Role of qualitative research in preventing customer churn: a case study of mobile network operators in Kenya

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Abstract

Managers want to utilize E-business applications without taking into consideration the human factor that comes as part of implementing any technological system and thus, resulting in unhappy customers. Customer turnover remains a serious problem in the service sector, especially the telecommunications industry. Literature provides evidence that when variables were tested in isolation, they proved to be of significance to the problem. This research used a qualitative research approach to understand different causes of the problem from a holistic approach through investigating the problem from customers' Mobile Network Operators' (MNO) perspective. Data were gathered from secondary and primary sources from MNO managers and customers. Results indicated that causes are complex as well as interlinked and that quantitative data need to be complimented with psychological and cultural investigations to identify customers' traits and habits. The study provides various practical recommendations for MNOs to implement.

Key words: Customer Retention; Mobile Network Operators, Churn; ICT and E-business

Introduction

Churn is a common term used in the service industry, especially in the telecommunication sector to indicate swooping of subscribers from one mobile network provider to another. The problem has been so visible with a reported churn rate of up to 28.6 percent swop within a six months period (Communication Authority, 2013). Although, numbers are key indicators for almost every factor in life, how much, how many as well as how long, are often used as measuring criteria for success, prosperity and even as indicators of happiness. However, after preliminary secondary research on the problem of churn in the telecommunication industry, the problem appeared to be too great to be explained just by numbers alone. Quantitative data reported the extent of the problem, but they were insufficient in clarifying causes of churn and its meaning (Morse, 2006). Solutions that were implemented by Mobile network operators based on statistical data gathered from data warehouses presented in figures that could fill up a whole server but were unable to make enough sense to reduce unhappy customers from churning to other service providers. That was evident by numbers provided by the Communication Authorities in Kenya (Communication Authority, 2013). The need for qualitative in-depth research that investigated all different aspects of the problem and approached the issue from viewpoints of different stakeholders was necessary to identify reasons previous research had not been useful enough. This primary research included

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two levels and provided an extensive overview of the problem. The first level introduced the view point of the MNOs and the second was from customers' viewpoints. Furthermore, several data collection methods were used to provide primary data, while secondary data were accrued from more than three sources, namely, publications, websites of MNOs and social media interaction pages. Finally, field data were gathered in a manner to provide as much diversity as possible to enable greater generalizability of research findings. With different methods integrated, triangulation of data was also evident to establish reliability and validity of the data gathering instrument and collected data (see Golafshani, 2003).

Research Questions
Main research question
The main research question for this study was, "What are causes of churn in the telecommunication industry in Kenya?"

Sub-research Questions
The following three sub-research questions were employed for this study:
    i)   What are *behavioural patterns* causing customers to churn?"
This sub-research question investigated all behavioural patterns that could cause churn. It sought for data on different demographical patterns, effect of family as well as friends, cultural habits, loyalty and others on customers to churn.
    ii)   What are *economic patterns* causing customers to churn?"
This sub-research question involved investigating income status, money spent on mobile usage and other factors that could have an effect on usage such as marketing as well as promotions.
    iii) What are *policies and regulations* affecting churn?"
These aspects were mainly related to the regulatory body and MNO policies that are causing customers to churn.

Literature Review
Abundant research on the problem of churn in developed countries was found, but the problem of churn seemed to be hardly investigated in developing nations, with only three articles found in literature on African countries that related to churn. Although approximately 80 percent of customer bases of African MNOs are on pre-paid plans, all retrieved research investigated post-paid customers, apart from a single research by Jahromi, Sepehri, Teimourpour and Choobdar (2010) that investigated pre-paid customers. Furthermore, all retrieved literature research used quantitative methods in investigating more than 250 variables, none of the research papers used qualitative methods to investigate the problem of churn. The enormous amount of data provided by the MNOs encouraged software developers to create churn prediction software that can be used to predict customers who are going to churn based on their usage patterns. Churn prediction software was developed to help MNO to predict churn using the gathered data from subscribers. It was proved statistically that the software, to a great extent, provides accurate results for statistical analysis of up to 50 different variables simultaneously (Lima, Mues & Baesens, 2009). Unfortunately, such software cannot predict the actual cause of churn. It was also found that only developing nations have used such software packages and during interviews, all MNOs in East Africa admitted they have never tried using churn prediction software.

