

# **BUSINESS PROCESS REENGINEERING AND SUSTAINABILITY: THE MODERATING ROLE OF TECHNOLOGY IN MANUFACTURING COMPANIES IN CROSS RIVER STATE**

**BY**  
**EDEMA, ALFRED J.**  
**MATHEW, SOLOMON UWEM**  
**UWAH, INEMESIT ENOBONG**

## ***Abstract***

*This study examined the relationship between business reengineering and sustainability of manufacturing companies in Cross River State. The specific objective was to interrogate the connection between job redesign and opportunity exploitation using technology as a moderator. The study adopted correlational research design, with a sample of 215 drawn from the population of 463 and data was collected through the use of structured questionnaire, and reliability obtained through a test-retest method, the reliability coefficient, ranged from 0.78 to 0.86. Simple and hierarchical regressions were used for testing the hypotheses. The major finding revealed a significant positive relationship between job redesign and opportunity exploitation. Also there was positive moderating effect of technology on manufacturing firms in Cross River State. The study concluded that the sustainability of manufacturing organizations is tremendously enriched by business process reengineering; and recommended that management of manufacturing organizations, particularly in Cross River state, should ensure adequate redesigning of jobs by describing employees' line of duties and place the right person on the right job to enhance adequate utilization of resources and exploit competitive opportunities.*

**Key words:** Business reengineering, organizational sustainability, technology, job redesign, opportunity exploitation.

## **Introduction**

Managers are desirably giving up obsolete modes of operation and leveraging upon change to make their organizations competitive and operate successfully in a complex, continually changing environment. In a competitive business environment where change is at high velocity, allowing for a fast adjustment in business process is a key requirement for rejuvenating modern enterprises. The increasing flexibility of business environment and the dwindling process validation have saddled managers with the responsibility of setting a new page for the organization. The survival of an organization in contemporary business environment requires more than an incremental management or a mere modification of the operational process. Organizations must involve all their units in the change process. Hence, business process reengineering is a prerequisite and an indispensable tool of organizational sustainability. Business process reengineering (BPR) is an effective tool for changing the entire operating system of an organization. Business process reengineering (BPR) is a managerial approach that focuses on doing things in a standard way clearer to enhance innovation and exploitation of opportunities. Business process reengineering encloses a systematic critical evaluation of existing ways of performing a task in the organization with a view to developing more effective methods of doing business in order to make its functions swiftly and more cost effective (Arora, 2009). Business process reengineering emphasizes how jobs are redesigned in organizations to enhance effective utilization of resources. Reengineering provides workers with new or additional tasks and procedures for serving the customer efficiently and effectively. Reengineering an organization is a mechanism for introducing change that is all inclusive, even with the style of management. It is the alteration of obsolete approach used in dealing with people in the organization and exercising of authority over subordinates in an effort to attain organizational goal. This covers how managers plan

and organize work in their areas of responsibility, specifically how they relate to, and deal with their team members and other members of the organization.

The sustainability of an organization is considered in terms of its ability to generate profits for owners, gain competitive advantage through innovations and add value to the people it employs as well as the society in a continuous endless period. It hinges on a combination of productive assets made up of capital, physical resources, human and strategies for the accomplishment of a shared purpose or goal of the organization. It encompasses three specific areas of an organization's performance indicators namely, exploitation of opportunities, market share and shareholders return. Thus, it entails an analysis of a company's performance relative to set goals and objectives, innovation, customer satisfaction and efficiency, which ensure the continuity of an organization's operation.

### **Statement of the Problem**

Globalization of business environment and the swift change in technology have necessitated organizations to restructuring their operational processes beyond seeking limited scope to a wider, limitless competition. In a competitive environment, the sustainability of an organization depends on the functionality of all its units. Its ability to explore and exploit opportunity and improve on productivity depends to a large extent on the employees' ability to understand the mode of operations, management style, belief and the cultural practices of different organizations. However, some organizations fail in re-designing jobs that portray mutual respect for one another's cultural background nourished by proactive management style and good technological system that facilitates the operational processes of the organization.

Despite the fact that managers in some manufacturing companies make a good change in various units of the organization, train their employees and even offer good incentives to motivate and improve employees' performance, they find it difficult to relinquish the old style or operational processes and poor quality control. This has led to declines in the productivity of the organization. Business today is conducted in a dynamic environment where creativity and swift technological changes are the order of the day.

