

Relationship Between Strategic Product Development Practices and Financial Performance of Telecommunication Firms in Kenya

Arnold Namusonge

PhD. Candidate Jomo Kenyatta University of Agriculture and Technology, School of Entrepreneurship, Procurement and Management, Nairobi, Kenya

Elegwa Mukulu

Professor Jomo Kenyatta University of Agriculture and Technology, School of Entrepreneurship, Procurement and Management, Nairobi, Kenya

Samuel Mokaya

Senior Lecturer Jomo Kenyatta University of Agriculture and Technology, School of Entrepreneurship, Procurement and Management, Nairobi, Kenya

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ABSTRACT

Product development is a crucial factor that determines success or failure of firms in the telecommunication industry. The success and sustainability of any organization in a competitive environment is determined by its product development strategy. The highly competitive nature of the telecommunication sector as well as globalization of markets has made it increasingly difficult for firms to differentiate their products on the basis of cost and quality. On the other hand, new product development is now a dominant driver that shapes the landscape of how these firms compete, with the possibility of new product failure also being high. It is therefore necessary for telecommunication firms to master the product development strategies that scale up their product and service portfolios that are likely to capture a wider market and therefore make more profits. Therefore, the objective of this study was to examine the relationship between strategic product development strategies and financial performance of telecommunication firms in Kenya. The population of interest for this study was 290 top level employees of the three telecommunication firms in Kenya, namely Safaricom, Airtel and Telkom. A sample of 145 employees was randomly selected to participate in this study after applying 50% criterion in selection. The study used a mixed research design, which allowed for both quantitative and qualitative data capture. Primary data was collected through questionnaires. Descriptive statistics such as, mean, frequencies and inferential statistics (regression and correlation analysis) were used to analyze data. The study recommends that the management of telecommunication firms should simultaneously scale up their product attributes to fit customers' needs and minimize time to market if they are to compete in the

ever growing market. This will give them competitive edge over other market competitors therefore attaining superior firm performance.

Key words: Product Development Strategy, Financial Performance And Telecommunication Firms

Introduction

Business performance of industries is a vital issue to management. In today's economic climate, industries competitions are greater than ever. Globalization has made business systems to undergo a number of changes in recent years. These changes are accompanied by growth both in size and magnitude. To cope with these changes, modern management techniques are used in contemporary business environments. One of such techniques is strategic management. Strategic management has been advanced as one of the effective management tools in strengthening organization performance through effective decision making and systematic strategic formulation and implementation (Anthony, 2009).

The challenges of the business environment in the 1990s, characterized by fragmented markets, increased competition, rapid technological changes, shifting regulatory frameworks, and a growing dependence on non-price competition have forced many businesses to more closely scrutinize their competitive strategy. Porter (1985) argues that firms create competitive advantage by conceiving new ways to deliver superior value to customers. Innovation is a key source of competitive advantage and can occur at any stage of the value chain.

Background of the Study

Strategic management is a continuous process that involves attempts to match or fit the organization with its changing environment in the most advantageous way possible (Pearce & Robinson, 2007). Strategies are the means by which long-term objectives will be achieved. A strategy is a unified, comprehensive, and integrated plan that relates the strategic advantages of the firm to the challenges of the environment. It is designed to ensure that the basic objectives of the enterprise are achieved through proper execution by the organization. The use of strategic management enables firms define their strategies which provide a central purpose and direction to its activities to people who work in the firm and often to the outside world. Strategic planning and implementation enables firms to adapt under conditions of external pressure caused by changes in environment. Firms can and often do create their environment besides reacting to it. Strategic planning and management helps firms develop competitive strategies (Johnson & Scholes, 2002).

In USA, Telecommunications operators are mastering the demands of technological and regulatory changes while illustrating transparency, customer innovation and bringing new services to the market. The telecom industry is transforming before our very eyes. And in many instances, there are no hard set rules for the new digital platforms, tools and lifecycle in which they live (Martinez, Rodriguez & Torres, 2010). In this industry more than any other, therefore, embracing a strategic, forward-looking business model is critical to survival and success. The transformation that has gripped the landscape presents with challenges, risks and opportunities

as never before. With continued pressure from new players entering the market, operators must continually find ways to stay ahead of the game.

