

## Customer Perceptions on E-service Quality and Customer Loyalty in Botswana Telecommunications Sector

Misani Sephetsolo

*PhD in Management, Texila American University, Botswana, Gaborone*

### **Abstract**

*The study examined the effect of electronic service quality on customer loyalty with specific reference to the telecommunications sector of Botswana. In this context, the study focused on the players in the mobile telecommunications sector of Botswana, that is, BTC, Mascom and Orange Botswana. The study adopted a quantitative survey that was guided by the positivist research philosophy. The study sample comprised of 450 subscribers of mobile telecommunication services in Botswana who took part in an online survey undertaken through a structured questionnaire. The analysis of research data was done using the Statistical Package for Social Sciences in which multiple linear regression analysis was adopted as the method of data analysis. The study found that the efficiency of e-services had a significant positive effect on customer loyalty of mobile telecommunication service subscribers in Botswana ( $\beta = 0.751$ ,  $p = 0.000 < 0.05$ ). It was also found that there existed a significant direct relationship between fulfilment and customer loyalty of mobile telecommunication service subscribers in Botswana ( $R = 0.519$ ,  $p = 0.000 < 0.05$ ). The study further found that there existed a significant positive relationship between service availability and customer loyalty of mobile telecommunication service subscribers in Botswana ( $\beta = 0.638$ ,  $p = 0.000 < 0.05$ ). The study concluded that efficiency, fulfilment, and service availability had a significant positive effect in customer loyalty in the telecommunications sector of Botswana. The study recommended the improvement of service efficiency; mitigating regular transaction timeouts; enhancing customer knowledge management and customer relationship management; undertaking of gap analysis and conducting of quality circles.*

**Keywords:** *Customer loyalty, Customer satisfaction, Electronic Service Quality, Efficiency, Fulfilment, service availability.*

### **Introduction**

The business operating environment today is associated with a number of changes and challenges which often present existential threats to business organisation within the private sector as well as the public sector [1]. According to [2], the operating environment is complex, volatile, and ambiguous, therefore, it is incumbent on business organisations to be in a perpetual flux because being docile presents significant competitive and existential risks to the operations of the business entities. Similarly, [3], note that globalisation, technological advancements, innovation and change in

customer expectations and perceptions drive the volatility that is evident within the operating environment and organisations owe it to themselves and their stakeholders to respond to the changes in a manner that is consistent with the actualisation of the vision and operational goals.

Organisations across the globe and across the sectoral divide are always conscious of the attainment of their performance targets because performance is instrumental in determining the extent to which the organisation survives, grows, and remains relevant in the face of a dynamic operating environment [4]. With this in mind,

*Received: 23.08.2023*

*Accepted: 25.08.2023*

*Published on: 30.10.2023*

*Corresponding Author: misanisephetsolo@yahoo.com*

service organisations across the geographical and sectoral divide can differentiate themselves from their competitors on the basis on the quality of the service that they deliver [2]. [3] argues that customer loyalty and quality of service delivery are twin paths when it comes to the creation of value for both the organisation and the customers. The author observed that an organisation that offers poor quality of service risks losing its credibility and erodes its own confidence in the eyes of the customers and the impact of this is reflected in the poor customer satisfaction, low customer retention rates and poor financial performance. It should be noted that whilst service quality concerns itself with the creation of value and benefits to the customers in tandem with the expectation of the customers, shortcomings in this regard impacts on the relationship of the organisation and its clients [7].

The focus of this study is to examine the effect of electronic service quality on customer loyalty within the telecommunications sector. In this regard, the study's independent variable is electronic service quality.

According to [8] electronic service quality is the quality as well as excellence of electronic service offerings by an organisation in the virtual marketplace as per the customers' overall assessment. Whilst electronic service quality has several dimensions which include reliability; ease of use; efficiency; privacy, fulfilment, system availability, compensation, contact, and responsiveness, this study will measure electronic service quality based on efficiency, fulfilment, and system availability as per the E-S QUAL Theory.

The dependent variable in this study is customer loyalty which is defined by [9] as being the commitment by a customer to re-patronise and re-buy a product or service of their preference continuously at every opportunity. In the context of this study, customer loyalty will be measured in terms of repeat purchases, positive word of mouth and positive attitude. The undertaking of this study is not isolated to

other studies that have been undertaken in the area of electronic service quality and customer loyalty and as such, recognition is given to the various studies that have been undertaken. In Greece [10]; [11] in the United States of America; [12] in China and [13] in South Africa found that there existed a positive and statistically significant relationship between electronic service quality and customer loyalty. On the other hand, [14] in France; [15] in Russia and [16] in Kenya found that electronic service quality did not have an effect on customer loyalty.

