The Use of Mobile Phones among Undergraduate Students-a Case in Ghana

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Abstract

The response to the development and growth of mobile phones in Africa has introduced new ideas in education, business, health, and banking needs of a country. Ghana has become a great place for mobile technology implementation to thrive as there are enough users to support the relevant technologies. In fact, the latest industry statistics released by the National Communications Authority state that, out of a population of 24.97 million, there are approximately 24.4 million subscribers on at least one of the five active mobile networks in the country. The objective of the study is to review the level of usage of the mobile phone by college students in both the private and public institutions in Ghana. The study looked at what the average student's level of usage of the mobile phone on a daily basis and the frequency of usage for the following activities; education-related research, personal finance, religious activities, making and receiving calls, current events. work related research, playing games watching movies, listening to music and social networking. The research revealed that 20.0% of the respondent always listening to music on their mobile phones, playing games 7.9%, watching movie 2.0%, social networking 46.5% , work-related research 12.9%, educational-related research 17.8%, religious programmes 3.2%, personal finance 15.0%, current events 3.2% and making and receiving calls 65.0%. The research also looked at the duration of usage by the students at school, home and at the work place. When it comes to using the mobile phone at home 32.0% said they spent 7 hours or more on their mobile phone at home, 9.9% spent 7 hours or more at school and 3.5% spend the same hours or more at the office.

Key Words: Mobile phone, undergraduates, Ghana.

Introduction

Africa now has more than 650 million mobile phone subscribers. That's more than either the United States or the European Union. And it's a market that has seen explosive growth. Since 2000, the mobile phone market has grown 40-fold, from 16.5 million, according to the world bank (Yonazi, E., Kelly, T., Halewood, N., & Blackman, C., 2012, p. 22).
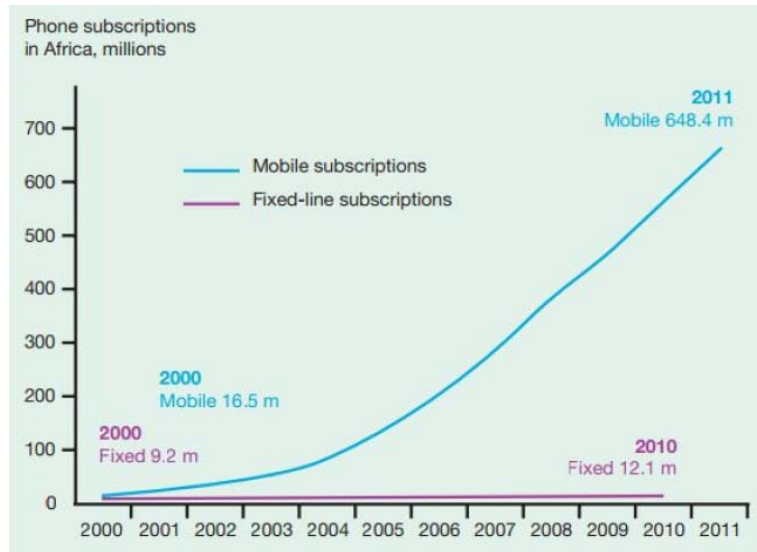
Figure 1

Africa trailed only South Asia as the region with the largest average mobile growth rate from 2000-2011 (Yonazi, E., Kelly, T., Halewood, N., & Blackman, C., 2012, p. 22). According to Yonazi, E., Kelly, T., Halewood, N., & Blackman, C. (2012), Jamal Saghir, World Bank Director for Sustainable Development in the Africa Region, said in a statement; "The Internet and mobile phones are transforming the development landscape in Africa, injecting new dynamism in key sectors. The challenge is to scale up these innovations and success stories for greater social and economic impacts across Africa over the next decade,". The rise in ICT in Africa has also led to a growing number of technological hubs; from Kenya's iHub to Senegal's BantaLabs. "Africa is rapidly becoming an ICT leader. Innovations that began in Africa – like dual SIM card mobile phones, or using mobile phones for remittance payments – are now spreading across the continent and beyond," said Tim Kelly, lead ICT policy specialist at the World Bank and an author of the report, in a statement. "The challenge going forward is to ensure that ICT innovations benefit all Africans, including the poor and vulnerable, and those living in remote areas " (Yonazi, E., Kelly, T., Halewood, N., & Blackman, C., 2012, p. 31).