In Nigeria, the telecommunication industry has experienced tremendous changes in recent years. The liberalization and de-regulation of the nation's telecommunication industry and the economy as a whole has prompted the entry of many new players into this sector. Taking advantage of the opportunities provided by the de-regulation, many local and foreign investors of different sizes and strength have sought to create a niche for themselves. The level of activities in this sector has increased significantly over the past ten years and it is envisaged that this will not abate soon (Oyedijo, 2012). The environment is, therefore, becoming more competitive than before while some of the leading telco companies have started expanding their operations overseas especially into the West African sub-region to compete with long established international players. In all of this, there is increasing demand and pressure on the management of these companies to deliver on shareholders earnings and justify increasing investment in their companies.

The telecommunications industry in Kenya, just like the rest of the world, is going through profound changes. In the recent past, 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. The result is new markets, new players, and new challenges. Market liberalization efforts have also picked up, ensuing in the successful partial privatization of Telkom Kenya Limited and divestment of Government of Kenya's 25% stake in Safaricom Limited through a public listing (March, 2008), and the launch of a fourth mobile operator Yu Mobile (December, 2008). This has resulted into some of the world's best known telecommunication providers being major players in the Kenyan market; Vodafone and France Telecom's through their investments in Safaricom Limited and Telkom Kenya Limited (brand name Orange) respectively, while Bharti Airtel and Essar Communications have a presence in the Kenyan market as Airtel Kenya and Yu Mobile respectively (Communications Authority of Kenya (CA), 2014).

Problem Statement

Increased expenditures and the growing number of players in the telecommunication industry have created many challenges to telecommunication players (Telco players) globally (Martinez, *et al.*, 2010). In Kenya, there have been four major Telco players since the year 2000; Safaricom, Airtel, Essar Telecom - operating under the brand name YU, and Orange. During the year 2014, the mobile market segment in Kenya saw the exit of Essar Telecoms Kenya Limited (Yu). Only one player (Safaricom) has been dominant and profitable with the rest registering losses (Airtel, Essar, Orange). This has led to investors divesting from the Kenyan market (Kencell to Celtel to Zain to Airtel). Orange Telecom has since left the market in 2016, paving way for a new investor, Helios Investment Partners.

The level of competition in local calls and inter-exchange carriage has been limited up to the present under the duopoly arrangements (Ocharo, 2014). There have nevertheless been real reductions in local call charges under the price capping arrangements and in response to the

threat of direct competition. Strategic management has been touted as one of the effective management tools in strengthening organization performance through effective decision making and systematic strategic formulation and implementation. However, it is not clear what role strategic management plays on the financial performance of firms in the telecommunications sector. It is for this reason that this study sought to determine the role. Studies done on strategic management practices in Kenya are insufficient. Arasa and Gathinji (2014) conducted a study on the relationship between competitive strategies and firm performance: a case of mobile telecommunication companies in Kenya. Ochola (2013) conducted a study on outsourcing strategies adopted by telecommunication vendor companies in Kenya. Ocharo (2014) carried out a study on factors influencing change management practices in the telecommunication industry in Kenya. Mutemi (2014) explored the strategic management practices and performance of small scale enterprises in Kitui town in Kenya. Suraj and Ajiferuke (2013) did a study on Knowledge Management Practices in the Nigerian Telecommunications Industry. As can be evidenced in the above studies, none of the studies capture strategic product development practices in the telecommunication industry in Kenya. The studies have focused on isolated factors that could affect financial performance of firms, and could be a subset of strategic management, as a practice. Thus, this study sought to fill the research gap that exists by carrying out an investigation into the role strategic product development practices holistically play on the financial performance of telecommunication firms in Kenya. Strategic product development is a management practice may lead to superior firm performance if it is well understood and implemented accordingly. Therefore, the purpose of this study was to examine the relationship between strategic product development practices and financial performance of telecommunications firms in Kenya.

Objective of the Study

The objective of this study was to examine the relationship between strategic product development practices and financial performance of telecommunications firms in Kenya.

Hypothesis

H₁ There is a significant relationship between strategic product development practices and financial performance of telecommunications firms in Kenya.

H₀ There is no significant relationship between strategic product development practices and financial performance of telecommunications firms in Kenya.

LITERATURE REVIEW

Theoretical Review

The study focused on resource-based view theory, agency theory and Porter's five forces competitive model.

