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The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 5, Iss. 3, pp 69 - 79, July 8, 2018. www.strategicjournals.com, ©strategic Journals

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Accepted: June 26, 2018

ABSTRACT

The telecommunications sector in Kenya is very competitive, very dynamic with players in this sector trying to outdo the other in a bid to get more subscribers. This study sought to investigate the influences of innovation strategies on organizational performance, a case study of Telkom Kenya Limited. The specific objectives were to evaluate the process innovations and administrative innovations strategies influence on firm performance. A descriptive case study design was used to establish the influence of the independent variables (innovation strategies) on the dependent variable (performance) of Telkom Kenya Ltd. This study was based on four theories which are open innovation theory, Schumpeter creative destruction theory, disruptive innovation theory and the resource based view theory. Data for this study was collected using semi structured questionnaires. The study was a census of all the 40 employees of Telkom Kenya Ltd headquarters. The researcher used Statistical package for social scientists (SPSS) for data analysis. The study established that process innovation and administrative innovation strategies have a positive effect on organizational performance as indicated by the respondents. The management needs to focus on administrative innovations like innovations hub development, feedback platforms, automation of processes and culture change initiatives in order to fully equip employees with skills thus giving them ability to grow. The findings of the study showed that process innovation has the highest positive influence on organizational performance. Process innovations assist companies to improve on quality of their products and services through better use of technologies, equipment's resulting to operational efficiency, effectiveness brand image improvement, sales growth and market rank performance .This study recommended that management of organizations need to seriously consider the investigated innovation strategies and implement them in their organizations if they are pursuing an improvement in the levels of their organizational performance.

***Key words**: Resources, Innovations, Telecommunications, Performance Measurement*

INTRODUCTION

To innovate is to make changes in something established, especially by introducing new methods, ideas or products (Lam, 2004). Thus defined Innovation is the process of translating an idea or invention into a good service that creates value for customers which allows an organization to a competitive advantage. As an innovation an idea has to be replicable at an economical cost whereas satisfying a need. The process involves effective application of information, ideas and the existing initiative in creating more from resources available(Naqshbandi & Garib Singh, 2015). Innovation is the act that endows resources with a new capacity to create wealth (Drucker, 2014).

For any institution to succeed and maintain its stability in this volatile decade, it must be ready to innovate and change its orthodoxies. Innovation can be divided into four areas which are; Product innovation entails introductions of goods or service that are new or improved, Process innovation entails introduction of new or significantly improved method of delivery ,Marketing innovation entails implementation of new marketing techniques with significant changes in production design or packaging, product promotion or pricing, administrative innovations entail creation or alteration of business practices, workplace organization or external relations as defined Bogota and Oslo(De Mel, McKenzie, & Woodruff, 2009).

Statement of the Problem

Innovation strategy is vital for success in innovation and performance improvement (Malek, Moradi, Mehdizade, & Dorostkar, 2013). A number of studies have been done relating to innovation and performance in other industries like insurance and manufacturing (Martin & Namusonge, 2014; Nandwa, 2016). Globally similar studies have been done regarding the innovation strategies and performance (Karabulut, 2015; Sintset Kenfac, Nekoumanesh, & Yang, 2013). Innovation can't be isolated and need to be aligned with organization corporate goals (Martin & Namusonge, 2014) Hence leading brands in the globe constantly like Apple, Google and Alibaba communicate how key innovation is similarly Safaricom being one of the leading telecommunication companies in Kenya constantly talk about innovation(Drucker, 2014).

Companies that have had a positive performance through innovations invest in more activities regarding innovations that have succeeded in order to achieve more. It's important to note that no company can exist and survive without innovating despite their activities of size (Sipos & Ionescu, 2018). Most organizations have great ambitious goals for growth but as is they are not end-less ways of market growth. The available markets are not growing as exponentially as the companies developing similar brands of products and the launch of unique new products is getting rare as most development portfolios are not keen on innovation (Cooper, 2011). The lack of an innovation strategies can result to different sections of a company pursuing different and conflicting priorities because different departments have different needs (Karabulut, 2015). A case study by (Njeri, 2017) on effects of innovation strategies on Safaricom Kenya Limited recommended for such studies to be carried out using a case by case of different players in the telecommunications industry. Telkom Kenya has rebranded with the new management keen on having a turnaround of the previous brand performance with better management of its resources at hand and applying innovation strategies that will enable the company rise to a solid customer base tagged with a profit margin. This study seeks to investigate which innovation strategies influence performance of Telkom Kenya Ltd.

