

## Determinants of Financial Performance in Internet Service Providers in Kenya

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### Abstract

Due to the increase in competition and increasing market liberalization, firms in the telecommunications industry are facing a threat to the profit sustainability. Furthermore, customers' preferences are dangerously volatile and satisfaction of their diverse needs can prove arduous and the heightened customer awareness results in search for better alternative offerings in the market. As a result, customers may voluntarily switch from one vendor to the other. The study adopted a descriptive study design. The population was ISP firms in Kenya from which 10 large ISPs were selected. A total of 50 questionnaires were mailed to the managers of these firms. Primary data was collected through structured questionnaires. Data was analyzed using descriptive analysis and regression analysis. The study found that before customer make a decision to purchase or stay with a service provider, they considered service uptime, network coverage, and customer service. The regression results showed that product pricing, customer service, and service uptime had negative but insignificant effects on firm performance while parent shareholding and network coverage had positive effects on firm performance. The study concludes that the factors influencing customer staying in a provider were service uptime, customer service, and network coverage. The study also concludes that product pricing, customer service, parent shareholding, network coverage, and service uptime do not have a significant effect on firm performance. Thus the financial performance of ISPs in Kenya is not influenced by the churn factors. The study recommends that Internet Service Providers in Kenya should ensure that they enhance the level of service uptime as this was a major factor that customers considered before making a decision to purchase an ISP product or to stay with the same ISP. The study also recommends that Internet Service Providers should have large network coverage and not just limit themselves to a small or specific area to cover. Third, the study recommends that Internet Service Providers should invest in a modern and efficient customer care service that can provide solutions to customers who have issues with their internet. This was an important purchase decision factor by customers.

**Keywords:** *Financial Performance, Internet Service Providers, Kenya*

### 1.0 Introduction

The telecommunications industry, mainly involving data communications, is increasingly becoming one of the crucial sectors in the any economy. Rapid technological advancements have made it the most fast paced industry the world over. Developed countries have mastered the speed necessary to keep abreast with the fast paced nature of the telecommunications industry; however, the developing countries significantly lag in this regard. Due to this there are plenty opportunities for growth, in terms of new markets, increase to access of information, and improved efficiency (Wanyama and Baryamureeba, 2007).

Profitability is the revenue realized in excess of costs incurred while sustainability may be represented as a number of objectives to be maximized or minimized. There are various measures of profitability which include Return On Assets (ROA) , Return On Equity (ROE), Return On Investment (ROI), Return On Gross Invested Capital (ROGIC) and Return On Capital Employed (ROCE). Sustainability is defined as "a program's capacity to remain financially viable in the absence of domestic subsidies or foreign support" (Woolcock, 1999). By definition, sustainability includes generating sufficient profit to cover expenses while eliminating all subsidies, even those less obvious subsidies. Market liberalization has contributed immensely to the level of competition that is being experienced. The telecommunications market in Kenya was liberalized in 1999. This led to the formalization of market structures and advent of activities geared towards the development of the telecommunications markets in total (CCK, 2005). This has magnified the intensity of competition further

causing dents in profitability as market share continues to shrink (Neslin, Gupta, Kamakura, Lu, and Mason, 2006).

The telecommunications industry is the most promising and it is raking in colossal profits as a whole, however, individual firms are struggling to maintain profitability levels due to the unpredictability of churn, which is the switching of customers from one provider to another and its adverse effects. Most firms are looking to safeguard the going concern and profitability of the firm as a whole (Peppard, 1993). True sustainability means profit, however marginal, otherwise how can any business survive? The industry needs a better deal from its end customers and a chance to develop further innovation without over-bureaucratic legislation (Ball, 2006).