Previous research found in literature reported investigating up to three factors simultaneously (Wong, 2011; Amitava, 2001). However, with the enormous amount of data provided it was

becoming difficult to investigate more variables using quantitative analysis. Some of the research found in literature investigated relevance of the following variables with churn: call plans (Wong, 2009; Wong, 2011); customer loyalty (Aydin, and Özer, 2005); customer relationship management (Jurisic, and Azevedo, 2010); service quality (Myron, 2004); mobile number portability (Shin, and Kim, 2007; Sutherland, 2007); profitability (Xevelonakis, 2005); customer perception (Amitava, 2001); marketing strategies (Sabat, 2005); technological advancement and network penetration (Harno *et. al.*, 2009); marital status (Oghojafor *et. al.*,, 2012); income level; educational background (Wong, 2011); effect of friends (Dasgupta *et. al.*, 2008); internal organizational policies (Katsianis *et. al.*, 2007); types of products as well as bundles (Myron, 2004); promotions (Ranaweera, 2007; Joo, Jun, and Kim, 2002); and maturity of the market (Jahanzeb, and Jabeen, 2007). Research by Ginn, Stone and Ekinci (2010) tried to combine a few causes together and indicated that service quality and price both affect service value simultaneously. Amitava (2001) stated that customers' behaviours, network performance, and financial performance are quite interlinked to the extent that they cannot be characterized in isolation. However, many previous researchers stated that inability to monitor all factors was a limitation of their research (Antipov and Pokryshevskaya , 2010; Ngai, Xiu and Chau, 2009; Ferguson and Brohaugh, 2008; Jiang, Au, and Tsui, 2007; Wong , 2011; Datta *et. al.*, 2000).

Research Methodology
Research Design
Qualitative research approach is increasingly replacing the previously dominating social and psychological research endeavours as an alternative to the study of human beings (Gordon, 2010). According to Gordon (2010), human sciences, including phenomenology, hermeneutics and symbolic interactionism have been defending their integrity against natural sciences and have developed progressively since the nineteenth century. Qualitative paradigms adopt an idiographic methodology viewing reality as a multiple, socially and psychologically constructed phenomenon. In this construct, the knower and the known are inextricably connected to each other. Qualitative research approach makes use of naturalistic designs that aim to study behaviours in natural settings. Qualitative methods, however, are not a substitute for quantitative methods, but they complement each other because each is the most appropriate for a specific purpose (Reige, 2003).

Whenever questions like why and how asked, quantitative studies often fail to answer. Qualitative methods are known for their descriptive and explanatory nature - they are used when quantitative data have no meaning to the body of knowledge (Ambert *et. al.*, 2008). Also qualitative research approach is the best and probably the only way to evaluate behavioural and sociological phenomena (Wainwright, 1997). Thus, qualitative approach is increasingly replacing the previously dominating social and psychological research as an alternative to the study of human beings (Gordon, 2010). Erickson (2012) also supported that qualitative research is not only meant to report behavioural actions but also describes social action and thus, in other words, it seeks to explain what people say and do (Smeyers, 2001). Finally, qualitative research aims to generate a theory when none exists (Christensen *et. al.*, 2010). For all presented reasons, qualitative research was chosen as the only possible and most appropriate of all approaches to be used in this research.

This research used a single snapshot, local, exploratory, theory-building case study design (Thomas, 2011) that aimed to investigate the in-depth causes of churn from MNOs' perspective

as well as from customers' perspective. The qualitative nature of this research enabled an in-depth investigation of the problem while taking into consideration all findings from previous research works. The question, "what are the causes of churn?" could only be answered if all different view-points were considered. This research did not only find causes of churn but also it was used as practical evidence to support use of qualitative research in natural settings.

