war was minimal as compared to the usage of media in the civil war that started in 2013. Sudan People’s Liberation Army (SPLA) used a radio as a medium of preaching anti-Islamic propaganda and as a way to increase mobilization of populace to take up arms against the Islamic Fundamentalist’s regime in Khartoum. The popular SPLA radio was based in Addis Ababa, Ethiopia until the time when Tigrean rebels took over control of Ethiopia and the radio broadcasted in Southern Sudan from October 1991 (Pease and Dennis ed., 1995). Just like the SPLA radio, many other radios affiliated to the Marxist movement operated until the collapse of the Soviet Union, most of the radios were used to preach the communist ideologies.

Media’s role in the South Sudan civil war has been perceived as live and direct. It has not only been seen as a peddler of negative propaganda, but also as an inciter to both sides of the political divide. Despite of this glaring evidence of media’s entanglement into the conflict, not much has been done to actually highlight the specific contributions in the war. On the other hand, potential benefits of media exist but require documentation in the context of South Sudan. A study by Cramer, Goodhand and Morris (2016) confirmed that the media can positively affect people’s attitudes towards “others” and sensitize them about conflict prevention hence encouraging social cohesion and peace. However, the transition from attitudinal change to behavior change is left unexplored in the context of South Sudan and it is unclear if such changes can be sustainable or durable. As a result, this study attempts to fill in this gap by outlining the different roles the media has played in conflict management using the context of protracted conflict in South Sudan.
Research problem

Manmade disasters usually result into immense social economic and political ramifications; they range from poverty, destruction of economic development to deprivation of people’s basic needs (Omwenga, 2017). As has been witnessed, most conflicts often take place in countries undergoing major political changes towards democratization. In such countries, the right to credible information and freedom of expression are essential in ensuring accountable and transparent governance, constructive communication, decreased perceptions of threat and creating more stable and sustainable political structures (Deane, 2013).

Despite the significant roles that media can play in disaster management, the subject has not been extensively studied by both scholars and practitioners, especially on African conflicts. The media scene in South Sudan is controlled by politics, side by side with an interminable peace process. Since the local media in South Sudan is largely controlled by the government, there have been witnessed cases where the government has arm twisted the media by arresting journalists and banning international media coverage, including the deportation of those journalists considered as ‘enemies of the state’. The presence of this obstructive tendency to the media may have contributed to an increase in violence because of the fact that information could not reach the intended audience; hence this could result in acceleration of the conflict and hence derailed the peace process. It is this scenario that motivated the research which intends to establish how the media contributed towards ending or accelerating the protracted conflict in South Sudan.

Justification and significance of the study

The justification for this study is informed by the apparent gap in the literature on the role of the media in disaster management in South Sudan. The critical need to focus on the role of the media in raising awareness in and countering propagation of violence in South Sudan is key component of effective intervention based on the need to restore stability, promote welfare and growth as well as meeting SDGs. The need to understand the role of media in Disaster management in South Sudan is also part of the responses to scholarly reference realities right from the start. The study is intended to provide clear relief efforts that ultimately contribute towards achieving stability and peace in the country.

There are a number of studies done on this subject. However, there still remains a big gap to be filled in the context of South Sudan. It is anticipated that the findings in this study will be important towards highlighting applicable standards that guide the decisions in the role of the media in disaster management. Above all, the findings of this study may lay the groundwork for further investigation and debate on the problem. Lastly, the results of this research are beneficial to a number of stakeholders and decision makers alike. These include conflict managers and peace practitioners who compose the main actors that provide humanitarian intervention activities and can thus provide best practices in terms of activities provided. Similarly, the findings are beneficial to educators, politicians and administrators by providing lessons from which they can learn and shape national policies.

Specific objectives

The study was guided by the following specific objectives;

i. To evaluate the extent to which media has assisted in mobilizing public support for peace agreements in South Sudan.

ii. To analyze the strategies/methods employed by the media in propagating cessation of conflict in South Sudan

iii. To assess media’s level of success in sensitizing the public about conflict prevention

iv. Determine the extent to which government censorship impacted the rights of affected populations, mobilization of resources, and safety of journalists and or aid workers.

v. Evaluate potential best practices of how media could contribute to effective emergency management in South Sudan
Study questions

The following research questions are derived from specific objectives outlined above:

i. How has the media assisted in mobilizing public support for peace agreements in South Sudan?
ii. What are the main strategies/methods employed by the media in propagating cessation of conflict in South Sudan?
iii. To what extent has the media succeeded in sensitizing the public about conflict prevention?
iv. In which ways did government censorship impact on the rights of affected populations, mobilization of resources, and safety of journalists and aid workers?
v. What are the potential best practices of how media could contribute to effective emergency management in South Sudan?

Literature review

Overview of the media

In its most simple or basic form, media includes apparatus which comes-in-between two or more parties. It can also be defined as the communication channels that are used to disseminate entertainment, news, education or promotional based messages. Based on this, the media comprise of all broadcasting and narrow-casting medium that includes magazines, news-papers, radio, Television (TV), direct mails, bill-boards and telephone as well as internet (Sigmund & Molly, 2009).

According to Schoemaker and Stremlau (2014), media refers to an avenue for communicating a desired message to an individual or groups of people in a particular geographical area. In the context of this definition, the term communication is derived from a Latin word which means to share and includes the active transmission and reception of messages in form of words, sounds or images, or a combination of the three, which in the modern world also takes the form of digital information.

According to Omotoso (2012) the media is also referred to as ‘fourth estate’ and the author attributes this to its surveillance role which requires media practitioners to scrutinize, monitor, and report the activities of the other realms, especially the three arms of government or estates (legislature, executive and judiciary). The media enhances accountability within the government and assists the populace to scrutinize leaders and policy makers. The media also highlights on issues of public concern which can then be translated into public pressure, hence putting pressure on government leaders to take appropriate actions on specific issues of concern.

Review of empirical studies

The role of the media in mobilizing public support for peace agreements

Gakunju (2016) in her work about the impacts of Media on conflict resolution using a case of - the 2007/8 PEV in Kenya, underscores the crucial roles played by the media in the restoration of peace and reconciliation in the country. The author argues that this happened at different stages of the electioneering period, that is, before, during and after the PEV. The author explains that the media facilitated and brought together Kenyans from various walks of life to re-build their nation. In the pre-election period, the author notes that, to some extent, the media supported the efforts of the then Electoral Commission of Kenya (ECK) towards the realization of the aim of free and fair elections, through advertisements that urged the public to respect one another in pre-elections period. Again, during the election, the media houses opted to live-streaming of events as they unfolded, and this was in order to keep the Kenyans well-informed about the events. Lastly, the media was actively involved airing peace messages and other peace-building strategies with the aim of de-escalating the violent conflict that broke following the disputed 2007/2008 presidential elections. Gakunju’s study is a rare and important study of the media and its potentials in conflict resolutions and restoration of peace. The study highlights the importance of the media calling on international community to put pressure of protagonist to end the conflict. The major shortcoming is that the author lacks empirical evidence to support her claims.

In a study conducted in Rwanda about community-based media and its role in peace-building, Mutasa (2015) sought to understand the contribution of the media in relation to restoration of peace in Rwanda following the genocide that led to massacre of the Hutu and Tutsi moderates by the Hutu
extremists. Mutasa’s study was guided by the citizen participation theory and a rhizomatic approach. Using data collected using informant interviews of media practitioners; the author demonstrates how the media encouraged restoration of peace by defining community in terms of region as opposed to ethnicity, and tribe. The author also explains how the media facilitated peace by putting more emphasis on homogeneity (such as same language and culture) as opposed to tribal difference. The findings show active involvement of the media in passing reconciliatory messages through the airwaves and establishing a platform for popular participation as well as an environment for sharing experiences and resolving disputes. In light of the above observations, it is clear that the study provides useful insights worth considering in the current study. The study seems to suggest that the media has an important role to play in conflict resolution but also raises the need to use appropriate methods of reporting. The only weakness of the Mutasa’s study is the failure to show the extent to which the media influences mobilization of public support for peace agreements. Thus, the current study seeks to fill this research gap.

Orgeret and Orgeret (2016) in their article about conflict and post-conflict journalism using a worldwide perspective, demonstrate the important role of the media in conflict resolution. According to the two authors, the media does support peace process by creating room for active involvement of the public, giving chance to the voiceless, promoting dialogues and reconciliation as well as empowering civil society. The authors also enumerate the core societal role of the media as providing information about people’s rights, unearthing illegal actions and protecting the public from corruption through its watchdog role, proving a two-way channel between those who govern and the governed, and to serve as identity suppliers where the media reflects how people see themselves and offer a wide spectrum of possible roles for people to take up.