### **1.1 Determinants of Financial Performance**

The telecommunications sector is changing radically. The changes are driven by a combination of market, business and technological forces (Evangelos, 2004). A revolutionary permeation of information has had worldwide witness due to increased efficiency by market players. Gupta (2008) indicates that the telecommunications industry is characterized by new technologies, new services, and huge capital investments to make content accessible anywhere. Market players are frequently coming up with new products, services, and tariffs to increase their market share in consequence, the industry competition has become fierce. The emergence of electronic commerce has multiplied the amount of available information and thus offers new ways for companies to efficiently respond to clients' expectations. Simultaneously, customers can more easily inquire about the market opportunities. They become more demanding and tend to switch from their previous supplier to another retailer. This gave birth to the notion of churn. This phenomenon has been magnified by electronic commerce. The Internet channel returns control and power to customers who are no longer confined to the decisions of a single company. The outcomes are increase in customer power (Peppard, 2000) and competition exacerbation. Competitors are only one "click away". Customer empowerment is likely to persist and amplify customer attrition issues. On the other hand, Zettelmeyer (2000) asserts that companies competing on multiple channels get information from multiple sources and can decide to communicate different amounts of data to different clusters of customers, thereby creating new differentiation opportunities. As a result, companies augment their market power, impede the emergence of a competitive strategy essentially based on the cost dominance and thus can design strategies that aim at softening churn problems.

### **1.2 Internet Service Providers in Kenya**

An Internet Service Provider (ISP), which falls under the wide category of the telecommunication sector, is an organization that provides access to the Internet. Internet service providers can be either community-owned and non-profit, or privately owned and for-profit. According to The Fiber Optic Association, Access ISPs directly connect clients to the Internet using copper wires, wireless or fiber-optic connections. Hosting ISPs lease server space for smaller businesses and other people (collocation). Transit ISPs provide large amounts of bandwidth for connecting hosting ISPs to access ISPs. Developments such as the fiber technologies have revolutionized data communications, and especially in Kenya where costs have significantly been reduced. Much as the telecommunication industry has a plethora of opportunity, it is curbed by its share of challenges that inhibit full potency actualization. These include; lack of appropriate legal framework, e.g. e-commerce, inadequate national infrastructure to reach markets, mobile operators refusing to interconnect, low ICT awareness in the industry, heavy tax on telecommunication equipment, limited amount of local content which hinders growth of the industry and lack of capacity to manage growth (Communication Commission of Kenya, 2005).

According to a PWC (2010) research on Telecommunications Industry in Kenya, 2010, they observed that the telecoms industry in Kenya, just like the rest of the world, is going through profound changes. In the past decade, technological advancement and regulatory restructuring have transformed the industry. Markets that were formerly distinct, discrete and vertical have coalesced across their old boundaries with a massive investment of capital - much of it originating from private sector participants. In the PWC research, 2010, it is observed that the result is new markets, new players, and new challenges. Market liberalization efforts have also picked up ensuing the successful partial privatization of Telkom Kenya Ltd (December 2007), divestment of GoK's 25% stake in Safaricom Ltd through a public listing (May 2008), and the launch of fourth mobile operator Econet Wireless Kenya (November 2008). This has resulted into some of the world's best known telecommunication providers - Vodafone, France Telecoms and Essar Communications through their investments in Safaricom Limited, Telkom Kenya Limited and Econet Limited respectively.

The communication sector is still experiencing an upward trend as registered by the growth in subscriptions to all the telecommunications services. Increased competition in the mobile sector has resulted in steady growth of this market segment as the services become more affordable. Consequently, the number of mobile subscriptions as well as mobile coverage patterns has continued to demonstrate a positive growth over the period. This trend is likely to continue in future as operators continue employing innovative ways of creating market niche and retaining customers (CCK, 2010). The telecommunication industry, especially the Internet Service Providers have experienced tremendous changes in the market. Due to market competition, most ISP's have seen their revenues drop over time. Up to fifty percent of this drop may be attributed to losing customers to completion or simply Churn. Churn management has been a big concern for most ISP's which have put in place various measures to control churn including a dedicated departments for Customer Relationship Management (CRM) whose focus is on containing customers. The ISP's however do not have a clear structure of how the firms can manage churn.

