

**BUSINESS INNOVATION, FIRM COMPETITIVENESS AND MARKET
PERFORMANCE OF MOBILE OPERATORS IN KENYA: A CASE OF
SAFARICOM PUBLIC LIMITED COMPANY**

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ABSTRACT

The intense competitive environment in the mobile communications industry, has compelled mobile operators to regularly review their strategies to align with appropriate business innovation and firm competitiveness in order to compete favorably and to achieve the desired market performance. This study seeks to examine, investigate and determine the influence of business innovation and firm competitiveness on market performance of Safaricom PLC. The study was anchored on the Unified Theory of Acceptance and Use of Technology (UTAUT) theory, supported by Michael Porter Five Forces Model. The sample size of 197 was taken from a target population of 402 using stratified random sampling techniques. Descriptive research design was adopted, with the primary data collected using structured questionnaire and analyzed using SPSS version 26. Pilot study was done with 20 respondents, giving a Cronbach alpha of 0.866. Regression analysis established coefficients, $X_1=0.3400$ ($p=0.000$) and $X_2=0.464$ ($p=0.000$) for business innovation and firm competitiveness respectively, hence the regression model equation of: $Y=0.447 + 0.340X_3 + 0.464X_4$ showed that there was a positive significant correlation to market performance. The overall regression coefficient $R= 0.750$ and R^2 of 0.563. A comparative study is recommended be done with Airtel and Telkom Kenya to determine whether the outcome is in line with the findings from the Safaricom PLC study.

Key words: *strategic leadership, organization culture, strategy implementation*

INTRODUCTION

The Telecommunication industry globally, has faced intense competition due to rapid changes in customer needs and preferences, and challenges in adopting to changes in technology, which has created barriers into market entry and made it hard for some

players to survive in the market (Strakova, Vachal, & Caniga, 2021). Several parameters are cited to influence market performance in different sectors just to mention, market share, technology, management competencies, decision-making, policy efficiency, leadership and leadership style, the shareholders and the stakeholders (Burdekin, & Harrison, 2021).

For organization to achieve their dreams, vision, mission and objective, it is important to understand how the organizations integrate business innovation and firm competitiveness to influence the market performance of the organization. Due to globalization, there is increased and intensive competition, demand for the new products in the market, and the diversity that is caused by the changing technology that has affected every sector in the globe (Atique, Safeer, Ullah, & Iftikhar, 2021).

In the African region and indeed in Kenyan market as well, there has been quite intense competition in the Mobile Telecommunications industry. For the last 15 years, African mobile industry has been dominated by mobile operators Vodacom, Vodafone, Airtel Africa, MTN Group, Orange, Etisalat and Safaricom. The effort by the mobile operators to capture the larger market share is through the competitive market performance, based on technology, business innovations and prudent business leadership and management. There three mobile operators in Kenya, Safaricom PLC, Airtel Kenya and Telecommunication Kenya, formerly Orange. Besides these advancements in the Telecommunication sector some of the operators are still struggling with market entry and market penetration to attain a favorable market share, as they experience the customer shift from one operator to another. The study tried to determine the causes of the variance with respect to market performance of these mobile operators and to determine whether the causes are due to Business Innovation and Firm competitiveness.

BACKGROUND OF THE STUDY

Business Innovation

Innovation is the process of changing the ideal idea into a product or a service that add value to the end users of the product efficiency in regards to the performance and

that of the employees and organization. Innovation can take different dimensions, (Product, process, service, management and organization) that aims at shifting the customer choice and preference, taste form other competitors in the market. The innovation may involve the aspect of technical specification, user friendliness, software associated with the product, the components of the product, product simplicity.

Gachigo, Kahuthia, and Muraguri (2019) stated that organizations or firms that introduce business innovation in order to introduce the efficiency usually reflects on the type and the nature of the strategy employed by the firm. The businesses innovations that will be of interest in this study will be product and process differentiation, change of brand image/identity just in time (JIT) in the introduction of their products in the market, how they use pricing strategy to be proactive. (Abdul, Shafique, Muhammad, & Altaf, 2017) posits that product innovation involves the improvement of goods and services, fresh design, or a fresh supply in the market with the latest version in the marketplace which is unfamiliar to the market.

Firm Competitiveness

A firm competitiveness is the ability of the firm to be creative, develop distinct features and to have exceptional resources that aims at enhancing market performance in the anticipated dynamic environment (Sijabat, Nimran, Utami, & Prasetya, 2021). In the current market set up where the globe has become a village, firms develop different strategies just to have a segment if not to control the market share. Notani and Jain (2021) stated that due to globalization and the limited resources, organizations are made to compete for the few prevailing opportunities by hastening for their growth in both local and international market, telecommunication companies have come up with the survival strategies that can enable them to improve and to increase their market performance.