Objectives of the Study

- To evaluate the influence of process innovation strategies on performance of Telkom Kenya Ltd.
- To assess the influence of administrative innovation strategies on performance of Telkom Kenya Ltd.

LITERATURE REVIEW

Open Innovation Theory

Open innovation is a paradigm which states that firms can and should use external ideas as well as internal ideas, internal and external paths to the market as the firms look to advance their technology(Chesbrough, 2006). This open innovation theory considers that research and development is an open system where ideas come from both the internal and external sources. In the open innovation system they are no solid boundaries of the firm and both the internal and external paths to the market are considered similarly. This ensures that there is a vast knowledge database and resources in the industry thus fuelling innovations fast (Naqshbandi & Garib Singh, 2015). Open innovations are divided into two dimensions namely inbound open innovation and out-bound open innovation (Naqshbandi & Garib Singh, 2015). In the case of inbound open innovation it involves leveraging on discoveries made by others and establishing key business relationships with external firms with hope of enhancing its competencies towards innovation (Naqshbandi & Garib Singh, 2015).Out-bound open innovation is about the outflow of existing knowledge or technology with intent to leverage existing external technological capabilities. This exploitation of ideas can occur in different markets by selling intellectual property and increasing capabilities by diverting ideas to the external market (Gassmann, Enkel, & Chesbrough, 2010).

Resource Based View Theory

The resource based theory states that organizations that have strategic resources have competitive advantages and perform better than organizations that lack them. The resource have the following characteristics in that they are rare, valuable, difficult to imitate and not easily substitutable(Barney, 1991).This theory was developed in 1977 by Wernerfelt and it suggests that the resources possessed by a firm are its key determinant of its performance. With emphasis that firms that have valuable, rare resources and capabilities have more competitive advantage leading to better performance(Wernerfelt, 1984). Valuable resources help in the organization performance effectively while overcoming the opportunities and threats of competitors in the industry, Rare resources are owned by few and selected and not by competitors, Difficult to imitate resources include intellectual property like patents, trademarks, copyrights, trade secrets.

Disruptive Innovation Theory

Disruptive innovations is a theory by Clayton Christensen which states that these innovations that enable creation of new markets and value networks which eventually disrupt the legacy system of networks and markets over a period of time. These innovations assist in improving quality of products and services in new ways that the market does not expect and it's only the radical innovations that can ensure growth(Hamel, 2009). Disruptive innovation can be defined as the successful configuration of a product or service that changes the demands of a market and its needs ending up displacing the legacy players in the market (Yu & Hang, 2010).The characteristics of these disruptive innovations are that they are inferior to the market place product attributes, provide unique and new value system to the either a new consumer or to market that is price oriented, prices are lower and they enter and succeed in the market from niche to mainstream(Govindarajan & Kopalle, 2006). Disruptive technologies offer alternative values from the mainstream technologies and at the beginning could perform lower than the legacy technologies which could result to resistance from traditional customers. Disruptive innovations occur as a process which seeks to develop and improve products to serve a niche market which does not consider the non-standard attributes. Market disruptions occur when the new seemingly inferior products overtake and displace the traditional mainstream products despite the performance (Hamel, 2009). They occur from gaps that exist in the market where small ideas are combined with a different world perspective which challenges the status quo and looks into new horizons. They set unthinkable goals and set the customers to a new unexplored view challenging their expectations(Harvey16 *et al.*, 2012).

