AN ASSESSMENT OF CHURN DETERMINANTS IN ZIMBABWE'S MOBILE TELECOMMUNICATION SERVICES

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─Abstract ─

In today's highly competitive, volatile and intense service environment, marketers are seeking ways to connect and engage with their customers in order to build long-standing relationships and achieve customer loyalty. However, achieving loyalty in itself is not sufficient, as research has established that even loyal satisfied customers can still defect to the competition. Thus, ascertaining the key determinants, which make customers want to switch between service providers, is particularly important to service providers. Having such knowledge will enable service providers to prioritise on customer retention initiatives with business strategies that aim to increase profitability, by mitigating the effects of these churn factors. This study sought to identify key factors that determine customer churn in Zimbabwe's mobile telecommunications sector. Drawing from the push-pull mooring theory, this study investigated the influence of customer dissatisfaction, low switching cost, lack of customer support, lack of sufficient or adequate advertising, as well as increased security/ethical concerns of customers.

A quantitative research method was adopted, with data collected from a sample of 413 Zimbabwean mobile subscribers, using structured questionnaires. Multiple linear regression analysis was applied to analyse the causal effect of the factors hypothesised as predicting customer churn. Factor analysis, validity and reliability tests were performed to confirm the reliability and validity of scales. The results reveal that key determinants of customer churn are customer dissatisfaction and poor complaints management system in place. Accordingly, mobile service providers are encouraged to prioritise initiatives that enhance customer satisfaction

as well as investing in systems and methods that effectively and satisfactorily resolve customer complaints, thereby ensuring customer retention.

1.   INTRODUCTION

In today's highly competitive, dynamic and intense service environment, marketers are seeking ways to connect and engage with their customers in order to have long-standing relationships and achieve customer loyalty. According to Kandampully, Zhang and Bilgihan (2015:379), creating and sustaining customer loyalty enable companies to establish enduring mutually beneficial relationships with customers. The aforementioned authors further assert that that loyal customers become attached and committed to a company, hence they are not easily attracted by competitors' offerings but rather, they are even more inclined towards paying premium prices, expressing greater buying intentions and resisting switching. However, achieving loyalty in itself is not sufficient, as research (see Jones & Sasser, 1995:5-6; Neal, 1999:21; Oliver, 1999) has established that even loyal satisfied customers can still defect to the competition. As such, ascertaining the key determinants, which make customers want to switch between service providers, is particularly important to service providers. It, therefore, is imperative that firms acquire knowledge about factors attributed to customer churn. Having such knowledge will enable them to prioritise customer retention initiatives with business strategies that aim to modify and improve service offerings, design new products and redirect advertising and promotional activities so that fewer customers leave the organisation. Thus, in order to retain existing customers, it becomes pertinent to identify reasons why customers are likely to defect to rival companies. Consequently, managing customer churn is critically important for companies to be profitable and to ensure their survival in this fiercely competitive service environment.

In Zimbabwe, the prevailing harsh economic conditions call for service organisations to enhance their capability of retaining their existing customers by meaningfully minimising the switching of customers to the competition. Available statistics show that the Zimbabwean mobile telecommunications industry is very

competitive, with only three mobile service providers being licenced to operate, namely Econet, Netone and Telecel. As evidenced in Figure 1, Telecel and Econet have lost subscribers in 2016, whilst Netone has seen a continual increase in their customer base. According to the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) (2016:7), the annual growth in this sector is relatively small as the mobile industry is reaching saturation, as reflected by a mobile penetration rate (active) of 94.8 percent. To grow their customer base, operators, therefore, must engage in aggressive promotional campaigns to encourage subscribers to switch from other service providers or even engage in multi-loyalty by subscribing to more than two mobile telecommunication providers.