Appropriateness of Design
Despite the positivist disputes, case studies are considered reliable and valid research methods (Wainwright, 1997) that add value to the knowledge (Golafshani, 2003) and they are highly appropriate for investigating aspects that cannot be numerically measured (Morse, 2006). Quantitative research usually follows a positivist approach, whereas qualitative research follows a highly naturalistic approach. Qualitative researchers aim to find knowledge and understanding of a certain phenomenon as well as seek evaluations of similar situations. The data used and gathered in qualitative research are unquantifiable but rather explorative. Nevertheless, like quantitative methods, they must also be tested for quality (Golafshani, 2003). The positivist systematic quantifiable process dehumanizes human behaviour because it does not explain feelings or social reality. Anti-positivism does not use any outside knowledge gathering tools and rather, the researcher acts as knowledge source through personal experiences. Post-positivism has three schools of thought, which are phenomenology, ethnomethodology and symbolic interactionism (Dash, 2005). All these schools emphasize on importance of daily human interactions with the environment. Post-positivism encourages qualitative research to be used to study different sociological attributes by investigating personal behaviours and reactions rather than quantifying the constructs (Reige, 2003).

A case study is an empirical inquiry that investigates a contemporary phenomenon in-depth and within its real-life context, especially when boundaries between phenomenon and context are not clearly evident (Ridder, 2012). Thus, case studies have been used in numerous occasions when a particular condition is unexplainable or is unjustified empirically. The case study must satisfy the following three rules: (a) describing, (b) understanding and (c) explaining (Tellis, 1997). Case study design was specifically chosen for this research to be able first to describe the problem that exists from different viewpoints, especially from the customers' perspectives, then to understand how the problem occurs and finally, to explain why it occurs. By doing the three steps, managers will be able to know how and why the problem exists and occurs thereby they will be able to find ways of solving or reducing the problem of high customer turnover.

Attempting to use quantitative research to answer the research question would have failed to present the human perspective. Moreover, gathered results from a quantitative research would just be a replication of prior research that can only measure a few factors, which in almost all previous cases, found that hypothesized factors were indeed affecting churn. Researchers who used quantitative methods reported in their limitations that they failed to find reasons churn occurred. In addition, they stated that their results were not generalizable due to psychological and cultural factors. Psychological and cultural factors that had caused previous quantitative research to be ineffective were the main driving reason for undertaking this qualitative research.
A qualitative method was necessary to answer questions beyond measurement of quantitative methods. Moreover, the case study was the best design to suit this research because it captured a single incident in a specific region. The problem of churn cannot be characterized as a phenomenological problem and thus, other qualitative designs were deemed inappropriate.

Therefore, it was decided that qualitative case study was the best method to investigate causes of churn and explain how to retain customers.

Sample size
This qualitative case study aimed at gathering richer information than more data. The research involved collecting secondary data from carriers' websites, publications, advertisements and newsfeeds. Primary research involved in-depth interviews with a manager from each of the four mobile network operators and a detailed field investigation with 29 customers from Nairobi, the capital city of Kenya. Pilot interviews with 10 customers were conducted to validate the data collection instrument and were vital to ensure that interview questions were well understood as well as unbiased. The data collection tool was composed of two sets. The first was an unstructured interview composed of 17 questions with managers of carriers. The interviews were meant to compliment collected secondary data and reflected the carriers' viewpoints on causes of churn. The second set of data was collected via 29 unstructured interview questions with customers who held dual or multiple SIM cards or who had changed their carrier. Interviews were conducted in four public locations in Nairobi, Kenya. The 29 participants were filtered to 26 to exclude customers who have used only one carrier throughout their lifetime. Minors and prisoners were also excluded.

The sampling procedures of pilot interviews and field interviews were based on convenience, non-probability sampling that aimed to cover a wide variety of demographics representing both genders with age ranging from 23 to 68 years. Other criteria such as income groups, geographical locations within Nairobi, marital status, education levels and occupations were conveniently recruited to reflect as much population diversity as possible. The interviews were stopped after reaching saturation of data, which means that responses from participants were becoming similar and repetitive thereby indicating that the particular demographic group has been well investigated.

Nvivo® 10 was a very useful tool in classifying and analyzing qualitative data. Qualitative analysis methods were used to analyze the data, which included sorting, matching, node analysis, tabulation, queries, classification sheets, text search, matrix coding, comparing, word frequency, and behavioural monitoring. Frequency tables were also used in the analysis to present simple percentages useful in presenting results.