### 1.3 Statement of the problem

There is need to understand the processes and impacts of a globalizing technology the historical development of that technology (Duque, Collins, Abbate, Azambuja, and Snaprud, 2007). They point out that the process of technology transfer is dependent on local cultural dynamics unique in various regions hence the different diffusions in different regions in the world over. In Kenya, market competition has been characterized by a rush of new entrants into the market, acquisitions and quality offerings to attract new customers and retain them however; this increase in competition has led to a decrease in market share and in profitability of the market players. Due to the increase in competition and increasing market liberalization, firms in the Telecommunications industry are facing a threat to the profit sustainability. As market players' increase and offerings diversify, the market share reduces causing decrease in profit (Neto, Kenny, Janakiram and Watt, 2005). Furthermore, customers' preferences are dangerously volatile and satisfaction of their diverse needs can prove arduous and the heightened customer awareness results in search for better alternative offerings in the market. As a result, customers may voluntarily switch from one vendor to the other.

A study by Mokadikwa (2008) focused on performance factors in the mobile market. The study found that causes of customer retention were "billing by service providers" that confused customers and "better phone deals offered by the competitors". Other aspects were "poor network quality", "confusing pricing structure" and "long waiting on customer care line". Wanyama and Baryamureeba (2007) focused on the general penetration of telecommunication in the economies of developing countries giving rise to plenty opportunities for growth, in terms of new markets, increase to access of information and improved efficiency.

## 2.0 Literature Review

Nowadays, more and more companies start to focus on CRM. Indeed due to saturated markets and intensive competition, a lot of companies do realize that their existing database is their most valuable asset (Athanassopoulos, 2000) and (Jones, Mothersbaugh, and Beatty, 2000). This trend is also notable in subscription services. Companies start to shift away from their traditional, mass marketing strategies, in favor of targeted marketing actions (Burez et al., 2008). It is more profitable to keep and satisfy existing customers than to constantly attract new customers who are characterized by a high attrition rate (Reinartz and Kumar, 2003). The idea of identifying those customers most prone to switching carries a high priority (Keaveney and Parthasarathy, 2001). It has been shown that a small change in retention rate can result in significant changes in contribution (Van den Poel and Larivière, 2004). In order to effectively manage customer churn within a company, it is crucial to build an effective and accurate customer-churn model.

The impact of determinants of financial performance is often correlated with the industry life-cycle. When the industry is in the growth phase of its life cycle, sales increase exponentially; the number of new customers largely exceeds the number of churners. Companies aim at getting more and more new customers. Nevertheless, the ratio (new customers/churners) tends towards one over time. The impact of churn becomes then markedly more sensitive (Lejeune, 2001). Reichheld and Sasser (1990) provided evidence about the advantages of customer retention strategy to mitigate churn losses, which are based on a strong relationship between customer retention and profitability. They found that long-time customers: spend more over time, the operating costs to serve them decline over time, become more loyal and are less price-sensitive. Additionally, Reichheld (1996)

argues that customer defection has severe effects on firms' profitability because firms have to incur in heavy costs to acquire new customers and older customers usually generates greater cash flow and profits than newer ones. Statistical Analysis System (2000) reported that the telecommunications sector endures an annual rate of churn, ranging from 25 percent to 30 percent. This churn rate could still continue to increase in correlation with the growth of the market. Another factor that could push churn rates to higher summits is the deregulation trend.