Figure 1: Growth of Active Mobile Subscriptions in Zimbabwe
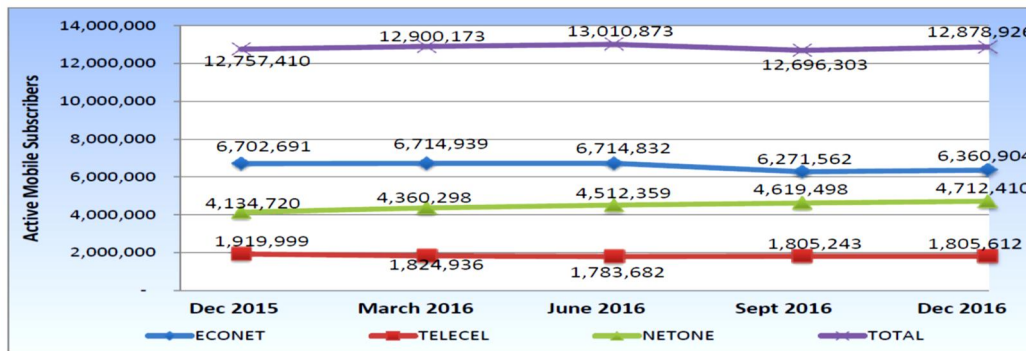
Source: POTRAZ: 2016:9

Consequently, competition for a share of a customer's business is the order of the day and for managers their key challenge is to increase the revenue by increasing usage of their services, whilst reducing what customers' spend with competitors. It, therefore, is essential for mobile network operators to comprehend the aspects of business performance that encourage customers to become repeat purchasers and be loyal towards their firms (Kandampully et al., 2015:380). To this end, mobile service providers ought not to lose their existing customers by effectively fighting customer churn. Building on previous research on customer loyalty and defection (Hejazinia & Kazem, 2014; Miranda-Gumucio & Gil-Pechuan, 2012; Nimako & Ntim, 2014; Rahman, 2016), this paper identifies customer dissatisfaction, switching costs, security concerns and complaints management as key factors that lead to customer churn in the mobile telecommunications service industry in Zimbabwe. Despite the strategic role of customer churn management, studies such as Hejazinia and Kazem (2014), Miranda-Gumucio and Gil-Pechuan (2012), Nimako and Ntim (2014), Rahman (2016), Shapiro and Varian(1999) and Yang

and Chiu (2006) that address its importance have been limited in the context of developing economies such as Zimbabwe. This is despite the fact that an appreciation of the determinants of customer churn allows marketers to create effective marketing strategies and offer promotional incentives that will entice subscribers to stay with their mobile operator.

2.   PURPOSE OF THE STUDY

The purpose of this study was to ascertain the key determinants of customer churn and to establish the extent of influence of each factor in determining customer churn behaviour.

3.   LITERATURE REVIEW

According to Yang and Chiu (2006), customer churn refers to the tendency of a customer to discontinue a service. Simply put, customer churn or customer defection is the loss of clients or customers to the competition. In this paper, a subscriber will be considered to have churned if he/she has switched service providers within the past 90 days from the date of survey, or have not done any income generating activity on their SIM card within the last 90 days. Generally, high churn rates result in loss of potential revenues and loss of market share amongst the mobile operators. Thus, to ensure business survival, growth and defence of their subscriber bases, mobile service providers ought to manage customer churn successfully. In this regard, the push-pull mooring (PPM) theory, developed by Lee (1966), is used to explain customer migration or switching intentions within the Zimbabwean mobile telecommunications industry. According to the PPM theory, negative factors at the source drive customers away whilst the positive factors at the destination lure clients towards them. The push and pull factors work hand in hand with mooring or moderating factors in influencing consumer switching behaviour (Nimako & Ntim, 2014). Situational factors, which could be either positive or negative in their influence (directly or indirectly) on a customer's switching intentions, are referred to as the mooring effects (Nimako & Ntim, 2014). These mooring factors, such as switching costs, make the switching decision either an easier one or a more difficult decision for customers (Jung, Han & Oh, 2017:140). Couched in the PPM model, this study contends that customer dissatisfaction, switching cost, security/ethical concerns and complaints management predict customer churn within the Zimbabwean mobile telecommunications industry.