Mwendia (2013) while studying the role of the media in countering political and tribal conflict in Kenya, also underscores the importance of the media in sensitizing people about peace and respect for one another. Mwendia’s work is appropriate or relevant for the current study because it adds to the debate about the media and its potential impacts to bringing peace as well as providing recommendations for sustainable peace building. However, the main shortcomings of the study are that it takes a general look at the possible impacts of media on peace and fails to clearly show the extent to which the media can help in mobilizing support for peace agreement.

In yet another study, Lush and Urgoiti (2012) provides interesting lessons for conflict resolution and building using relatively broader perspective of participation to ownership and social cohesion. The study uses the case of Namibian community broadcasting sector’s sustainability to show how active involvement particularly during programming and governance of the media houses reflects the broad diversity of community interests while simultaneously encouraging community ownership and by extension, social cohesion. The authors reveal that the Namibia’s community media sector has succeeded but only to some degree because involvement or participation is limited since programming is largely produced by paid employees, volunteers and people paid for their airtime. The study recommends for the active involvement of the audience especially in production of programs. The authors also call for regular consultation of the audience in relation to program’s format, content, and scheduling to make it more representative. One weakness of Lush and Urgoiti’s study which the present study seeks to fill is the link between the community /stakeholders and public support for peace agreements.

**Strategies/methods employed by the media in propagating cessation of conflicts**

In one of the latest studies, Hussain and Lynch (2018) investigated the existing journalistic strategies used during the three deadly conflicts in Pakistan. Basing their findings on data collected through semi-structured interviews with journalists, analysts and stakeholders involved in the religiously inspired Taliban conflict, separatist-led Balochistan conflict and the ethno-political conflict in Karachi, the authors identify six strategies that include demonstrating the challenges of the victims, and contextualization of the Taliban conflict; integration of multi-perspectives and an highlight of peace-makers’ voices during the Balochistan conflict, and lastly, humanization and solution-oriented coverage of the ethno-political of the Karachi’s conflict. Based on the findings of this article, the authors recommend for pragmatic form of peace journalism, which portrays the ground realities as compared
to the more critical form of peace journalism difficult to be practiced in conflict situations. The current study seeks to identify strategies/methods employed by the media in propagating cessation of conflicts in South Sudan.

In yet another study, Danaan (2017) examines strategies employed by journalists in the appropriation of media logics in the conflict frame building process. Through objectivity, mediatization and news framing as the main models of the study, the author provides empirical evidence of the various methods used by the media in representing ethnic and religious identities in the conflict-based narratives, with particular focus on the conflict that took place in Jos found at the northern part of Nigeria in 2001, 2008 and 2010. The study discloses the use of Neutral-to-goal-focused or pyramid strategy which according to the author presents a systematic frame building process that changes the nuanced inverted pyramid news structure. The study is important since it underscores the ‘strategic’ role of journalists towards de-escalation of conflicts and restoration of peace. The current study seeks to find the main strategies that were adopted in propagating cessation of conflicts in South Sudan.

Kosgei (2015) carried out a study that specifically aimed at investigating the role that peace journalism plays in conflict management in Kenya. The study was a descriptive one and relied on key informant interviews. In the study, the author underscores the importance of peace journalism approach explaining that the methods are capable of becoming a third side to facilitating communication and able to ease tensions between rival groups especially in situations of mistrusts. The author observes journalists and news anchors tend to use their own discretion when deciding on the best and appropriate approach to use during conflicts. The study recommends for the need for a policy framework and training of employees on how to report conflicts.

Greenwood and Jenkins (2013) add to the debate about the different types of methods used by the media in propagating cessation of conflicts. The two authors say that most conflicts are visually framed according to active involvement of participants and aftermath of conflicts as opposed to the affected by-standers or efforts aimed at negotiating for peace. The authors also highlight on the use of peace journalism approach that put more emphasis on peaceful demonstration and negotiation as opposed to the usual aspects of the conflicts. The study relied on the visual framing of the 2011–2012 Syrian conflict following the Arab Spring movement that occurred in northern Africa and the Middle East. The study also utilized a total of 193 photographs published in two news magazines and nine public affairs magazines. The study revealed that the media used visual frame of conflict through images of active fighting and victims as well as photographs of peace framing.

After assessing the roles of conventional journalism norms and practices often believed to valorize conflict and/or violence in Uganda, Tayeebwa (2012) observed that although most journalists acknowledge the importance of peace, they still prefer the conventional media approaches including the use of ‘drama’; ‘crisis’; ‘extremism’; ‘threats’; and destruction’, all which encourage violence. The study recommends for a pedagogical and praxis-oriented actions that help in reporting conflicts, and a need for training in conflict analysis.

Akin (2009) highlights on publicity approach as one of the methods used by media in propagating for cessation of conflicts. The author explains that the method is preferred because of its ability to put pressure on persons or groups viewed as hypocritical or malicious. The author explains that this method facilitated the end to apartheid in South Africa.

**Government censorship and the rights of affected populations, resource mobilization, and safety of journalists / aid workers**

Chen and Yang (2018) explain that government censorship may violate people’s human rights and safety of journalists but only if used inappropriately. The authors argue that government censorship is a hallmark of authoritarian systems/ regimes. The study was carried out in China to assess the potential impacts of allowing access to uncensored Internet materials. The two authors intended to track subjects’ media consumption, their beliefs about the media, cultural and socio-economic beliefs, political aspects and their behaviors over a period of one year. After calibrating a simple model, the authors demonstrate how China’s censorship strategies remained robust to a large number of citizens. The authors demonstrate the role of censorship in manipulating people’s beliefs, perception and their preferences in relation to direction of the regimes’ intentions. The study is relevant because it highlights on how
government censorship may violate human rights due to the possibility of manipulating people’s thoughts, beliefs and attitudes perhaps against their will. However, it lacks individuals’ experiences on how censorship has impacted upon their lives. The current study seeks to show how government censorship in South Sudan has affected people’s lives, resource mobilization and safety of journalists.

Using implicit and explicit control to model the effect of internet censorship on political protest in China, Lu and Zhao (2018) indicate that the level of awareness of the existing regulations can contribute directly to people’s political protests and that the level of psychological perception of censorship can directly or indirectly limit political protest by controlling for their online political expression. The study relied on data collected from 2188 university students in China. The implication of the study is that censorship was a factor in political protests in China. The study is relevant because it discusses the possible implications of censorship on freedom of speech under an authoritarian government. However, the study takes a general overview of censorship instead of media censorship and fails to show the level at which censorship may have affected emergency response. Its omission therefore limits the final results and interpretations, hence the need for the current study.

After investigating press freedom based on the political environment of Zambia’s Post, a daily tabloid which operates in the country, Chama (2014) concludes that although press freedom is the life-blood of any democratic nation which aspires to be enhanced, there are other factors or complexities hindering its realization, including conflict of interests, expectations of politicians, and readers’ socio-economic background. The study relied on key informant interviews with journalists working or having worked with the tabloid specifically in political coverage and reporting. The study also revealed that the conceptualization of press freedom in democracy is not clear despite the general public’s expectations and the press’s passionate quest for press freedom. The study demonstrated how the government censorship and strict regulation compromised the Post’s level of credibility and its traditional watchdog role of exposing politicians for their wrong doings. The study recommends for the need for the government to provide appropriate mechanisms that encourage online publishing deemed essential in the promotion and protection of democratic gains achieved so far. The relevance of the Chama’s study lies on the fact that it presents a critical examination of the possible effect of censorship on journalism in modern democracies. Besides, it provides detailed information on censorship and uses Zambia as a case example of emerging democracy.

Clark and Grech (2017) explore the prevalence of unwarranted interference, perception of likelihood/fear of such interference and censorship amongst a non-probability convenience sample of 940 journalists in the 47 Council of Europe member states. The study adopts a quantitative approach and utilizes an anonymous self-report questionnaire. The study reveals that most of the respondents were subjected to significant levels of unwarranted interference. Most respondents indicated that they had been beaten, others threatened with force, while other experienced physical assault. Despite this, a large number of journalists are resilient and committed in their role as public watchdogs. The study recommends for the need to come up with appropriate policy to safeguard journalists.

Odongo (2012) looks at the level of independence and freedom of the mass media sector using the case of Uganda. Using qualitative methods based on key informant interviews and content analysis, the author observes that government censorship and media regulations have both contributed to violation of human rights in Uganda especially the right to information and expression. The author partly blames this on media laws’ inconsistency and lack of alignment to international and regional standards. The study recommends for a self-regulatory media system as a way of ensuring less interference by the government in the regulatory process.