Ghana was recently listed at number 14 by the World Bank in the Top 29 countries with the highest growth based on 2013/2014 growth estimates – and what we are seeing is that many of the countries in Africa experiencing fast paced growth are adopting various mobile and ICT technologies, which have helped them reach such high growth projections. By utilising mobile technology, new ideas are able to emerge out of pure necessity to meet the educational, business, health, and banking needs of a country. Ghana is a great place for mobile technology implementation to thrive as there are enough users to support the relevant technologies (Assabi, 2012)

The latest mobile cellular subscriber base figures for the period ending August 2014, indicate that mobile data subscribers in the country now account for almost 50% of total number of mobile phone lines and over 55% of Ghana's population. As at the end of August 2014, the total mobile subscriptions in the country was 29,531,488, while total data subscribers also reached 14,615,048, which is 49.5% of the total. Meanwhile, at the end of August 2014, the country's population was estimated at 26,566,240 so the number of mobile data customers constituted 55.01% of the population (Dowuona, 2014).

This study looked at the average university student's level of usage of the mobile phone on a daily basis. The study adopted a survey research approach. The research revealed that 20.0% of the respondent always listen to music on their mobile phones, 7.9% played games, 2.0% watched movie, social networking had 46.5% , work-related research 12.9%,

educational-related research 17.8%, religious programmes 3.2%, personal finance 15.0%, current events 3.2% and making and receiving calls 65.0%.

Methodology

The objective of this study was to obtain the current mobile phone usage by undergraduate students in Ghana . The study adopted a survey research approach. The survey strategy is usually the preferred choice for collecting original data from a large population of interest at lower cost (Trochim, 2009). Surveys have become a widely used and acknowledged research method. The concept of considering information derived from a small number of people to be an accurate representation of a significantly larger number of people has become a familiar one. Since the mobile phone provides a source from which general information is known or can be collected, Survey research is considered an appropriate technique for this study. Data collected from the survey covered; Phone category, Nationality and Type of Student.

Table 1: The various Category of Phones students use.

Phone Category

		Frequency	Percent
	No Response	4	.5
Valid	Conventional	147	16.9
	Smart	718	82.6
	Total	869	100.0

Table 2: The Nationality of Student who responded to the survey

Nationality

		Frequency	Percent
	No Response	3	.3
Valid	Ghanaian	815	93.8
	Nigerian	42	4.8
	Togolese	3	.3
	Ivorian	1	.1
	Others	5	.6
	Total	869	100.0

Table 3: Distribution of the various student types

Student Type

		Frequency	Percent
	No Response	1	.1
Valid	Full Time	781	89.9
	Evening	54	6.2
	Weekend	33	3.8
	Total	869	100.0

Category of phones used by the students, 16.9% were using the conversional phones and 82.6% smart phones. (Table 2). On nationality because Ghana now has quite a sizable number of foreign students. 93.8% were Ghanaians, 4.8% Nigerians, 3% Togolese and 1% Ivoirians. (Table 3).

The research also looked at the hours per week the average student actively used the mobile phone at school, home and at the office especially evening and weekend students.

A paper-based survey was developed and administered by the authors. Out of the 900 questionnaires that were administered, 869 were received. The survey results were evaluated using SPSS. From the 869 respondents 51.2% were male and 48.8% were female. Table 3 indicates that 89.9% were full time students, 6.2% evening students and 3.8% weekend students.