3.1 Determinants of customer churn behaviour

In the extant literature on customer switching behaviour, there seems to be no agreement as to which factors are the main cause of customer churn. Findings from previous studies have indicated that most customers switch mobile service providers because of better offers from competitors, customer dissatisfaction in the products or services, costly rates, technological capability-related problems, lack of innovative promotions as well as deficiencies in customer care quality and issues to do with poor service delivery (Ng, Sek, Teow, & Wong, 2016; Miranda-Gumucio & Gil-Pechuan, 2012). A study by Hejazinia and Kazem (2014) ranks service quality as the most significant determinant of customer churn, followed by customer dissatisfaction, better offers from competitor with superior technology, switching costs and advertising respectively. Conversely, findings obtained from a study by Keramati, Jafari-Marandi, Aliannejadi, Ahmadian, Mozaffari and Abbasi (2014) put forward customer dissatisfaction, switching cost and customer status as the key factors that influence customer churn. Equally, Rahman (2016) identified customer dissatisfaction with voice quality, price and network coverage as the main drivers of customer churn within the Pakistan mobile telecommunications industry. It, therefore, seems that studies are inconclusive as to which factors can be considered as key in influencing customer churn. Accordingly, this study seeks to investigate the influence of customer dissatisfaction, switching costs, security concerns and complaints management on customer churn. To this end, the study will determine which factor has the most significant influence on customer churn within the Zimbabwean mobile telecommunications industry.

4. METHODOLOGY

A cross sectional quantitative study design was adopted, with data collected through a survey method using a self-administered questionnaire. Survey respondents were selected from the current mobile telecommunications users in Harare (Zimbabwe) who currently have a mobile phone they personally use at least once a day.

4.1 Participants and sampling method

Stratified proportional sampling was used to select participants from the three mobile operators in Zimbabwe as illustrated in Table1 below. Proportional sampling was deemed suitable, as it would give an appropriate representation of the study population.

Table 1: Determination of Stratified Random Samples

Mobile Network Operator (MNO)	Total Active Subscribers (Sampling Units)	Market Share (%)	Total Sample (Sampling Elements)
Econet	6 360 904	49.4	247
Netone	4 712 410	36.6	183
Telecel	1 805 612	14	70
Total	**12 878 926**	**100**	**500**

While it would have been ideal to focus on the Harare population of the three mobile telecommunication companies, this was not possible because the subscriber statistics are proprietary-owned and statistics are only available for the whole country. Stratified sampling was applied in the drawing the sampling units from mobile telecommunication subscribers in Harare. The number of sampling elements to be drawn from each respective telecommunication brand was determined by considering the market share of each service provider as indicated in Table 1. As professed by Zikmund, Babin, Carr and Griffin (2013:397), proportional stratified sampling was used to ensure that the number of sampling units drawn from each service provider was in proportion to the market share held by that particular service provider.

4.2 Instrument design and data collection

The study adopted and modified existing instruments from literature which have been validated in numerous studies to make some of the questionnaire items specific to the telecommunications context. Customer dissatisfaction, switching cost and complaints management were measured using scales employed by Bansal, Taylor and James (2005) and Kim, Park and Jeong (2004), whilst a scale developed by Gappert (2002) measured security concern. A five-point Likert scale was used anchored with strongly disagree and strongly agree. The questionnaire captured information on demographic and socio economic data of the respondents in addition to their reasons for switching service providers. The structured questionnaires were distributed to households and business shopping centres that were conveniently chosen on the basis of accessibility. A total of 500 questionnaires were distributed and out of these 413 were returned. However, 400 (Econet 183; Netone 149 and Telecel 68) were used for further statistical analysis following a data cleaning and validation exercise and this gave an overall response rate of 83 percent.