Market Performance

Performance is viewed to be the ability of the organization to be able to convert the resources of the organization and proper utilization of its resources, this includes the workforces of the organization to effectively and efficiently realize the objective and goals of the organization. Performance in the market depends on the purpose in which the processes and the objectives were designed. (Costa, Aleksic, & Bortoluzzi, 2021) stated that, the organizations or business that do well are those that have a proper technology, proper innovation, that includes product innovation, process innovation, and even the organizational innovation good leadership style that matches the needs of their clients, and offer that which is different from their competitors in the market and that they have effective strategies that help them gain a competitive advantage. The performance of the organization in the market can be perceived by various parameters in the market which they operate such as quality of the product and the process, efficiency in terms of delivery and giving feedbacks to the customer as to when the concern is raised by the customer, customer satisfaction and loyalty to the organization product and the brand of the institution by repeatedly buying over other companies.

Safaricom PLC

Safaricom PLC is a Public Limited Company which is listed in the Nairobi Securities Exchange (NSE) and has its headquarters at Safaricom House, Nairobi, Kenya. Safaricom is the leading Telecommunications mobile operator in Kenya.

with a market share of mobile subscriptions of about 64% as compared with its closest competitor, Airtel with about 27% and Telkom Kenya with less than 10%.

Statement of the problem

Most of the Telecommunication sector players, locally and globally, are under intense pressure to expand and/or maintain their market share and the mobile operators, being the key players in the telecommunication industry, are striving to survive in this competitive market. In Kenya, the mobile operators, Safaricom Plc, Airtel Kenya and

Telkom Kenya, have all come up with varying technologies, they have gone through changes in leadership, they have adopted several business innovations models and they are competing in the same market environment; however, the market share remains skewed at 64% in favor of Safaricom. It is with this revelation that this study seeks to investigate the causes for the market performance variances as observed from the three mobile operators. Barbara, Alberto and Francesco (2012) opined that to increase their perceived value of goods or services and to expand market performance innovation and best strategies should take the center stage if the organization is to remain relevant and competitive in dynamic economic market. Based on differences in the market share as stated here, the study intends to determine the influence of business innovation and firm competitiveness on the market performance of telecommunication industries.

Research Objectives

The principal objective of this research study was to find out the influence of business innovation and firm competitiveness on the market performance of mobile operators in Kenya.

Specifically, the study is seeking;

- i. To demonstrate the influence of business innovation on the market performance of mobile operators in Kenya
- ii. To find out the effect of firm competitiveness on the market performance of mobile operators in Kenya.

Research Questions

- i. What is the effect of business innovation on the market performance of mobile operators in Kenya?
- ii. How does firm competitiveness influence the market performance of mobile operators in Kenya?

Significance of the Study

The study is important in theory, policy and practice to various stakeholders. The outcome of the study will contribute to the Academia and other researchers giving additional source of literature review to the existing literature and giving secondary data for future researchers on the same topic.

The study is also guide policy makers like Communications regulator (CAK) in shaping the operational efficiency and fair competition within the industry and enhance innovations.

The study is of great significance to the practice of the Telecommunication industry players in Kenya by helping them understand the how to blend business innovation and firm competitiveness to operationalize efficiency to better market performance.

LITERATURE REVIEW

THEORETICAL FRAMEWORK REVIEW

This study utilized various theories related to the factors that influence the market performance of the mobile Telecommunication industry. The review covered Michael Porter Five Forces Model and Unified Theory of Acceptance and Use of Technology (UTAUT). The study was anchored on Michael Porter Five Forces Model supported by UTAUT. The theories give a review of business competition and innovative approach in business as well as market performance.

Michael Porters Five Forces Model

The theory was developed by Michael E. Porter in the early 1980s. The five forces models are used by the firms to analyze the new strategies that are developed by the organization to analyze the micro and macro environment. The model is constituted by five forces constituents: the bargaining power of the buyers, bargaining power of suppliers, threats of substitutes, barriers to new entrants and the competitiveness of the competitors already in the industry. Porter believes that the magnitude of these five forces influences both the existing strategies and the newly developed strategies

with respect to decision making and making the organization to be lucrative (Kum, Yuenan, & Yingxue, 2021).

Michael Porter further introduced four other generic strategies that added value to the organization which includes the disruptive innovation, product leadership, customer intimacy and operational excellence (Porter & Competitive Strategy, 1998). Disruptive innovation involves distracting the preceding market and the value networks, product leadership entails re-branding and innovating the product which is acceptable by the customer, customer intimacy is the connection that exist between the firms and the market, operational efficiency are organizations actions that generate value to both external and internal stakeholders (Jaboob, Jaboob, & Amri, 2020). The Five Forces Analysis is assumed to be a good tool that guides the strategic development and the standard of business research.

The mobile operators are in a strange position as they try to balance their profitability, increasing market share through performance. The five forces model is used to analyze the difference that exist between the consumers and the suppliers' diversity (Goyal, 2020). The core aim of most business entities is to control a large market, share. Due to stiff competition, they have developed the pricing and other marketing strategies to attract customers due the oligopoly nature of the market. This calls for the mobile operators to combine their value goals and accurate strategy to locate the customer needs that aim at customer satisfaction (Zhang, Leng, & Zhou, 2020).

