

BUSINESS PROCESS RE-ENGINEERING PRACTICES AND PERFORMANCE OF TELECOMMUNICATION SECTOR IN KENYA

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ABSTRACT

This study sought to establish Business Process Reengineering (BPR) strategies used by telecommunication companies in Kenya to enhance their service delivery to gain competitive advantage, and to explore the influence of BPR strategies in the telecommunication companies in Kenya. The study was anchored on the following theories, Resource-Based, the Open Systems and Stakeholder. The study used a descriptive cross sectional research design targeting thirty five telecommunication firms in Kenya. Data was collected through structured questionnaires. Data analysis was done by use of descriptive and inferential statistics. The study established that most of Telecommunication companies have used various BPR strategies such as Teleconferencing technologies, computerized performance measurement and reporting system, shared Information Technology infrastructure and computerized procurement system. Findings show that after BPR implementation the telecommunications firms were able to increase efficiency of customer service, quality of products and workforce, elimination of non-value adding process, reduction in inspection time, moving time and waiting/queuing time. The study recommends that Telecommunication companies should fully automate their operations besides replacing obsolete technology equipment with modern ones. BPR efforts should be implemented in the most effective manner through sound management and leadership; this is because top management commitment, support, championship, sponsorship, and effective management of risks are the most noticeable managerial practices that seem to directly influence the success of BPR execution. The study recommends that most companies should be cautious when re-engineering in order to avoid downsizing without figuring out how to reduce the workload.

Key words: Business Process Reengineering, Telecommunication companies, management support, employee commitment, IT infrastructure.

INTRODUCTION

All over the world, businesses are faced with different market dynamics making it necessary for them to reinvent themselves to be strategically competitive (Okumu, 2013). One of the channels available for this process is the Business Process Re-engineering (BPR).

Business Process Reengineering improves effectiveness and output in an organisation. The market environment is dynamic and calls for companies to be innovative so as to remain competitive and increase their market share hence need for BPR (Johnson & Scoles, 2006). Business process reengineering reviews internal processes with aim of continued improvement to achieve success in service, quality and costs (Chase, Jacob & Aquilano, 2004).

Business Process Reengineering redesigns internal processes and procedures to assist in cost reduction, quality improvement and in service delivery speed in the long term plan of a business (Nigel, 2001). Thompson et al. (2007) observed that BPR is a means of attaining long term plan of action that aims at achieving specific objectives and purposes as well as achieving short term and long term company goals. A company can implement or adopt a business process reengineering model depending on resources available, the company's core competencies, and the immediate market environment in order to maximize holistic productivity. Kapoor, (2011), established that in organizations where BPR was implemented, those companies were process-oriented with specific names assigned to various processes.

Despite the implementation of BPR, an assessment of the effects of this process on performance has not yet been undertaken. Locally, Thiga, (1999) looked at what constitutes BPR in Kenya Power & Lighting Company Limited Institutional Strengthening Project and concluded that BPR entail restructuring an organization by concentrating more on the ground-up design of their business processes. Munyiri (2004) did a research on the application of BPR approach in the Pharmaceutical Manufacturing Industry in Kenya where he concluded that most reengineering approaches share common elements, but negligible differences can have a significant impact on the project's success or failure. Nyaanga (2007) investigated the influence of e-commerce adoption on business process management in Kenyan Commercial Banks where he concluded that BPR is the chief avenue through which organizations become more efficient and modernize and that, it transforms a firm in ways that directly influence performance. Despite the said importance of BPR past studies have not adequately addressed the effects of the process on overall performance of an organization. To this end, this research paper seeks to establish the effect of Business Process Reengineering on the performance of Telecommunication sector in Kenya.

The study objectives were:

- i) To establish Business Process re-engineering strategies used by telecommunication companies to enhance their service delivery to gain competitive advantage over rival companies in the Republic of Kenya.
- ii) To explore the influence of Business Process Re-engineering strategies on the performance of the telecommunication companies in the Republic of Kenya.