Results and Discussion

The respondents were asked to indicate the purpose of their use of the mobile phone under classifications such as playing games, listening to music, watching movie, social network, work-related research, educational related research, religious activities, personal finance, current events and making and receiving calls (Table 4).

Table 4: Percentage distribution of the Purpose of usage of their mobile phones

PURPOSE OF MOBILE PHONE USE	PERCENTAGE						
	Always	Frequently	Occasionally	Rarely	Never	No Response	Total
Playing Games	7.9	18	25.8	26.2	19.6	2.5	100
Listening to Music	20.0	30.8	28.4	15.4	4.3	1.1	100
Watching Movies	2.0	4.4	15.7	30.8	43.6	3.5	100
Social Network	46.5	31.6	8.7	4.2	7.5	1.5	100
Work-Related Research	12.9	29.2	33.9	9.3	9.3	5.4	100
Educationally Related Research	17.8	38.7	28.0	7.5	4.7	3.3	100
Religious	15.1	23.6	28.1	14.2	13.2	5.8	100
Personal Finance	3.2	7.9	17.8	23.2	43.3	4.6	100
Current Events	15.0	22.1	24.1	18.8	16.8	3.2	100
Making and Receiving Calls	65.0	24.1	6.2	1.8	0.9	2.0	100

Playing games

The mobile phone provides a lot of entertainment and games for users. It has become a means by which users can play a lot of games. The research revealed that 7.8% of the respondents always play games on their mobile phone, 18% frequently, 25.8% occasionally, 26.2% rarely play games, 19.6% and never play games.

Listening to music

The mobile phone provides musical entertainment and free videos for lovers of music which can be downloaded onto the phones. The research revealed that 20.0% of the respondent always listened to music on their mobile phones, 30.8% frequently, 28.4% occasionally, 15.4% rarely and 4.3% never listen to music on their mobile phones.

Watching movies

The mobile phone is now well suited for watching movies. Users of smart and android phone download and watch movies on their phones. The research revealed that only 2.0% of the respondents always watch movies on their mobile phones. 4.4% frequently, 15.7% occasionally, 30.8% rarely and 43.4% never watch movies on their mobile phones.

Social network

Today's mobile phone offers the opportunity for users to create online social network among students. It provides the many-to-many communication medium, unlike the conversional one-to-many communication medium. The research showed that 46.5% of the respondent always have social network online on their mobile phones. 31.6% frequently, 8.7% occasionally, 4.2% rarely and 7.5% never.

Work-related research

A lot more Ghanaians now use the mobile phone for work- related research. The research showed that 12.9% of the student respondents always use the mobile phone for work-related

research. 29.2% frequently, 33.9%, occasionally, 9.3% rarely and 9.3% never use it for work-related research.

Educational related research

Today the mobile phone provides learning platform applications including downloading online educational videos and lecture notes and assignments. The research revealed that 17.8% of the student respondents always use their mobile phones for educational related research, 38.7% use it frequently, 28.0% occasionally, 7.5% rarely and 4.7% never used it.

Religious activities

In Ghana religion has become an integral part of the society so the use of the mobile phones to download sermons, teachings, songs, sharing of testimonies and prayer. The research showed that 15.1% of the respondent always download religious activities on their mobile phones, 23.6% use it frequently, 28.1% occasionally 14.2% rarely and 13.2% never use it.

Personal finance

Internet access and web application services and platforms make it easier for online users to make purchases online. Today we have mobile banking and mobile commerce. People can now access their finances and also shop online. 3.2% of the respondent always uses the mobile phone to access their personal finance, 7.9% use it frequently, 17.8% occasionally, 23.2% rarely and 43.3% never use it.

Current events

The mobile phone is now an important medium for people to search for the latest happenings around the world by a tap on their phone. The research revealed that 15.0% of the respondents always use their mobile phones to access current events, 22.1% use it frequently, 24.1% occasionally, 18.8% rarely and 16.8% never use it.