According to SAS (2000) the churn costs for European and US telecommunications companies are estimated to amount to US\$4 billion annually while the ratio (customer acquisition costs/ customer retention or satisfaction costs) would be equal to eight for the wireless companies. It is generally admitted that companies need three years to amortize the cost (US\$400 in USA and US\$700 in Europe) induced by the replacement of churners and the acquisition of new customers. Not less than 10 percent keep the same supplier while opting for another package. While this kind of churn is not as alarming as the loss of a client, the effect nonetheless remains negative provided that the amount of money spent to recapture the customer in that case is more or less equal to the costs associated with normal churn. The Strategic Group asserts that the Internet Service Providers endure a five times higher churn rate, culminating to 10 percent monthly. The main reasons invoked were "busy signals, connection speed and poor customer service" Strouse (1999) indicates that churn rate is more marked for private customers than for business ones. Groth (1999) underscores that the cellular telephone market experienced a 30 percent annual rate in the USA. In this industry, the cost of acquiring new customers amounts to \$400 per new subscriber.

Hoffman & Novak (2000) confirm that costs incurred for obtaining new customers are much higher than costs linked with customer retention. Average customer acquisition costs supported by retailers on the internet range between US\$100 and US\$500 per customer. Mozer et al. (2000) observed that at present, domestic monthly churn rates are between 2%-3% of the customer base. Luna (1998) indicates that it costs an average of \$400 to acquire a subscriber and churn cost the industry nearly \$6.3 billion in 1998; the total annual loss rose to nearly \$9.6 billion when lost monthly revenue from subscriber cancellations is considered. It costs roughly five times as much to sign on a new subscriber as to retain an existing one. Consequently, for a carrier with 1.5 million subscribers, reducing the monthly churn rate from 2% to 1% would yield an increase in annual earnings of at least \$54 million, and an increase in shareholder value of approximately \$150 million. Evangelos (2004) observed that the cost of churn in the telecommunications industry is large. It costs a great deal more to win new customers than it does to retain current ones. Moreover, frequently, a new customer will churn away before the company can fully recoup its acquisition costs. Customer satisfaction surveys can be misleading as indicators of what drives churn. Eighty per cent of churners had previously stated that they were satisfied with their service, but nevertheless churned within 12 months.

These different examples underline why companies pay such great attention to the churn rate. Companies that solely rely on onerous marketing campaigns to replace the lost customers are prone to serious survival problems before long. Churn management increasingly becomes crucial and generates a variety of customer-oriented activities (Lejeune, 2001). Churning is, therefore, costly to a firm and its effective management will greatly reduce the costs to a firm. Churn management consists of developing techniques that enable firms to keep their profitable customers and it aims at increasing customer loyalty (Lejeune, 2001).

## **2.1 Determinants of financial performance**

Mattison (2005) outlines that a great number of researches have been carried out on determinants of financial performance in various countries, the results, invariably, indicate differences due to influences of culture and different market structures, however, there are five major reasons for churn worldwide. These are: price, quality of solutions, customer service, coverage and image.

Roh, Han, and Jang (2000) further indicate that poor performance, limited coverage, price of service, promotion of competitor's enhanced and satisfaction with customer service are among the reasons that should be taken into deep consideration because if neglected can cause churn. The fundamental objective of churn management is to extract the reasons of customer churn from which a suitable model can be structured. Voluntary churn in the

telecommunication industry deals with measurement of customer disconnects for personal reasons like switching to a competitor, cancelling service, transferring from one place to another, etc. The subscriber initiates it and is either deliberate or incidental. The deliberate reasons might include pricing, poor customer service or network problems (Jahanzeb and Jabeen, 2007).

Price of the products is the most cited reason for churn activity. According to a study done in Portugal by Menezes and Portela (2009) customers are constantly keen on the market trends, any dissatisfaction by the customer in terms of price will lead to a termination, especially where there are cheaper alternatives in the market. Customers are keen on price and priority is sometimes wholly and entirely ascribed to this aspect of the firm's products (Kim and Yoon, 2004). According to CCK (2010) the glide path adopted by the Commission imposed an immediate 50% reduction in mobile termination rates from Ksh.4.42 per minute to Ksh.2.21 per minute and then will progressively decline by 35%, 20% and 15% annually in 2011, 2012 and 2013 respectively with a view to attaining fully cost-oriented levels by 2014.