This theory is tied to the study as it focuses on different factors and strategies that hinders the entrance and expansion of the market and competition by the organization hence influences market performance

Unified Theory of Acceptance and Use of Technology (UTAUT) Model

The Unified Theory of Acceptance and Use of technology (UTAUT) was first formulated by Venkatesh (2003) who relied on and reviewed the theories that had been in existence to develop the model. The UTAUT model was the integration eight theories of Theory of Reasoned Action (TRA), Innovation Diffusion Theory (IDT),

Social Cognitive Theory (SCT), Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Model of PC utilization (MPCU), Motivational Model (MM) and Combined TAM and TPB (C-TAM-TPB). The integration enhanced the different scholars' views on the predictors of technology acceptance and use by individuals' and organization in their systems (Raza, Qazi, Khan & Salam, 2021). The model constructs are Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC).

Cheng (2020) proposed a conceptual model of UTAUT to determine factors that influenced the adoption, in relation to FC and BI and the main moderating factors being generation and age. Organizations should enhance the momentum of technology adoption to increase efficiency and effectiveness in their operations. This study is aimed at addressing how business innovation with utilization of UTAUT model to enhance the market performance of the mobile operators in Kenya. This theory is relevant to the study as it forms the basis for setting expectation for adoption of the technology considering the users intentions, behaviour intention, acceptability and the use of technology in the Telecommunication sector.

EMPIRICAL LITERATURE REVIEW

The review of previous studies in relation to business innovation and firm competitiveness and their impact on the market performance in the mobile telecommunications industry.

Business Innovation and market performance

Innovation explicitly is the development of the products, process and services that are aimed at enhancing the operation of the business to gain competitive edge (Gyemang, & Emeagwali, 2020). Innovation has made most of the organizations to reduce lots of cost through monitoring and evaluation, implementation of the returns earned from the implementation of the business innovation. Research conducted by (Goyal, 2020) on the innovation strategies applied by organizations putting into consideration the financial strategies, organization culture, technology, and training and development

are some of the immediate or the long-term impact on the performance of the organization.

Bhatti, Malik, Kamal, Aamir, Alaali, and Ulla (2021) researched on much-needed business digital transformation through big data, internet of things and blockchain capabilities considering the implications for strategic performance in Telecommunication sector. The importance of digital transformation within a business set up was evaluated through big data, the internet of things and blockchain based capabilities for overall strategic performance within the telecommunication sector in China. The data were collected online by random sampling that gave 343 responses from the professionals in telecommunication sector. The primary data were analyzed by confirmatory factor analysis (CFA) and Structural equation Modeling (SEM). The research findings revealed significant relationship between data quality, technological competence and strategic performance. Further, the study established that big data analytics and internet of things significantly mediate between the independent and dependent variable.

Gyemang and Emeagwali (2020) researched on the roles of dynamic capabilities, innovation, organizational agility and knowledge management on competitive performance in Telecommunication industry. Their work elicited the relationships among dynamic capabilities, innovation, organizational agility and knowledge management in achieving maximum performance in the Telecommunication industry. The study used survey data from the 70 firms in which 341 questionnaires were returned from the respondents. The findings revealed that dynamic capabilities had a positive relation with organizational agility and competitive performance. Also, knowledge management has a positive relation with dynamic capabilities, competitive performance and innovation. The study recommended that the Telecommunication players should embrace the finding of the study for better decision making and improve on their performance. As the study contributes immensely on the development of the literature in the Telecommunication sector its findings were more general as it did not exhibit how these objectives can address

business innovation and improve on the market performance of the organization as it focused on the general performance of the organization.

Hajar, Ibrahim, Darun, and Al-Sharafi (2020) carried a study on the value innovation activities in the wireless Telecommunications services sector: a case study of the Malaysian market. The intend of the research was to highlight the logic of value innovation in the wireless telecommunication sector to enhance customer satisfaction and customer loyalty. The study used a qualitative research approach to analyse the actions related to value innovation in the mobile sector in Malaysia. The study recommended that the telecommunication service providers should improve on customer satisfaction and loyalty by ensuring customer value to enhance customer requirements, maximize the use of customer relation management (CRM) software to enhance high end customer connection. What the study did not address was how all these can improve the market performance and the business innovation in an organization.

Firm competitiveness and market performance

Firm competitiveness is the capability of the organization to use its innovative models, leadership style and resources to create a flexible market to enhance their competitiveness in the market (Dorson, 2021). Ivanova, Deliyaska, and Terziyska (2021) affirmed that firm competitiveness varies from company to company and this is measured by use of key performance indices that include quality, product and technological indicators. Different scholars have developed a lot of literature in the view of firm competitiveness with different dimension in regards to the performance (Dorson, 2021; Afum et al., 2021; Njeri, and Kariuki, 2019; and Chesula, & Kiriinya, 2018).