There currently exist differing opinions and contradictory empirical findings regarding the effect of electronic service quality and customer loyalty as illustrated in the brief review of empirical findings above. Further, the findings referred to above are all based on studies that have been undertaken in other countries and none of them reflects a study undertaken in Botswana. For that reason, it becomes difficult to generalise the findings to Botswana thus presenting a research gap in terms of empirical findings that relate to Botswana. On the other hand, the studies alluded to relate to studies earlier all in the retail sector and also in the banking sector and given the fact that this study wishes to focus on the telecommunications sector, it can further be deduced that there exists a research gap in that regard. All the aforementioned studies were all undertaken using different methodological approaches and these approaches differ significantly to the approaches to be adopted in this study and this again amplifies the existence of the research gap which the undertaking of this study seeks to bridge.

This study will focus on the Botswana mobile telecommunications sector which according [17] to has a 94.3% mobile penetration rate; 1,724,522 active subscribers; 1,836,299 active mobile internet subscribers; 6,661TB mobile data usage as of 31 December 2022 and three major mobile telecommunications service providers namely, Botswana

Telecommunications Corporation (BTC); Mascom and Orange Botswana. Table 1 shows the customer satisfaction index for the three

telecommunications companies in Botswana as of 31 December 2022.

**Table 1.** Subscriber and Customer Satisfaction Data (2022)

	Year		
	BTC	Mascom	Orange
Service usage rate (%)	79%	88%	83%
Customer Satisfaction Index	4.30	5.66	5.27
Source	[17]		

Table 1 shows that at as 31 December 2022, BTC had a service usage rate of 79%, Mascom 88% and Orange 83%. Table 1 also shows that Mascom had the highest customer satisfaction index (CSI) of 5.66 points with Orange at 5.27 points and BTC at 4.30 points. According to [17] there was a decline in customer satisfaction to 5.08 CSI points in 2022 from 6.11 in 2018. This points to growing dissatisfaction amongst the customers in the telecommunications sector which all points to possible declining loyalty amongst the customers especially if one were to look at both the CSI and service usage rates. It is anticipated that a high CSI index is associated with high loyalty as denoted by the service usage rate.

However, in the case of the mobile telecommunication service providers in Botswana, the growth in subscribers, declining CSI and declining service usage raise questions regarding the electronic service quality within the sector and whether or not this has any bearing on customer loyalty.

The objectives of this study were:

1. To evaluate the effect of efficiency on customer loyalty in Botswana’s telecommunications sector.
2. To examine the effect of fulfilment on customer loyalty in Botswana’s telecommunications sector.
3. To evaluate the effect of service availability on loyalty in Botswana’s telecommunications sector.

To respond to the above research objectives, the following research hypotheses were tested:

**H<sub>1</sub>:** There exists a statistically significant relationship between efficiency and customer loyalty in the telecommunications sector.

**H<sub>2</sub>:** There exists a significant relationship between fulfilment and customer loyalty in the telecommunications sector.

**H<sub>3</sub>:** There exists a statistically significant relationship between service availability and customer loyalty in the telecommunications sector.

## Literature Review

### Theoretical Framework

The Electronic Service Quality Model (E-S-QUAL) model was developed from the work of [18] with a view to measure electronic service quality. According to [18], the E-S-QUAL model was developed from the SERVQUAL model which laid the foundation on service quality in general. The E-S-QUAL model. According to [18] the E-S-QUAL model is made up of 4 constructs of e-service quality namely, efficiency, fulfilment, system availability and privacy.

According to [8], the E-S-QUAL model is one of the latest models of measuring e-service quality and its scale of measurement of e-service quality has a significantly high level of validity. In support of this view, [19] argue that in all studies in which the E-S-QUAL model was used, it was found to have a very high level of validity as well as reliability which makes it a very competent model in measuring e-service quality. In spite of high validity and reliability, [20] falter the E-S-QUAL model for its lack of

exhaustiveness. In this context, [20] argue that the E-S-QUAL model only focuses on 4 dimensions of e-service quality and thus, its ability to measure e-service quality is only limited to efficiency, fulfilment, system availability and privacy. On the other hand, [7] criticise the E-S-QUAL model for its low predictive power which means that the E-S-QUAL model has a low predictive power over changes in e-service quality.

Even though the E-S-QUAL model faces a number of criticisms within literature, its strengths outweigh the weaknesses and for that reason, it is my view that it remains a very competent model. In line with this, this model was adopted as the key model for this study because of its high validity and reliability and more so, its alignment to the constructs of e-service quality adopted in this study.

### **Electronic Service Quality**

According to [8] electronic service quality is the quality as well as excellence of electronic service offerings by an organisation in the virtual marketplace as per the customers' overall assessment. In line with this view, it is deduced that the electronic service quality from the view of the customer is a measure of extent to which the service received over virtual platforms meets and exceeds their expectations. In this regard, electronic service quality is based on the outcome of the electronic service that would have been rendered to them by the service provider which is based on what they get versus what they expected to receive over the virtual platforms [21].