Therefore, a firm needs to effectively keep its pricing element at par with its competitors as the biggest chunk of churners, are sensitive to pricing. However, due to inherent circumstances firms may not offer relatively cheaper pricing. In such a case they may have delineate the customers from focusing on the price structure by aggressively differentiating value propositions from their competitors (Lubin and Esty, 2010). Customers have varied needs and therefore varying priorities, whilst many of the clients would focus on price, most will also focus on quality of solutions and products offered. This is especially true for the corporate clients (Mattison, 2005). The focus is on innovation and effective delivery of the products and services (Roh et al., 2000). Churn activity will be triggered when there is an expectation gap between what the customer expects and what is delivered. Firms should, therefore, work on minimizing the gap so as to avoid churn and loss of customer loyalty (Emagine International, 2008).

To succeed in offering superior services to customers, the company has to identify service factors and the quality of these service factors (Evangelos, 2004). Firms have an imperative duty to deliver proof of value so as to lock in customers and prevent churn (Lubin and Esty, 2010). The disadvantage is that quality of service is a subjective measure and it is arduous to assess, however, manipulation is possible through innovative advertising (Mattison, 2005). Customer service, just like quality of solutions, is a subjective determinant and difficult to measure but it is one of the key factors that will cause a mass churn if not given much importance. Most of the distasteful factors are the customer representatives are not well familiarized with the telecommunication business, lack of courtesy, lack of information about customers and general lack of information on promotions and current trends in the market. This is a factor that management, most times inadvertently, overlook. Effective churn management will therefore encompass management strategies for personnel (Coussement and Van den Poel, 2006)

The area of coverage by the telecommunications firm plays a big role in churn reduction. It is pervasive in considering drivers of churn. This is a sensitive factor considered by customers. Menezes and Portela (2009) asserted that customers would terminate subscription where the area of coverage is limited so that they switch to a firm with a wider coverage to cater for contingencies. Further, a limited coverage is likely to cause involuntary churn described as inevitable switch of vendors due to circumstance such as where the customer vacates and is no longer within the range provided by the firm. Some companies may churn due to the preference of a specific positioning on a certain provider in the market. Home countries influence may also influence loyalty especially for multinationals which may prefer specific providers and influence the same from the mother countries. Brand positioning also has a huge influence in some firms who strategically choose providers to take pride on their strong brand and associations (Dasgupta, Singh, Viswanathan, Chakraborty, Mukherjea, and Nanavati, 2008).

Competition in the wireless telecommunications industry is rampant. To maintain profitability, wireless carriers must control churn, the loss of subscribers who switch from one carrier to another. As many as seven competing carriers operate in each market. The industry is extremely dynamic, with new services, technologies, and carriers constantly altering the landscape. Carriers announce new rates and incentives weekly, hoping to entice new subscribers and to lure subscribers away from the competition. The extent of rivalry is reflected in the deluge of

advertisements for wireless service in the daily newspaper and other mass media. Although there is significant room for growth in most markets, the industry growth rate is declining and competition is rising. Consequently, it has become crucial for wireless carriers to control churn (Mozer, et al., 2000).

### **3.0 Methodology and Design**

The research was descriptive research based on Internet Service Providers in Kenya. It is quantitative and uses surveys and panels and also the use of probability sampling. Descriptive research is mainly done when a researcher wants to gain a better understanding of a topic. A simple random sampling involves usually much more than a desirable number of sample points and often impractical for complex, time-consuming analyses. The main goal of this type of research is to describe the data and characteristics about what is being studied. The idea behind this type of research is to study frequencies, averages, and other statistical calculations. Although highly accurate, it does not gather the causes behind a situation. Certain importance/descriptive sampling methods have been developed to reduce the sample size without sacrificing the quality of the statistical properties of the output behavior variables. In the descriptive sampling technique (Ziha, 1995) the space defined by each random variable is divided into subsets of equal probability and the analysis is performed with each subset of each random variable only once.