**Theoretical orientation**

A theory is a symbolic way for researchers to understand a particular phenomenon. The theory helps in explaining, describing, understanding, or reforming the mechanism of a particular process. It explains how things work (Dainton et al. 2014). The current study will be guided by human Capital theory and Agenda Setting Theory.
Human capital theory

This study will be guided by the theory of Peace Journalism. This theory was propounded by Johan Galtung (1965), renowned for his scholarship on matters of peace and conflicts. The theory holds that often news about conflicts has a value bias towards violence. Other terminologies that are synonymous with the Peace Journalism theory include: ‘conflict-solution journalism, Conflict sensitive journalism and Constructive sensitive journalism’.

As opposed to war journalism approach, which essentially is skewed towards bias to violence and violent groups, Peace journalism aims to correct these biases. Its operational definition is ‘to allow opportunities for the society at large to consider and value non-violent responses to conflict (Lynch, 2008). This form of journalism involves picking and highlighting cases related to calls for peace, and articulation for non-violence policies from whatever quarter and allowing them into the public sphere.

This theory finds application to this study; from the stand point of the theory of Peace journalism, the systematic and systemic misreporting of the unfolding events in South Sudan during the period of the conflict was an attempt to impose war journalism. The government attempted this by sanctioning the media from reporting critical events hence fanning bias towards violence and violent groups. If peace journalism is embraced, the effects of manmade disasters will be reduced considerably.

Agenda setting theory

This theory is associated with Lippmann (cited in Albalawi, 2015, p.26) and Shaw and Mcombs (cited in Kosgei, 2015, p.16). This theory explains how the media sets the agenda for public attention and lays the groundwork for public views. It also explains how people learn how much importance to attach to a given topic as per the level of strength or emphasis placed on the topic (as reflected in certain news coverage). According to this theory, the media links the real world to how people envision the technologies in their minds. The media is viewed to play key role in orienting people’s attention towards particular issues (Vu & Gehrau, 2012). The theory maintains that there exists some relationship between media’s agenda and the public.

The main concept of this theory is that media triggers people’s awareness about specific issues. It holds the assumption that the media determines the dominant discussion through frequent coverage of issues. According to the theory, the media may not be what we want or think but only divert our minds to what to think about (Theunissen, 2015). Through frequent reporting of issues, the media transfer them from press agenda to public agenda. These assumptions are based on the fact that the media tends to filter and shape reality, before presenting it to the public. The media channels determine priority with which individuals regard salient issues (University of Utwente, 2015).

Media agenda setting represents decisions made by the media houses/organizations about issues to be prioritized and discussed through the media channels. These issues may revolve around their importance towards the general public (Public agenda setting) and towards policy, such as those involving government officials or agencies in order to decide the important issues worth discussing (Theunissen, 2015).

This theory is relevant because though frequent, meaningful and responsible coverage of acts that breed insecurity in South Sudan, the media can sensitize the public against such actions that break peace. Besides, frequent discussions on insecurity issues not only attract attention to the need to address such challenges but also raise consciousness on the need to restore peace.
Conceptual framework

Figure 1 presents the conceptual framework that will guide the current study.

In this study, conflict resolution on protracted conflict in South Sudan is taken as the dependent variable. The level of success in terms of the conflict resolution will be determined by the independent variables which include mobilization for public support for peace agreement, best practices, government censorship, sensitization of the public about the importance of peace, and method used by the media. For instance, some methods used by the media may not be successful in the restoration of peace in South Sudan hence; the type of method is a determinant factor. Peace journalism approach has proved to be successful in propagating for peace. Again, peace can only be restored if the public are sensitized through the media on its importance. Conflict resolution can also be achieved depending on the extent to which best practices on the media is being implemented. Government censorship is yet another factor that determines conflict resolution; this is because if journalists are restricted to air some news, then it may not be possible for the public to be informed adequately. Again, the issue of intimidating journalist and compromising their security for failing to adhere to government rules also influences the level of conflict resolution.

Research methodology

The study adopted a Descriptive Survey Design. This approach allowed the researcher to investigate the role of the media in detail. Target population included Media houses-both local and international, print media, social media, government Information and Communication Ministry. Data was collected with the aid of questionnaires.

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**Sampling technique**

Random sampling was used to select respondents/participants. Questionnaires were then developed, pre-tested and shared with the selected sample population of 150 respondents.

**Data Collection**

Data collection was done in Rumbek and Juba. The study used questionnaires, which were distributed to different medias, humanitarian organizations, and ministries of humanitarian affairs and information. Below is a table summarizing targeted data:

<table>
<thead>
<tr>
<th>S/N</th>
<th>Data Collection Method</th>
<th>Sample Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Questionnaires</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Primary data

**Data analysis**

Data analysis will be conducted using SPSS statistical software. The research links media (telecom, social media, print, and TV) to the domain of emergency management. Within the purview of emergency management, media could be a lifeline and also source of violence particularly in armed conflict.

**Results**

One hundred and fifty questionnaires were received after a period of about two months from the time of distribution. The data was triangulated as depicted below:

**Demographics of respondents**

A total of 150 questionnaires were distributed and received at the end of the study period. Of the 150 respondents, 50 were female. Over 36 percent of the respondents were between the age range of 31-35 while only 1 percent were between the age group of 51-60 years. The table below shows the gender and age groups of the respondents.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Male Respondents</th>
<th>Female Respondents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>25</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>26-30</td>
<td>18</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>31-35</td>
<td>42</td>
<td>13</td>
<td>55</td>
</tr>
<tr>
<td>36-40</td>
<td>9</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>41-45</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>46-50</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>51-60</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>61-65</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Above 65</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>50</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Primary Data
Level of education of respondents

The study also collected the highest level of education of respondents, 21 percent of the respondents have bachelor’s degree while about 5 percent completed at least advanced certificate. The table hereunder presents disaggregated information on respondents’ level of education.

Table 3. Highest qualification of respondents

<table>
<thead>
<tr>
<th>Level of Education</th>
<th># of Male</th>
<th>Number of Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school</td>
<td>15</td>
<td>13</td>
<td>28</td>
</tr>
<tr>
<td>Secondary school</td>
<td>25</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Diploma</td>
<td>10</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>27</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None of the above</td>
<td>8</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>50</strong></td>
<td><strong>150</strong></td>
</tr>
</tbody>
</table>

Source: Primary data

Professional domain of respondents

Respondents were asked about their specific areas of specializations as this is critical in the value attached to this research. Majority of the respondents constituting 60 percent were journalists, humanitarian workers, and others. Twenty percent were nutritionists, development practitioners, and GBV workers. Educationists and medical practitioners constituted 10 percent each. The pie chart below shows the various areas of specialization of the respondents.

![Respondents' Work Domains](chart)

Source: Primary Data

Role of media in mobilizing public for peace agreement in south sudan

Different types of media ranging from radio, social media (facebook and twitter), television, and other online news platform like Pan Luel Wel, Radio Tamazuj, Sudan Tribune have to some extent played a key role in circulating news pertaining to the peace agreement on the resolution of the Conflict in the Republic of South Sudan. Notable efforts included the coverage of peace rallies such as the ones conducted by the President of South Sudan in Greater Bahr El Ghazal region in March 2019. Similar rallies were conducted in Juba with the participation of opposition figures as well as in Greater Upper Nile and Greater Equatoria. These efforts were aimed at reassuring the public of the good will of the warring parties to the implementation for the Agreement on the Resolution of Conflict in the Republic of South Sudan. Commonly used types of medium as indicated by all the respondents included; the radio, newspapers (print media), television by at least a quarter of the respondents, social media
(facebook and twitter) by 50 percent of the respondents, and internet (Sudan Tribune, Panluel Wel, Radio Tamazuj, and Miraya) by 50 percent of the respondents.

Following further probing of the respondents, there were indications that a message of peace was circulated as well as information which exacerbated the hatred amongst the communities. Participants in this research have received information like; peace messages, entertainment (music and drama, and radio talk shows), hate messages were observed by at least 50 percent of the respondents, announcements, and government programs (relieve of politicians from their public offices). The respondents were asked to rank their perceptions from the continuum of disbelief and belief. Their responses are summarized in the table hereunder:

<table>
<thead>
<tr>
<th>Messages</th>
<th>Disbelief</th>
<th>Belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hate messages</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Messages of peace</td>
<td>30</td>
<td>120</td>
</tr>
<tr>
<td>Mobilization for war</td>
<td>20</td>
<td>130</td>
</tr>
<tr>
<td>Entertainment</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>Programs not essential for peace</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Primary Data

All respondents have at least heard or read information on the Agreement on the Resolution of Conflict in South Sudan. From the beginning of the war in 2013, media was observed to fanned in the war in a greater extent, consistent responses across 50 percent of the respondents depict that social media has promoted hatred and war, however, this changed when an agreement was reached, and media helped in disseminating the peace agreement in 2018 to 2019.