On the other hand, [18] define electronic service quality as being the extent to which an organisation's website enables and facilitates efficient and effective purchasing, shopping and delivery of services and products. Whilst electronic service quality has several dimensions which include reliability; ease of use; efficiency; privacy and responsiveness [11], this study will measure electronic service quality based on reliability; efficiency and responsiveness.

According to [22], the retail managers' perspective of electronic service quality holds that electronic service quality should be embedded in the core strategies of the organisation on the basis that the effects of electronic service quality are often reflected in the market performance and goodwill of the organisation in the market. In this regard, [22] argue that electronic service quality is a tool through which an organisation can attain and maintain its strategic competitive edge over its competitors. This means that whilst the retail manager's view of service quality is also reflected in the outcomes of service delivery, the view is much more strategic and financial in nature than it is premised on the need to give maximum utility to the customers [23].

[23] notes that to the retail manager, electronic service quality is a tool through which the organisation can make an assessment of the extent to which their online service innovations and product developments have gone to satisfy the needs of their customers. In line with this view, the concept of electronic service quality remains a tool but, it is customer centric in that it seeks to evaluate the progress made by the organisation in putting in place electronic services that satisfy the customer's needs [24]. Within this context, an assessment of the level of electronic service quality by the organisation helps the management to be able to place into context how well their electronic services and the manner in which the services are digitally delivered to the customers fares well in relation to the specifications and ratings by the customers [24].

### **Customer Loyalty**

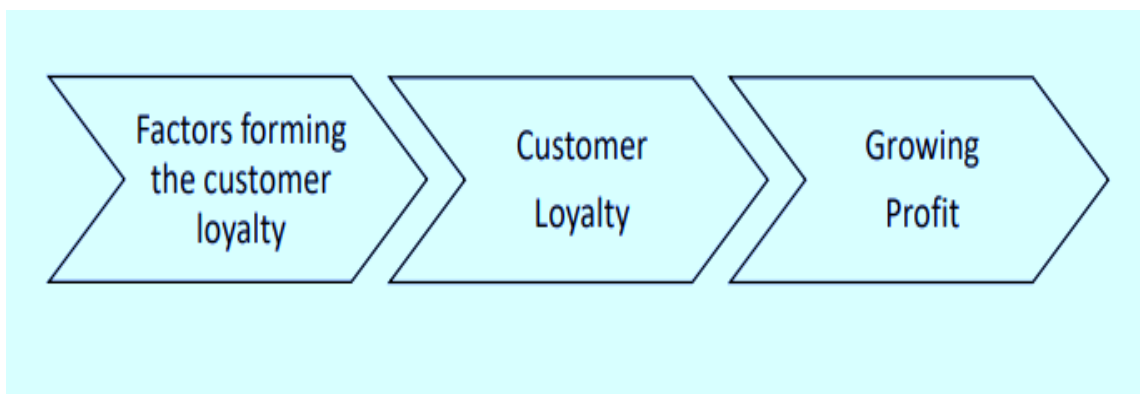
Customer loyalty has been defined differently by various scholars mostly in terms of what should be the scope of customer loyalty and what its determinants and measures are. As defined by [25], customer loyalty is an expression of the commitment to re-patronise a service and rebuild a relationship with a service provider regardless of factors and circumstances that might motivate

the desire to switch service providers in the future. In this regard, [25] further argued that customer loyalty represents the manner of strength that underlies the relationship between re-patronage and the general attitude of the individual customer to the organisation and its services. It goes without say that customer satisfaction is a critical determinant of any business success story, but in isolation, customer satisfaction can't take the organisation to greater heights of prosperity [26]. Though the inevitable repeat purchases that are stimulated by customer satisfaction, it can be concluded that customer satisfaction has a positive impact on the financial fortunes of an organisation [27].

In today's market where the customers are fickle and self-aware and largely dynamic to the evolving and changing times, creating, and maintaining a base of satisfied customers is proving to be a mammoth task for organisations in operation today [28]. This elevated level of customer expectations can be attributable to the widespread use of technology which has enhanced the ease with which customers can access information on what's happening around them, with this information, the customers' expectations are thus evolving and non-static [29]. Thus, loyalty building is premised on the thrust by the organisation to tailor its services to the attainment of the utmost value by its customers such that in a way, they can illustrate and demonstrate their commitment to build and sustain relationships with their customers [30].