LITERATURE REVIEW

The study was anchored on the following theories: Resourced Based theory, Open System Theory and Stakeholder Theory .The Resource-Based View Theory (RBV) has been advanced by several proponents such as Hamel and Prahalad (1990), Wernerfelt B (1995), and Barney and Heisterly (2010). This theory highlights the key basis for the competitive advantage of a company. According to RBV a company is a unit that has a special bundle of resources and assets which generate proper flow of system which incorporate the BPR. Therefore, a company can outsource processes but not its key competencies or process (Quinn 1992, Mclvor 2010). The advocates of the resource-based view have faith on heterogeneity in a company. Under the Open systems theory, Lawrence, Thompson and Lorsch (1967) discuss that companies are made up of interconnected units. They argued that firms that work in a steady and foreseeable situation can be more efficient and industrious when they are ordered in a hierarchical structure. Similarly, those operating in a highly dynamic market tend to thrive, if they continuously adopt technology. The scholars argued that external changes affects directly how internal units operate which now means companies should adopt new technologies if only to improve on their performance. The Stakeholder hypothesis has changed execution estimation from the ordinary monetary success proportions of profit for resources (ROA), return on equity (ROE), (Freeman and Ehrhardt, 2012). The interconnected system of stakeholders influences the methodology for settling on choice of the organization, its adequacy and execution.

A study by Olawumi, Awolusi and Onigbinde (2014) examined the fundamental success variables for BPR in the oil and gas industry in Nigeria. The survey sought to recognize the basic success components and also assess the effect of BPR

and CSF's on the organization's operational and overall performance. The results revealed that administration framework, project administration and planning, competence and support administration, organizational culture and IT framework were the basic components of success. Similarly, a survey by Odede (2013), explored the variables that are vital for effective execution of BPR at the Kenya Revenue Authority. The research focused on BPR activities embraced by KRA. The results revealed that BPR results in income growth, progressed innovation, cost decrease, prepare turnaround duration and progressed client benefit. Some researchers have explored the concept of BPR both locally and globally. A study by Sarang (2012) examined business process reengineering within the Indian retail industry. The findings revealed that BPR within the retail division involved presenting mechanical variations and update of workflow exercises. Moorty and Ensermu (2013) considered the effect of BPR on performance within the Ethiopian Bureau of Fund and Financial Improvement (BoFED). The survey concluded that lion's share of BoFED clients were fulfilled with improved quality of service, service cycle time and the overall organizational performance.

Studies by Weicher, et. al, (1995) found that the interface between BPR and IT is permanent. The authors established that it wouldn't be conceivable to perform BPR that involved mass-market retail merchandise's distribution channels and acquirement forms without including IT. In the same research by Weicher *et al.*, (1995) established that the workforce of Ford was decreased by 75% within the procurement office primarily through effective use BPR and IT. Subsequently, IT and BPR framework can be treated as autonomous. This is attributed to the choice to change or present new business process which affect the constituents of IT framework that will be utilized (Rastogi 2008).

According to Hammer (1993), the biggest challenge confronting most supervisors is to totally replace work forms that don't include value rather than utilizing innovation to automate these processes. Hammer (1993) noted that larger part of work practices in establishments don't include value to clients. Subsequently, the work practices ought to be totally removed instead of utilizing innovation to quicken them. A survey by Archer and Bowkers (1995) examined the consulting companies that conduct BPR. The analysts found that lack of worker cooperation, poor communication, and failure of workers to require possession of the method largely contributed to the disappointment of numerous BPR projects. Subsequently, for the BPR to be fruitful, all the workers from distinctive business units got to be specifically included within the process so as to persuade them to own the venture. Furthermore, it is fundamental to inculcate a reengineering culture and emphasize on venture planning.

A survey by Sidikat (2008) examined the effect of BPR within the Nigerian financial services division. The results revealed that variations in the performance of the organisation presented through BPR had a significant impact on the financial services and products. The study sought to make new structures for presentation of new banking services and products for instance credit cards, educational credits, housing credit plans and adaptable deposit plans. Also, the scrutiny was implied to assess the effect of integrated department network and client product personalization activities through twenty four hour banking and Programmed Teller Machines. The key constituents of any BPR process are critical examination and radical redesign of work processes (Sidikat, 2008). According to Sidikat (2008), adequacy, quality of services and timeliness are the major determinants of operational performance within the banking sector.