Findings and Discussion
Findings from this research support all previous research endeavours with the exception of only one research study by Oghojafor and colleagues (2012) that found marital status to be irrelevant to churn. It is true that almost all variables measured by previous researchers do affect churn, in one way or another. However, when measured in isolation, there is no doubt that researchers would have found and would probably continue to find relevance between their measured variables and churn. Yet, such results might be greatly misleading. As much as different variables affect churn, there is a strong interlink between variables that makes it almost impossible to hold all other variables constant while measuring a single variable, which makes quantitative research unusable.

Figure 1 presents different causes of churn from both MNOs and customers' perspectives and interlinks as found from the analysis of gathered data. The font size of the causes mentioned in

Figure 1 is proportional to importance of the cause. However, no scaling was used. Also, the relationships between causes were not tested. Thus, this Figure is only a representation of causes to highlight the true complexity of the problem due to interlinked causes.

This research did not follow the conventional quantitative research methodology that previous churn research had used. Instead, it followed the problem based on the customers and the MNOs' perspectives to reveal the true hidden psychological, economical as well as political causes of churn. It was only then that causes of churn were identified. Identifying the true causes of churn is only the first step to a complete research. Further quantitative research on the identified variables can be done to investigate the extent of their effect on the problem. The subdivision of the main research question into smaller, manageable questions assisted in finding all possible causes of churn from different perspectives. The choice of three categories came as a result of extensive literature research and assumed or hypothesized causes found in previous studies.

Mobile network operators' perspective
Answers from four MNO managers were entered and analyzed using Nvivo10. The responses produced 22 different categories. Some categories ranked equally. The top 11 categories were referenced by all four participants and ranked as follows:
  a) Rank 1, products
  b) Rank 2, (i) price and (ii) customer care
  c) Rank 3, marketing
  d) Rank 4, (i) customer segmentation and (ii) brand name and loyalty
  e) Rank 5, (i) promotions and (ii) network quality.
  f) Rank 6, (i) network coverage and distribution channels, (ii) competitors and (iii) call plans and tariffs.
Word frequency analysis ranked the causes differently as per the following order: (a) customers, (b) services, (c) network, (d) products, (e) coverage, (f) competitors, (g) price and (h) promotions. In both cases, the analysis showed that causes of churn from the perspective of all four MNOs had more to do with the MNO itself and not to customers. Although the ranking of categories differed, the categories identified from both analyses remained the same.

Customers' Perspective
From the customers' perspective, variables that affected them were more MNO related. However, 41.7 percent of causes were psychologically and economically related to customers themselves as seen in Table 1. Despite variance in reported causes by MNOs and customers, there were many similarities and common variables that were found to cause churn. They were grouped into the following three main categories: psychological, economic and regulatory related.

Behavioural Causes of Churn
Use of qualitative research was indeed very useful in identifying many patterns causing churn, especially when it came to behavioural patterns. Demographic analysis showed that female participants had higher education levels, but slightly lower income levels than males. Unemployment rates in the chosen sample were equal in both genders. Although there was no relationship found between gender and willingness to churn, the average female spending on phone usage was found to be approximately 60 percent that of males. Females also showed slightly higher knowledge of products.

The social status analysis revealed that 69% of participants call more when they are in a relationship and call less if they are single or if they are married. This is consistent with research by Wong (2011) but contradictory to Oghojafor and colleagues (2012). It was also noted that 60 percent of married participants called less after they became married than when single. This indicated the importance of segmenting customers based on their social status.