According to [31], customer loyalty is a basis for sustained profitability by the organisation. It was their argument that loyal customers have the propensity and proclivity to encourage those within their social circles to try the services of the organisation whose services they find satisfying. To this end, it is important to note that customer loyalty isn't incidental but rather it is a result of deliberate efforts by the service providers to satisfy their customers from product design, service delivery and initiatives after the first and subsequent sales of services.

Customer loyalty is a process and the result of multiple interactions and transactions between the organisation and its customers [19]. In actualising customer loyalty, organisations should understand that it is imperative and pertinent that they establish and maintain a strong relationship with their customers because without a relationship, customer satisfaction and loyalty become myths that might prove elusive in the entire lifespan of an organisation [32]. According to [33] customer loyalty is divided into three distinct categories namely, emotional loyalty, intentional loyalty, and behaviour loyalty. Behaviour loyalty speaks to the acts by customers of repeat buying of the organisation's services. Intentional loyalty is attributable to the possible intention of buying an organisations' services and emotional loyalty an expression of the way the customer feels about the organisation and the value that they derive from the organisation [33].



Source:[33]

**Figure 1.** Model of Customer Loyalty

As illustrated in Figure 1, customer loyalty is a process involving a connection between deliverables that inform it. According to customer loyalty model, understanding the needs and wants of the customers are key components of customer loyalty as a whole [34]. It was argued by [19] that an organisation should thus pay attention to its pricing and promotional strategies to ensure that they meet the mark of expectations by their customers thus derive customer loyalty from such satisfaction. It is also important that the organisation creates an environment of comfort and trust between the organisation and its customers regardless of their diversity [20].

### **Electronic Service Quality and Customer Loyalty**

[26] examined the effect of e-service quality on customer loyalty of commercial banks in Jaffna district, Sri Lanka. The study sought to examine the extent to which customer loyalty was influenced by the e-service quality amongst the commercial banks. A sample of 400 employees was drawn from 5 commercial banks using stratified random sampling to which structured questionnaires were administered for the purposes of data collection. The findings from the Spearman correlation analysis revealed that there was a strong positive and statistically significant correlational relationship between measures of e-service quality and measures of customer loyalty.

In the same regard, [35] found that e-service quality was a significant predictor of customer satisfaction and by extension, customer loyalty. This finding emerged from a study undertaken by [35] in Indonesia to examine, in part, the effect of e-service quality on customer loyalty. The study sample comprised of 225 randomly selected online customers. Data were collected using a structured questionnaire and analysed using structured equation model. The findings revealed that there existed a significant positive relationship between e-service quality and customer loyalty. On the other hand, [36]

undertook a study to examine the impact e-service quality on customer satisfaction and online shopping behaviour. The study found that e-service quality had an indirect relationship with customer loyalty and the relation was mediated by customer satisfaction.

[37] also undertook a study with a view to examine the effect of e-service quality on customer loyalty in the United Kingdom. In this study, the researcher sought to examine if there existed a relationship between e-service quality and customer loyalty. The study administered a structured questionnaire to 151 respondents. The findings from the Pearson correlation analysis revealed that e-service quality had a significant effect on customer loyalty. In this regard, it was concluded that there existed a direct significant relationship between e-service quality and customer loyalty in the United Kingdom.

In a related study, [27] inquired into the effect of e-service quality and customer relationship management on customer loyalty with customer satisfaction as the mediating variable. The study was conducted in the retail sector in Indonesia from which data were collected from a sample of 248 retail sector online shoppers who were on Instagram. The findings from the study revealed that e-service quality did not have a significant effect on customer satisfaction. It was also found that e-service quality only had an effect on customer loyalty through customer relationship management practices and customer satisfaction. The study thus concluded that, e-service quality had an indirect relationship with customer loyalty.

### **Methodology**

The study was guided by and grounded by the positivism research philosophy. According to [38], positivism is a research philosophy within which the researcher focuses on the collection, analysis, and utilisation of quantitative research data from the study population in response to a set of research questions. In addition, a quantitative survey research design was adopted which allowed for the collection of quantitative

data from the respondents and also the collection of data from multiple sources within the telecommunications sector. A structured questionnaire was administered through an online survey in which the researcher sought responses from 450 subscribers across the three main mobile telecommunications service providers in Botswana. The Statistical Package for Social Sciences was used to analyse research data in which case, multiple linear regression analysis was used to test the nature, strength and significance of the relationship between e-service quality and customer loyalty.

The regression model that was adopted for this study is given below:

$$CL = \alpha + \beta_1 EFF + \beta_2 FL + \beta_3 SA + \mu$$

– Equation 1

CL = Customer loyalty

EFF = Efficiency

FL = Fulfilment

SA = Service availability

$\mu$  = Error term

## Results and Discussion

### Respondents' Profile

The study sample comprised of 450 respondents and of these, 51.1% (n = 230/450) were female and 48.9% (n = 220/450) were male. The sample was comprised 17.3% (n = 78/450) respondents who were below the age of 21 years; 40.7% (n = 183/450) between the ages

of 21 and 29 years; 22.4% (n = 101/450) between 30 and 39 years of age; 12% (n = 54/450) were aged between 40 and 49 years and 7.6% (n = 34/450) were between 50 and 59 years of age.