Positive contributions of social media

- The media has contributed positively in peace program with recent speedy usage of Facebook which feeds the grass root with immediate information although some information carries partial individualistic interests.
- It has led to public participation as everyone can write in his/her Facebook page or forum page about his opinions and what he/she thinks to make peace possible.
- It has helped South Sudanese to understand themselves and how they think about their tribal lines and how they hate themselves which would have been hidden if social media was not available.

Negative contributions of social media

- It has exacerbated misinformation which usually leads to conflict. In 2016, SPLM-iO spokesperson wrote in Nairobi that there is fighting in J-1, and Dr. Riek is being arrested. This propaganda sparked out 2016 deadly fighting which risked 2015 peace agreement between SPLM-iG and SPLM-iO.
- During 2018, peace agreement mediated by former Sudan President Omer Al Bashir, the media highlighted the hatred between Dr. Riek Machar and President Kiir Mayardit. Dr. Riek went to President Kiir for the hand shake which President Kiir declined with the pretend that he did not see Dr. Riek. This was replayed several times by several media houses and has given less hope for peace to the citizens of South Sudan.
- It has intensified the value of tribal lines within South Sudanese. Majority valued their tribemates as media particularly, social media dwells on negative parts of other tribes. The recent message from Dr. Adwok Nyaba that Dinka is dominating South Sudan does not carry any traces of peace. Therefore, leaders should use media positively amid the peace agreement to help in realization of lasting peace.
- It has trained majority of young people about the negative history that they did not know. Especially, when leaders explained what happened in 1991 factions and how Nuer and Dinka killed themselves. Majority of the young people who lost their fathers, brothers, uncles in 1991 tribal war
between Nuer and Dinka learned how they were murdered and this exacerbated hatred between Nuer and Dinka.

**Methods adopted by media to propagate cessation of conflict in South Sudan**

Media entities in the Republic of South Sudan, social media alike adopted the following methods which are consistent with the theory of peace journalism to propagate peaceful coexistence; broadcasting peace programs on TVs and radios, use of jingles containing messages of peace, use of drama series, facebook news posts, twits, telephone communication, and coverage of peace rallies. The level of success of these methods varies considerably as perceived by the respondents of this study. Hereunder is a summary of the perceived level of success and potential reasons for success or failure.

**Table 5. Media’s success in sensitizing public on conflict prevention**

<table>
<thead>
<tr>
<th>Types of Media</th>
<th>Unsuccessful</th>
<th>Low Successful</th>
<th>Successful</th>
<th>Reasons for Success/Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print media</td>
<td>0</td>
<td>150</td>
<td>0</td>
<td>Many people do not read/illiteracy</td>
</tr>
<tr>
<td>Television</td>
<td>100</td>
<td>50</td>
<td>0</td>
<td>Majority have no access to television</td>
</tr>
<tr>
<td>Radio</td>
<td>0</td>
<td>0</td>
<td>150</td>
<td>Many have access to radio</td>
</tr>
<tr>
<td>Social media</td>
<td>150</td>
<td>0</td>
<td>0</td>
<td>Free access abused by users to spread propaganda and hate</td>
</tr>
<tr>
<td>Other online platforms</td>
<td>90</td>
<td>10</td>
<td>50</td>
<td>Other media rely information. Sometimes are biased. Often used for hate.</td>
</tr>
</tbody>
</table>

Source: Primary Data

**Impacts of government censorship on affected population, mobilization of resources, safety of journalists and aid workers**

It became clear that government censorship has resulted into reduction of Resource mobilization efforts of humanitarian organizations as journalist were denied access to war affected population, arrested, detained, and deported to their home Countries for the case of foreign journalists, notable here was the restriction/banning of Aljazeera during the aftermath of the civil war in 2013. On a similar vein, 6 journalists were killed because of their reporting, with the highest number of fatalities in 2015 with a record of 5 journalists and 1 in 2017. Five of those journalists were killed in impunity (CPJ, 2019). Other media houses like radio Miraya, Citizen Newspaper, and other local radio stations were equally banned from reporting by the government. These summed resulted in reduced freedom of journalists and to some extent, on a positive note led to reduction of propaganda to spread more violence.

**Discussions**

Media has played a vital role in the context of South Sudanese conflict during the signing of the Agreement on the Resolution of Conflict in the Republic of South Sudan. Responses from this research analyzed both the positive and negative role played by media. Consistent with the theory of peace journalism and agenda setting theory propounded by Galtung (1965) and Lippmann as cited in Albalawi (2015, p.26), media outlets in South Sudan helped in disseminating peace agreements through broadcast of key articles of the agreement over radio, television, print outlets, and radio stations. Bulk of the young population having access to social media easily took to their social media platforms to get news and express their views on the political developments in the Country. Telephone communication was also used in many remotest parts of the Country for families to get updates of the situation.

However, the situation became extremely complex when some media entities failed to embrace ethical journalism and tended to propagate propaganda which helped to fan hatred and war. Notably, Sudan tribute online provided a platform for comments which are not properly scrutinized thus...
becoming a platform for hate speeches and tribalism. Facebook by its nature of freedom encouraged hardliners to circulate their tribal agenda.

In this connection, some of the responses indicated that the deadly J-1 fighting in July 2016 was triggered by a post on Facebook claiming that the Dr. Rick Machar, the leader of SPLM-iO was being detained at J-1 which prompted the reinforcement of the SPLA-iO forces and subsequent clash the office of the president leading to collapse of the agreement in 2016.

It can therefore be deduced that the differences between peace journalism and war journalism is complex because information solicited or unsolicited could result into catastrophic impact of an all-out war as seen in July 2016.

Government censorship became apparent in the responses received during this study. Censorship leads to detention, killing, closing of media outlets, and obstruction of international media entities working alongside humanitarian organizations. Two things were certain in South Sudan, the government obstructed media from publishing information which the government felt was inappropriate for the survival of the government or the government felt their responsibility of reducing nuisance caused by unethical media entities. In either of the cases, it was a game of survival by the government or the media entities to stand their ground and defend themselves for undertaking appropriate measures for benefit of the Country. But it is certain that censorship has caused a great harm to the media fraternity leading to murder of 6 journalists between 2015 and 2017, mostly with impunity. Scores of other journalists were arrested and arbitrarily detained by government operatives.

Best practices of how media can contribute to effective emergency management

The research has identified potential best practices that could be embraced in contexts like South Sudan as per the responses received from this research:

- Media should be ethically proactive to provide more accurate messages that glimmers humanitarian aspects without exaggeration of individual interests of entities or politicians.
- Media should be correctly used as a source of information with an intention to save lives rather than destroying lives as it does happen in South Sudan. Media is useful when used to save lives of injured people or people in need of humanitarian aid including for informing the donor community on the plights of the unarmed civilians.
- Media needs to give citizens accurate feedbacks on locations, roads, time and the scale of the emergency to any person or institution who/which wants to help, to have an idea on how to approach such emergency context.
- Media needs to be brief and informative always and keeps tracking the course of emergency from the beginning and even after it ends.
- Media should follow all the events related to the emergency to send to the citizens the frequent updates.

Conclusion

In a nutshell, media had varied roles in South Sudanese Conflict. Media has helped in sensitization of citizens on the milestone of the Agreement on the Resolution of Conflict in South Sudan and its revitalized version. It has also helped humanitarian organizations to showcase the challenges facing citizens of South Sudan in displaced camps and protection of civilian sites. Media in its varied forms, particularly social media has helped people to express their views since it is anonymous to post comments and twits without reprehensions from government operatives. The study was hinged on peace journalism and agenda setting theories. It is deduced that, during the revitalized peace agreements and agreement on the resolution of conflict in the Republic of South Sudan, media followed the two theories as better part of the work of media was to spread peaceful co-existence and the need to implement the peace agreement.

However, it should also be noted that media contributed negatively to the potentials of harmony among citizens in South Sudan. This was because social media, telephone communication, online media and some print media misinformed the public and circulated hatred further exacerbating the tribal divides between Nuer and Dinka. The deadly J-1 fighting in Juba was triggered by a Facebook post by
the Spokesperson of SPLM-iO claiming that their leader was being detained in the office of the President leading to all-out war.

The study also uncovered the potential best practices to ensure responsible usage of media; media should be ethically proactive to provide more accurate messages that glimmers humanitarian aspects without exaggeration of individual interests of entities or politicians; media should be correctly used as a source of information with an intention to save lives rather than destroying lives as it does happen in South Sudan. Media is useful when used to save lives of injured people or people in need of humanitarian aid including for informing the donor community on the plights of the unarmed civilians; media needs to give citizens accurate feedbacks on locations, roads, time and the scale of the emergency to any person or institution who/which wants to help, to have an idea on how to approach such emergency context; media needs to be brief and informative always and keeps tracking the course of emergency from the beginning and even after it ends; media should follow all the events related to the emergency to send to the citizens the frequent updates.