Resource-based view theory

Strategy has generally been defined as the firms matching of its resources and capabilities so as to take advantage of the environmental opportunities while neutralizing the environmental threats (Porter, 1996). This study looked at strategic management through the lenses of the resource based view theory. The resource-based view theory (RBV) may be defined as how a firm matches its combinations of resources and capabilities to achieve sustainable comparative competitive advantage. It is predicated on four fundamental factors, the resource- capability combination must be valuable, rare, in-imitable and non-substitutable.

Many researchers in the field of strategic management have defined the resource based view in various ways but generally meaning the same. Rumelt (1984) and Wernerfelt (1984) articulated that the resource based view of a firm is about how a firm fits its bundle of resources and capability combination to achieve a sustained competitive advantage. (Barney, 1991) define with greater clarity, that resources are all that which is tangible or intangible in terms of assets, capabilities process', attributes, information, and knowledge that are linked to the firm either permanently or semi- permanently; and proceeded on to give examples such as brand names, machinery and equipment, plant, land, human resources, human resource systems and process, and organizational and technological systems among others.

The RBVF is a theoretical perspective that attempts to describe, explain, and predict how firms can achieve a sustainable competitive advantage through acquisition of and control over resources. Resources, according to the RBVF, include both tangible (e.g. equipment) and intangible (e.g. process knowledge) assets (Grant, 1991) that facilitate the production and delivery of goods and services. Firms seek to acquire and exert either permanent or semi-permanent control over resources that can provide a competitive advantage over competitors. Because firms may exert different levels of control over different types of resources, they would differ in terms of the collective whole – commonly referred to as bundle of resources (Barney, 1991) or resource endowment – that would be available to them (Amit & Schoemaker, 1993). These differences, in turn, should lead to different product and/or service attributes that ultimately account for the firms' competitive position (Schulze, 1994).

Barney (1991) and Peteraf (1993) have discussed, in more specific terms, the five explicit characteristics of a resource that would allow firms to attain a sustainable competitive advantage. First, the resource must be valuable in that it improves firm efficiency and/or effectiveness. Second, the resource must be rare so that by exercising control over it, the firm can exploit it to the disadvantage of its competitors. Third, the resource must be imperfectly imitable to prevent competitors from being able to easily develop the resource in-house. Fourth, the resource must be imperfectly mobile to discourage the ex-post competition for the resource that would offset the advantages of maintaining control of the resource. Fifth and last, the resource must not be substitutable; otherwise, competitors would be able to identify different, but strategically equivalent, resources to be used for the same purpose.

The traditional concept of strategy considers the resource position of the firm. A firm selects its strategy to generate rents based upon their resource capabilities. Organizations with the strategic capability to focus and coordinate human effort and the ability to evaluate effectively the resource position of the firm in terms of strengths and weaknesses have a strong basis for competitive advantage (Andrews, 1971). Rent theory allows the clarification of the SWOT

framework by identifying exactly what can be real 'strengths' and firm capabilities for strategic advantage. Differences among firms in terms of information, luck, and/or capabilities enable the firm to generate rents. The firm's unique capabilities in terms of technical know-how and managerial ability are important sources of heterogeneity that may result in sustained competitive advantage (Mahoney & Pandian, 1992).

Agency Theory

The assumptions and prescriptions of agency theory fit naturally with the issues inherent in strategic management. Agency theory is predicated on the belief that individual economic agents choose actions that maximize their personal utility. Within the modern corporation, there often exists a separation between the individuals making corporate decisions (managers) and the individuals bearing the wealth consequences of those decisions (shareholders).

Agency theory is concerned with agency relationships. Two parties have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf (Rungtusanatham et al., 2007). The important assumptions underlying agency theory are that: Potential goal conflicts exist between principals and agents; each party acts in its own self-interest; Information asymmetry frequently exists between principals and agents; Agents are more risk averse than the principal and Efficiency is the effectiveness criterion (Ekanayake, 2004; Rungtusanatham et al., 2007).

In agency relationships, typically, the principal will seek to minimize the agency costs, such as, specifying, rewarding and monitoring, and policing the agent's behavior, while the agent works towards maximizing rewards and reducing principal control (Fleisher, 1991). Efficient management of agency problems such as information acquisition (or communication), preference mismatch (or conflict of interest), effort (or moral hazard) and capability (or adverse selection), mainly associated with the agent (Fleisher, 1991), is also imperative to any principal-agent relationship.