### Hypothesis Testing

The study also ought to test research hypotheses relating to the relationship between e-service quality and customer loyalty. the study thus tested the hypotheses given below:

**H<sub>1</sub>:** There exists a statistically significant relationship between efficiency and customer loyalty in the telecommunications sector.

**H<sub>2</sub>:** There exists a significant relationship between fulfilment and customer loyalty in the telecommunications sector.

**H<sub>3</sub>:** There exists a statistically significant relationship between service availability and customer loyalty in the telecommunications sector.

The study utilised multiple linear regression analysis to test the hypotheses above and in order to guarantee that assumptions for multiple linear regression analysis tests are met, the study concluded tests for autocorrelation and multicollinearity.

### Test for Autocorrelation

The Durbin-Watson test was undertaken in order to test for autocorrelation and the findings are given in Table 2.

**Table 2.** Durbin-Watson Statistic

Model	Durbin-Watson
1	1.924

Source: Primary Data

The findings in Table 4.8 show the Durbin-Watson statistic = 1.924. The Durbin-Watson statistic in this regard was greater than 1.5 and less than 2.5 thus indicating the absence of significant autocorrelation problems. This is consistent with the view of [39] that a Durbin-Watson statistic between 1.5 and 2.5 indicates that there exist no significant autocorrelation

challenges. In the context of this study, the finding indicates that multiple linear regression analysis can be conducted since the assumption of absence of autocorrelation was satisfied.

### Test for Multicollinearity

The findings from the test for multicollinearity are given in Table 3.

**Table 3.** Tolerance and VIF Statistics

Model	Collinearity Statistics	
	Tolerance	VIF
Efficiency	.668	1.498
Fulfilment	.833	1.200
Service Availability	.604	1.656

Source: Primary Data

Table 3 shows that all of the study’s variables, that is, efficiency, fulfilment, and service availability, did not approach multicollinearity. This is based on the fact that all the variables had a tolerance statistic which was greater than 0.10 and a VIF statistic that was less than 10. This agrees with [40] who argued that

multicollinearity is deemed to be absent if the tolerance statistic is > 0.10 and the VIF statistic is <10.

**Multiple Linear Regression Analysis**

Tables 4 and 5 present the findings from the multiple correlation analysis.

**Table 4.** Model Summary for Multiple Linear Regression Analysis

Model	R	R Square	Adjusted R Square	S.E. of the Estimate	Durbin-Watson
1	.842 <sup>a</sup>	.709	.704	.31386	1.924

Source: Primary Data

Table 4 shows that the R-Square statistic from the regression model was 0.709. In line with this finding, it can be deduced that 70.9% of the changes in customer loyalty within the telecommunication organisations in Botswana can be explained by the variables, efficiency,

fulfilment, and service availability when taken as a unit. In addition, the finding shows that the study’s variables have a strong explanatory power over the variations in customer loyalty. The regression coefficients are given in Table 5.

**Table 5.** Regression Coefficients for E-Service Quality and Customer Loyalty

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		β	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.146	.116		35.836	.000	-	-
	EFF	.751	.048	.613	1.554	.000	.668	1.498
	FL	.519	.021	.482	1.253	.000	.833	1.200
	SA	.638	.052	.604	1.463	.000	.604	1.656

a. Dependent Variable: CL

Source: Primary Data

The findings in Table 5 show that the predictor variables (EFF, FL, and SA) all were significant at 5% LOS. The findings also show that efficiency has the highest standardised regression coefficient of 0.613 and fulfilment had the least at 0.482.

Taking into account the findings in Table 5, the multiple linear regression model for this study was given by:

$$FP = 4.146 + 0.751EFF + 0.519FL + 0.638SA + \mu - \text{Equation 2}$$

**Efficiency and Customer Loyalty**

Table 5 shows that increasing efficiency in e-service quality by a unit would result in a



corresponding increase in customer by a factor of 0.751 units. In this regard, the findings show that there exists a significant positive relationship between efficiency and customer loyalty. The finding that there existed a statistically significant correlation between efficiency and customer loyalty could be attributed in part to the fact that customers are interested in greater efficiency when they select a mobile service provider and if they experience efficiency, their satisfaction will be expressed through their continued patronage of the services offered. In the same manner, with efficiency, customers are drawn to be loyal to the services of the organisation and their loyalty will be expressed in their willingness to speak positively to their social circle thus drawing more customers to the organisation. This finding thus agrees with [41, 42] who all found that efficiency of electronic service platforms had a significant effect on customer loyalty. The study, therefore, accepts the hypothesis that, there exists a statistically significant relationship between efficiency and customer loyalty in the telecommunications sector.