**Recommendations**

This research recommends the following:

1. Need for restraint by the government to allow unhindered access to media entities to cover news relating to the plight of the affected population and particularly following international media laws.
2. Social media especially Facebook should devise control measures to prevent messages which can potentially result in hate and increase war.
3. There is need to conduct another research to examine how media helps in humanitarian situation at the community level.

**References**


[52]. University of Twente. (2015). Agenda Setting Theory. Enschede: University of Twente.
The Theory of Disequilibrium: Why Complexity is Required to Sustain Organizational Management

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Abstract

The study of management has been a series of sequential events contingent upon the exploration of multiple fields of study. Widely and broadly inclusive in the evolution of organizational management are sociologist (Max Weber), economist (Adams Smith), philosopher (Pluto) etc. This research has attempted analysis and classification of organizational management in three phases: Pre-industrial era, industrial era and post-industrial era. In a second fold, this research has compounded and formulated the theory of organizational disequilibrium or simply put the theory of disequilibrium. This theory has been adopted to emphatically, intrinsically and extrinsically elaborate to a comprehensive whole, the variance of imbalance of organizational management across the evolutionary phases of management, in a highly complex digital transitioning and transformational era. A dashboard analysis of the theory exposed organizational management and leadership (internal environment) as a fundamental fracture impeding organizational growth from reaching the required complexity of the digital age. In furtherance, provided measures to mend the organizational fracture.

Keywords: management; evolution; organizational disequilibrium; imbalance; complexity; leadership.

Introduction

Organizational management has evolved through the antecedent of revolutionary and transitional contingencies, famously, the industrial revolution (Chen, 2019), and now the ever-penetrating acceleration of the digital age (Mircea, 2015; Mckinsey Quartely, 2016; Meyer, 2017). Management theories have evolved from a null setting of theoretical (Business Communication, 2016; Segupta, 2018) and philosophical (Arun, 2018; Bragnes, 2007; Meinwald, 2019) ideologies through the path of interdisciplinary modeling and revolutionary precedencies. Yet, the faith of management theories is still derogatory and leaves stench of organizational melancholy in a highly complex digital revolution. In the words of (Matthews, 2016), the digital era has just commenced, but organizational management is far from equilibrium and battling with the reality of stability in an ever-changing global community. Indeed, the modern world has been adulterated, and altered by the resurgence of digital revolution, giving sleepless nights to organizations, in constant competition to catch up with the digital pace (Goran, 2017). However, the complexity of business organizations is not that they cannot catch up with the pace of digitization; the problem is compounded internally rather externally. Business organizations in the 21st century is rather dragged backward by their own internal processes and procedures rather than being left behind by the pace of digitization. The complex reality is that business organizations require change in management approach, parallel to features that speaks the language of digitization and complexity, compatible with the information age (Schwab, 2016). The complexity of the digital age is not only limited to the demand of celestial visualization, predictability and risk response rate, expansion and restructuring, adaptable and flexible practices (New Media, 2016), but also, the digital age increases complexity through globalization, interconnectivity, interrelationships, interactions and interdependence of individuals and systems (Kaufman, 1995). Exploration of weaker nations and weaker organizations, cybercrimes, insecurity and safety issues are other characteristic of a complex society. Hence, organizational management should adapt to managing these complexities. However, in a sharp contrast, management principles of the industrial era are no longer satisfactory. Organizational procedures of the industrial era are not compatible with the complex management requirement of the digital age. Fundamental to the success of the digital age is information (French, 2012). In other words, the digital age feeds on information to function efficiently. In respect, the digital age is people centered.
Indicating that an efficient management theory or principle is one that is able to manage people (the human resource of the organization) because information resides with the people. Therefore, management practices should focus on the study of human behavior that is fast transforming the digital world, in the form of innovation and technological advancement that enable organizations to predict and forecast human behavior in relation to change, growth and development.

The literature has attempted to respond to the challenges of organizational management in the 21st. This study has therefore built on the advancement made in the literature into a holistic force. The study has classified into three eras, the analysis of the evolution of management practices: pre-industrial, industrial and post-industrial. In furtherance, compounded and formulated the theory of organizational disequilibrium to elaborate into a holistic whole, the root causes of organizational imbalance or disequilibrium across the revolutionary and transformational stages of organizational management. Subsequently, this study proposed measures to mend organizational fracture and augment complexity in the digital

**Classification of the evolution of management practices**

The graduation and success of management principles from evolution to revolutionary existence has been the interplay of multidisciplinary fields of study rather than confinement to a constructive possession of a monopolistic field of study. The growth of organizational management has been aided through the scientific study of Economics (Adam Smith, 1723-1790) Sociology (Max Weber, 1864-1961) Philosophy (Socrates, 469-399 BC) Engineering (Frederick W. Taylor, 1856-1915) etc. It is very difficult to classify which subject area has made the most impactful contribution to the growth of organizational management. This study has therefore segregated the study of management into three analytical phases:

**Pre-industrial era**

This period describes the early formational stages of man and his communities prior to the commencement of the industrial revolution around the mid-1700 (Torrington et al., 1989:12).Consequentially, the first Homo sapiens is the native of this era and by 12,000, Homo sapiens made other transitions in their environment (McBrearty and Books, 2000). According to Stockton (2017), pre-industrial era was anything but paradise “for thousands of years, town planning meant little more than putting houses close together and hoping for the best. As a result, ancient cities were death traps, full of overcrowding, diseases and filth. Especially filth.”- (McBrearty and Books, 2000). If this statement is any testimony of the pre-industrial era, then obviously, McGrath (2014) is right to claim that little existed to be associated with the practice of management. Without missing words, Hartwell (1971) also confirmed that pre-industrial era was very static and often cruel, dominated by child labour, dirty living conditions and long working hours. Withal, does it mean there was no management practices in pre-industrial era?

The Merriam-Webster dictionary interprets management synonymously as administration, change, control, supervision, direction etc. According to the Business Dictionary (n.d), the size of management varies across persons, organizations and multinational. Wilkinson (2013) attempted the definition of management as “a single or group of individuals who challenges and oversees a person or collective group of people in effort to accomplish desired goals and objectives”. Denning (2013) admonished that management matters and that what happens in management is a measure of how far we go in life. He stated, “Without management, no people are clothed or fed or housed, no children are educated, no health services are provided…and no government can be run”. In congruence, history confirmed that people and group of people have challenged, and oversee the accomplishment of desire goals. The Mali Empire, Ghana Empire and the Roman Empire are all testimonies of great management techniques. Management theories cannot be subjected to control experiment in the laboratory, but management represents a direction and focus of life. Therefore, management practices have existed since time immemorial, but the practice and subject area have evolved and transformed overtime.

The pre-industrial era defines and confines management into systemic foundation and evolution of managerial ideas, mostly rational and philosophical, but relevant to the emergent and celestial application of knowledge in the contextual era. This period was dominated by rational and management
perspective and principles largely reflected in today’s management practices. The managerial ideologies of this era focused on the perceived concession of management as a methodology of practice than as a field of study (Griffin, 1987:38; Black and Porter, 2000:32; Mescon et al., 1988:41). The pre-industrial era marked the period prior to the introduction of machines. We can therefore support (Hodgetts and Kuraliko, 1988:31) intuition that large-scale production was few or nonexistence. As such, management processes within this period did not experience the level of complexity associated with the industrial and digital revolutions (Bateman and Snell, 2002). Historically, the first managerial incidence could be accredited to Adam, the first human creation according to the bible (Genesis 1:27, stated in Walvoord, 2008). The bible made it clear that God created Adam in his own image and likeness and put Adam as the dominion of his (God's) creations (Genesis 1:26-28; Psalm 8:6, stated in Kulikovsky, 2009). In other words, Adam was the manager of God’s creations and the first manager ever. Other great contributors to management evolution during this period include.

**Aristotle (384-322 BC):** the great philosopher and scientist universally known for the classification of animals into genus and species, and the founder of formal logic (Amadio & Kenny, 2019). Aristotle writings on actions, choice, virtue and constitution are among his relevant contributions to the evolution management. His work on household- management comes nearest to today’s management practices (Nurmi, 1984).

**Socrates (Socrates, 469-399 BC):** Socrates the Greek philosopher, who is believed to have brought down philosophy from the heavens, is also widely recognized for inaugurating the study of management and business ethics (Bragues, 2007).

**Adam Smith (1723-1790):** Adams Smith, the father of modern economics is largely credited for laying the foundation for modern management practices through his work on the division of labour. In his book, the wealth of nations (1776), Adam Smith laid the bedrock for the foundation of management in the industrial revolution.