In a product development setting, the firm that involves sub-contractors and suppliers in product development and innovation acts like a principal that delegates the authority of production and/or services to the sub-contractor or supplier, the supplier being the agent, so both parties are engaged in an agency relationship. Similarly, the sub-contractor or supplier could also further involve other firms in the value chain and could be either the principal or the agent depending on whether it is buying from the supplier or selling to a market intermediary. Therefore, the management of telecommunication firms needs to employ aspects of the agency relationship and the agency theory to the daily operations. Along with the delegation of production and services, the responsibility of maintaining satisfactory quality of the supplied products and services is also delegated to suppliers, so buying firms need to ensure that suppliers provide products and/or services that conform to the quality requirements stipulated in their contracts.

Porter's Five Forces Competitive Model

Competitive practices are derived from Porters generic strategies. Porter's model of generic competitive strategies is an important synthesis of Porter's research and teaching experience

within strategy and industrial economics. Since the publication of this model in 1980, Porter (1998 and 2004) has confirmed his belief that firms should pursue one of his recommended strategies in order to succeed. From the firm's point of view, the most relevant and important aspect of the competitive environment is the industry in which the firm competes. In Porter's wording, the industry is the "arena" where competition takes place.

In light of Porter's analysis, industries are comprised of firms that produce close substitutes; but the firms' competitive environment has a common structure, consisting of five competitive forces namely; threat of new entry, intensity of rivalry among existing firms, pressure from substitute products, bargaining power of buyers and bargaining power of suppliers.

Given this context, Porter goes on to suggest strategies that firms should pursue in order to position themselves against the pressure of the main competitive forces and achieve higher profitability than the industry's average. These strategies are presented in the so-called model of generic competitive strategies (Porter, 1980). The term "generic" would refer to the broadest level of the strategic approach that the firm chooses to pursue, regardless of its business, be it manufacturing, service, etc. The generic strategies are defined as the development of an overall cost leadership, differentiation, or focus approach to industry competition.

When using differentiation strategy, a company focuses its efforts on providing a unique product or service (Bauer & Colgan, 2001). Since, the product or service is unique this strategy provides high customer loyalty (Hlavacka *et al.*, 2001). Product differentiation fulfills a customer need and involves tailoring the product or service to the customer. This allows organizations to charge a premium price to capture market share. The differentiation strategy is effectively implemented when the business provides unique or superior value to the customer through product quality, features, or after-sale support. Firms following a differentiation strategy can charge a higher price for their products based on the product characteristics, the delivery system, the quality of service, or the distribution channels. The differentiation strategy appeals to a sophisticated or knowledgeable consumer interested in a unique or quality product and willing to pay a higher price. The key step in devising a differentiation strategy is to determine what makes a company different from a competitor's (Reilly, 2002). When using differentiation, firms must be prepared to add a premium to the cost (Hyatt, 2001). This is not to suggest costs and prices are not considered; only it is not the main focus. However, since customers perceive the product or service as unique, they are loyal to the company and willing to pay the higher price for its products (Hlavacka *et al.*, 2001).

The value added by the uniqueness of the product may allow the firm to charge a premium price for it. Because of the product's unique attributes, if suppliers increase their prices the firm may be able to pass along the costs to its customers who cannot find substitute products easily (Johnson and Scholes, 2009). Firms that succeed in a differentiation strategy often have the following internal strengths; access to leading scientific research, a highly skilled and creative product development team, strong sales team with the ability to successfully communicate the perceived strengths of the product and a corporate reputation for quality and innovation.

Strategic product Development Practices

The emphasis on new products has spurred researchers from strategic management, engineering, marketing, and other disciplines to study the new product development process (Schilling & Hill, 2005). Most conclude that in order to be successful at new product development, a firm must simultaneously meet two critical objectives: maximizing the fit with customer needs, and minimizing time to market. While these objectives often pose conflicting demands on the firm, there is a growing body of evidence that the firm may employ strategies to successfully meet these objectives. Successful firms are those that articulate their strategic intent and map their R&D portfolio to find a fit between their new product development goals and their current resources and competencies. They further state that their success also rests on how well the technology areas they enter contribute to the long term direction of the firm by helping them build new core capabilities critical to the firm's long term goals. Strategic alliances to obtain enabling technologies may shorten the development process, but partners must be chosen and monitored carefully.