Empirical Review

Process Innovation and organizational performance

Process innovation is the adoption of significantly improved or new delivery or production method. Process innovation is meant to decrease unit costs of delivery and production, deliver new or to produce new significantly improved product and increase quality(Gunday, Ulusoy, Kilic, & Alpkan, 2011). Process innovation focusing on improving the efficiencies and effectiveness of production and also improve or change the way firm perform. Process innovation is a significantly improved delivery method or adoption of a new production process Thus also includes a significant change in equipment and software and techniques.(Suroso & Azis, 2015) Process innovation is divided into three different categories. These were: service process innovation, incremental process innovation and radical process innovation (Aziz, Abidin, & Kadir, 2015). Service innovation refers to making changes to intangible products which influences to a high degree the customer demand and interaction. The incremental process innovation is referred to as the making of minor changes or improvements in firms' elements of internal process but will have no effect to industry (Reichstein & Salter, 2006) .Radical process innovation involves levels of change whether these major improvements or new changes on the firms' elements of internal process are related to industry (Kim, Kumar, & Kumar, 2012). The incremental on process and product from technological innovation helps improve firm competiveness with the main justification being to increase organization value or productivity which is important to the manufacturing sector and that process innovation should be encouraged as a major strength for achieving competitive advantage to the firm (Oke, 2013)

Process innovations are also a solution to the rising needs for synchronization within departments for example the marketing and manufacturing department which allows a company to produce only what the client needs(Davenport, 1993). The process innovation strategies' are developed from industry knowledge that has been acquired which works as a solution to the companies weak internal capabilities (Hervas-Oliver, Sempere-Ripoll, & Boronat-Moll, 2014). With process innovations, performance is measured using details of the production process which include indicators of cost reduction, flexibility and capacity improvement. The firms implementing the process innovation strategy have been seen to rely on acquired knowledge outside its boundaries to solve their internal issues which is a big difference form the legacy research and development product innovation strategies (Hervas-Oliver *et al.,* 2014).

Administrative innovations and performance

Administrative innovations refers to changes in the structure of an organization or the administrative processes which include personnel recruitment, allocation of firm's resources, restructuring of tasks, authority and rewards(Damanpour, Walker, & Avellaneda, 2009). Administrative innovations are among the four types of innovation as per the Oslo Manual (Oecd, 2005) Administrative innovations deals with recruitment policies, allocation of firm's resources and authority, structure of tasks as well as reward tasks related to management activities. This means that that the components above are directly related to the structure and social system of the organization(Moreno, Mata, Bello, López, & Hernán, 2015). Administrative innovations are also defined as the creation and implementation of different management practices, processes, technique which are novice and meant to ensure the form perform better(Birkinshaw, Hamel, & Mol, 2008). This means that administrative innovations cut across structural, management systems, work management knowledge operational and administrative dimensions all aimed at improving performance. Based on this the Administrative innovations can be divided into; information technology dimension which is about new use of management and enterprise systems meant to enhance efficiency in the organization operations and systems and an administrative dimension which relates to use of novice management systems to enhance efficiency in the work of management (Damanpour, 2014).

Administrative innovations are also referred to as organizational or management innovations(Damanpour, 2014).They significantly address how managers do what they do thus improving their decision making leading to better performance of an organization. Administrative innovations are concerned with how organizations adapt to changing conditions on competition, technological changes, market expansions by production of newer and better products, techniques and systems(Dougherty & Hardy, 1996). This entails that organizations will keep developing new products and services and finding ways of introducing them to the market continuously, which is crucial to its stakeholders. Administrative innovations are concerned with managerial skills which foster efficiency and effectiveness of an organization processes regarding management and its administrative systems.

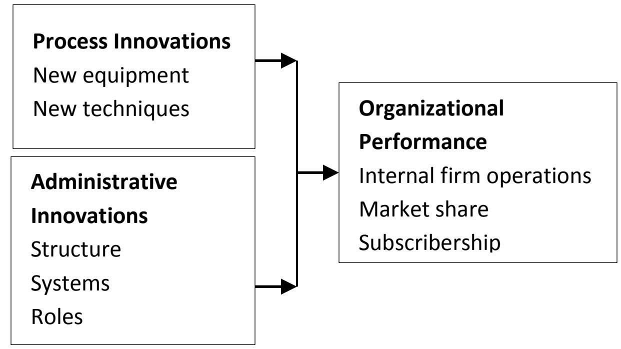
Performance Measurement

Evidence from literature indicates that scholars are of the opinion that what is not measured cannot be managed and what is managed often improves (Drucker, 2014). However, (Lazer, Kennedy, King, & Vespignani, 2014)disputes this argument arguing that not all important things are measureable. There is consensus in literature that organizations must measure their performance which has seen the growth in popularity by managers seeking to establish how good or bad they have been working towards meeting their organizational objectives (Van Looy & Shafagatova, 2016). Therefore performance measurement has become an important element for overall organizational performance evaluation. Performance measurement refers to quantitative or numerical indicators that can be used to show how well the objectives of an organization are being met. Performance measurement includes both financial and non-financial objectives that in turn influence organizational performance (Richard, Devinney, Yip, & Johnson, 2009).