### The industrial era

This is a transition from the pre-industrial era to a period of expansion and growth, massively fueled by the introduction of machinery and emergence of factories and industries for large-scale productions (Chen, 2019). The period is largely accrued to the industrial revolution of the late 17th to 18th centuries, pioneered by the creation of the steam engine (History.com, 2019; Wren, 1979:45). Commencing in England, the period can best be described as a total shift in life processes. A transformation from domestication to factory or industrial production. This is not to propel into the conclusion that pre-industrial era was characterized mainly by domestic production, but the concession that pre-industrial contribution to Gross Domestic Product (GDP) was in most quantities subsistence and few commercial production due to the absence of equipment for voluminous production (Hudggets, 1981:6; Torrington et al., 1989:12). The period marked a great revolutionary from labor-intensive to capital-intensive system of production. Synonymously, this period has been described as the machine age due to the innovation and technological growth with industrial explosions in the form of mini and mega factories, medium and large-scale enterprises, accompanied with vociferous demand for change in management principles to accommodate the complexities of industrial revolution. According to (Kwok, 2014) industrial management theories can be categorized into three main branches-bureaucratic, administrative and scientific. Bureaucratic management theories are largely known for the work of (Weber, 1905, cf Sociology Group, 2018)). Fayol (1949:43-110) is credited as the pioneer of administrative or process management. Taylor (1911) is recognized as the father of scientific management approach. Each of these theories were evolutionary to meet the complexity of the industrial era. Inductively, implying that the complexity of the industrial era requires different level of thinking and management approach for organizational sustainability and growth. During this period, the rational and philosophical theories of pre-industrial era were put to test and in some cases enhanced to meet the increased level of complexity of the era. In other word, each revolution comes with its own level of increased complexity, shifting away far from equilibrium, business organizations (internal environment) and creating a phenomenon known as organizational imbalance with the external environment.
Post-industrial era

Literature still celebrates the living testimony of the industrial era. Some writers like (Eubanks, 2017) hold strong concession that the industrial era still lingers on. Others such as Matthews (2016) is with the view that the digital era has just began. Salazar (2016) ascents that the digitization is just a more modern version of industrialization. Simply put, the post-industrial era is dominated by digitization and new world experience of the information age. Nevertheless, the digital era is defined as the period commencing with the creation of the transistor in 1948, but only got properly integrated into society with the arrival of personal computer in the 1980’s (Digital Tonto, 2012). The term digitalization and digitization are associated with the period and used interchangeably, but the digital revolution has been accepted generally as the increase adoption and use of digital tools such as computer etc. by an organization, industry country etc. (BarNir, Gallaugher and Auger, 2003; Khan, 2016). Pariona (2017) defines digitization as the development resulting in the switch from mechanical and analogue to digital. In the business parlance, digital transformation is the change in working culture through the implementation of digital technology in organizational processes, operations and activities (Parviainen et al., 2017). The digital era has witnessed never before in the history of the world, information dissipation at a breath taken pace. The rate of penetration and acceleration of information in the digital age is unprecedented and shrinks the world into every corner of life. Hinton (2015) argues that the digital age represents a means of distributing information in a much, faster and universal way. According to (Jones, 2016), “digital evolution sped up everything both by facilitating communications (satellites, cellular phones, network, fiber optic cables, data centers, cloud computing, internet, standardized software...”). In the words of Ardman (2018), the digital revolution is doing it all over again, but more deeply and ubiquitous.

Collin, Heikkinen, Korhonen, Halén, Itälä, and Helenius (2015) observed that digital revolution is transitioning and transforming the value chain in the global market and this is taking the business world by storm. Scholars such as (Brennen and Kreiss, 2014; Li, Liu, Belitski, Ghobadian and O'Regan, 2016; Brynjolfsfison and McAfee, 2014; Bonnet, D., McAfee, A., Westerman, G., 2014) have acknowledge that digitization is transforming business models and management approaches. In effect, the digital transformation is speaking a different language of pace, speed and universal distribution of information to reach everyone. Tyler (2018) commemorates that the industrial revolution drives people from the countryside to the cities, but digital revolution carries the cities to the people in their various towns. In other word, the digital age is more inclusive that the industrial era. Indeed, the digital revolution is a true revolution for everybody, anybody and everywhere. A revolution larger than any other revolution in history due to its penetration to deep rooted communities all over the world. Digital revolution is part-and-parcel of the people and the people part-and-parcel of it. The digital age is an era for the people, made by the people and consumed by the people, hence people centered. This makes relationships and interactions within the system ever more complex, as every individual character contributes to influence the behavior of the system. With ever-increasing complexity, business organizations (internal environment) further shifts away from equilibrium, creating a variance of imbalance with the external environment.

Complex Adaptive System (CAS) in post-industrial regime

The journey of organizational management from pre-industrial to post-industrial era, from evolution to revolution, and to its status, owes much to the demand for increase organizational complexity. As demonstrated in the previous sections, revolution is not precisely the problem of organizational management, but the level of complexity required to sustain organizational balance with the global environment. Complexity is therefore not a choice, but a necessity for survival in CAS. According to McDaniel, Lanham and Anderson (2009), understanding the fundamental properties of CAS aids in diluting appropriate research solutions. CAS offer valuable tools that enables organizations to make sense of natural phenomenon and provide appropriate response (Ellis and Herbert, 2011). The aim of this study is not for a deep-throat cover of CAS, but helping with a diagnostic comprehension of CAS fundamental.

Just as the evolution of management is interdisciplinary, so is the study of the complexity surrounding organizational management. Complexity evolved from more than one theoretical
framework (Yolles, 2018). Complexity theory emerges from the principle that human behavior is non-linear (Capra, 2002) and due to the intensity of interactions among a large number of micro and macro components within a system and between a system and its environment (Chan, 2001). A complex adaptive system involves many natural systems (societies, revolution, economic systems, the brain etc.) and as many artificial systems (artificial intelligence, evolutionary programmes, engineering systems, business organizations among others) (Honavar, 2001). According to (Colella, Klopter, and Resnick, 2001).

“CAS is a system made up of many individual parts or agents”. CAS are not stable systems, but dynamic system that are able to adapt and evolve as the external environment keep changing. In order word, a business organization is an automatic member of CAS that contributes directly to the global environment and directly influenced by changes within the global environment. As stated by (Honavar, 2001), there is no separation between a system and its environment, a system always adapts to meet the complexity of its environment. Gell-Mann (1994) confirms this position stating that agents within CAS are in constant interactions with its own environment and the external environment, acquiring information into a kind of schema and acting based on the schema. McDaniel et al., (2009), enumerated five characteristics of CAS to include (a) diverse agents that learn (b) nonlinear interdependencies (c) self-organizing (d) emergent order and (e) coevolution. Others are far from equilibrium, state of paradox and connectivity (Page, 2009). CAS is irreversible and unpredictable (Gell-Mann, 1994). This assertion makes Doorley (1997) proceeds that the best way to predict the post-industrial era is to, allow it to evolve, and then observe what happens.

Analysis of CAS and organizational disequilibrium

Characteristics of CAS may be irreversible and unpredictable because change is dynamic, but change is not spontaneous. Change occurs over a period. As elaborated in section 2.3, the digital revolution took a period of more than 200 years to commence. A change resulting from an individual element or schema may affect other schema or entities around it (Gell-Mann, 1994), but not spontaneously. The entities/elements within a system may respond to a change overtime, due to the process of learning, which may take time to adapt. Hence, individual element in a system may be affected, but a change in the external environment implies a greater proportion of schemas adapting to a new knowledge.

Chaotic phenomenon is unpredictable because individual elements may exhibit paradoxical characteristics of the self (Doorley, 1997). However, chaotic situations are only evolutionary, but not revolutionary because chaotic situation do not necessarily represent the general characteristic of the external environment. They represent various elements or associations within the internal environment, which is itself, a part of the external environment. The precedence of revolution resulting in the formation of a new order implies chaotic elements or elements of both the internal and external environment exhibiting similar patterns of behavior. Only through this, we can talk of revolution or transformational change or drive, resulting in organizational shift from the state of equilibrium or organizational imbalance with the external environment.

Prediction within a chaotic system may not be necessary because chaotic systems are not synonymous to revolutions. Chaotic situations may be defined as revolutions if and only if elements within the larger ecosystem are showing similar patterns of behavior of the chaos system. In this case, the chaotic situation may no longer be described as chaotic, but as acceptable behaviour that can be predicted because they exhibit general pattern of change over time. Therefore, a change is unpredictable only in the chaotic state, but an external or global change is predictable when different elements of the environment begin to exhibit similar traits and characteristics with time. The challenge for business entities is prediction with precision because of differences in organizational fracture. This may be accrued to differences in organizational learning and resource capacity especially resulting from differences in the intellectual capital and the quality of leadership.