Afum et al. (2021) did a study on the links between logistics outsourcing, company competitiveness and selected performances. The purpose of the study was to examine the mediation effects of time-based competitiveness, cost-based competitiveness and customer performance between logistics outsourcing and financial performance. The analysis indicated that logistics outsourcing has a significant positive impact on time-

based competitiveness, cost-based competitiveness, customer performance and financial performance. Time-based competitiveness and cost-based competitiveness were both found to have a significant positive impact on financial performance. The study focused on financial performance of the organizations and the logistics hence cannot be generalized for other sectors of the economy.

A study by Njeri and Kariuki (2019) on the influence of Mckinsey on competitive advantage of firms in the Telecommunication industry in Kenya. The purpose of the study was to assess the influence of Mckinsey framework on competitive advantage of firms in telecommunication industry in Kenya. The objectives of the study were, to examine the influence of Strategy and staff on a firm Competitive Advantage in Telecommunication Industry in Kenya. 179 Telecommunication firms licensed by Communications Authority of Kenya (CAK) were targeted and sample size of 123 firms taken. The study findings indicated that strategy and staff greatly influence competitive advantage. The gaps were that, it did not stipulate how telecommunication firms can utilize the Mckinsey framework to influence their market share performance.

Chesula, and Kiriinya (2018) did an empirical study on competitiveness in the Telecommunication sector in Kenya using porters five forces model. The purpose of the study was to use Porter's Five Forces Model to empirically review the competitive structure of the industry and extract key insights for strategically marketing the key payers. The study reviewed the empirical sources and the secondary source of data to arrive at the conclusion. The study revealed that the impact of the five forces model is vital for the formulation of business competitive strategies by players in the Telecommunication industry. With the review pillar to the development of the literature study there still existed some of the gaps that needed to be addressed such as the empirical review and the statistical field research. This study was meant to fill the existing gaps by undertaking primary source of data that was be obtained from the respondent in the field.

Market performance in the Telecommunication Sector

Market performance of an organization is the ability of the organization to use the available resources to achieve their set goals and objectives by use of their product and services to win and maintain their customers sustainably (Omotoye et al., 2021). Extant literature on measurement of market performance considers indicators such as; sales revenue, sales growth, market share, leads, customer satisfaction, customer loyalty and cost of customer acquisition (Ahmad, Ramaya, & Halim, 2017). Different scholars have different views in regards to the performance of the firm (Obeidat, AL-Tamimi, and Hajjat 2021; Pustokhina et al., 2021; Mugo 2020; and Wanyeri 2020).

Toni, Reche and Milan (2021) carried out a study on the effects of market orientation, innovation strategies and value-based pricing on market performance. The purpose of the study was to propose and test a theoretical model that contemplates antecedent constructs of organizational performance and their interactions. The survey was conducted among the 151 respondents and the data analysis focused on the regression analysis, mediation and moderation test. From the research findings it was revealed that value-based pricing and innovation strategies had a direct significant influence on the market performance while market orientation had an indirect effect on the market performance.

Mugo (2020) did a study on the Porter's five forces influence on competitive advantage in Telecommunication industry in Kenya. The purpose of the study was to investigate the influence of adopting the Porter's Five Forces model in examining the firm competitive advantage in Telecommunication industry in Kenya. The study findings revealed that threat of entry into the market and threat of substitute product greatly influenced the performance of these Telecommunication industry players. The study recommended that the firms to establish strategies like product differentiation, technology innovation, process innovation and product innovation. Also, the study recommended that the Telecommunication players should always monitor their business environment so as to put in place the appropriate strategies. With the great contribution of the study on the development of the market performance literature, the study heavily relied on the secondary data that could not be perfect

representations of the view of the present time. This study relied on the primary data so as to exhibit the present strategies adopted and how the Telecommunication industry players can harmonize these strategies with the market performance.

Wanyeri (2020) carried out a study on the events marketing as a strategic communication tool towards performance of Telecommunication firms using Safaricom PLC, Kenya as a case. The data were analyzed descriptively and inferentially. The results revealed a strong positive relationship between the independent variables with the performance and that sponsorship increases the exposure to new clients, customers and businesses. The study did not demonstrate how these efforts can be harnessed to the increase of market performance. This study was aims at integrating these practices to influence positively the market performance of the mobile operators in Telecommunication sector in Kenya.

Summary and the research gaps

Several studies have been done in regard to the organization and the companies with most of the studies concentrating on the financial performance and organizational performance and failing to understand that for the organization to realize a better if not excellent performance, it should understand the market in which it operates.

Table 2: Summary of the Research Gaps

Author and year	Focus of the study	Findings	Methodology	Current Focus of the
Ramalingam, Piaralal, Osman and Arokiasamy (2021)	Effect of transformational leadership and creativity and innovation on organizational performance using a conceptual model with the objectives of the determining the relationships between transformational leadership, creativity and innovation	The study revealed that transformational leadership and creative innovation significantly affects the performance of the	Quantitative	The study was aimed at establishing the effect of business innovation on market performance of mobile operators in

Author and year	Focus of the study	Findings	Methodology	Current Focus of the study
		organization.		
Hussain, Mu, Mohiuddin, Danish and Sair (2020).	Mediating effects of sustainable competitive advantage, brand equity and marketing innovation on market performance in hospitality industry focusing only on urban markets leaving the rural customers	Revealed that brand equity, market innovation, sustainability and market performance had a strong positive relationship	Quantitative	The current study based on the urban business innovation competitiveness influence the performance operators in Kenya.

