EFFECT OF BUSINESS PROCESS RE-ENGINEERING ON EMPLOYEES SATISFACTION IN CONSUMER GOODS SECTOR IN SOUTH-WEST, NIGERIA

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Abstract

The changing economic system required a change in business processes in order to remain competitive and enhance employees' satisfaction, thus, the application of Business Process Re-engineering (BPR). The study examined the extent to which BPR enhances employees' satisfaction. A sample of 395 employees' of the organizations quoted in consumer goods sector in South-west, Nigeria was taken, and the data gathered with the aid of a structured seven point Likert scale questionnaire was analysed with ordered logistic regression to establish the effect of BPR on employees satisfaction. The results show that information management, management perception of cross-fertilization of ideas are significant at 1% (0.325) level of significance, while employees' free-will participation in organizational operations is significant at 5% (0.260) level of significance. It is concluded that organizations should embrace BPR in order to remain relevant in their industry. The study therefore recommended that organizations should create appropriate organizational culture and policies that fosters effective cross-fertilization of ideas by facilitating interaction through brain-storming sections and workshops so that effective operational procedures can be attained in order to create, share, utilize and retain knowledge, especially tacit knowledge for the purpose of attaining employees satisfaction which ultimately culminate to the attainment of organizational objectives.

Keywords: Business Process Re-Engineering, Employees Satisfaction, Employees' Freewill Participation, Cross-fertilization of ideas and Knowledge Management

Introduction

Improving employees' satisfaction in an organization for the ultimate goal of achieving organizational objectives and satisfying the various stakeholders in the information age in 21st century require effective process re-engineering (PR) in order to align with the prevailing knowledge management (KM) concept so that organizations can be effective in asset utilization and gain competitive advantage in their various sector. In the early 1900's, Fayol (1900) patented the concept of reengineering, which is to conduct undertaking toward its objectives by seeking to derive optimum advantage from all available resources.

Lyndall (1979) as cited in Lloyd, 1994) indicated that it is not enough to hold people accountable for certain activities, it is also essential to delegate to them the necessary authority to discharge that responsibility". This admonition fore-shadows the idea of worker empowerment which is central to work processes re-engineering.

About two decades ago, Knowledge Management (KM) was hailed as an approach that would unearth and leverage the buried knowledge held closely by a company's employees, and would drive employees' satisfaction, innovation and productivity. It would also enable the evolution of a "learning organization" where the corporate body of knowledge would always be evolving and being made accessible to employees eager to learn and apply these corporate secrets. With the KM era, there began a series of efforts spanning a number of industries to focus on improving, re-engineering, or otherwise managing business process as key corporate assets.

Therefore, enterprises should create – entirely – new ways of working to survive in a competitive environment. As stated in Barrett (1994), organisational transformation depends on the creation of a powerful vision of what the future should be like. This calls for an in-depth understanding of the current functioning in the organization. In this context, access to past decisions, information and methodology employed by the organizations are key to effective Business Process Re-engineering in the organization. Therefore, modeling of enterprise knowledge becomes a pre-requisite for system development. Enterprise knowledge modeling refers to a collection of conceptual modeling techniques for describing different facets of the organisational domain including operational (information systems), organisational (business processes, actors, roles, flow of information etc), and purposes considerations (Bubenko, 1994).

But BPR is not an end on its own as the company can become so wrapped up in “fighting its own demons” that it fails to keep up with its competitors in offering new products or services (Cafasso, 1993).

While KM and process re-engineering were being evolved in parallel, there was no serious effort to fuse them into a consistent, holistic architecture. KM programs over the past decade have focused on organizing employees into communities of practice and building repositories of “best” or proven practices. There is still a general lack of understanding of how valuable the fusion of processes and knowledge can be. The thought of actually taking the distilled knowledge and making it easily available to people executing the process was somehow overlooked. Employees would only stop to access the available knowledge base when the process execution came to a screeching halt due to an inability on the part of the employee to continue. Many times, this would involve looking up information in an offline source like a procedures handbook or calling a friend who might know the answer. A major thrust of KM efforts in the past years has been building these employee locators who could answer questions involving specific knowledge domains, so as to attain effective operational practices that will put smile on the faces of the organisations’ employees and the stakeholders in general.

Research Question

Can process re-engineering enhance employees’ satisfaction objective of an organization?

Objective

The study examines the extent to which process re-engineering enhance employees’ satisfaction objective

Research Hypothesis

Process re-engineering doesn’t enhance employees’ satisfaction objective in an organization.