For success to be realized, the groups charged with implementing BPR ought to incorporate agents from the diverse work groups within the affected organizations. These ought to incorporate: finance; senior administration, user groups and innovation agents. The agents from the diverse work groups exhibit a significant influence on the final outcomes of the BPR. According to Dooley and Johnson (2001), BPR groups ought to be differentiated in terms of knowledge. In addition, Clandestine (2007), contends that successful BPR group individuals ought to be less than ten as in the event that the number exceeds ten, at that point challenges will be experienced in performing its functions proficiently and effectively.

RESEARCH METHODOLOGY

Research Design

The study embraced a descriptive cross sectional research design of thirty five telecommunication companies in Kenya. Cross sectional design gathers information around population of interest when the research is being carried out. It also permits the collection of huge amount of data from a sizable population in a highly conservative way. The study aimed to set up BRP techniques used by telecommunication companies to improve their service delivery and to pick up competitive advantage over rival companies in Kenya. Gray (2013) contends that survey strategy is broadly utilized to get information valuable in assessing present practices and in giving basis for decisions.

Target Population

This study's target population comprised of thirty five telecommunication firms in Kenya with a total market share of 96%. Communication Authority of Kenya (2018) Bearing this in mind, the analyst settles on the number depicted in order to come up with the correct inferences on status of BPR in Kenya. Population is well defined as set of individuals, services, components, or groups of things and families under exploration (Ngechu, 2004).

Data collection

Data was collected through administering structured questionnaires. The questionnaire is perceived as the most suitable since it permits for collection of information from numerous respondents over a short period of time and gives a high level of standardization and utilization of generalized data among any populations. The questionnaire comprised of open-and closed ended questions since this resulted in control over the collected information.

The respondents, who were the IT director and/or the Administrative supervisor, filled within the questionnaire as the research assistants wait. This makes a difference to reduce the likelihood of non-response. The questionnaires was left and picked afterward in order to guarantee a high proportion of usable responses. Where appropriate, secondary information was used.

Data Analysis

Completed questionnaires were edited for uniformity, consistency and completeness. The questionnaires were then coded to permit for measurable examination. Analysis was done utilizing descriptive and inferential statistics. The data analysis was done utilizing SPSS program which can show the output and relationship between the variables.

Descriptive statistics which incorporated mean, standards deviation and frequency percentages was utilized to analyse the data. Regression analysis was also done to show the interrelationships among the variables.

STUDY FINDINGS

The study targeted 35 IT Managers from 35 telecommunications companies in Nairobi County to fill the questionnaires. Through follow ups, the researcher was able to receive back all the 35 questionnaires. This gave a responses rate of 100%. The study sought to establish the BPR strategies used by telecommunication companies to enhance their service delivery to gain competitive advantage over rival companies in the Republic of Kenya.

The respondents were requested to rate the extent to which their company have utilized information Technology strategy in implementing BPR. The findings are shown in Table 1.

Table 1: Statements on BPR and Technological Infrastructure

	Mean	Std. Dev.
Automated workflow & document flow system	3.857	0.601
Website for publishing information about services of the organization	2.514	1.197
Website for publishing basic organizational information	4.029	0.822
Teleconferencing technologies	4.371	0.646
Electronic communication media for formal external communication	3.229	1.087
Electronic communication media for internal communications	2.829	0.707
Shared IT infrastructure	4.314	0.583
Computerized procurement system	4.286	0.572
Computerized budget and expenditure system	3.343	0.998
Computerized human resource management (personnel) system	4.171	0.618
Computerized performance measurement and reporting system	4.371	0.770
Computerized process management, monitoring, and reporting system	4.029	0.822
Online delivery of services	3.600	0.775

The findings in Table 1 shows that most of the respondents agreed to have used Teleconferencing technologies (M= 4.371, SD =.0.646). The respondent also agreed that there is evidence of shared IT infrastructure (M= 4.314, SD =.0.583). There was also strong agreement on the statement regarding use of computerized procurement system (M= 4.286, SD =.0.572). The respondents were asked to rate the extent to which their company has utilized Customer Focus strategy in implementing BPR. The findings are shown in Table 2.