Conceptual framework

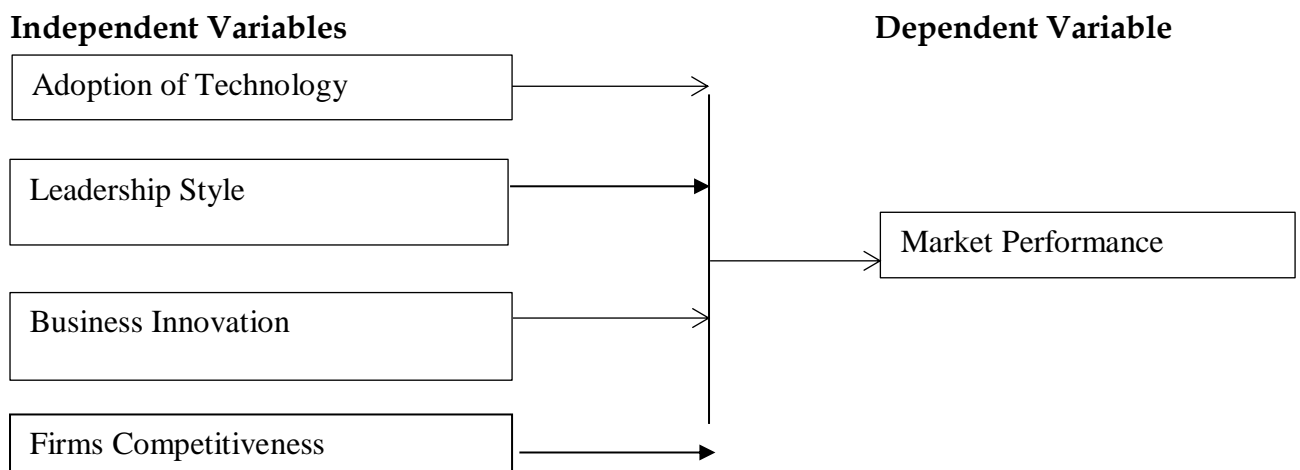


Fig 1 Conceptual Framework

Operationalization of Study Variables

Variable	Indicators	Tool of Analysis	Measurement Scale
Market performance	Market share Efficiency Customer loyalty Market growth	Descriptive survey	Ordinal Measurement using the 5-point Likert scale. 1 - strongly disagree 5 - Strongly Agree
Business Innovation	Process innovation Product innovation Product Leadership Brand recognition	Descriptive survey	Ordinal Measurement using the 5-point Likert scale. 1 - strongly disagree 5 - Strongly Agree
Firm Competitiveness	Price/Cost Competitive Advantage Location/Environment Turnaround time/speed Added customer value	Descriptive survey	Ordinal Measurement using the 5-point Likert scale. 1 - strongly disagree 5 - Strongly Agree

RESEARCH METHODOLOGY

This research adopted a descriptive research design. Descriptive survey was used to enhance the description of the findings in the present state that will enhance the reliability of the collected data (Baumgartner, Strong and Hensley 2002) and according to Bhalta (2003), the descriptive research design makes it possible to summarize results per research objective findings.

The target population for the study was consist of 402 respondents including the employees of Safaricom Ltd (who will be drawn from: marketing department, technical department, and customer care department) and Safaricom dealers.

The sampling techniques adopted were both stratified random sampling and simple random techniques. The stratified random sampling technique was used to sample heterogeneous members, like in this case study respondents involved non-employees and employees of from different departments, which were then be divided into homogeneous strata from which members of the study sample were selected with simple random sampling. The adoption of the stratified random sampling technique gives the members of the sample an equal chance to be selected from each stratum (Kothari, 2008).

Sample Size is obtained by selecting of a fraction or a part of individuals from the target population as a representative of the whole (Upagade, & Shende, 2012). According (Mugenda & Mugenda, 2019) a reasonable sample size for a target population greater than 10,000 can be obtained by the following formula;

$n = Z^2(p)(q)/d^2$, for population >10,000, where n is sample size, Z=1.96 (critical z-value), p=0.50 (assumed 50%), q=1-p, d=0.05 (Set confidence level)

$n_{adj} = n/(1+n/N)$, for population < 10,000, where nf is desired sample size, n is sample size for population>10,000, N is estimated target population (402 in this study)

From the calculation, n=384 and nf=197

Thus, in this study, nf is 197 which is 49% of the accessible target population (402) was considered adequate and used for the sample size in each category of the targeted population to get the respondents.