Literature

Business Process Re-engineering (BPR)

Hammer and Champy (1993) as cited in Mukherjee and Chatterjee (2013) define BPR as "'the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service, and speed." It is the process by which organisations assesses their operational processes from the sourcing of materials, men and source of capital (input), conversion processes up to when the goods or services gets to the end user. But, access to past decisions via well-equipped library and effective records keeping will go a long way in evaluating past and present decisions in order to re-design better processes and procedures for the betterment of the organizational stakeholders. Gerstner and Louis (2002) researched extensively on re-engineering for the IT giant IBM with special focus on eleven areas of operation. The first six, called the Core Initiatives, were those parts of the business which dealt more with the outside world: hardware development, software development, fulfillment, integrated supply chain, customer relationship management and services. The relevance of BPR became important in the 21st century because of the premium placed on knowledge occasioned by the concept of Knowledge Management (KM).

KM is a process that, continuously and systematically transfer knowledge from individuals and teams, who generate them, to the brain of the organization for the benefit of the entire organization. It is an approach to discovering, capturing, and reusing both tacit (in people's heads) and explicit (digital or paper based) knowledge as well as the cultural and technological means of enabling the KM process to be successful." Knowledge is differentiated from information in that there is an element of expert review and refinement where knowledge is concerned. A good example of knowledge is the comments and recommendations in a write-up or research. The comments and recommendations from the write-up is where the real value lies.

In my opinion, Knowledge Management cannot be successfully accomplished in an enterprise unless it is closely linked to a particular group of processes of critical interest to the business, i.e., supporting customer product or service inquiries, and employees will not do the extra work to support KM unless it is really important both to themselves and the business. It is an era where there is no packaged solution to organizational issues. Organisations

therefore, have to frequently evaluate their processes and procedures in order to remain relevant to their stakeholders.

KM Process Re-engineering and Employees Satisfaction

With the development in the world economy organisations have had to re-examine and re-arrange their business processes, policies and procedure in order to align with the realities in the global economy and to be able to compete favourably in the present business world. According to Davenport and Prusak (1998), KM is focused on processes and mechanisms for locating and sharing what is known by an organization or its external stakeholders. The ability to share internal best practices is important to attainment of organizational objectives and exploiting external knowledge is crucial in driving new product innovation and organizational performance in general. To this end, we have included items to measure the extent to which the organization is able to identify operational areas, internal sources of expertise and transfer best practice throughout the organization. While BPR is about identifying key areas of operation where the understanding of new economic system i.e knowledge economy has brought improvement that organisations can leverage on to enhance employees' satisfaction and subsequently achieve organizational objectives.

Although, BPR does not provide a painless quick fix for organizational challenges, rather it advocates strenuous hard work and instigates the people involved to, not only change what they do, how they do it, but targets at altering their basic way of thinking itself in order to exhibit the right behavior that will allow the organization to gain competitive advantage in their industry.

Employees' Satisfaction

Employee satisfaction is a significant aspect of business operations, as satisfied employees can result in increased production, innovativeness, higher profits and a positive business reputation. Employee satisfaction is quite simply, how content or satisfied employees are with their jobs. It is measured by high retention rate, conducive work environment, reduced work-day length, high job turn-around time and improved workers' experience (Sageer, Rafat & Agarwal, 2012).

Theoretical Review

Socio-technical Theory

This has to do with the idea that the design and performance of any organisational system can only be understood and improved if both 'social' and 'technical' aspects are brought together and treated as interdependent parts of a complex system. It is an approach to understanding the relationship between technology, individuals, organisations and society in work place design and focuses on understanding the social aspects resulting from interactions among people in their societies and technical aspects - machines and technology in pursuit of optimizing corporate objectives. This study is therefore based on this theory because it is believed that the business environment is dynamic and organisations have to be innovative in their operational procedures so as to be able to adjust to the dynamics in the industry.

Empirical Review

Nkurunziza, Ntayi, Munene, and Kaberuka (2018) submitted that many organizations are now attempting to enhance their performance through Business Process Reengineering, i.e a strategy of redesigning business operations to take full advantage of information technology and human resources. This has necessitated organisations to create – entirely – new ways of working to survive in a competitive environment and organisational transformation now depends on the creation of a powerful vision of what future should be like.

Suliman and Al-Hosani, (2014) in their study on Job satisfaction and knowledge sharing: The case of the UAE, investigated the influence of job satisfaction on knowledge sharing in an oil and gas sector. The data were collected with the aid of a self-administered questionnaire, analyzed with regression analysis. The results revealed that employees' job satisfaction levels have a direct and positive relationship with their knowledge sharing behaviours.

Methodology

The population of the study comprise of 29,275 staff of the entire 19 firms in the Consumer Goods Sector in South-West Nigeria based on 2017 stock exchange fact-book. 395 sample was selected from the population with

Rakesh (2013) sample size determination formular. South-West Nigeria was selected because of the familiarity of the researcher to the region.