### **Fulfilment and Customer Loyalty**

Table 5 also shows that a unit increase in fulfilment would result in an increase in customer satisfaction by 0.519 units. The findings in overall terms show that fulfilment had a significant effect on customer loyalty. The study, therefore, has adequate evidence at hand to accept the hypothesis that there exists a significant relationship between fulfilment and customer loyalty in the telecommunications sector. The findings in Table 5 could be attributed to the fact that even though the subscribers enjoyed a level of fulfilment which was satisfactory to the extent that they were willing to continue their relationship with the organisations. In this regard, their willingness to continue using the services of their mobile telecommunications service provider and not switch to other service providers was a display of their level of loyalty which enhanced their

willingness to continue being clients. This finding agrees with [26] and [35] who all found that there existed a significant direct relationship between fulfilment and customer loyalty.

### **Efficiency and Customer Loyalty**

The study also found that there existed a significant relationship between service availability and customer loyalty. In this regard, a unit increase in service availability would result in a corresponding 0.638 units increase in customer loyalty. Given this finding, the study accepts the hypothesis that, there exists a statistically significant relationship between service availability and customer loyalty in the telecommunications sector. This finding could be attributed to the fact that mobile telecommunication is based on the availability of network services across the country. In this regard, the availability of network and internet coverage without interruption entails that customer convenience will be high. Thus, the more the services are available, the greater the level of customer loyalty. This finding is consistent with the finding by [37] who found that there existed a significant direct relationship between service availability and customer loyalty.

### **Summary and Conclusion**

The study examined the effect of electronic service quality on customer loyalty with specific reference to the telecommunications sector of Botswana. The study's specific objectives were (1) To evaluate the effect of efficiency on customer loyalty in Botswana's telecommunications sector. (2) To examine the effect of fulfilment on customer loyalty in Botswana's telecommunications sector. (3) To evaluate the effect of service availability on loyalty in Botswana's telecommunications sector. The study also sought to test the following hypotheses: (H<sub>1</sub>) There exists a statistically significant relationship between efficiency and customer loyalty in the telecommunications sector. (H<sub>2</sub>) There exists a

significant relationship between fulfilment and customer loyalty in the telecommunications sector. (H<sub>3</sub>) There exists a statistically significant relationship between service availability and customer loyalty in the telecommunications sector.

The study found that the efficiency of e-services had a significant positive effect on customer loyalty of mobile telecommunication service subscribers in Botswana ( $\beta = 0.751$ ,  $p = 0.000 < 0.05$ ). It was also found that there existed a significant direct relationship between fulfilment and customer loyalty of mobile telecommunication service subscribers in Botswana ( $R = 0.519$ ,  $p = 0.000 < 0.05$ ). The study further found that there existed a significant positive relationship between service availability and customer loyalty of mobile telecommunication service subscribers in Botswana ( $\beta = 0.638$ ,  $p = 0.000 < 0.05$ ).

The study makes the following recommendations:

- 1. Improve service efficiency:** The study recommends that mobile telecommunications service providers should enhance the efficiency and speed with which their mobile and electronic platforms which process customer transactions. This might involve creating direct USSD codes on platforms for all electronic transactions such that, the number of prompts is minimised, and customers can complete a transaction with a few clicks.
- 2. Mitigating regular transaction timeouts:** One of the issues that negatively impact on e-service quality is quite timeout of transactions. In this regard, this study recommends that the organisations should enhance their processes so that transactions do not time out early because there are clients who are slow in issuing command on their devices and the more the transactions timeout, the more they will complete transactions after several attempts.
- 3. Gap analysis:** The study recommends that mobile telecommunication organisations in

Botswana should regularly conduct gap analysis. As part of their weekly or monthly returns, they should assess the e-service quality gap and in so doing, timeously assess and correct their shortcomings in the area of e-service efficiency, fulfilment, and service availability.

- 4. Enhancing customer knowledge management and customer relationship management:** The study further recommends that, organisations in the telecommunications sector should put in place customer knowledge management and customer relationship management initiatives. If the organisations institute CKM and CRM initiatives, they will be able to know the expectations of their clients better and the more they know of these expectations, the more they will be able to deliberately institute e-service delivery programs that target the surpassing of the expectations of the customers.
- 5. Conducting of quality circles:** Quality circles allow the organisation to be able to appraise their own performance on the service delivery and service quality front and to also share ideas on how they can improve on any areas that would have been found to be lacking. This also involves making service downtime a key review area during quality circles so that, service availability can be enhanced.