Population distribution

Categories	Frequency	Percentage
Marketing department	20	5
Technical Enterprise	78	19
Customer Care	144	36
Super Dealers	160	40
Total	402	100

Sample size distribution

Category	Frequency	Sample ratio	Sample size
Marketing Dept.	20	0.49	10
Technical Dept.	78	0.49	38
Customer Care	144	0.49	71
Dealers	160	0.49	78
Total	402	0.49	197

The study relied on primary data which was obtained using structured questionnaire. The scale used in questionnaire is based on a five-point Likert scale (1 –strongly disagree, 2 – disagree, 3 – neutral, 4 –agree, 5 –strongly agree).

The pilot study was carried out to test the validity and reliability of the research questionnaire and gives a chance to make adjustments (if any) to the research instrument. According to Cooper and Schindler (2010) and Mugenda & Mugenda (2019), a sample of at least 10% of the total sample is usually appropriate for a pilot study. In this study 20 respondents represent 10.2% of the sample size.

Validity is concerned with the integrity and accuracy of the conclusions that are derived from research and evaluation of the research instrument and design. The extent to which data collected using a research instrument represents the content of the concept being measured (Mugenda & Mugenda, 2003). A measure that is valid and reliable enhances the results produced and ensures they are well understood and usable. (Elstak, 2013).

Reliability is the degree at which results obtained from a study remain consistent. Kothari (2011) described a reliable measuring instrument as one that gives consistent results. The reliability of the research instrument in this study will be measured using Cronbach’s alpha with a reliability threshold of alpha of 0.7 or above being generally accepted.

Introduction letter from Management University of Africa was given and used to get a research permit from the National Council for Science Technology and Innovation (NACOSTI). The permit enabled research assistants to obtain a permission from the relevant Safaricom departments and dealers to reach the respondents for data collection using structured questionnaires.

The collected data was edited and processed, then analyzed using SPSS Version 26.0. The researcher adopted descriptive statistics as well as inferential techniques such as regression and correlation analysis to examine the relationships between the study variables. The regression model for the relationship is as shown below:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$, Where: Y is the dependent variable, (Market performance),
 X_1 = Business Innovation

X_2 = Firm Competitiveness. B_0 is a constant while β_1 to β_2 represent the predicted coefficient of regression which measures how strong each independent variable impacts the dependent variable. ε is the error term. The analyzed data is presented in tables for easy understanding and interpretation.

FINDINGS AND DISCUSSIONS

Response Rate

Response Rate	Frequency	Percentage
Complete	161	81.7
Incomplete	10	5.1
Non-Respondents	26	13.2
Total	197	100

Out of 197 questionnaires given out, 171 responded representing 86.8% while 26 (13.2%) did not respond. 161 (81.7%) responses were complete and 10 (5.1%) were found to be incomplete. According to Mugenda and Mugenda *et.al.*, (2019) a response rate of 60% response rate is enough to draw conclusion and a response rate of 70% is enough to make analysis and draw conclusion from the findings.

Reliability Statistics

Variable	Cronbach's Alpha	No of Items	Conclusion
Business Innovation	0.700	4	Reliable
Firm Competitiveness	0.800	4	Reliable
Market Performance	0.700	4	Reliable
General Reliability	0.886	12	

The table 6 Business innovation, firm competitiveness and market performance, all had a reliability of greater than 70% (0.700) while the general reliability was found to be 0.886 approximately 0.9 (90%) which is regarded as excellent for a tool to be used in a research study Kothari (2011).

Gender	Frequency	Percent
Male	88	54.7
Female	73	45.3
Total	161	100

The results indicate that 54.7% of the respondents were male while 45.3% were female. This implies that there is gender balance in mobile industry which positively reflects the gender equality in constitution of Kenya 2010.

AGE	Frequency	Percent
18-30	94	58.4
31-40	46	28.6
41-50	13	8.1
Above 50	8	5.0
Total	161	100.0

From the analysis in table 8, it was clear that an average of 87% of the respondents were at the age of 18-40. This is the age bracket that is expected to embrace the current technology and innovation hence forms the larger percentage of employment in this industry.

Level of Education	Frequency	Percent
Primary	8	5.0
Secondary	61	37.9
University	83	51.6
Others	9	5.6
Total	161	100.0

From the analysis of education level, it is seen that 51.6% of the respondents had attained the university, 37.9%, secondary level of education. This indicated that majority of the respondent had acquired basic knowledge, and could understand and respond clearly to research questions.

Duration of usage of Safaricom products and services

Duration	Frequency	Percent
0-5 years	33	20.5
5-10 years	49	30.4
10-15 years	44	27.3
15-20 years	35	21.7
Total	161	100.0

The table above illustrates that Safaricom has good customer retention as shown with the about 50% who have used Safaricom products and services for more than 10 years. On equal measure the entrance of new customers is about 50% as shown by those who have used the service below 10 years.

Preferred Mobile line	Frequency	Percent
Safaricom	129	80.1
Airtel	23	14.3
Telkom	9	5.6
Total	161	100.0

From the data 80.1% of the respondents preferred Safaricom line, followed by Airtel at 14.3% while Telkom had 5.6%.