**Table 1: Causes of churn from customers' perspectives**

MNO related causes	References	Customer related causes	References
Price	122	Comfort zone	56
Network coverage and quality	89	Group think	50
Mobile money	71	Customer's ignorance	50
Customer support	44	Price irrelevance	38
Services	39	Phone number	29
Marketing	31	Business vs. personal	28
incumbency and stability of the MNO	31	Loyalty	27
distribution channels (agents)	29	Customer's knowledge	25
M-Shwari (savings services)	11	Income	17
Reliability	10	Irrelevant marketing	16
Credit services	7	Type of phone	15
Cost of receiving calls	4		
Corporate social responsibility	3		
Total	491		351

Comfort zone ranked the top most in reference and was mainly generated by stability of the MNO that, in turn, caused some sort of forced loyalty. Participants showed reluctance to join new MNOs due to their instability. Also change of ownership of Airtel and Orange made participants hesitant when it came to moving from Safaricom. Loyalty was another cause of churn, but unlike what MNOs may think, loyalty was not created by MNOs' loyalty reward programs. Only 19 percent of participants found value in reward programs. Loyalty was mainly created as an effect of staying in the comfort zone for too long. Heritage associated with Safaricom's stable local presence and introducing the company into public stock allowing customers to own shares increased customers' loyalty with Safaricom. Next behavioural customer related cause of churn was group think. Kenyan customers are socially active and value opinions of their spouses, family, friends, colleagues, co-workers, customers and community members thereby creating a hallow effect that changes psychological image of the MNO in eyes of the subscriber.

The phone number also had some impact on preventing people from churning, with 38.5 percent of participants refusing to churn for fear from losing their number. Mobile Number Portability (MNP) had an insignificant effect because it had not been well communicated and because customers who use MNP would lose services offered by their old MNO. The importance of number together with introduction of dual SIM phones and flexibility of choosing a similar number from other MNO has resulted in 70 percent of participants actively using more than one SIM card simultaneously. Phone sharing in families was found to be common even in urban Nairobi, where 50 percent of the participants reported sharing their phones with family members.

It was also noted that phone sharing is only used when airtime of one member is exhausted, but all family members have their personal phones.

Figure1 Causes of churn from all perspectives and their interlinks
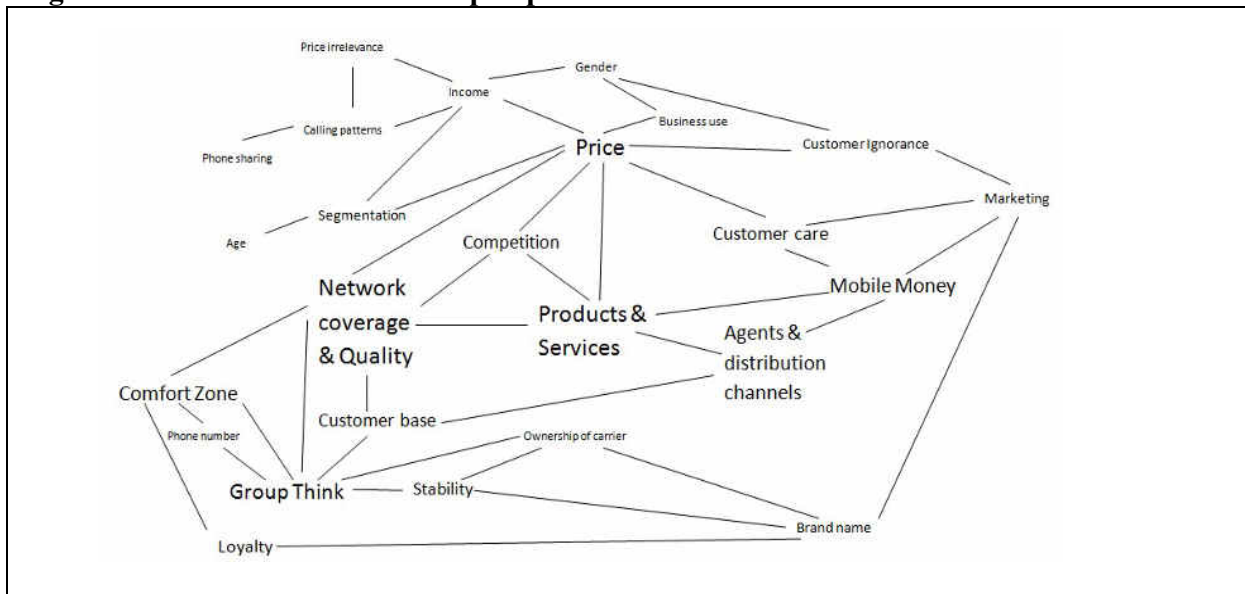
Ignorance of products and services is a major problem that caused customers to be unhappy and dissatisfied with the MNO. The results indicated that 88.5 percent of participants had no idea about tariff they were subscribed to. Moreover, all (100%) participants were unaware of wide variety of services their MNOs offer. Marketing by MNOs was also not very effective in educating customers, especially in occasions where customers felt they were receiving irrelevant text messages from the MNO trying to market unwanted services. Educating customers on how to save costs would be a remarkable way to market the brand and retain price-conscious customers.