4.3 Reliability and validity

To ascertain the questionnaire's reliability, internal consistency was computed using Cronbach's alpha. A coefficient above 0.7 is considered acceptable for basic research (Oluwatayo, 2012).

Table 2: Reliability

Variables	Number of items	Cronbach's Alpha value
Customer dissatisfaction	5	0.718
Switching costs	5	0.713
Security concerns	4	0.715
Complaints management	5	0.717
Overall Cronbach's alpha value	19	0.717

Table 2 shows that all the variables yielded an alpha value greater than 0.7. As such, the questionnaire was deemed reliable. Face validity was determined by two experts in the area of marketing management at the University of Zimbabwe. Furthermore, exploratory factor analysis using the principal component analysis method was performed. Four factors were extracted, which had Eigen values greater than one and accounted for a 61.9 cumulative percentage of variance. These four factors, namely; customer dissatisfaction, switching costs, security concerns and complaints management were retained for further data analysis and labelled as identified in the literature.

4.4 Data analysis

The Statistical Package for the Social Sciences (SPSS), version 23.0, was used to process and analyse data. SPSS enabled the investigator to perform correlation analysis and regression analysis to interrogate the nature of the relationship that exists between customer churn and the identified factors. The regression model that was estimated consisted of customer churn as the dependent variable and the independent variables were customer dissatisfaction, high switching costs, increased security concern and complaints management.

5. RESULTS AND DISCUSSION

5.1 Profile of the respondents

Of the 400 respondents surveyed, 256 (64%) were male whilst 144 (36%) were female. A large number of the research participants were within the age range

between 20-35 years (n=292; 73%), with majority of the respondents (n=229; 57%) having at least attained a high school education.

5.2 Correlation analysis

Table 3 shows the results of the correlation analysis. Spearman's correlation was used due to the non-parametric nature of the data in this study. Of the four independent variables, only customer dissatisfaction has a negative correlation with customer churn (r = -0.575) and the remaining three are positively correlated with customer churn.

Table 3: Correlation analysis (Customer Churn Determinants versus Customer Churn)

Construct or Dimension	CD	SC	SEC	CM	CC
Customer dissatisfaction (CD) Significance (2-tailed)	1.000				
Switching cost (SC) Significance (2-tailed)	0.283 0.000	1.000			
Security concerns (SEC) Significance (2-tailed)	0.269 0.000	0.341	1.000		
Complaints management (CM) Significance (2-tailed)	0.371 0.000	0.035	0.102	1.000	
Customer churn (CC) Significance (2-tailed)	0.667 0.000	0.487 0.000	0.422 0.000	-0.575 0.000	1.000

As indicated in Table 3, there is a statistically significant positive high correlation (r=0.667, p=0.00, N=400) between customer dissatisfaction and customer churn. There is a statistically significant moderate correlation (r=0.487, p=0.00, N=400) between switching cost and customer churn. The results also indicate a statistically significant moderate correlation (r=0.422, p=0.00, N=400) between security concerns and customer churn. The findings further indicate a statistically significant inverse relationship (r=-0.575, p=0.00, N=400) between complaints management and customer churn. Generally, the rule of thumb is that presence of high correlations (r =0.9 or above) indicates substantial collinearity (Yoo, Mayberry, Bae, Singh, He & Lillard, 2014).