Primary data was gathered through a seven point Likert scale structured questionnaire. This is basically to ensure active participation of the respondents in the study. The questionnaire was designed based on the literature regarding process re-engineering according to Awad and Ghaziri (2011), and employees' satisfaction based on Sageer, Rafat and Agarwal, (2012). The questionnaire was elaborated by the author to suit Nigerian business environment. This is because the studies employed variables that are peculiar to their business environment which may not be applicable to Nigerian business environment.

The questionnaires were administered based on convenience sampling method. This is because of the nature of the work and willingness to attend to the questionnaire by the respondents.

Ordered Logistic Regression was employed to achieve the objective of the study.

A functional specification of the model used to achieve the objective is given below:

E-S = f(P-D)

where:

E-S = Employees' Satisfaction and,

P-D =Process Re-engineering Drivers

P-D is further decomposed to CF, PI, TE, FP and IM. Therefore, putting the above model in an explicit form in order to examine the impact of variables of process re-engineering on employees' satisfaction, the above model becomes:

$$E\text{-}S = \beta_0 + \beta_1 CF_i + \beta_2 PI_i + \beta_3 TE_i + \beta_4 FP_i + \beta_5 IM_i + U_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(7)$$

Where:

CF = Management perception of cross-fertilization of ideas

PI = Access to past information

TE = Trust among Employees' to share Operational Procedure

FP = Employees' Freewill Participation in Organizational Operations

IM = Information Management in the Organization

U = Stochastic Term

A prior expectation is given as:

$\beta 2, \beta 3, \beta 4, \beta 5 > 0$

Presentation of Result

Factor Analysis

The Principal-component factor analysis of data reduction is employed on the basis of orthogonal arrangement in this work.

Table 1: Principal-Component Factor Analysis on Employees Satisfaction – Factor Loadings and Unique Variances

Employees' Satisfaction	Uniqueness
With the bottom-top approach adopted by my organization, my involvement in the organization activities is……	0.1856
My experience in the organization has been …..	0.2247
My turn-around time on the job has been …..	0.2259
The rate at which management encourages collaboration among employees' in the organization is	0.2468
My organization's work environment and infrastructure compared with other firms' in the industry can be said to be…..	0.2740
Attitude of my management to pay competitive salary is …..	0.3288
My management attitude towards training and development is …..	0.3348
My delivery time on the job is ……	0.3386
Management attitude to continuously improve work environment is…..	0.3503
My attitude towards my organization's reward system has been …..	0.4224
Work-day-length in my organization compared with other organizations' in the industry can be said to be ….	0.5778

Source: Authors' Computation, 2019

The result of the principal-component factor analysis in Table 1 presented the uniqueness value of each of the question used. Uniqueness gives the proportion of the common variance of the variable not associated with the factors. It is the variance that is 'unique' to the variable and not shared with other variables. It is equal to 1 minus communality (which is the variance that is shared with other variables or associated with the factors). The greater the 'uniqueness', the lower the relevance of the variable in the factor model, and vice versa. This method is employed in this work to select the most relevant variables that proxy each of the variable constructs used in regression analysis. This method was adopted to select five most important variables from KM process re-engineering drivers.

The first set of models presented in Table 1 shows the dependent variables in each of the three models used as proxies for employees' satisfaction in the first row. The independent variables were variables of process re-engineering listed on the first column. The effect of process re-engineering such as management perception of cross-fertilization of ideas, access to past information, trust among employees' to share operational procedure, employees' freewill participation in organizational operations, information management in the organization are all seen on the probability that an employee would have more experience on the job. Also, the effect of each of the process re-engineering mentioned above is seen on the probability of having a higher turn-around time on the job, while the fourth column shows the effect of each of the process re-engineering on the probability of getting involved in organization's activities.

Table 2: Ordered Logistic Regression of Employees' Satisfaction on KM Process Re-engineering Drivers

Variables	**Length of Experience on the Job**	**Turn-around time on the job**	**Involvement in Organization's Activities**
Management perception of cross-fertilization of ideas	0.325*** (0.0996)	0.256** (0.106)	0.264** (0.108)
Access to past	0.0212 (0.110)	0.325*** (0.106)	0.201* (0.106)

information			
Trust among employees' to share operational procedure	0.0386 (0.0279)	-0.0114 (0.00746)	-0.0419*** (0.00943)
Employees' freewill participation in organizational operations	0.260** (0.121)	0.355*** (0.107)	0.326*** (0.113)
Information management in the organization	0.221* (0.115)	0.133 (0.135)	0.494*** (0.128)
Observations	**339**	**337**	**334**
Wald Chi^2	**40.07*****	**68.09*****	**77.97*****
Pseudo R-squared	**0.0655**	**0.0818**	**0.1044**

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
*Note: *** indicates significant at 1%, ** indicates significant at 5%, and* indicates significant at 10%*
Source: Authors' computation, (2019)