Table 2: Rating of Customer Focus Strategy Utilization in Implementing BPR

	Mean	Std. Dev.
Customer service oriented processes has eliminated customer complaints	3.914	0.742
Services are now focused on the customer	3.857	0.879
Retraining of staff on BPR concepts and skills contribute towards success of BPR in addressing customers' needs	3.571	0.655
Effective communication between internal and external customers is necessary to all levels for successful BPR.	2.057	0.802
Communication to customers has improved after introduction of BPR strategies.	4.371	0.770
BPR has resulted in analysis of customer needs with a view to meeting them.	4.029	0.822
Customers valued speed, efficiency and easy access to information about the company products.	4.371	0.646

As per the findings in Table 2, most of the respondents agreed that communication to customers has improved after introduction of BPR strategies as illustrated by a mean of 4.371 with a standard deviation of 0.646. The implemented strategies ensured that the customers are able to find what they need and give feedback which improved communication in organizations (M=4.371 , SD = 0.770). The respondents also agreed that BPR has resulted in analysis of customer needs with a view to meeting them (M=4.029 , SD = 0.822).

The respondents were also asked to rate the extent to which their company have utilized organization Structure strategy in implementing BPR. The findings are shown in Table 3.

Table 3: Rating of Organization Structure Strategy Utilization in Implementing BPR

	Mean	Std. Dev.
The organizational structure has been simplified	3.914	0.742
Coordination within departments has been enhanced	2.686	1.367
Reorganization of the structures improves working condition of the company	3.971	0.785
Clear structure improves organization effectiveness and efficiency.	4.314	0.718
Simplified structure improves organization effectiveness and efficiency.	3.571	0.948
Our organization combines the individuals and jobs and defines the regulations and relationship governing them	3.029	0.568
Formality of job gives the freedom of action to do the tasks associated to that job and when to do it	4.086	0.612
Tall structures reduce effectiveness.	1.971	0.514
Flattening the layers of management enhance effectiveness.	4.143	0.648

From the findings in Table 4.7, the respondents agreed that clear structure improves organization effectiveness and efficiency as shown by a mean of 4.314; clear structure in the organization saves on time and cost, that flattening the layers of management enhance effectiveness as shown by a mean of 4.143; when the management levels is flattened it reduces bureaucracy hence decision making is made effectively within a short time and that formality of job gives the freedom of action to do the tasks associated to that job and when to do it as illustrated by a mean of 4.086. The respondents also agreed that reorganization of the structures improves working condition of the company as shown by a mean of 3.971.

The findings supports Weicher *et al.*, (1995) and Rastogi (2008), who established that the workforce of Ford was decreased by 75% within the procurement office primarily through effective use BPR and IT. Subsequently, IT and BPR framework can be treated as autonomous. This is attributed to the choice to change or present new business process with affect the constituents of IT framework that will be utilized (Rastogi 2008). Moreover, a responsive IT foundation depends on the data created through diverse business exercises which are stipulated in the BPR. BPR examines the sorts of business processes, their arrangement and the manner in which they create information to be utilized by IT frameworks.

The respondents were also asked to rate the extent to which their company have utilized process redesign strategy in implementing BPR. The findings are shown in Table 4.

Table 4: Rating of Process Redesign Strategy Utilization in Implementing BPR

	Mean	Std. Dev.
Process time is a very essential component to make a company dramatically compress the time for key business processes	4.114	0.530
Improved on innovation and creativity	3.943	0.838
Reorganization of the process improve working condition of the company	3.743	0.701
Problematic processes are considered for redesign	4.057	0.838
Processes that are critical to accomplishing company strategy and have the greatest impact on the company's customer are redesigned	3.086	0.919
Scope and costs involved in redesign affects implementation of BPR	2.000	0.767
Strength of the reengineering team and the commitment of process owners and sponsors affects redesign	2.571	0.608
Continuous improvement deliver the required improvements in processes	3.629	1.087
process evaluation techniques such as flow charts, fishbone diagrams and quality function deployment are important in redesign	3.714	0.987
In reengineering a process redesign is to eliminate all waste work	3.971	0.785
In Redesign aim is elimination of non-value-adding work	4.314	0.718