## Acknowledgements

I would like to express my sincere gratitude to the help I received from my supervisor, Dr Lesego Selotlegeng, whose guidance, expert and patience was of great value. I would like also to acknowledge the Government of Botswana and my employer: Department of Public Service Management (DPSM) for the support they gave to carry this research fellow workmates,' efforts and willingness to share ideas, which made this project possible. I would also appreciate Texila American University Mentors who really believed in me and gave me the chance to work

with me through out. Last but not least, I would also like to acknowledge the unquantifiable moral support from my family and friends without which it would have been impossible to complete this project.

## References

- [1] Tende, F.B., Ekanem, I.S., 2018, Strategic Agility: An Intervention Prescription to Competitive Advantage of Small Businesses in Nigeria, *Int J Bus Syst Econ*, 6(4), 1401–23. [https://www.researchgate.net/publication/34310319\\_strategic\\_agility\\_and\\_performance\\_of\\_small\\_and\\_medium\\_enterprise\\_in\\_the\\_phase\\_of\\_covid\\_19\\_pandemic](https://www.researchgate.net/publication/34310319_strategic_agility_and_performance_of_small_and_medium_enterprise_in_the_phase_of_covid_19_pandemic).
- [2] Nejatian, M., Zarei, M., 2019, Moving Towards Organizational Agility: Are We Improving in the Right Direction? *Glob J Flex Syst Manag*, 14(4), 241–53.
- [3] Kuleelung, T., Ussahawanitchakit, P., 2018, Organisational Agility and Firm Performance: Evidence from Information and Communication Technology (ICT) Businesses in Thailand, *Bus Manag Rev*, 7(1), 206–19.
- [4] Behnamiri, N., Mohammad, H., 2018, The role of strategic management in crisis management, *Cris Manag J*, 15(6), 7–40.
- [5] Mukherjee, A., Nath, P., Pal, M., 2018, Resource, service quality and performance triade: a framework for measuring efficiency of the retail sector, *J Oper Res Soc.*, 54(7), 723–35.
- [6] Kitapci, O., Taylan, I., Yaman, Z., Gulmez, M., 2018, The paths from service quality dimensions to customer loyalty: An application on supermarket customers, *Manag Res Rev.*, 36(3), 239 – 255.
- [7] Price, L., Arnould, E., Tierney, P., 2018, Going to Extremes: Managing Service Encounters and Assessing Provider Performance, *J Mark.*, 59(7), 83–9.
- [8] Butt, M., de Run, E., 2018, Private healthcare quality: applying a SERVQUAL model, *Int J Health Care Qual Assur.*, 23(7), 658–73.
- [9] Oliver, R.L., 2018, Whence consumer loyalty? *J Mark.*, 63(4), 33–44.

## Conflict of Interest

The author declares that there is no conflict of interest.

- [10] Tsoukatos, E., Rand, G.K., 2018, Path analysis of perceived service quality, satisfaction, and loyalty in Greek insurance, *Manag Serv Qual.*, 16(5), 501 – 519.
- [11] Marimon, F., Vidgen R., Barnes S., Cristobal E., 2017, Purchasing behaviour in an online supermarket, the applicability of E-S-Qual, *Mark Res Soc.*, 16(1):111–29.
- [12] Wang, C., 2017, Service quality, perceived value, corporate image, and customer loyalty in the context of varying levels of switching costs, *Psychol Mark J.*, 27(3), 252–62.
- [13] Ganguli, S., Roy, S.K., 2019, Generic technology-based service quality dimensions in banking: Impact on customer satisfaction and loyalty, *Int J Bank Mark.*, 29(2), 168–89.
- [14] Chang, H.H., Wang, H.W., 2017, The Relationship among e-service quality, Value, Satisfaction and Loyalty in Online, *Eur Adv Consum Res.*, 13(1), 10–4.
- [15] Srinivasan, S.S., Anderson, R., Ponnavaolu, K., 2019, Customer Loyalty in e-commerce: an exploration of its antecedents and consequences, *J Retail*, 78(2), 41–50.
- [16] Saba, M.H., 2016, Measuring Quality of Electronic Service (E-Service) in Banking, *Int J Eng Res Appl.*, 4(3), 350–9.
- [17] BOCRA, 2022, Consumer Satisfaction Survey (2017 - 2022), Gaborone, Botswana.
- [18] Parasuraman, A., Zeithaml, V.A., Malhotra, A., 2005, E-S-QUAL a multiple-item scale for assessing electronic service quality. *J Serv Res.*, 7(10), 1–21.
- [19] Pandey, S., Chawla, D., 2019, E-lifestyles of Indian online shoppers: A scale validation, *J Retail Consum Serv.*, 21(6), 1068–1074.
- [20] Loureiro, S.M.C., Cavallero, L., Miranda, F.J., 2018, Fashion brands on retail websites: customer performance expectancy and e-word-of-mouth, *J Retail Consum Serv.*, 41(1), 131–141.