Economic Causes
Economic causes were an influence of both customers and MNOs. They were reflected in the following cause:
Income analysis showed that income had a direct influence on amount of money spent on mobile usage. In the lower income group that earned from 0- 6,000 Kenyan shillings Ksh), 56 percent were using their minimum spending to cope with their low income. The group had an average spending of Ksh 1,500 per month. The two higher earning groups combined (those earned from Ksh 6,001-40,000 and Ksh 40,001-Ksh 100,000) used an average of Ksh 3,000. However, 41 percent of participants in these two groups were using their maximum mobile usage and 33 percent with stable usage. This indicated that marketing to this group might not be effective in earning MNOs more money. Finally, the group earning above Ksh 100,000 spent an average of Ksh 5,700 with 80 percent of participants in that earning group having stable usage that was unaffected by variance of their income. Only 15.4 percent of overall participants had variable calling patterns based on their varying incomes.

Irrelevance of price was a rather odd factor to be considered as a cause for not churning. Participants showed no willingness to churn because price difference was too small for them to consider moving to another MNO. Every participant who could afford to buy a dual SIM phone opted to use multiple SIM cards to make use of cheaper offers provided by MNOs rather than throwing any of the old lines they have been using.

Pre-paid business lines turned out to be used for business more than post-paid lines with 57 percent of pre-paid customers having dedicated lines for business usage. Despite MNOs focusing their full attention on post-paid customers, the analysis showed that out of 19.2 percent that used post-paid lines, 40 percent were using them because post-paid had cheaper bundles than pre-paid. Therefore, they were able to reduce their cost by more than half what they would spend if they were on pre-paid. The analysis also showed that Safaricom customers spent about four times more on their business lines than their personal lines, whereas Airtel customers spent a maximum of double the amount on their business lines.

The cost of receiving calls is an interlinked cause with group think that was explained in the behavioural causes. Customers expressed their concern about the cost that their family members and friends would incur if they were to use a different network as the off-net calls are more expensive, especially from Safaricom to other networks. This is a new contribution to research on churn because it was never mentioned in any of literature on churn.

Customers explained their disappointment from multiple marketing messages they receive. About 38.5 percent considered marketing text messages as junk and deleted them without attempting to read the content. However, 35 percent customers recommended audio-visual commercials and 11.5 percent preferred direct approach through face-to-face interaction to be highly appealing.

Customers felt more value when they received bonus offers that did not require them to subscribe to any promotions. Participants were concerned with subscriptions feeling that there were always hidden charges that are withdrawn from them without their knowledge. Customers often complained about automatic renewals of such subscriptions and many sought customer support assistance to unsubscribe. Participants indicated that rewarding long talkers with free airtime and doubling the value of bundles when purchased without the need for subscriptions were much more appreciated than trying to convince them to subscribe to cheaper tariffs or offers.

Policies and Regulations Causing Churn
As much as the previous section expressed causes of churn from customers' actions and behaviours, according to the analysis, 58.3 percent of the causes were indeed caused by MNOs and their policies. Previous literature related to network expansion, technological advancement, customer base and marketing as major causes of churn, but none investigated the effect of management systems or internal processes of MNOs on the problem of churn.
Communication Authority of Kenya (CA) had a great effect on the telecommunication industry as a whole by mandating SIM card registration that has provided MNOs with sufficient personal information about their customers. CA also reduced termination charges although it only affected off-net call rates. However, it has tremendously improved competition in the market because customers of new MNOs can now make cheap calls to incumbent MNOs.

Mobile Number Portability regulations that were introduced by CA have not seen much publicity. Customer awareness of this service remained at 7.7 percent only. Moreover, participants reported that they would still not use MNP because of losing services of their old MNO if they churned using MNP.