It was from the above understanding, that the research was based on a descriptive study. The study is vital to ISP's as it focused on the underlying factors influenced financial performance of ISP's in Kenya and maybe unique to the region. By picking a descriptive study the research focused on getting the unique determinants financial performance and be able to determine which of those factors was most important to ISPs.

### **3.1 Target Population**

ISP's in Kenya deal majorly with corporate clients & SME's, which are both local and multinationals. According to the CCK Quarterly sector statistics report, 2nd quarter Oct-Dec 2011/2012, the total number of Corporate customers and SME's that had lease lines from ISP's were 76, 245. Appendix 3 groups these customers into different operators showing the total number of subscribers and the percentage market share for each operator and does not include mobile data/internet subscriptions by mobile service providers i.e. Safaricom, Airtel, Essar Telecom (yu Mobile) and Telkom Orange which operate in the Kenyan market as this are considered the mass market. The study is based on ISP's in Kenya on corporate firms and Small and Medium Enterprises hence the exclusion of mobile service providers. According to Register of Unified Licensing Framework Licensees released by Communication Commission of Kenya in February 2012, the total number of registered ISP's in Kenya was ninety two. From the ninety two registered ISP's, the top ten providers control over ninety two percent of the market share while the other providers control less than eight percent of the market share.

### **3.2 Sample**

The study took the market share as a consideration and as per the population from CCK as per Appendix 4 the top ten providers control over ninety two percent of the market shares while the other providers control less than eight percent of the market share. According to Register of Unified Licensing Framework Licensees released by CCK in February 2012, the total number of registered ISP's in Kenya is ninety two. The study considered that the top 10 (ten) ISP's who control over ninety two percent of the market share which is considered to be a fair representative of the populations and the other 82 (eighty two) ISP's, which represent less than eight percent of the market share was not considered for the purpose of this study. Five questionnaires were sent to the each of the top 10 ISPs which were a total of 50 (fifty) questionnaires. This was considered not to significantly affect the outcome of the study hence the sample size.

### **3.3 Data Collection**

This involves the techniques to be adopted by the researcher in the data gathering phase of the work. The researcher used the following instruments to collect the data to meet the problem of the study: primary data was obtained through structured close ended questionnaire that was distributed to the target population of top management of selected ISP's that specifically targeted the Managing Directors, the Marketing Managers,

Service Delivery Managers, Technical Managers and the Finance Managers. The questionnaire that was used was closed-ended type of questionnaire. These are questionnaires that provide a number of alternative answers from which the respondent is required to choose from. The responses are then easy to compare and analyze as they have been determined. The research adopted the closed-ended questionnaire because most of the determinants of financial performance in the telecommunication industry are widely known and the challenge is in finding out how relevant and realistic they are in specific firms.

Among the factors that are outlined by various researchers, that determine financial performance, that were included in the questionnaire included: price, service uptime, customer service, network coverage and parent shareholding. A great number of researches have been carried out on the determinants of financial performance in various countries, the results, invariably; indicate differences due to influences of culture and different market structures. Major factors that influence financial performance include; call quality, pricing options, corporate capability, customer service, credibility / customer communications, roaming / coverage and billing. The questionnaire adopted questions from other researchers with a few amendments to suit ISP's in Kenya since the study is specific to ISP's in Kenya. The objective of the questionnaire included questions that sought to find out the major factors that influence financial performance in ISP's in Kenya; Determine the relevance and applicability of the financial performance factors from other researchers to ISP's in Kenya; Determine the importance attached to each of the factors and find out if there were other factors that were significant that may not have been included in the closed-ended questionnaire. The questionnaires were sent to the sample population via email and a reminder was sent after two weeks to the ISPs that had not responded. In case there were low responses, a phone call to the ISP was made to request for their responses and where necessary the contact was changed within the same company to ensure the sample size is sufficient. Test questionnaires were sent out to some ISPs to test their validity, reliability and administration before the questionnaires were sent to the entire sample population.