Business Innovation

Statement	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree	
	Fre	Per	Fre	Per	Fre	Per	Fre	Per	Fre	Per
1. Safaricom regularly changes its business and operational processes to ensure efficient and effective service delivery to the customer.	43	26.7	73	45.3	20	12.4	13	8.1	12	7.5
2. Safaricom has ensured continuous product/services variety that has retained its customers.	44	27.3	71	44.1	24	14.9	10	6.2	12	7.5
3. The business practices adopted by Safaricom are customer focused and drawn near to its customers and has enhance their performance.	46	28.6	57	35.4	29	18.0	16	9.9	13	8.1
4. You can easily recognize and access Safaricom agents, dealers and products	66	41.0	55	34.2	22	13.7	9	5.6	9	5.6

From the analysis, it is revealed that majority of the respondents agreed that Safaricom has: Innovation in business processes 72%, Product Leadership (Product innovation) 71.4%, Customer Retention 64.0%, Brand Image/recognition 75.2%

The outcome of the analysis agrees with Gyemang, and Emeagwali (2020) who stated the innovation explicitly enhances the operation of the business to gain competitive edge, also supported by (Hussain, Mohiuddin, Danish, & Sair, 2020) who stated that brand equity, market innovation, sustainability and market performance had a strong positive relationship. This therefore, implies that for Safaricom to increase their market share there should be sustained business innovation by the organization.

Firm Competitiveness

Statement	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree	
	Fre	Per	Fre	Per	Fre	Per	Fre	Per	Fre	Per
1. You prefer Safaricom products and services due to good quality and reliability	62	38.5	63	39.1	12	7.4	12	7.5	12	7.5
2. You prefer Safaricom to other networks due to its competitive prices.	36	22.4	44	27.3	20	12.4	38	23.6	23	14.3
3. Safaricom has specific products and services for its customers which are not available with other networks.	54	33.5	56	34.8	20	11.2	20	12.4	13	8.1
4. Safaricom has some additional value to its customers and Kenyan society at large	53	32.9	64	39.8	21	13.0	6	3.7	17	10.6

From the analysis, it is seen that majority of the respondents agreed that Safaricom has:

Network quality and reliability 76%, Not very good competitive prices, 49.7%

Specific products give competitive advantage 68.3%, Other value adds services 72.7%

From the analysis, firm competitiveness is seen to have remarkable influence on the market performance of the mobile operators in Kenya. This is in support of a study by Chesula and Kiriinya (2018) established and stated five forces model is vital for the formulation of business competitive strategies by players in the Telecommunication industry as this will enhance their firm competitiveness.

Market Performance

Statement	Strongly agree		Agree		Neutral		Disagree		Strongly Disagree	
	Fr e	%	Fr e	%	Fr e	%	Fr e	%	Fr e	%
Safaricom services are reliable and are available in most locations to the users.	71	44.1	56	34.8	19	11.8	7	4.3	8	5
Majority of the people you know, use Safaricom line as compared to other networks providers.	73	45.3	47	29.2	24	15	11	6.8	6	3.7
You would stick to Safaricom no matter the circumstance and recommend other customers to Safaricom	40	24.8	37	23	28	17.4	31	19.3	25	15.5
You perceive Safaricom to be getting bigger in terms of products, services and number of customers in the market	49	30.4	75	46.6	17	10.6	8	5	12	7.5

Table above summarizes the analysis of respondents on the market performance of mobile operators. From the analysis it is revealed that Safaricom Plc has established itself in the mobile industry by ensuring larger Market share (74.5% respondents), Availability and reliability (78.6%), Customer loyalty, (47.8%) and market growth (77%). Most of the respondents agreed that Safaricom market performance was good. The findings supports a study by Toni, Reche and Milan (2021) stated that value based pricing and innovation strategies had a direct significant influence on the market performance.

Model Summary

Coefficient of determinant				
Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.750 ^a	0.563	0.557	0.58281

a. Predictors: (Constant), Firm competitiveness, Business innovation.

The coefficient of Correlation R, is used to determine the degree of Correlation between independent variables and the dependent variable. The coefficient of Correlation from the table is R= 0.750. This implies that there is a strong correlation between market performance and business innovation, and firm competitiveness. The data indicate that the relationship can be fitted in a linear regression model. The coefficient of determination is R² =0.563, which is a measure of the validity and feasibility of the variables being used in the research and implies that the data on the variables fits in the linear regression at about 56%, hence the independent variables, business innovation and firm competitiveness can be used to predict the direction of the dependent, variable market performance.

Variance Analysis (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	69.043	2	34.522	101.633	.000 ^b
	Residual	53.668	158	0.34		
	Total	122.711	160			

a. Dependent Variable: Market performance; b. Predictors: Firm competitiveness, Business innovation.