Customer support is directly related to the number of customers each centre or agent serves. Generally, higher customer per agent ratio results in longer queue and thus, more complain customers. All participants complained about Safaricom's long queues both physically and waiting on the phone for an agent to assist them solve their issues. Whereas 92 percent of the complaints were about network quality, mobile money related problems held the second position in number of complaints. Moreover, customers also complained about paying higher prices. Nevertheless, it was reported that 60 percent of the participants would rather remain with incumbent MNOs despite the higher prices and poor customer service, just because of their wider network coverage, availability and accessibility of their distribution channels. Thus, customers would tolerate higher prices and inconvenience of waiting in exchange for wide availability and spread of distribution network of their MNO.

Innovative products are what made Safaricom prosper in the Kenyan market, being the leader of M-Pesa, the popular mobile money service. Innovation has become a trend with incumbent MNOs to enable them to retain old customers as well as attract new ones and at the same time generate more revenue from price sensitive customers. However, it is worth noting that up to 40 percent of clients, as reported by Airtel manager, are uneducated enough to use Value Added Services (VAS).

As much as innovative products are essential for continuous growth of MNOs in an already saturated market, the number of products must be controlled. Customer analysis showed that 23 percent of the participants were aware of their tariff on Safaricom simply because it is only one tariff, but none of the customers of the other MNOs had any idea of their tariff.

Ignorance of customers is somehow affected by enormous amounts of services that are provided by the MNOs, resulting in customers refusing or failing to choose any. Customers prefer getting bonus benefits as an attraction point, but they also like to hear musical radio commercial and watch live television (TV) commercials that would often attract customers' attention. Moreover, many participants indicated their preferences for direct interaction and door-to-door marketing as highly personalized ways of grabbing their attention and educating them on new products.

Finally, network advancement and quality of service are continuously reported problems by customers. Lack of network coverage, dropped calls, weak signal and busy network were enough causes for 7 percent of the participants to completely swap their old MNO. Moreover, another 34.6 percent of participants were willing to churn if they found similar problems with their current MNO or found an MNO with better network. Thus, it can be considered that network quality and availability, coupled with wide distribution channels and acceptable customer service would convince even price conscious customers to pay slightly higher premiums for getting consistently reliable services.

Implications

This research has provided several valid links and correlations between different variables that have all proven to have an effect on churn. Despite all previous research proving through quantitative methods that each variable does indeed have an effect on churn, it is very important for managers to consider correlations between variables and their indirect effect on churn. Furthermore, managers can make much use of provided results and statistics to improve customer retention rates as well as enhance the decision-making process related to customer care, marketing, promotions, technological advancement, network expansion and number of outlets as well as agents.

On the other hand, clients need to be aware that they contribute grossly to the problem and rather than blaming the MNOs for the high cost they are charging them. Customers should utilize options available from different MNOs to choose bundles that best suit their needs. In fact, customers have great consumer power through market demand and they can involve communication authorities to force MNOs to provide better services at lower costs whenever possible.

The communication authority can also use results to provide better services that suit clients rather than the MNP that proved to be worthless to clients. The Authorities should participate in educating the clients on how to achieve value from the MNOs by utilizing the best promotions and services that many customers do not know about rather than burdening the client with new services of their own, resulting in further confusion.

Finally, this research is greatly valuable in contributing to the overall economy of the nation if applied on the regional level. The service industry has many related services that can be obtained through offshore companies and if the service providers are not careful enough, they might end up losing clients to outside countries. Retaining customers within local service providers will greatly save the economy from losing lots of foreign currency through off shoring and help retain as well as grow existing industries.

Recommendations to MNOS

These are recommendations for all four MNOs in general and need to be considered whenever policies are made. They are particularly useful for upper management and leaders to take appropriate decisions including directive visions, but also useful for departmental managers when devising their strategies.