Performance measurement has several components; first, it ensures that organizational mission and operational goals are specified, understood, and accepted across the organization. Second, the specification of performance targets and measures ensures the strategy, and how it is implemented tactically and operationally, is continually assessed. Third, the clear specification of objectives and their understanding across the service areas permits devolution of control to line managers who can make local decisions based on the wider organizational mission and goals. Fourth, serious deviations from the plans that surpass the local scope and resources are communicated to top management and the corrective action is applied in the organization.(Walker, 2014)

The overall organizational performance is done by developing a performance evaluation model, based on integrating two methodologies of balanced scorecard (BSC) – a multiple perspective plan for performance assessment – and analytic hierarchy process (AHP) – a structured technique for organizing and analyzing complex decisions. The method was conducted in Isfahan Telecommunications Company (ITC), in 2013. In total, 27 managers of ITC were invited to participate. First, according to overall firm goals, key performance indicators (KPIs) were established with respect to four perspectives of BSC framework. Then pairwise comparisons were done, through standard AHP questionnaires, to determine the preference weights of each indicator and perspective and give precedence to them. The findings indicate that Organizational performance can be measured by the proposed model in a telecommunications industry. According to the adopted method, company KPIs, relative importance of BSC perspectives and performance evaluation of functional areas were identified.(Yaghoobi & Haddadi, 2016)

Conceptual Framework



Independent Variables Dependent Variables

Figure 1: Conceptual Framework

METHODOLOGY

This study employed a questionnaire as a data collection tool which was collect primary data. Data analysis is the computation of key measures arising from the relationship patterns between sets of data (Kothari, 2004). Data was subjected to tests which were validating the data. After the collection of data, it was tabulated and analyzed using Statistical Package for Social sciences (SPSS). Descriptive statistics were also incorporated in analyzing the data to bring out the answers to the specific questions.

RESULTS

Process Innovation and Organizational Performance

The study sought to find out how process innovations influenced performance at Telkom Kenya. Table 1 illustrated the findings. The response was on a five point Likert scale (1-5). The means were computed and categorized as either high= 3 and above or low= below 2.85. The study asked the respondents to indicate the extent to which they agreed with the statement on the role of process innovations on organizational performance.

Table 1: Process Innovation and Organizational Performance

	Min	Max	Mean	Std. Deviation
Introduction of improved production	1	5	4.22	.706
Improved delivery method	1	5	4.19	.780
Reduction of costs	1	5	4.25	.672
Conformance to regulations	1	5	3.63	.907
Business process changes	1	5	3.97	.822
New unique processes	1	5	3.88	.707
	Aggregate Score		**4.02**	**0.76**

The results for process innovation strategies on performance showed an aggregate score of 4.02 and Standard deviation of 0.76. This showed that performance in Telkom Kenya Limited was greatly influenced by process innovation. The respondents indicated that the introduction of improved production processes in Telkom Kenya positively influenced organizational performance as indicated by a mean of 4.22. Reduction of costs was reported as positive influencers of organizational performance as indicated by a mean of 4.25. Improved delivery method had a mean of 4.19 which signified that it had an influence on organization performance. Conformation to regulations and changing business processes were also reported to influence organizational performance as indicated by a mean of 3.63 and 3.97 respectively. New Unique processes had a mean of 3.88 which mean they had a moderate extent influence on organization performance. The respondents had variations in their opinions as indicated by the standard deviations with the highest variations being from conformance to regulations of 0.907 and business process changes with 0.822.The reduction of costs and introduction of improved production had the lowest standard deviations with 0.672 and 0.706 respectively meaning the respondents agreed more on the process innovations activities.