The importance of new product development (NPD) has grown dramatically over the last few decades, and is now the dominant driver of competition in many industries. In industries such as automobiles, biotechnology, consumer and industrial electronics, computer software, and pharmaceuticals, companies often depend on products introduced within the last five years for more than 50 percent of their annual sales. However, new product failure rates are still very high. Many R&D projects never result in a commercial product, and between 33 percent and 60 percent of all new products that reach the market place fail to generate an economic return (Schilling & Hill, 2005).

The globalization of markets is a natural result of the steady decline in barriers to the free flow of goods, services, and capital that has occurred since the end of World War II. The result has been a substantial increase in foreign competition. The more competitive a market becomes, the more difficult it is for companies to differentiate their product offerings on the basis of cost and quality. As a result, new product development has become central to achieving meaningful differentiation. Product life cycles have been shortening as the innovations of others make existing products obsolete.

Companies with short cycle times can continually upgrade their products, incorporating state of the art technology when it becomes available. This enables them to better serve consumer needs, outrun their slower competitors and, build brand loyalty. It also enables them to offer a wider range of new products to better serve niches. Numerous studies have found a strong positive relationship between speed and the commercial success of new products. The objective, then, is to minimize time to market by making the NPD process more efficient, without sacrificing product or service quality (Schilling & Hill, 2005).

Firm Performance

Superior financial performance is a way to satisfy investors and can be represented by profitability, growth and market value (Cho & Pucik, 2005). These three aspects complement each other. Profitability measures a firm's past ability to generate returns (Glick *et al.*, 2005). Growth demonstrates a firm's past ability to increase its size. Increasing size, even at the same profitability level, will increase its absolute profit and cash generation. Larger size also can bring

economies of scale and market power, leading to enhanced future profitability. Market value represents the external assessment and expectation of firms' future performance. It should have a correlation with historical profitability and growth levels, but also incorporate future expectations of market changes and competitive moves.

Customer and employee satisfaction are two further aspects to consider. Customers want companies to provide them with goods and services that match their expectations (Fornell, Johnson, Anderson, Cha, & Bryant, 1996). To do that, companies must understand their needs, avoid defects and improve the perceived quality and value added by their offerings. Customer satisfaction increases the willingness-to-pay and thus the value created by a company (Barney & Clark, 2007). Employees' satisfaction is related to investments in human resources practices. This group tends to value clearly defined job descriptions, investment in training, career plans and good bonus policies (Harter, Schmidt, & Hayes, 2002). The satisfaction of these stakeholders, translates itself into a firm's ability to attract and retain employees and lower turnover rates.

According to Ganeshkumar and Nambirajan (2013) firm performance can be measured by the following factors: Market share, Sales growth, Profit margin, Overall product quality, Overall competitive position, Average selling price, Return on investment and the Return on sales. The approach in measuring firm performance can be divided into two categories which are financial measures and non-financial measures. Alternative, firm performance can be measured by financial measures and strategic measures. Non-financial measures include aspects such as customer satisfaction, employee satisfaction, environmental performance, social performance, efficiency, effectiveness and relevance. Financial measures were adapted to measure organizational performance in this study.

RESEARCH METHODOLOGY

This study adopted a mixed research design, which allowed for both quantitative and qualitative approaches. This method has been known to facilitate collection of data from large populations within a reasonably short period of time (Koul, 2002). A formalized study, structured with clearly indicated investigative questions was given out to a targeted population from a representative sample of the population.

A cross-sectional survey design was used to collect quantitative data. Bryman and Bell (2007) define a cross-sectional design as a research method that entails the collection of data on more than one case and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables, which are then examined to detect patterns of association.

A survey was also found to be the most appropriate form of research whenever the population was big and largely homogeneous. The Communications Authority of Kenya puts the number of licensed mobile telco providers in Kenya as three (Safaricom, Airtel and Orange/Telkom). This study focused on all the three operators. The main focus of the study was quantitative. However, some aspects of qualitative approaches were used in order to gain a better understanding from respondents, through their opinions in particular areas, and this, therefore, enriched the quantitative data. The target population was 290 senior employees drawn from

the three telecommunication firms; 130 from Safaricom, 110 from Airtel and 50 from Orange. A sample of 145 employees was randomly selected to participate in this study. Both primary and secondary data was used for the study. Primary data was collected using questionnaires which covered the relationship between strategic product development practices and financial performance of telecommunication firms in Kenya while Secondary data consisted of publications and literature related to product development and firm performance.