The result presented in Table 2 is ordered logistic regression for the model concerned in the study. In the second column, the result shows that management perception of cross-fertilization of ideas, employees' freewill participation in organizational operations, and information management in the organization have significant impact on the probability that an employee would have more experience on the job. Management perception of cross-fertilization of ideas is significant at 1% level of significance; employees' freewill participation in organizational operations is significant at 5% level of significance, while employing information management in the organization is significant at 10% level of significance. Other variables included in this model do not significantly affect the probability that an employee would have more

experience on the job. This implies that these insignificant variables do not really affect the probability that an employee would have more experience on the job. All statistically significant variables are seen to have positive signs. This connotes that each of these variables has positive influence on the probability that an employee would have more experience on the job. The implication of this is that, improvement in management perception of cross-fertilization of ideas, employees' freewill participation in organizational operations, and information management in the organization improves the probability that an employee would have more experience on the job. Statistically significant Wald Chi-squared value (40.07) suggests that the overall model is significant at 1% significance level. However, the reported Pseudo R-squared of 0.0655suggests that the model has a weak fitness.

In the third column of table 2, the result shows that management perception of cross-fertilization of ideas, access to past information, and employees' freewill participation in organizational operations have significant impact on the probability that an employee would have higher turn-around time on the job. Access to past information and employees' freewill participation in organizational operations are significant at 1% level of significance while management perception of cross-fertilization of ideas, access to past information is significant at 5% level of significance. Other variables do not significantly affect the probability of having higher turn-around time on the job. This implies that these insignificant variables do not really affect the probability of having higher turn-around time on the job. All statistically significant variables are seen to have positive signs. This connotes that each of these variables has positive influence on the probability of having higher turn-around time on the job. The implication of this is that, improvement in management perception of cross-fertilization of ideas, access to past information, and employees' freewill participation in organizational operations improves the probability of having higher turn-around time on the job. This is because they will be exposed to the organization's operation and thereby improves their skills and competences which will lead to easy attainment of tasks and efficiency in the organization. Statistically significant Wald Chi-squared value (68.09) suggests that the overall model is significant at 1% significance level. However, the reported Pseudo R-squared of 0.0818suggests that the model has a weak fitness.

In the fourth column of Table 2, the result shows that all process drivers included in this model have significant impact on the probability of getting involved in organization's activities. All variables are significant at 1% significance level except management perception of cross-fertilization of

ideas and access to past information which are significant at 5% and 10% level of significance respectively. All statistically significant variables are seen to have positive signs except trust among employees' to share operational procedure which has a negative sign. This connotes that each of these process drivers has positive influence on the probability of getting involved in organization's activities except trust among employees' to share operational procedure which is seen to pose negative influence. The implication of this is that, improvement in management perception of cross-fertilization of ideas, access to past information, employees' freewill participation in organizational operations, and information management in the organization improves the probability of getting involved in organization's activities. On the other hand, improvement in trust among employees' to share operational procedure decreases the probability of getting involved in organization's activities. Statistically significant Wald Chi-squared value (77.97) suggests that the overall model is significant at 1% significance level. However, the reported Pseudo R-squared of 0.1044suggests that the model is moderately in good fit.

With this, the null hypothesis is rejected since all the Wald Chi^2 is significant, therefore, the alternative hypothesis which states that "there is statistical significant impact between process re-engineering drivers and employees satisfaction objective of the organization" is accepted.

Discussion of Findings

The results of the Ordered Logistic Regression for the objective shows that the BPR variables employed (management perception of cross-fertilization of ideas, access to past information, trust among employees' to share operational procedures, employees' freewill participation in organizational operations and the extent of information management in the organization) have significant effect on employees' satisfaction and supported alternative hypothesis which states that "There is a statistical significant impact between Knowledge Management, Business Process Re-engineering and Employees Satisfaction objective of the organization". This findings is in line with Nkurunziza, Ntayi, Munene, and Kaberuka (2018) who submitted that many organisations are now attempting to enhance their performance through BPR.

Conclusion

Based on the findings, it is concluded that organizations should embrace the process of BPR because of the dynamic nature of the business environment and in order for the organization to remain relevant in their industry. Cross-fertilization of ideas, access to past information, trust among employees' to share operational procedures, employees' freewill participation in organizational operations, among others should be effectively embraced so as to position the organization for global relevance.

Recommendations

Organizations should create appropriate organizational culture and policies that fosters effective cross-fertilization of ideas by facilitating interaction through brain-storming sections and workshops so that effective operational procedures can be attained in order to create, share, utilize and retain knowledge, especially tacit knowledge for the purpose of attaining employees' satisfaction which ultimately culminate to the attainment of organizational objectives.

Organizations should also ensure easy access to past information by keeping a functional library where employees can assess past decisions pertaining to operational issues in the organization.

Furthermore, employees' free-will participation should be encouraged by seeking employees' opinion in critical issues thereby giving them a sense of belonging in the organization.

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