### **Purpose of the Study**

This study seeks to find out the relationship between business process reengineering and sustainability of manufacturing organizations in Cross River State. Specifically, the paper:

- i. Examines the relationship between job redesign and opportunity exploitation; and
- ii. Assesses the moderating role of technology between job redesign and opportunity exploitation.

### **Research questions**

The following interrogations are pertinent to the paper:

1. What is the extent of relationship between job redesign and opportunity exploitation?
2. To what extent does technology moderate the relationship between job redesign and opportunity exploitation?

### **Hypotheses**

1. There is no significant relationship between job redesign and opportunity exploitation.
2. Technology does significantly moderate the relationship between job redesign and opportunity exploitation.

### **Theoretical Framework**

This study is premised on the systems theory and the job characteristics theory. Systems theory as propounded by Von Bertalanffy (1972) is essentially concerned with organizing the interaction between component parts of an organization to achieve common goals. The theory states that an organization should know its parts and the relationship between them. The systems theory, therefore, takes a holistic view of the organizational framework and stresses process (Inyang, 2007). This theory enables the organization understand the problems of all its units and make changes that is all inclusive to enhance its sustainability to achieve a competitive advantage. Systems theory suggests that management needs to focus on all parts of the organization, and changes should be emphasized not only on one aspect of the organization and ignore other aspects. An organization is a system and all units in the organization are interdependent and interacting, therefore, all parts or the inter-systems must function together to achieve sustainability, as a change in one part affects other parts. Thus, the value of this theory to the study is to further encourage managers of manufacturing companies to appreciate and synergize the various components of the organization and the reengineering of operational processes for sustainability, and to make and implement better changes that are all inclusive. This is the basis for selecting the variables for the study.

The job characteristics theory, developed by Hackman and Oldham (1976) is another theory, which supports this study. This theory suggests that a well-designed job can cause the employees of an organization to be satisfied and motivated with their job and personal growth opportunities, generate higher quality working life and have lower turnover rates and absenteeism. This can result in positive work outcome and sustainability of the organization. The theory was originally intended as a way to evaluate jobs and to see if they should be redesigned to increase employee motivation and productivity. The job characteristics theory has three primary components: core job dimensions, critical psychological states and work outcomes. The main purpose of job redesign is to increase both employees' motivation and productivity. Thus, this theory is essential to this study in the sense that it enables manufacturing companies to know the features of jobs in terms of skills required, tasks identification, meaningfulness of the job, the responsibility for the outcome of the job etc. Hence, this serves as a driving force to make the employees give out their best in their job because they are valued and treated as tangible assets of the organization. Again, it enables employees to know what is expected of them in the process of carrying out their tasks and duties which will boost their morale thereby improving performance and enhance the organization's sustainability.

The conceptuality of business process reengineering

According to Arora (2009), business process reengineering entwined a methodical examination of existing ways of performing a task in the organization with a view to developing easier and more effective methods of operating business in order to make the function faster, more cost effective and qualitative. Perhaps the earliest attempt to reengineer business process came during the era of scientific management. Taylor (1911) in his book scientific management suggested that managers should systematically examine activities and ascertain the most efficient way of performing them to improve performance. He stressed the importance of critical analysis, measurement and incremental improvement of explicit task in the organization. This principle echoes that classical belief that there is a better way to perform a task to improve performance, which is also the aim of business process reengineering.

Hammer and Champ (1993) cited in Bhaskar and Sindgh (2014), Bhaskar, (2018) define business process reengineering as a fundamental rethinking and radical redesigning ways of performing a task in an organization to obtain dramatic advancement in fastidious contemporary measures of performance like cost, quality, service and speed. Loweuthal (1994), cited in Arora (2009) views business process reengineering as the fundamental rethinking and redesigning of operating procedures to achieve dramatic

improvement in the performance of the organization. Radical redesigning signifies that instead of shallow changes, all existing structures and methods for performing a task should be rejected. A company's sustainability depends on its ability to understand the existing methods of operation in the organization and implementing changes that provide a clear understanding and definition of customers' needs and expectations. Business process reengineering transforms a company's core business process to respond more rapidly and effectively to the changing business environment. Eke and Adaku (2014) stated that business process reengineering has become useful instrument for any organization that is looking for ways to improve its current overall performance as well as gain cost leadership strategy in a competitive environment. Business process reengineering entwines changes in structure in job design, in management style, in technology and procedures of performing a task as well as the control system within the business environment. Davenport (1993) views business process reengineering as a broad radical design of cross-functional business processes with the aim to gain significant performance, often with the aid of information technology. Accordingly, business process reengineering is a complete transformation of organization, and fitful reshaping of all business processes, structure, and technology as well as value and management style to enhance dramatic advancements in the organization. It is also a process of revitalizing the entire aspects of the organization to increase efficiency and obtain sustainable improvement.