- [21] Swaid, S.I., Wigand, R.T., 2019, Measuring the quality of e-service: Scale development and initial validation, *J Electron Commer Res.*, 10(1), 13–28.
- [22] Tse, D.K., Wilton, P.C., 2018, Models of Consumer Satisfaction Formation: An Extension, *J Mark Res*, 25(2), 204–12.
- [23] Voss, C., 2014, Rethinking Paradigms of Service: Service in a Virtual Environment, *Int J Oper Prod Manag.*, 23(1), 88–104.
- [24] Cronin, J.J., Taylor, S.A., 2016, Measuring service quality: a reexamination and extension, *J Mark.*, 56(3), 55–68.
- [25] Rafaeli, A., Ziklik, L., Doucet, L., 2018, The Impact of Contact Center Employees' Customer Orientation Behaviors on Service Quality, *J Serv Res.*, 10(3), 239–55.
- [26] Sumithra, K., Sivanenthira, S., 2019, E-Service Quality and Customer Loyalty: Special Reference to Banking Sectors in Jaffna District, *Saarj J Bank Insur Res.*, 8(6), 16–21.
- [27] Zulfadli, A.R.L., Permana, H.L., 2020, The Effect Of E-Service Quality and Customer Relationship Management on Customer Loyalty with Customer Satisfaction and Trust Asmediation Variables for Instagram Users In Banda Aceh, *Int J Bus Manag Econ Rev.*, 3(1):318–27.
- [28] Long, S.K., 2019, Impact of CRM Factors on Customer Satisfaction and Loyalty Asian Social Science, *J Sci Educ.*, 9(3), 11–25.
- [29] Duffy, D.L., 2018, Customer loyalty strategies, *J Consum Mark.*, 15(5):435–448.
- [30] Pee, L., Jiang, J., Klein, G., 2018, E-store loyalty: Longitudinal comparison of website usefulness and satisfaction, *Int J Mark Res [Internet]*, 12(1), 1–17, Available from: 10.1177/1470785317752045
- [31] Magdalena, A., 2018, Analisis antara E-Service Quality, E-Satisfaction, dan E-Loyalty Dalam Konteks E-Commerce Blibli, *J Strateg Pemasar.*, 5(2).
- [32] Pham, T.S.H., Ahammad, M.F., 2017, Antecedents and consequences of online customer satisfaction: a holistic process perspective, *Technol Forecast Soc Chang.*, 124(1), 332–342.
- [33] Bruschi, I., Schwarz, B., Schmitt, R., 2019, David versus goliath - service quality factors for niche providers in online retailing, *J Retail Consum Serv.*, 50(1), 266–276.
- [34] Blut, M., 2020, E-service quality: development of a hierarchical model, *J Retail Consum Serv.*, 92(4), 500–517.
- [35] Ahmad, J., Chidirb, G., Novitasari, D., Joni, I., Dhaniel, H., Tias, P., et al., 2022, The role of customer e-trust, customer e-service quality and customer e-satisfaction on customer E-loyalty, *Int J Data Netw Sci.*, 6(2022), 477–486.
- [36] Paulo, R., Tiago, O., Almira, F., 2019, The impact of e-service quality and customer satisfaction on customer behavior in online shopping, *Heliyon [Internet]*, 5(2019), 1–14, Available from: <https://doi.org/10.1016/j.heliyon.2019.e02690>
- [37] Jalil, A., Kaur, H., Vijay, J.A., 2021, The Impact of E-Service Quality on Customer Loyalty in United Kingdom, *Int J Appl Bus Manag Stud.*, 6(1), 69–90.
- [38] Davidavičienė, V., 2018, *Research Methodology: An Introduction.*
- [39] MacDonald, S., Headlam N., 2018, *Research Methods Handbook: Introductory Guide to Research Methods for Social Research*, Manchester.
- [40] Al Zefeiti, S.M.B., Mohamad, N.A., 2015, Methodological Considerations in Studying Transformational Leadership and Outcomes, *Int J Eng Bus Manag.*, 7(1), 7–10.
- [41] Ślusarczyk, B., Tvaronaviciene, M., Haque, A.U., Olah, J., 2020, Predictors of Industry 4.0 Technologies affecting logistic enterprises' performance: International perspective from economic lens, *Technol Econ Dev.*, 26(2), 1–21.
- [42] Ng, S.R., Wong, S.Y., Chong, L., 2017, Outsourcing to Online Food Delivery Services: Perspective of F&B Business Owners, *J Internet Bank Commer.*, 22(2):1–13.