RESEARCH FINDINGS AND DISCUSSION

Response Rate

The number of questionnaires that were administered was 145. A total of 125 questionnaires were properly filled and returned. This represented an overall successful response rate of 86% as shown in Table 1. This agrees with Babbie (2004) who asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on this assertion 86% response rate was adequate for the study.

Table 1: Response Rate

Response	Frequency	Percent
Returned	125	86%
Unreturned	20	14%
Total	145	100%

Reliability Analysis

Cronbach's alpha was used to test the reliability of the measures in the questionnaire (Cronbach, 1951). According to Sekaran (2003), Cooper and Schindler (2003), Cronbach's alpha has the most utility for multi-item scales at the interval level of measurement, requires only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale.

Reliability was tested using questionnaire duly completed by eight randomly selected respondents. These respondents were not included in the final study sample in order to control for response biasness.

The questionnaire responses were input into statistical package for social sciences (SPSS) and Cronbach's alpha coefficient generated to assess reliability. The findings indicated that strategic market entry practices had a coefficient of 0.897.

Strategic product development practices and financial performance

Respondents were asked different questions with an aim to establish the relationship between strategic product development practices and financial performance of telecommunication firms in Kenya. Using a five-point likert scale, the study sought to know respondents' level of agreement on various statements relating to the relationship between new product development practices and financial performance of telecommunication firms in Kenya as shown in Table 2.

Measurement of Strategic product development practices

Table 2: Strategic Product Development Practices

Statements	strongly disagree	Disagree	Neither agree nor disagree	agree	strongly agree	Mean	Std. Dev
My organization always Prepares to roll out the product early and this has led to an increase in the company's profits	0.00%	0.00%	0.00%	49.60%	50.40%	4.50	0.50
My organization Involves subcontractors and suppliers in product development and this has led to an increase in the company's profits	0.00%	0.00%	9.60%	57.60%	32.80%	4.23	0.61
My organization resolves production problems quickly and this has led to an increase in the company's profits	0.00%	17.60%	48.00%	16.80%	17.60%	3.34	0.97
My organization Simulates & analyzes product designs early to minimize late iteration and physical prototypes and this has led to an increase in the company's profits	0.00%	0.00%	33.60%	66.40%	0.00%	3.66	0.47
Strategic product development practices influences profitability of an organization	0.00%	0.00%	25.60%	48.80%	25.60%	4.00	0.72
Average						3.95	0.65

Results in Table 2 revealed that 100% (49.6%+50.4%) of the respondents agreed that their organization always prepares to roll out the product early and this has led to an increase in the company's profits. 90.4% agreed that their organization involves subcontractors and suppliers in product development and this has led to an increase in the company's profits. 48% of the respondents were neutral to the statement that the organization resolves production problems quickly and this has led to an increase in the company's profits. The results further revealed that 64% agreed that the organization simulates and analyzes product designs early to minimize late iteration and physical prototypes and this has led to an increase in the company's profits.

Finally, 74.4% of the respondents agreed that strategic product development practices influences profitability of an organization.

Using a five point scale likert mean, the overall mean of the responses was 3.95 which indicates that majority of the respondents agreed to the statement of the questionnaire. Additionally, the standard deviation of 0.65 indicates that the responses were varied. The results herein imply that strategic product development practices affect financial performance.

Further, the respondents were asked to indicate whether strategic product development practices influence the financial performance. Results indicate that majority of the respondents who were 92% said yes while only 8% said no. This implies that strategic product development practices play a significant role in firms' financial performance.

Correlation Analysis

Correlation analysis was conducted between strategic product development practices (independent variable) and financial performance (dependent variable). Results presented in Table 3 indicated that there was a positive and a significant association between strategic product development practices and financial performance ($r=0.584$, $p=0.000$). This implies that both strategic product development practices and financial performance change in the same direction.

The study findings agree with that of Reilly (2002) who notes that differentiation is also one of Porters key business strategies .When using this strategy; a company focuses its efforts on providing a unique product or service (Porter, 1996) (Cross, 1999) (Hlavacka *et al.*, 2001). Since the product or service is unique, this strategy provides high customer loyalty (Porter, 1985; Cross, 1999; Hlavacka *et al.*, 2001). Product differentiation fulfills a customer need and involves tailoring the product or service to the customer. This allows organizations to charge a premium price to capture market share. Aaker (1984) further argues that a differentiation strategy is often but not always associated with a higher price because it usually makes price less critical.