### **Organizational Sustainability**

Organizational sustainability comprises the capacity and strategy that enhance competitiveness. According to Dyllick and Hochterts (2002) organizational sustainability is the capacity companies have for leveraging their economic, social and environment capital for contributing towards sustainable development within their political domain. Luciano, Barbara and Rafael (2006) depict that organizational sustainability is an attempt to find equilibrium between what is desirable economically viable and ecologically sustainable. An organization's sustainability could be viewed in terms of its ability to generate profits for owners, gain competitive advantage and add value to the people with whom it employs as well as the society.

It is certain that the environment in which organizations exist changes. Trends such as globalization, demographic change, climate change and social inequality have been considered significant to the existence of businesses. Boodre and Ramstad (2005) see organizational sustainability as achieving success today without compromising the needs of the future. To Colbert and Kurucil (2007) organizational sustainability is keeping business going. According to the chartered institute of personnel and development (2012), the essence of sustainability in an organizational setting is the principle of improving the societal, environmental and economic systems within which the organization operates. Thus, organizational sustainability can be viewed as a company's strength to survive the challenges of rapidly changing environment of business.

### **Job Redesign**

Job redesign can be defined as an alteration in the job characteristics to improve efficiency and effectiveness of an organization. Albert (2007) views job redesign as the restructuring of the elements of work, responsibility tasks and duties of employees to make the job more inspiring and encouraging. The idea is to maximize output and increase the level of satisfaction through placing the right person on the right job (Slocum & Sims, 2000). Job redesign is the deliberate purposeful planning of a job to cover all structural and social aspects and their effect on the worker (Opiyo, Isaac & Silas, 2014). The aim is to improve both productivity and the quality of work experience employees gain.

The challenges of job redesign provide workers with new or additional task and procedures for serving the customer efficiently and effectively. Organizing is the strength of any business, the more organized

the different components in a business are the better it functions and produces better results. Through job redesign companies try to raise productivity levels by offering non-monetary rewards such as greater satisfaction from a sense of personal achievement in meeting the increased challenges and responsibility of one's work. Opiyo, Isaac and Silas (2014) establish that the status of task identity affect the performance of employees in an organization. Turner and Lawrence (2005) also affirm this by stating that the goal of job redesign is to reconstitute job roles in terms of work functions that are attractive to individual worker's capabilities that align with the organization's strategy and vision.

Accordingly, job redesign is the reorganization of tasks, duties and obligations of an explicit job in order to stimulate and encourage employees. It is the process of remapping out or blueprinting of the task required by the employees in an organization. Job redesign takes place when the new line of duties, role responsibilities are made known to workers to guide their actions and give them ideas about what is expected of them in the organization. These activities need to be clearly spelt out and defined in a way and manner that will make the workers find their work appealing, challenging and interesting to enable them integrate their personal goals with that of the organization hence, improve performance.

### **Opportunity Exploitation**

Organizations exploit opportunities in order to gain competitive advantage and economic improvement through the discovery of gaps in the market. It involves the decision to act upon a perceived opportunity and the associated behaviour aimed at realizing the value of the opportunity (Wikilund, 2015). An organization's choice to exploit an opportunity represents a commitment to new market entry. Business dictionary (2017) defines opportunity as newly identified need, want, or demand trend that a firm can exploit because it is not being addressed by the competitors. It also views opportunity as a set of exploitable circumstances with uncertain outcome, requiring commitment of resources and involving risks, it is essentially is a gap in the market where the potential exists to something better that creates value.

Choi and Shepherd (2004) define opportunity exploitation as activities and investments committed to gain returns from new products arising from the opportunity through the building of efficient business system for full scale operations. Thus, organizations during opportunity exploitation acquire and organize requisite resources and competencies to develop a product or service and take to an existing or new market. The outcome of opportunity exploitation is new products or service or both. However, this newness is a double-edged sword. On the one side, its represents something scarce which can help differentiate an organization from its competitors. Correspondingly, it creates a number of challenges or uncertainty over the value of a new product (Walker & Ruekert, 1995; Sapienza & Gupta, 1994; Choi & Shepherd, 2004).

Exploitation of opportunity relies on factors such as financial capital access, risk attitude and its perception, over-optimism and self-efficacy, tolerance for ambiguity, achievement need and information from precious engagement and its transferability (Kanyi, 2004).