1- **Either reduce the price or change the target market:** Price has been referenced by participants (30%) more times than any other cause of churn. An alternative to price reduction would be to target a specific market niche or concentrate on a specific product.
2- **Network coverage and quality; Distribution channels; and Mobile money:** As the customer analysis showed, the only combination that would let customers change their MNO regardless of price is if the MNO provides the following three services simultaneously: (a) wide network coverage with good quality; (b) distribution channels and agents within reach of every clients; and (c) mobile money services.
3- **Segment the population:** There is still much potential in segmenting the population that has not been explored, such as targeting customers who are in a relationship and shown to be spending more on phone usage. Also targeting pre-paid business lines that have not received sufficient attention despite their importance. The male population was seen to be spending more yet is less educated. MNOs should find a way to target that group in a simple manner.

4- **Target groups:** Group think is an underestimated cause for churn yet, it ranks the second highest amongst customer causes for churn. The more people join an MNO, the more other people will want to join the same MNO. Targeting university campuses, large organizations and congregations in religious institutions, political rallies and close communities could be a way of achieving great numbers of customers even if they are not profitable in the beginning.

5- **Avoid complicated offers:** Avoiding multiple tariffs that confuse customers. Reduce the number of services that do not reach a certain percentage of customer usage and instead, try innovating new products that would appeal to customers. Be consistent in promoting one product or service at a time instead of confusing customers with many offers, promotions and services.

6- **Use target marketing not mass marketing:** Nobody likes spam. MNOs should stop sending continuous annoying messages when they now know that they are not read by their customers. Use personalized messages using clients' names and introduce a service that meets their profile. Try using local ethnic group languages to market products rather than use of English and Kiswahili.

7- **Give simple direct rewards:** If MNOs want to please their customers, they need to give them simple direct gifts such as 50 percent more data when they load their bundle or 100 percent airtime when they top up using mobile money. Participants who were requested to subscribe to certain services by dialling a certain number felt less reluctant to do so and sometimes even worried about hidden charges, which prevented them from subscribing.

8- **Provide family plans:** Fifty percent of participants shared their phones with family members at home. Why not make a family plan to share airtime with family members instead of sharing the phone itself? This way the MNO can also guarantee that the rest of the family members are also using the same network.

9- **Use Churn Prediction software:** Most churn prediction software has proven to be accurate and useful (Lima, Mues & Baesens, 2009). Although it does not provide causes of why the customer would churn but incorporated prediction models usually provide nearly accurate predictions of which customers are going to churn. This is a very useful tool for active approach to the problem of churn.

Limitations

The most important limitation in studying the telecommunication industry is the factor of time. The speed at which the telecommunication industry is moving makes research obsolete in a very short time. The study was also geographically constrained to Nairobi, the capital city of Kenya. Nairobi is a city with slightly over three million people whereby about 80 percent live in semi-rural settings in slums and congested settlements with poor living conditions. Conditions in other cities and villages may differ and thus, the study may not represent the wider geographical scope of Kenya.

The study was conducted on English speaking Kenyans only, no foreigners or non-English speaking Kenyans were interviewed. This could compose a certain portion of the population that was not investigated and could have an effect on churn. More than 60 percent of the population had completed high school education, which is in English, with only an average of 2 percent uneducated or illiterate people (KNBS and MLE, 2011). Although a greater percentage of the uneducated people live in villages, which were not in the geographical scope of this research, it means that broader research should include Non-English speaking citizens and other towns and villages need to be investigated in further research. Also people aged below 18 years were

excluded from the study despite being active users, especially with the rising smart phone technology. Prisoners were also excluded. Finally, business sections of MNO websites were not investigated because concentration of this research was mostly on individual customers.

Summary
The extensive literature research revealed a big gap in research and weakness in findings resulting from using quantitative research solely. Variables that were tested were insufficient and not linked enough to show hidden relationships between psychological and economic factors as well as policies and regulations causing customers to churn. Using a qualitative case study, the in-depth research revealed aspects beyond the capacity of quantitative research. Valuable information gathered from data analysis revealed a new set of correlations and links between variables. Furthermore, the analysis revealed that customers are as big a cause for churn as the MNOs themselves. The analysis provided a unique set of findings that aided in setting up a number of practical recommendations that MNOs can use to retain their customers and reduce churn. The recommendations are also applicable to many service industries and they are also replicable in neighbouring countries, which have somehow similar demographic and economic factors.

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