Overview of economic disequilibrium

Disequilibrium is a displacement from the status of stability (Biswas, 2018). No economic condition flourishes in the pursuance of disequilibrium. A monopolistic condition is an artificial creation of economic instability; they set prices above the marginal cost because of absence of competition. Hence,
no economic efficiency is ever produced in a monopolistic ecosystem. A favorable economic condition that produces efficiency and effective use of resources is the point of equilibrium (Kainz, 2011). A general status of disequilibrium is a market condition in which the interplay of demand and supply fails to agree, resulting in inclination for change (Essay-Uk, 2018). Market disequilibrium is a function of market deficiency resulting in shortages or excesses in aggregate demand or aggregate supply side of the economy. Economists argue that any point below equilibrium point implies economic resources are under employed to full capacity. In the classical view, the economy automatically adjusts to clear the deficit, but Keynesian advocates contend this position, stating that markets may not be self-adjusting that markets will not attain full potential if allow to self-regulate (Essay-Uk, 2018). Thus, there is the need for deliberate actions by government to restore market conditions to equilibrium.

The theory of organizational disequilibrium

The theory of organizational disequilibrium is a consultation theory compounded on the principles of CAS, economic principles, management perspective and general change theory. The foundation of the theory is deep rooted in CAS concession that a perfect understanding of individual parts does not necessarily translates into a perfect understanding of the whole (Miller and Scott, 2007). Thus, understanding the internal organizational environment is inadequate to meet the complexities of the external environment. Economic principles are adopted in this theory to demonstrate the inadequate employment of organizational resources to full capacity—especially leadership. As a result, there is the tendency for change, which again explains the need to augment complexity to attain the level of equilibrium. This theory also adopts the Keynesian’s view for deliberate actions of organizations to increase complexity to attain and sustain equilibrium with the global market. A management view, according to this theory is relevant to cure the organizational fracture. Organizational leadership and management, in this instance, leadership roles and quality, an integral necessity to ensure the employment and deployment of organizational resource towards technological innovations.

The global environment is tensed with rivalries, ever-increasing competition coupled with fusion and diffusion of the global market with constantly changing, and evolving technological innovations of which digitization is the cynosure. Management principles of the 20th century (industrial era) are no longer sufficient to produce the level of complexity required in the post-industrial era because the business environment is not at par with digital revolution. This often created the condition this paper refers to as organizational disequilibrium. The state of disequilibrium is a phenomenon where the business organizations (internal environment) is not at par with globalization (the external environment). No business entity wishes to find itself in the state of disequilibrium. However, the influence of the whole (the external environment) carries a greater proportional weight than the influence of the part (internal environment). As a result, the global environment is able to exert weight on equilibrium position, forcing a shift upward and to higher levels of equilibrium position. The internal environment in this content carries a description analogous to “David and Goliath”. In this scenario, Goliath is the external environment or master, and David the internal environment or servant. David or the servant have no choice, but to follow in the path of the master and tries to adapt to tactics and strategies to meet the demands of the master. Following that, the inability of internal environment to adopt and adapt strategies towards attaining and sustaining higher levels of equilibrium with the external environment creates unpleasant conditions for survival. The external environment is able to influence the direction of the internal environment coz the interactions, interconnections, interrelations and interdependence of networks and individuals increases complexity higher than the activities within business organizations. When the various components within the external environment exhibit similar characteristics and build stronger schemas, they assume a steady pattern of behaviour that imposes force on the equilibrium position and in the process displacing equilibrium status.

A dashboard view of the theory

In figure 1.0, two factors have been identified as relevant for organizational shift toward equilibrium i.e. organizational capacity with reference to a) resources and b) quality management and leadership. Management and leadership constitute one unit and represented on the vertical axis and organizational resources e.g. capital, human resource etc. also represented on the horizontal axis. The downward
sloping curve represents the internal environment (IE) and the upward sloping curve denoted the external environment (EE).

Figure 1.0. Disequilibrium caused by external complexity

In figure 1.0,
- M/L = Management and leadership capacity; M/L₀ = Management and leadership capacity at initial equilibrium of e₀; M/L₁ = Management and leadership capacity required to attain new equilibrium of e₁
- M/L₁ – M/L₀ = Level of increased Management and leadership capacity required at e₁
- R = Organizational resource capacity
- R₀ = Initial Organization resource capacity at e₀
- R₁ = Required Organization resource capacity at e₁
- R₁ – R₀ = Required Organization resource complexity at e₁
- e₀ = Initial equilibrium position (during industrial era)
- e₁ = New higher equilibrium position (during post-industrial era)
- O = Zero complexity; zero internal and zero external pressure

IE and EE are curves, but assume a straight line, indicating the state of chaos that can be experienced externally and internally. At the state of chaos, both IE and EE are curves implying a complex and unpredictable conditions. However, after sometime, the curves assume a straight line, a phenomenon representing observable behaviours that are predictable.

At e₀ IE and EE are at equilibrium with a resource capacity of R₀ and management and leadership strength of M/L₀. Nevertheless, equilibrium at e₀ was only relevant as far as the industrial revolution was concerned. Globalization and digitization during post-industrial era increase the complexity within the external environment (EE) disproportionate to organizational complexity, which moved the equilibrium point from e₀ to a higher equilibrium at e₁. The complexity within the external environment created the condition known as disequilibrium or organizational imbalance (e₁-e₀). Complexity within EE intensified due to technological innovations, competition in the global market and new market demand etc.

The movement from e₀ to e₁ was along a straight line. Indicating that the change did not occur overnight. The new equilibrium position in the global ecosystem does not only intensify the fight to attain efficiency at e₁, but exposes organizational incapacity or deficiency at R₁ – R₀, and management/leadership capacity gap of M/L₁ – M/L₀. The difference in capacity gap is the required level of complexity necessary to restore organizational equilibrium and efficiency at e₁.

In brief, the theory of organizational disequilibrium is a condition or phenomenon that displaces organizational equilibrium with the global environment, a consequence of revolution transformations. This theory posits that organizational imbalance is only temporal, but organizational fracture disables a spontaneous response necessary to increase organizational complexity required to sustain equilibrium with the external environment. The inability to produce a spontaneous response imposes unpleasant
conditions in the form of organizational dissolution, pre-mature death and organizational collapse. Organizations therefore in order to sustain completion requires increased level of complexity in technological innovations, capital investment, human resource development and effective and efficient leadership.

**Disequilibrium emerging from internal complexity**

Output may be disproportionate to input, allowing small input to produce large outcomes. Similarly, large inputs may produce small outcomes (McDaniel et. al., 2009). A possible scenario applicable to the theory of organizational disequilibrium is the disproportionate influence of the IE on EE, to impose a shift away from equilibrium. This happens when complexity within the IE develops characteristics or schemas similar to other schema or agents within the internal environment. When this phenomenon occurs, IE grows larger with increased complexity and characteristics disproportionate to unparalleled behaviours within the external environment. The size of IE gradually grows allowing it to gain more influence and commands a shift away from equilibrium. In figure 2.0, EE requires a bodily shift from $EE_0$ to $EE_1$ to assume equilibrium at $e_1$.

![Figure 2.0. Disequilibrium caused by internal complexity](image)

A downward shift in $M/L_0$ to $M/L_1$ implies a tradeoff between management and organization resource capacity. In other words, innovation and the drive for change in post-industrial era does not require many managers, but improved human resource capacity through training and development and distributional leadership, to influence individual beliefs in driving change through technological innovations. A shift from $M/L_0$ to $M/L_1$ further echoes the point that the digital age is stupefied by the need for more leaders than managers who can connect to teams internally and externally to lead the transformation change of innovative growth. A shift from $R_0$ to $R_1$ is a prerequisite condition that requires organizations to spend more on human resources to improve the existing technological capacity and encourage individual innovations; thus, increasing the complexity necessary to drive the change. When an organization drives the change, it becomes the leading player in the industry. For example, England commenced the birth of industrialization; hence, England benefited enormously as the leading innovator. Internal influence on the equilibrium position is possible in learning organizations that are industry drivers and direct the path of innovation. This scenario is a possible reality, but not often the case for most organizations. Management and leadership influence on organization shift toward equilibrium has been given further impetus in section 7.3.

**Factors affecting organizational shift towards equilibrium**

Organizations are slow to react to change. Technological innovations in post-industrial regime, moving at exponential rate, is not really the dominant challenge of organizational management. Instead, accepting change, adopting learning strategies and adjusting to a new organizational culture that comes
along with the change. According to Quick Base (2012), "it doesn’t matter if the proposed change is a change in the process of project or general planning or general operation. Adjusting to change is difficult for any organization and its employees". A research conducted by Garner incorporation (2014) on technology adaptation reveals that CEO’s pay attention to things that are easily measurable than things that adds the most value to the company. Michelman (2016) carried out a research on the CEO’s of Accenture and discovered that as at 2015, many leaders are still in limbo of having a website or even the need for cloud computing. The Lewin’s Change Management Model, shows that majority of people are not in favour of change and will therefore engage in any repellant behaviour to discourage it.