From the findings, the respondents agreed that in Redesign aim is elimination of non-value-adding work as shown by a mean of 4.314, redesign enables the organization to reduce the cost and time. Process time is a very essential component to make a company dramatically compress the time for key business processes as represented by a mean of 4.114, BPR is a costly investment and management should ensure it is implement within the set time limit. That problematic processes are considered for redesign as shown by a mean of 4.057, implementation of the system enables the organization to reduce the previous issues that were arising from the manual system and that in reengineering a process redesign is to eliminate all waste work as shown by a mean of 3.971.

The respondents were requested to rate the extent to which their company have utilized Change management in implementing BPR. The findings are shown in Table 5.

Table 5: Rating of Change Management Utilization in Implementing BPR

	Mean	Std. Dev.
Attitude, behavior, integrity, people participation and team spirit have influence on BPR implementation	3.914	0.853
Top leadership is more engaged to deliver services effectively and efficiently	3.371	0.843
The concept of continuous improvement has been embraced by the leadership	4.171	0.382
The levels of corruption within the company agency have reduced	3.771	0.426
Employees are more willing to serve clients efficiently after BPR implementation.	2.343	0.639

As per the findings, the respondents agreed that the concept of continuous improvement has been embraced by the leadership as shown by a mean of 4.171, BPR needs the organization to be part of the running of organization because the environment is dynamic. The organizations will only be relevant and competitive if there is continuous improvement. that attitude, behavior, integrity, people participation and team spirit have influence on BPR implementation as shown by a mean of 3.914; organizations need to train and enlighten the people on the importance of the BPR implementation to avoid resistance and that the levels of corruption within the company agency have reduced as shown by a mean of 3.771. The respondents however, were neutral that top leadership is more engaged to deliver services effectively and efficiently as shown by a mean of 3.371 and disagreed that the employees are more willing to serve clients efficiently after BPR implementation as shown by a mean of 2.343.

The respondents were further asked to rate the extent to which implementation of BPR have influenced the organizational performance. The findings are illustrated in Table 5.

Table 5: Influence of Implementation of BPR on Organizational Performance

	Mean	Std. Dev.
Introduction of BPR has change in the numbers of customer’s base.	3.943	0.765
The company increased in your working hours after BPR exercise was implemented	2.143	0.912
Company revenue/performance of the company increase after BPR projects implemented.	3.829	0.453
There has been reduction in the cost in the bank after BPR has been implemented.	3.829	0.954
Has the company improved in the service delivery to customers after the BPR implementation	3.800	0.933
Customer’s feedback when the BPR was implemented.	2.686	0.471
Has BPR improved the effectiveness and efficiency of the system in the organization	4.229	0.808

From the findings, the respondents agreed that BPR have improved the effectiveness and efficiency of the system in the organization as shown by a mean of 4.229 (SD= 0.808). The respondents also agreed that introduction of BPR has change in the numbers of customer's base (M = 3.943, SD = 0.765). Finally, the respondents agreed that there has been reduction in the cost in the bank after BPR has been implemented (M = 3.829, SD = 0.954

Regression analysis is applied when the study aims at establishing if a variable (independent) predicts another variable (dependent). The results are shown in table 6.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.883	0.780	0.751	1.799		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	379.116	4	94.779	26.622	.000
	Total	485.921	34			
F-critical (obtained from F tables)= 2.6787						

From the findings, the regression model had an R square value of 0.780 which implies that 78% variations in performance of telecommunication companies in Kenya are explained by the adoption of BPR strategies.

From the ANOVA Table, the F-value was 26.622 with p value of 0.000 which is significant since the p-value was less than 0.05 Table 7 shows the regression coefficients of the model.