The findings agreed with previous studies which established that process innovations assists companies to improve on quality of their products and services through better use of technologies, equipment's and delivery strategies leading to costs reduction(Sipos & Ionescu, 2015). The incremental on process and product from technological innovation helps improve firm competiveness with the main justification being to increase organization value or productivity(Pratali, 2003). This is important to the manufacturing sector and that process innovation should be encouraged as a major strength for achieving competitive advantage to the firm (Oke, 2013). More than 87% of the total respondents agreed that Costs reduction was very important in fuelling the organization performance which agrees with similar studies on effect of innovation strategies on performance in the telecommunications the study by (Soi, 2016).

Administrative Innovations and Organizational Performance

The study sought to establish the respondents' views on the importance of administrative innovations on organizational performance at Telkom Kenya Limited. Table 2 below illustrated the findings.

Table 2: Importance of administrative innovations on organizational performance

	Min	Max	Mean	Std. Deviation
New business practices	1	5	3.78	.659
Workplace organization	1	5	3.75	.803
Structures	1	5	3.88	.707
New roles	1	5	3.97	.782
Service planning	1	5	3.84	.808
Automated personnel	1	5	3.56	.716
Management by objectives	1	5	4.06	.759
Job rotation	1	5	3.78	.706
Incentive systems	1	5	4.11	.916
Aggregate Score			**3.85**	**0.761**

Source: Survey data, 2018

From the findings, the study established that incentive systems had a high influence on performance with a mean of 4.11 followed by management by objectives having a mean of 4.06. The respondents reported that structure and new roles had an impact on the level of organizational performance as shown by the means of 3.88 and 3.97 respectively. New business practices and job rotation both had a mean of 3.78 which showed that respondents saw them equally important on the influence on performance .Finally, the respondents indicated that automated personnel records fairly affected the organizational performance as shown by a mean of 3.56.

The standard deviations as in table 2 indicated that the respondent had different views on the influence of different administrative innovations on performance at Telkom. Incentive system had the highest value of standard deviation at 0.961 which indicated how respondents viewed incentive system influence on organization performance. Service planning and work reorganization were second high with a standard deviation of 0.808 and 0.803.

The administrative innovations are crucial in changing an organization, facilitating the external relations of the firm and improving efficiency of the internal processes. Some examples of administrative innovations like the Balance score card and Total quality management ensures that an organization is aligned to the needs of the clients at much lesser costs(Walker, Damanpour, & Devece, 2010). The findings concur with to a study by (Naveh, Meilich, & Marcus, 2006) it was found out that administrative innovations have performance gains when implemented line in line with adaptation and readiness to go beyond the change. In this case organizations are most likely to perform better if they learn as they are strong relationship ties between implementation of the administrative innovations and firm's performance. The findings also confirmed findings of a study by (Moreno *et al.,* 2015) administrative innovations are key as they make it possible for firms to understand challenges and build capacities to handle them such as knowledge and training methods development, development of autonomy methods on appraisal on employees performance.

Conclusions

The findings of the study showed that process innovation has the highest positive influence on organizational performance. Process innovations assist companies to improve on quality of their products and services through better use of technologies, equipment's. Operational efficiency, effectiveness brand image improvement, sales growth and market rank performance are all as a result of process innovation as they enable the organization of firm to launch more enhanced products and services at a low cost which met the needs of the customer.

Administrative innovations were found to have a positive significant influence on rotational performance. Administrative innovations are meant to increase a firm performance by reducing costs on administration activities, providing a conducive workplace environment, reducing cost of supplies and acquiring assets that are non-tradable. The key component of administrative innovation is the administrative process which entails a new management system, a new administrative process and a program to develop staff administratively. This element of administrative innovation impacts the organization and its members socially not excluding their roles, procedures, structures in their communication. The telecommunication industry should enhance more process innovations and administration innovations with policies incentives of idea formulated and also ensure that they fully involve their employees in their product and services development. The senior management in administration should change and companies in this sector should embrace more administrative innovations that encourage and foster social relations among employees. Finally, organizations in the telecommunications industry are further informed by this study on the way in which they can improve their performance through developing innovations strategies reviewed and tested in this study.

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