### **3.4 Data Analysis**

Regression analysis was used to draw the relationships between the churn and the factors that determine financial performance. Regression analysis describes the relationship between a quantitative dependent variable and one or more independent variables. Here, regression analysis was used in order to calculate the determinants of financial performance of ISPs based on various factors. To measure the determinants, the study focused on the factors that customers look at before investing on a service from a service provider. The factors the study focused on were Product Pricing, Customer Service, Service Uptime, Parent Shareholder and Network Coverage. All these factors contribute different weightings in making a decision to take up a service or not. These factors had been considered as major indicators of financial performances but to different extents. This implies that the Return On Invested of various ISPs was dependent on the resources they invest to mitigate this churn factors like ensuring their prices are competitive, the customer services is effective, the services uptime is optimal, there is well branded name that is internationally recognized and their network coverage is as wide spread as possible to cover a large market. Once the weighting of various churn factors have been determined, then ISPs made a decision on what churn factors are customers sensitive to and put more resources to them and eventually minimize churn hence increase the Return On Investment. The dependent variable was: Return on Investment.

**Table 3.1 Independent Variables:**

No	Factor	Abbreviation	Nature of data required for prediction
1	Product Pricing	PP	Market price in comparison with other providers & CCK guidelines.
2	Customer Service	CS	Calls & emails to CS department & how many are resolved within 24 hours
3	Service Uptime	SU	The percentage of uptime to 99.99%
4	Parent Shareholder	PS	Whether the decisions are made locally or from the parent company
5	Network Coverage	NC	Number of Points of Presence (POP) in the country & the world over

*Author, 2015*

Service uptime was measured using the period a customer's link is monitored and seen to be up running. Customer services were measured using the number of emails and calls by customers to the customer service centre with various issues and how many were resolved within the agreed Service Level Agreement (SLA). Network coverage was measured by the point of presence (POP) around the country and the world through partnerships with other service providers. Pricing was determined by the cost to the customer in comparison to the market rates under the guidelines of CCK. Parent shareholding was determined using the companies' affiliation and whether top company decisions are made locally or from the head office out of the country. For each of the dependent variables, the regression equation was as follows;

$$\text{Return on investment (ROI)} = \alpha + \beta_1\text{PP} + \beta_2\text{CS} + \beta_3\text{SU} + \beta_4\text{PS} + \beta_5\text{NC} + \varepsilon$$

Where,

$\alpha$  is a constant,

$\beta$  is the coefficient of each variable,

PP is the Product Pricing,

CS is the Customer Service,

SU is the Service Uptime,

PS is the Parent Shareholder,

NC is the Network Coverage and

$\varepsilon$  is an error term.

A constant is 5%, a value which is acceptable in the industry over the last five years. This means that, regardless of all efforts, 5% of the customers are likely to switch providers.

#### 4.0 Study Findings

Table 4.3 shows the regression model summary results where R, R square, adjusted R square and standard error of estimate are presented.

**Table 4.1: Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.601 <sup>a</sup>	.361	.201	3.31805

Source: Author (2015)

The results in Table 4.3 show that the churn factors had a joint moderate effect on firm performance as shown by r value of 0.601. The R squared of 0.361 shows that the independent variables accounted for 36.1% of the variance in firm's financial performance.

Table 4.4 shows the ANOVA results which explain the model fit through the F statistic and the probability of F-statistic.

**Table 4.2: ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	124.469	5	24.894	2.261	.088 <sup>b</sup>
Residual	220.189	20	11.009		
Total	344.657	25			

Source: Author, 2015

The results in Table 4.4 show that the F statistic was 2.261. At 5% level of confidence, the F statistic was not significant but at 10%, it was significant. The sum of squares also confirms that the regression model explained less than the residual. Table 4.5 shows the coefficient results for the model variables, the t-values of each of the independent variables as well as the significance (p-value).