The ANOVA analysis F-test that is used to determine the significance of the whole model. F-test is used to analyze the variations in the data sets within and between the data sets given to show if there is the constancy in the data provided. The overall result analysis shows that (p=0.000) value is less than 0.05 implying that the overall model is significant therefore, technology adoption, leadership style, business innovation and firm competitiveness are deemed to be significant predictors to market

performance. F- statistics support this with 101.6 confirming the appropriateness of the model in testing the relationship between independent and dependent variable. Therefore, the market performance can be explained by the independent variable; competitiveness, technology adoption, innovation, and leadership styles.

Regression Analysis

Regression Analysis Coefficients

Mode		Non- standardized Coefficients Beta	Std. Error	Standardize d Coefficients Beta	T	Sig.
1	(Constant)	0.815	0.221		3.693	0.000
	Business innovation	0.340	0.061	0.348	5.606	0.000
	Firm competitiveness	0.464	0.057	0.506	8.156	0.000

a. Dependent Variable: Market performance

The Regression analysis indicates that both the independent variables (Business innovation, and firm competitiveness) positively and significantly correlate with the dependent variable (market performance).

The y-coefficient $b_0=0.815$ indicates that there is a degree of market performance that is not affected by the independent variables in any way when the independent variables are equated to zero, implying that other factors play a role in the market

performance. Business innovation with $b_1=0.340$ ($p=0.000$) Firm competitiveness with coefficient $b_2=0.464$ ($p=0.000$). The results are summarized in the model:

$Y = 0.815 + 0.340X_1 + 0.464X_2$, Where: Y = Market performance, Constant = 0.815

X_1 = Business Innovation, 0.220 and X_2 = Firm competitiveness, 0.464.

The finding agrees with Costa, Aleksic and Bortoluzzi (2021) that there is a strong positive relation between performance and innovation implementation and Chesula and Kiriinya (2018) that the impact of the five forces model is vital for the formulation of business competitive strategies by players in the Telecommunication industry.

Limitations of the study

The study had some limitation such as the time frame which was not sufficient to reach all the targeted population of the study. The scope of the study was a limited to the city, leaving out the rural areas and other parts of the country. The study only focused on the marketing department, technical department, customer care, and Safaricom dealers leaving the top management and the subscribers and this was due to cost implications. The Covid-19 pandemic was responsible for limitations in free movements and association in data collection such as the one-on-one interview with the respondents. The research study was not comparative to get responses from those using other networks in Kenya, such as Airtel and Telkom. This could not ascertain the impact of technology adoption, leadership style, business innovation and firm competitiveness on the market performance of other competitors in the industry.

FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

The regression analysis coefficient indicate that business innovation has a significant positive correlation with market performance with $b_3=0.340$. This signifies that a unit increase of business innovation leads to 0.340 increase in market performance, when other factors are held constant. Business innovation had a positive significance on the market performance as indicated by ($p=0.000$) from the variance analysis. Business innovation in the study was focusing on process innovation, product innovation, brand recognition and product leadership. The outcome from the study has proved

that having a continuous innovation approach to business which targets the customers, will result in significant market performance.

In the regression model, firm competitiveness had the highest value of beta coefficient $b_2 = 0.464$, which implies that a unit increase in firm competitiveness leads to 0.464 increase in market performance when other factors are held constant. This indicates a very strong correlation between firm competitiveness and market performance. In this study firm competitiveness focused on pricing, competitive advantage, business environment, other value adds to the customer. Hence market performance of mobile operators in Kenya can be positively predicted by the level of firm competitiveness. Mobile operators therefore need to put the highest priority on investments that are related to firm competitiveness, in order to get the best market performance results.

The study give recommendation to policy makers, especially the Communications regulator (CAK) to act in giving policy guidance that will help in shaping the operational efficiency of the mobile operators and give clear and precise instructions on fair competition within the industry and enhance innovations. As mobile operators regularly effect their business innovation, many changes in technology take place and eventually reach the end user/customer. Hence, policy guidance is needed for the protection consumers of the mobile communications devices that rapidly change due to technological innovation.

In practice the study outcome will help investors and top management of the mobile operators to invest correctly for improved market performance. The recommendation out of this study is that the mobile operators should keenly analyze and consider investing in business innovation practices that will enhance Firm competitiveness which in turn improves their market performance.

Mobile operators should improve on their public relations (PR) and corporate social responsibility (CSR) to enhance customer participation and interaction, for this will help in identifying the kind of innovation that is appropriate to be adopted to enhance the competitive edge and increase their market performance

The study outcome has determined that Safaricom PLC can utilize its resources on business innovation and firm competitiveness to enhance its market performance in Kenya. Other mobile operators in Kenya can benchmark with Safaricom in regard to Business innovation and firm competitiveness following the outcome of the study. Due to time and financial constraints, it was not possible to conduct a comparative study to determine the market performance of the other two mobile operators, Airtel Kenya and Telkom Kenya. This is recommended for further research. More research should also be done on the other factors that influence market performance a part from the two variables considered in this study, as this will justify the constant Y-intercept $b_0=0.815$. Also recommended for further investigation is the impact of technology adoption on the market performance as it plays a key role in business innovation and firm competitiveness.

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