5.3   Regression analysis

Multiple linear regression was performed to test the predictive relationship between customer churn and the identified churn determinants. The model summary is shown in Table 4 below;

Table 4: Regression Results of Customer Churn and its Determinants

DETERMINANTS OF CUSTOMER CHURN	Dependent variable: Customer churn						
	Unstandardised Coefficients		Standardised Coefficients	T	Sig.	Collinearity statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.961	0.197		4.885	0.000	0.669	1.495
Customer dissatisfaction	0.346	0.047	0.370	7.406	0.000	0.577	1.732
Switching cost	0.077	0.040	0.091	1.944	0.053	0.820	1.220
Security/ethical concerns	-0.011	0.039	-0.014	-.292	0.771	0.552	1.812
Complaints management	0.109	0.040	-0.130	2.718	0.007	0.657	1.522
R= 0.837 R2 = 0.700 Adjusted R2 = 0.687 F = 54.024 * Significant at p<0.05							

The F value of 54.024 with a p-value of 0.00 indicates that the research model is statistically significant and the proposed variables can be used to predict customer churn. The value of adjusted R square (0.687) indicates that 69 percent of the variance in customer churn in the telecommunications mobile services industry is explained by the model. In addition, the βeta values revealed that customer dissatisfaction followed by complaints management have more predictive power and are more significant in explaining customer churn at (β=0.37, p=0.00) and (β=-0.130, p=0.007) respectively. Although switching costs (β=0.091, p=0.053) are statistically significant, their predictive power in explaining customer chain is very weak. On the other hand, security concerns (β= -0.014, p=0.771) are not statistically significant.

Customer dissatisfaction (β=0.37, p=0.00), positively impacts on customer churn. This suggests that as customer dissatisfaction increases, customer churn also increases. Thus, to reduce customer churn, mobile service providers should craft and invest into marketing strategies that aim to eradicate customer dissatisfaction whilst instantaneously enhancing customer satisfaction. Under this context,

managers seeking to mitigate customer churn should measure and monitor customer satisfaction frequently. In addition, improvements on service and product quality are warranted as they are more likely to result in customer satisfaction. Srivastava and Sharma (2013) allude to this, as their study established that there is a direct effect of service quality on switching behaviour via customers' satisfaction and repurchase intentions. In a different study, Bansal et al. (2005) postulate that customer dissatisfaction with service quality is linked directly to the intention to switch. Service providers, therefore, ought to set their service quality standards high and continually assess and reassess how customers perceive their services and implement appropriate corrective retention strategies to existing customers as well as attracting new customers.

Switching costs were found to be a less key factor in driving customer churn (β=0.091, p=0.053). These findings suggest that switching costs are a statistically significant predictor of customer churn. It, therefore, implies that if mobile service providers are to increase switching costs, subscribers are less likely to switch, thus reducing customer churn in the process. This finding is consistent with many prior conceptual and empirical works, such as Shapiro and Varian (1999) who assert that switching costs deter customers from freely switching to other service providers. In contrary, the Harrison, Beatty, Reynolds and Noble (2012) study established that switching costs have no influence on a customer's exit. This seems to hold in the Zimbabwean mobile industry, as findings in this study, point to a weak relationship between switching costs and customer churn. Within the Zimbabwean mobile industry, this seems not surprising, as it is characterised by multi-SIM loyalty, where consumers are known to switch between operators, seeking to bargain and capitalise on different promotional campaigns offered by each mobile service provider.

Security concerns have an insignificant influence on customer churn (β=-0.014, p=0.771). The finding suggests that reduced security concerns in the mobile telecommunications industry does not guarantee reduced customer churn. This was not consistent with Gappert (2002), who introduced security concern as a new factor, which influences customer churn. However, the finding is in tune with the results of Dass and Jain (2011) who identified 140 churn determinants, where security concerns was not part of that long list. In light of this finding, it, therefore, can be said that security concern does not have a significant influence in customer churn management within the Zimbabwean mobile telecommunications industry.