The cost of complexity

Accepting change is a daunting task for organizations and its employees. However, change is everywhere, but not everywhere free. Change requires adapting to higher levels of complexity and complexity is a cost to every organization as organizations and employees have to adjust to a new organization culture, which is more demanding technically, mentally, requires advanced knowledge and skills, time involving and financially straining. In figure 2.0, the cost of complexity is the cost of management expenditure that must be forgone (ML1-ML0) in order to increase organizational resource capacity from R0 to R1. In figure 1.0, to attain the desired level of complexity from e0 to e1, the organization will have to increase expenditure on organizational capacity from ML0 to ML1 and R0 to R1 respectively. Hence, the cost component of organizational management is a major drawback in the quest to keep up with digitization.

Improving organization imbalance in post-industrial era

Firstly, improving organizational imbalance requires identifying areas that need improvement and what kind of improvements necessary to affect the required complexity. Complexity in the digital age is not a reflection of a fixed phenomenon. Complexity is relative in time and space, culminating from various factors including the speed of technological innovation and transformation within the external environment. Complexity in the digital age can be intensified in to two major ways: a) figure 1.0-a bodily shift in IE or b) figure 2.0- a movement along EE. In figure 1.0, improving organization imbalance requires a bodily shift from e0 to e1. A bodily shift in IE implies organizational incapacity in all areas including management and leadership and organization wide resource capacity. This indicates a total transformation or improvement required to sustain organizational growth. In figure 2.0, attaining equilibrium status at e1 is rather substitutionary and requires a movement along the same path, EE. Improving organization imbalance requires organizations to spend more on their human resource i.e. employees and leadership development, but not on management. Representing a shift or movement of resources in particular area(s) to other area(s) that are more valuable. Chery (2019) posits that making a lasting change is a function of three variable: knowledge, resource and readiness to change. Removing or eliminating organization imbalance also requires improving these three variables through:

Relevant learning theories

Day (1994) in his study of organizational learning defining learning as the process of adopting new knowledge based on informed inquiry and interpretation. This postulate that organizational learning is not reflex but a mental consciousness through cognitive ability (Hesse et. al., 2001). On the other hand, Odor (2018; Bergmann, 2000) agrees with Day (1994), but adds that learning is also through behavioural approach. Argyris (1977) claims that learning leads to discovery and correction of errors. However, Dooley (1997) argues that learning and change are dependent function of each other. In other words, without adoption of effective organizational learning practices, organizations may not acquire new knowledge relevant for organizational growth. Nevertheless, organizational learning does not occur in a vacuum and learning is not a codified property of one organization. Organizational learning is a context between internal and external interplay of agents (Glynn, Lant, and Milliken, 1994) resulting in the discovery of new knowledge. The external environment represents a more complex structure of multiple interactions, interdependencies, interconnectivity that directly or indirectly contributes to value appreciation on the organization. Knowledge is not unidimensional; therefore, learning must be multidimensional in solving uncertainties (Boiston and Child, 1999) of the external environment that
affect the internal environment. It is therefore very necessary for organizations to engage in knowledge sharing strategies such as benchmarking, community of practice, crowd sourcing, association with digital platforms etc., to acquire and tap relevant external knowledge. In figure 1.0, the shift away from equilibrium was because of application of new technological knowledge within the external environment disproportionate to technological growth within the organization. Organizational knowledge is a prerequisite for technological innovations (Gomes and Wojahn, 2017). Diversity is a mandate for creativity and problem-solving ability McDaniel and Walls (1997), but knowledge is diversional, hence organizational learning is strategic approach to tackling organizational complexity.

Organizations should focus on learning as a scientific measure to predict and focus the next level of action. Detailed prediction of systemic behaviour is impossible (Zimmerman, 1998), but learning is a systemic acquisition of knowledge; hence, learning is not spontaneous. Therefore, organizational learning can guide with the direction of change, since learning is externally participatory. In figure 1.0, increase in M/L_0 to M/L_1 requires organizational leaders in addition to possessing the necessary leadership qualities to be psychologically strategic and scientifically equipped to study and manage its human resources.

**Training, development and organizational research**

Complexity is a necessity but attaining the required level of complexity in post-industrial era require organizational employment of resources to full capacity. In figure 2.0, employment to full capacity is resident on development of organizational human resource. However, the value of organization’s resource capacity includes intellectual capital that is not readily available (Chen, 2019). In order for organizations to lead the wind of change, organizations must be ready and able to mine new knowledge across the breath and length of its human resource. The digital world has demonstrated that the drive for change is rather the drive for individual innovations, exploring idle knowledge. Digital innovation is not necessarily planned action of management, but the intellectual applications of individual like Mark Zuckerberg, Osafo Kantanka of Ghana etc. In order to make visible the invisible organizational assets, organizations must be ready to motivate and train future leaders to identify other digital gurus within the company (CCCK online, 2018).

Just as intellectual capital is hidden and resides in individual human resource of the organization, so is knowledge. Knowledge is not always acquired. It is only acquired after it has been discovered. Therefore, the most assured way to uncover raw knowledge is to invest in organizational research to discover raw knowledge. Research and development is the first stage in the development process that leads to the discovery of new products (Kenton, 2019) and a leading factor in displacing IE away from EE.

**Modeling management as function of leadership**

Kottler (2001) states that management involves dealing with complexity whiles leadership deals with change. This may be comprehensive in the sense that leadership is closer to change, hence, able to effect necessary change. Thus, change is a direct function of leadership, but indirectly contingent upon management. Management and leadership are often argued to be complementary concepts of similar purpose, but this duality is incongruence in debt and application because no matter their complementary roles, leadership in the position of change depends on management to function. In this sense, management can be argued to be perceived from a broader or macro perspective whiles leadership from a micro or narrow angle. This analysis can be inferred from the evaluation interpretation of management and leadership roles in organizational performance. Management, (a passive function), and leadership (activity function) are complement of change, but the active has to depend on the passive to function. This is incongruence and will eventually fail with intense complexity.

The argument of this study is that organizational fracture is deeply rooted in the duality of the two concepts: leadership and management. The digital age is skeptical. The paste of digitization is outdoing and outmoding laid down procedures and plans. Management plans and processes often become outmoded relative to the rate of change in the global ecosystem. As a result, management processes are not spontaneous response to complexity that influence the required change. In other word, the lag in management response is a deficiency to change. This paper is with the view that organizational
imbalance can be reduced if management is practice as a distributive and executive function of leadership. In essence, management is modeled actively than passively as a process. The 21st organizations should begin practicing management as an activity and not a process because the process represents just the means, but activity is living the means. According to the contingency theory, what managers do depend on the situation at hand (Chandra, 2013), but this explains the reason why management is in slumber and moving at a slower pace as a follower. However, the formula in the 21st does not require followers, but leaders who can effect rapid change; this can only be modeled through everyday activity.

This study argues that it takes innovation to check innovation. Hence the continues use of managers with insufficient capacity to match a digital system of machine exploration of Artificial Intelligence (IA), is an imperfect fit of a square peg in a round hole. Thus, the digital age requires a carbon copy of itself to match its pace and speed for successful organizational management. Electronic-Leadership (Walumbwa and Weber, 2009) is an example of a perfect system, necessary to cut down the cost of management, and distribute management as a constructive function of leadership.

Conclusion

Latour (1992) and Callon (1999) professed that technology is made by humans, and substituted for human actions. Shield (2012) in a similar voice claimed that technology shapes human behaviour, but does not determine human actions. In order words, the post-industrial era may be transcending at exponential rate. However, the inability of organizations to match the pace of digital revolution is fundamentally the inability of human beings to live up to their own standard. According to (Drucker, 2009), management is doing things right, and leadership, doing the right thing. So therefore, organizational imbalance is certainly a problem at the doorsteps of organizations not doing things right and leadership not being empowered to do the right thing. Hence, in order for business organizations to attain the necessary complexity required in the digital age, organizations must adopt a radical and paradigm shift in organizational management. Organizational leadership need a virtual reality glasses that project the future in the form of a mirror-like image, draws on existing technology trend, modify to simplicity, relatable and applicable future complexities and possible revolutionary changes. Leaders do not need to be supernatural; they only need to super humans, as management in the 21 century requires more than just being a human to model the reality of what the next revolution will be. Leaders need to be people with celestial minds, visionary, system thinkers, pace setters, with vast psychological experience and intellectual capital extractors. The focus of the digital age should be the language of management, meaning leadership and leadership translated as management.

References


[76]. Stockton R. (2017) why pre-industrial life was anything but paradise. Available at: allthatisthinking.com/pre-industrial-history-gross. [Retrieved on 19/07/2019].
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