Table 3: Correlation matrix

		Financial Performance	Product Development Strategies
Financial Performance	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Product Development Strategies	Pearson Correlation	.584**	1.000
	Sig. (2-tailed)	0.000	

** Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

The results presented in Table 4 present the fitness of model used of the regression model in explaining the study phenomena. Strategic product development practice was found to be satisfactory variable in explaining financial performance. This is supported by coefficient of

determination also known as the R square of 34.1%. This means that Strategic product development practices explain 34.1% of the variations in the dependent variable which is financial performance of telecommunication firms in Kenya.

Table 4: Model Fitness

Indicator	Coefficient
R	0.584
R Square	0.341
Adjusted R Square	0.335
Std. Error of the Estimate	0.28803

In statistics significance testing, the p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number found is less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; else the model would be regarded as non-significant.

Table 5 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variable is a good predictor of financial performance. This was supported by an F statistic of 63.592 and the reported p value (0.000) which was less than the conventional probability of 0.05significance level.

Table 5: Analysis of Variance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.276	1	5.276	63.592	.000
Residual	10.205	123	0.083		
Total	15.480	124			

Table 6 presents the regression of coefficient results. The findings revealed a positive and significant relationship between strategic product development practices and financial performance of telecommunication firms in Kenya as supported by a p value of 0.000 and a beta coefficient of (0.512). This implies that a change in strategic product development practices by a unit led to an improvement in financial performance of telecommunication firms by 0.512 units.

The study findings agree with that of Kamau (2013) who conducted a study on effects of product differentiation strategy on sales performance in supermarkets in Nakuru town central business district. The outcome of the study shows that product differentiation and physical differentiation plays a major role in activating annual sales performance at the supermarkets unlike service differentiation which showed a weak relationship.

Table 6: Regression of Coefficients

Variable	B	Std. Error	T	sig
(Constant)	2.224	0.261	8.534	0.000

Strategic Product Development Practices	0.512	0.064	7.974	0.000
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Thus, the model for the study is;

$$\text{Financial Performance} = 2.224 + 0.512 X_2$$

Where,

X_2 = Strategic Product Development Practices

Hypothesis Testing

The hypothesis was tested by using the ordinary least square regression. The acceptance/rejection criteria was that, if the t-value is greater than t-critical (1.96), the H_0 is rejected but if it's less than 1.96, the H_0 fails to be rejected. The null hypothesis was that there is no significant relationship between strategic product development practices and financial performance of telecommunication firms in Kenya. The alternative hypothesis was that there is a significant relationship between strategic product development practices and financial performance of telecommunication firms in Kenya. Results in Table 6 show that the calculated t-statistic of 8.534 was higher than the critical t statistic ($t_{\alpha} = 1.96$). The findings were further supported by a p-value of 0.000. This indicated that the null hypothesis was rejected hence Strategic product development practices had a significant relationship with financial performance.

CONCLUSION AND RECOMMENDATIONS

The objective of the study was to establish the relationship between strategic product development practices and financial performance of telecommunication firms in Kenya. Results revealed that organizations always prepare to roll out the product early and this increases their profitability. In addition, results revealed that organizations involve subcontractors and suppliers in product development, which leads to improved performance. Further, results showed that organizations resolve production problems quickly, simulates and analyzes product designs early to minimize late iteration and physical prototypes and that strategic product development practices influences profitability of an organization.

Correlation analysis showed that strategic product development practices and financial performance are positively and significantly associated. Regression analysis indicated that strategic product development practice has a positive and significant effect on financial performance of telecommunication firms. The hypothesis results indicated that there is a significant relationship between strategic product development practices and financial performance in telecommunication firms in Kenya.

Based on the findings the study it can be concluded that strategic product development practices influenced the financial performance of telecommunication firms in Kenya. This can be explained by the regression results which showed that the influence was positive and also showed the magnitude by which strategic market entry practices influenced the financial performance of telecommunication firms. The univariate regression results showed that strategic product development practices influenced the financial performance of telecommunication firms by 0.0512units. Further, the overall regression results revealed that

strategic product development practices influenced the financial performance of telecommunication firms by 0.199units.

Based on the conclusions of this study, it is recommended that telecommunication firms should scale up their product and service portfolios if they are to achieve superior firm performance. If the firms generate new products and services, then they are likely to capture a wider market and thus making more profit. Further, the study recommends that the telecommunications firms should simultaneously scale up on the attributes of their product to fit customer needs and minimize time taken to market if they are to compete in the growing market.

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