Making and receiving calls

The main conversional use of the mobile phone is to make and receive calls. The research showed that 65.0% of the student respondent always use the mobile phone to make calls, 24.1% frequently use it, 6.2% occasionally use it 1.8% rarely use it and 0.9% said they never use it.

Duration of use

The research also looked at the duration of use by the student at school, home and at the work place. This is shown on table 5, 6, and 7. The durations are from one hour to seven hours and more. When it comes to using the mobile phone at home 32.0% said they spent 7 hours or more on their mobile phone at home, 9.9% spend 7 hours or more at school and 3.5% spend the same hours or more at the office. When it comes to using the phone for just an hour, 13% said they use it for an hour at home, 21.6% at the office and 43.2% at school.

Table 5: Hourly distribution of how student use their phones at Home

When at Home Use

		Frequency	Percent
Valid	0 -1 Hr	113	13.0
	2-3 Hrs	206	23.7
	4-5 Hrs	168	19.3
	6-7 Hrs	96	11.0
	More Than 7 Hrs	286	32.9
	Total	869	100.0

Table 6: Hourly distribution of how student use their phones at Office

When at Office

		Frequency	Percent
	No Response	534	61.4
	0 -1 Hr	188	21.6
	2-3 Hrs	67	7.7
Valid	4-5 Hrs	30	3.5
	6-7 Hrs	20	2.3
	More Than 7 Hrs	30	3.5
	Total	869	100.0

Table 7: Hourly distribution of how student use their phones during School hours

When at School Use

		Frequency	Percent
	No Response	71	8.2
	0 -1 Hr	375	43.2
	2-3 Hrs	165	19.0
Valid	4-5 Hrs	120	13.8
	6-7 Hrs	52	6.0
	More Than 7 Hrs	86	9.9
	Total	869	100.0

Conclusion

The effect of ICTs on the African economy is impressive, but it is the way they are changing the lives of ordinary Africans that is genuinely transformational (Yonazi, E., Kelly, T., Halewood, N., & Blackman, C., 2012, p. 13). E-Marketer expects 4.55 billion people worldwide to use a mobile phone in 2014. According to Husson and Ask (2014), Mobile adoption is slowing, but new users in the developing regions of Asia-Pacific and the Middle East and Africa will drive further increases. Between 2013 and 2017, mobile phone penetration will rise from 61.1% to 69.4% of the global population. Mobile phones and the internet are helping to release the dynamism of African society (Yonazi, E., Kelly, T., Halewood, N., & Blackman, C., 2012, p. 13). It is believed that mobile phones have the potential of having a central place in the daily lives of undergraduates (Amali I., Onche. O., Bello M. B & Hassan I., 2012). The latest mobile cellular subscriber base figures for the period ending August 2014, indicate that mobile data subscribers in Ghana now account for almost 50% of total number of mobile phone lines and over 55% of Ghana's population (Dowuona, 2014). The objective of this study was to obtain the current mobile phone usage by undergraduate students in Ghana. The study adopted a survey research approach. The survey strategy was usually the preferred choice for collecting original data from a large number of undergraduate students.

The study looked at the looked at the average student's level of usage of the mobile phone on a daily basis and the frequency of usage for the following activities; educational-related research, personal finance, religious activities, making and receiving calls, current affairs (news), work related research, playing games, watching movie, listening to music and social networking. The research revealed that 20.0% of the respondent always listened to music on their mobile phones, 7.9% played games, 2.0% watched movies, 46.5% on social network, 12.9% for work-related research, 17.8% for educational-related research, 3.2% for religious programmes, 15% for personal finance, 3.2% on current events and 65.0% for making and receiving calls. The research also looked at the duration of use by the students at school, home and at the work place. When it comes to using the mobile phone at home 32.0% said they spent 7 hours or more on their mobile phone at home, 9.9% spend 7 hours or more at school and 3.5% spend the same hours or more at the office.

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