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.876	0.175		5.006	.000
Technology infrastructure	0.833	0.378	0.716	2.204	.035
Customer focus	0.741	0.309	0.647	2.398	.023
Process redesign	0.678	0.277	0.571	2.448	.020
Change management	0.782	0.312	0.669	2.506	.018

From the regression coefficients table, the following regression model was derived.

$$Y = 0.876 + 0.716X_1 + 0.647X_2 + 0.571X_3 + 0.669X_4$$

Where: -

- Y= Performance of telecommunication companies in Kenya
- X₁= Technology infrastructure
- X₂= Customer focus
- X₃= Process redesign
- X₄= Change management

The regression equation above has established that taking (Technology infrastructure, customer focus, process redesign and change management), performance of telecommunication companies in Kenya would be 0.876. The findings presented also show that increase in the technology infrastructure leads to 0.716 increase in the score of performance of telecommunication companies in Kenya if all other variables are held constant. The variables was significant since 0.035 was less than 0.05. Further it was found that if customer focus increases, there would be a 0.647 increase in performance of telecommunication companies in Kenya. The variable was significant since 0.023 was less than 0.05.

Further, the findings show that a unit increases in the scores of process redesign would leads to 0.571 increase in the scores of performance of telecommunication companies in Kenya in Kenya. The variables was significant since 0.02 was less than 0.05. The study also found that a unit increases in the scores of change management would lead to a 0.669 increase in the scores of performance of telecommunication companies in Kenya in Kenya. The variables was significant since 0.018 was less than 0.05.

Discussion of the Findings

Influence of BPR Strategies in the Telecommunication Companies

BPR and Technological Infrastructure

The study found that most of Telecommunication companies have used Teleconferencing technologies, computerized performance measurement and reporting system, shared IT infrastructure and computerized procurement system when implementing BPR. The study also revealed that most of telecommunication firms have used computerized human resource management (personnel) system, website for publishing basic organizational information, computerized process management, monitoring, and reporting system, automated workflow and document flow system and online delivery of services in implementing BPR. This concurs with Moorthy and Ensermu (2013) who examined the effect of BPR on performance within the Ethiopian Bureau of Fund and Financial Improvement (BoFED) and concluded that lion's share of BoFED clients were fulfilled with improved quality of service, service cycle time and the overall organizational performance.

BPR and Customer Focus

The study found that communication to customers has improved after introduction of BPR strategies, that customers valued speed, efficiency and easy access to information about the company products, that BPR has resulted in analysis of customer needs with a view to meeting them and that customer service oriented processes has eliminated customer complaints. The study established that services are now focused on the customer and that retraining of staff on BPR concepts and skills contribute towards success of BPR in addressing customers' needs. Moreover, the study found that effective communication between internal and external customers is necessary to all levels for successful BPR. Hammer (1995) advocates that organizations should assess their capacity to satisfy client necessities and in light of the cost structure in place. Service centred firms can boost the customer fulfilment by guaranteeing that the needs of the client are at the centre of BPR ventures. Entirely characterized rules and need of specialist frequently limits numerous benefit workers from fulfilling the requirements of customers.

BPR and Organization Structure

The study found that clear structure improves organization effectiveness and efficiency, that flattening the layers of management enhance effectiveness and that formality of job gives the freedom of action to do the tasks associated to that job and when to do it. The study also established that respondents also agreed that reorganization of the structures improves working condition of the company and that the organizational structure has been simplified and that simplified structure improves organization effectiveness and efficiency. The study established that most of organization combines the individuals and jobs and defines the regulations and relationship governing them and that coordination within departments has been enhanced .

BPR and Process Redesign

The study established that the respondents agreed that in Redesign aim is elimination of non-value-adding work, that process time is a very essential component to make a company dramatically compress the time for key business processes and that problematic processes are considered for redesign and that in reengineering a process redesign is to eliminate all waste work. In addition, the study found that BPR improved on innovation and creativity, that reorganization of the process improve working condition of the company, that process evaluation techniques such as flow charts, fishbone diagrams and quality function deployment are important in redesign and that continuous improvement deliver the required improvements in processes.