As reported in Table 4, complaints management process (β=-0.130, p=0.007) significantly impacts on customer churn. This means that service providers will

significantly curb customer churn if they effectively and satisfactorily resolve customer complaints. A negative beta shows that customer churn should decrease by 13 percentage points if effective complaints management is increased by one. This means that when customers complain and service providers accept responsibility to resolve the problem, then customers become bonded to the company (Peppers & Rogers, 2016). According to Bhatt and Bamrara (2012), disgruntled customers may lower their service consumption and the combined effect of negative word of mouth, switching and reduced consumption will affect profitability of the firm. Due to the characteristics of telecommunication services, failures are difficult to avoid; hence, service recovery becomes a key ingredient in the restoration of customer satisfaction (Harrison et al., 2012). If service failure is encountered, service providers should try to compensate customers through service recovery in an attempt to minimise the damage caused. Findings from the study revealed that effective complaints management negatively affects customer churn. Thus, when customer complaints are resolved effectively and satisfactorily, customer churn will be reduced significantly. Moreover, customer complaints allow the mobile operators to acquire customer feedback that will be useful in crafting strategies that can result in increased customer satisfaction and eventually reduce churn (Tronvoll, 2008). Knox and Van Oest (2014), further argue that effectively rectifying customer complaints can impact positively on a customer's trust and commitment to a brand. Therefore, commitment by management to resolve customer complaints effectively and satisfactorily should be exhibited. Customer complaints management has to be viewed as a profit centre instead of a cost centre since the service provider may lose its loyal customers' lifetime value when they switch to the competition.

Overall, the results seem to suggest that mobile service providers need to focus more on customer satisfaction and effective customer complaints management. Furthermore, switching costs and security concerns proved not to be significant factors that determine customer churn. As such, it, therefore, can be concluded from this study that effective customer churn reduction cannot be attained by either increasing switching costs or reducing security concerns. Instead, operators ought to strive to reduce customer dissatisfaction and effectively and satisfactorily manage and resolve customer complaints in order to reduce customer churn.

6. RESEARCH LIMITATIONS AND AVENUES OF FURTHER STUDY

While this study has provided some valuable information about the key determinants of churn and the extent of their impact on churn, the results of the study may be interpreted with caution because of the following limitations. The use of a structured questionnaire with only close-ended questions in the study limited the depth of information on key churn determinants from subscribers. In addition, the sample of the study was drawn from subscribers in Harare, the study should be extended to other subscribers nationwide so that results can be generalised. Furthermore the study was based on a snap survey, it is recommended that a longitudinal study be undertaken to see if the same determinants will emerge. Arising from the above research limitations, new avenues of research can be considered. The results of the study indicated that 69 percent of the variance in customer churn in the telecommunications mobile services industry is explained by the above factors. This means that there are also other factors that influence customer churn, which are outside those examined in this study. This is an area for further studying to determine what other factors determine customer churn. Having used a quantitative research design, it will be worthwhile to investigate customer churn determinants using a triangulation methodology, which utilises both quantitative and qualitative approaches. Qualitative approach will be used to follow up and interrogate responses provided by the quantitative design. It will be an interesting extension of the study if future researchers explore effective ways to reduce customer churn.

7. THEORETICAL CONTRIBUTION AND PRACTICAL RELEVANCE OF THE STUDY

The study makes an academic contribution by extending the existing knowledge on customer churn and its key determinants. The research findings should also assist managers in understanding significant factors that determine customer churn in the mobile services industry in Zimbabwe. In particular, the findings have suggested that if managers are to manage customer churn effectively, they should prioritise strategies and initiatives, which promote customer satisfaction as well as efficiently and adequately manage customer complaints. Essentially this study, combined with findings from other studies, may serve as a tool for managers to mitigate customer churn, which subsequently affects the firm's bottom line.

8.   CONCLUSION

The major objective of this study was to determine the key determinants of customer churn and their extent of impact of each identified factor on customer churn. Customer dissatisfaction and complaints management emerged as key customer churn determinants in order of their influence. It means that reducing customer dissatisfaction and effective customer complaints management significantly reduces customer churn. Therefore, managers in the mobile telecommunication services sector in Zimbabwe need to prioritise initiatives that enhance customer satisfaction as well as invest in systems and methods that effectively and satisfactorily resolve customer complaints in order to successfully mitigate customer churn.

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