**Table 4.3: Coefficients**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	36.502	13.808		2.64	.016
Product pricing	-3.327	1.648	-1.021	-2.01	.057
Customer service	-2.312	2.456	-.302	-.941	.358
Service uptime	-4.934	2.825	-.433	-1.74	.096
Parent shareholder	2.174	1.763	.683	1.23	.232
Network coverage	3.372	2.221	.703	1.51	.145

Source: Author, 2015

The results in Table 4.5 show that product pricing had a negative effect on performance (-3.327). The t-value was -2.01 and the p-value was 0.057 suggesting that the effect of product pricing on performance was insignificant at 5% but significant at 10% level of confidence. Table 4.5 also shows that customer service had a negative effect on firm performance (-2.312). The t-value was -0.941 and the p-value was 0.358 meaning that the effect of customer service on firm performance was not significant. Further, Table 4.5 also shows that service uptime had a negative effect on firm performance (-4.934). The t-value was -1.74 and the p-value was 0.096 meaning that the effect of service uptime on firm performance was not significant at 5% but was significant at 10% level of confidence.

The study also found that parent shareholder had a positive effect on firm performance (2.174). The t-value was 1.23 and the p-value was 0.232 meaning that the effect of parent shareholding on firm performance was not significant at 5% or at 10% level of confidence.

Lastly, Table 4.5 shows that network coverage had a positive effect on firm performance (3.372). The t-value was 1.51 and the p-value was 0.145 meaning that the effect of network coverage on firm performance was not significant at 5% and at 10% level of confidence.

### **5.0 Summary of the Findings**

The objective of this study was to determine major determinants of financial performance and their weighting for Internet Service Providers (ISP's) in Kenya. The study adopted a descriptive study design. The population was ISP firms in Kenya from which 10 large ISPs were selected. A total of 50 questionnaires were mailed to the managers of these firms. Primary data was collected through structured questionnaires. Data was analyzed using descriptive analysis and regression analysis.

The study found that most of the firms (45%) had been in business for more than 5 years. The study further revealed that before making a decision to purchase or stay with a service provider, 82% considered service uptime, 81% of the customers considered network coverage, and 64% considered customer service. Regarding the factors influencing customer churn, the study found that churn in all the firms was influenced by service uptime, customer service influenced churn in 90% of the firms while network coverage influenced 73% of the firms.

The regression results showed that product pricing, customer service, and service uptime had negative but insignificant effects on firm performance while parent shareholding and network coverage had positive effects on firm performance. All these factors were insignificant at 5% level of confidence while product pricing and service uptime were significant at 10% level of confidence.

On the suitability of the model, the study found that the variables had a moderate effect on performance ( $r = 0.601$ ). The independent variables accounted for 36.1% of the variance in performance. The models F statistic was not significant at 5% level but at 10% level of confidence.

### **5.1 Conclusion**

The study concludes that the important attributes that customers considered before making a decision to purchase or stay with a service provider were service uptime, network coverage, and customer service.

Secondly, the study concludes that the factors influencing customer churn were service uptime, customer service, and network coverage. These factors significantly influenced customers' decisions to change a service provider if unsatisfied.

### **5.2 Recommendation**

Based on the findings of this study and the conclusions thereof, the study makes a number of recommendations. First, the study recommends that Internet Service Providers in Kenya should ensure that they enhance the level of service uptime as this was a major factor that customers considered before making a decision to stay purchase an ISP product or to stay with the same ISP.

Second, the study recommends that Internet Service Providers in Kenya should have large network coverage and not just limit themselves to a small or specific area to cover. This was an important factor that customers considered before making a purchase decision and therefore in order for an ISP to attract customers and maintain them, there is need to cover a large area. It was also an important churn factor.

Third, the study recommends that Internet Service Providers should invest in a modern and efficient customer care service that can provide solutions to customers who have issues with their internet. This was an important purchase decision factor by customers and also a churn factor.

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