BPR and Change Management

The study established that the concept of continuous improvement has been embraced by the leadership, that attitude, behavior, integrity, people participation and team spirit have influence on BPR implementation and that the levels of corruption within the company agency have reduced. The study found that top leadership is more engaged to deliver services effectively and efficiently and that the employees are not willing to serve clients efficiently after BPR implementation. This is in line with Odede (2013) who established that the primary step in executing BPR demands that

all the teams affected be enlightened along the anticipated changes before the commencement of the method. This is likely to guarantee outcomes of the BPR process. In any case, the ultimate BPR success is decided by steady, solid and constant engagement with influenced groups all through the organization.

The study found that Customer's feedback when the BPR was implemented. This agrees with Clandestine (2007) who contends that successful BPR group individuals ought to be less than ten. The analyst contends that less than ten makes the group sensible. Be that as it may, in the event that the number exceeds ten, at that point challenges will be experienced in performing its functions proficiently and effectively.

BPR and Performance

From the findings, the respondents agreed that BPR have improved the effectiveness and efficiency of the system in the organization as shown by a mean of 4.229, The system enable the organization to reduce the cost of production through analysis of the process from the initial stage to the end, that introduction of BPR has change in the numbers of customer's base as shown by a mean of 3.943, the customer base increase in most organizations since the implementation of BPR enable the operations to be more efficient and effective in service delivery thus the company revenue/performance of the company increase after BPR projects implemented as shown by a mean of 3.829, that there has been reduction in the cost in the bank after BPR has been implemented as shown by a mean of 3.829 and that the company improved in the service delivery to customers after the BPR implementation as shown by a mean of 3.800. However, the respondents were neutral that Customer's feedback when the BPR was implemented as shown by a mean of 2.686, feedback from customer has been a continue process before and after implementation of the strategies and disagreed that the company increased in your working hours after BPR exercise was implemented as shown by a mean of 2.143. The working hours reduced since the system was improved and productivity was more effective since there was improvement in all aspects of organization both internal and external.

Conclusions

The concluded that most of the targeted telecommunication companies targeted indicated to have implemented BPR initiatives. This was prompted by management support, employee commitment and IT infrastructure and organization structure, organization culture, BPR team composition, business needs analysis, strategies and goals setting, change management and management competency and support.

The study also concluded that BPR are related to technological infrastructure, customer focus, organization structure, process redesign, change management and organizational performance.

The study concluded that flattening the layers of management enhance effectiveness and that formality of job gives the freedom of action to do the tasks associated to that job and when to do it. The study also established that reorganization of the structures improves working condition of the company and that the organizational structure has been simplified and that simplified structure improves organization effectiveness and efficiency.. The study established that processes that are critical to accomplishing company strategy and have the greatest impact on the company's customer are redesigned and that strength of the reengineering team and the commitment of process owners and sponsors affects redesign.

Recommendations

BPR implementation comes with a lot of challenges which impacts the improvement achieved. For substantial benefits from BPR implementation to an organization, the challenges must be managed properly. The biggest challenge experienced by Telecommunication companies was on communication of the project importance within the organization which was high rated.

The study recommended that Telecommunication companies should fully automate its operations besides replacing obsolete technology equipment with modern ones.

The study also recommended that proficiency in-service training as a component of the career development initiative must be closely coordinated with the organization's training efforts. This benefits both the Telecommunication companies and its employees by keeping them up-to-date on duties and responsibilities within present job assignments.

Management should redesign organizational processes that are innovative and flexible enough to adjust quickly to changing market conditions, value creation, faster solution delivery, and improvement and development of quality products and services offered to customers.

The study recommends that most companies should be very cautious when re-engineering in order to avoid downsize without figuring out how to reduce the workload. This is because legitimate reengineering is a matter of streamlining internal processes and eliminating redundancies.

Suggestions for Further Research

This research study focuses on the business process re-engineering practices and performance in telecommunication sector in Kenya. The concept of BPR is however applicable across the private and public organizations as a whole and in processes as well within organizations. Other studies can be done in other sectors in order to confirm if the practices adopted by the telecommunication sector are also applicable in other industries.

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