Building from the above discussion, this paper addresses the concept of opportunity exploitation as an organization's action to satisfy newly identified customers needs, wants or demand to gain market dominance or competitive advantage. It is essentially the deployment of resources to take an advantage identified gap in the market that is both desirable and feasible for sustainability. Opportunity exploitation can also be expressed as a pro-active activity that enables an organization increase its market share and profitability.

### **The Moderating Roles of Technology**

Technology encompasses the methods, processes, devices, knowledge and facilities, which are used in the completion of work in any organization (Aluko, Odugbesan, Gbadamosi & Osuagwu, 2011). It involves virtually every aspect of getting things done and it is a component of all organizations, regardless of their size, shape and composition. Technology has progressively changed managerial activities and attitude towards the business environment. It refers to the human creation of physical systems that perform work focusing upon both the attempt to control the environment and the process through which man creates things.

Technology plays a crucial role in moderating the relationship between business process reengineering and organizational sustainability. The use of technology has a significant effect on the style of management and job design that are now available.

Accordingly, technology has the ability to influence or cause an organization to reengineer its business processes. It would seem that organizations with developed manpower, management styles, values, ethics, well-structured or designed job content should benefit considerably. They will be supported by information system and their process of operation could become more interesting and varied and much of the drudgery is removed with the information system carrying out many of the repetitive tasks procedure. However, it is also fair to say that those firms with incompetent employees, and low value and ethical standards will be forced to restructure or be driven out by competition. Hence, technology acts as a moderating variable in examining the relationship between business process reengineering and organizational sustainability.

## **Empirical Studies**

Mahmoud and Mollae. (2014) conducted a study on the effect of business process reengineering factors on organizational agility using path analysis in ports and maritime organizations in Tehran province in Iran, with 120 questionnaires administered to respondents. The aim of the study was to investigate the effect of business process reengineering by cultural factors, communications, methodology, project management, information technology, leadership, strategic alignment, empowerment and performance management. The study validated the instrument by sending 10 copies of questionnaire to professors and theoreticians in this field for assessment. The projected Cronbach Alpha value of the research ranged from 0.70 - 0.79, which indicates that the scales used in the study are reliable. Data was analyzed using multiple regression, the results showed that leadership and empowerment variables had the most effect on organizational agility than other variables. The recommendation was that managers of organizations should effectively develop incentives and also encourage and train the personnel. Also leadership team should consist of talented elites from different departments, which hence executive power and board of directors should play a significant role in directing the project. They concluded that these factors will build the materials for organizational agility.

Orogbu, Onyeizugbe and Onuzulike (2015) conducted a study on the business process reengineering and organizational performance using employees of selected automobile companies in south east of Nigeria. Their broad aim was to determine the extent of business process reengineering on the performance of some automobile companies. They specifically seek to find the extent to which work process innovation influences employees' retention as well as enhancing organizational success. They anchored study on business action theory. The study adopted descriptive survey design. In carrying out their study, they administered 120 questionnaires to employees of automobile companies in south east of Nigeria. The study showed that process innovation influences employee retention and this enhances organizational success. The study recommended that automobile companies in Nigeria need a wave of process redesign that can unfold more flexibility and rapidity to meet the ever changing requirements of an increasing diverse customer base.

Ringim, Razalli and Hasnan (2012) carried out a study on the moderating effect of information technology capability on the relationship between business process reengineering factors and organizational performance of Nigerian banks. The study adopted a survey research design; they administered 560 questionnaires to the respondents of the banks. Out of these, 417 questionnaires were useable for further analysis making a valid response rate of 74.0%. The study used hierarchical regression analysis through the help of SPSS. It proved that information technology capability played a crucial role in moderating the relationship between business process reengineering and organizational performance, recommending that managers of banks should restructure the activities of the organization thus improving its performance.

Opiyo, Isaac and Silas (2014) carried out a study on the effect of job redesign on employee performance in commercial bank in Kisumu, Kenya. The purpose of the study was to determine the role of job redesign on employee performance in commercial banks in Kisumu. The study employed a cross-sectional research design and questionnaire was the major instrument in eliciting responses from 297 respondents. Analysis was conducted through percentages and means, using SPSS software. The study established that task identity, task variety and task significance affect the performance of employees of commercial banks in Kisumu. It was recommended that commercial banks should create a high degree of task identity for their employees.

## **Methodology**

This study adopted a correlational research design. This is necessary because the study seeks to identify and make inference about the relationship between variables. Usually, correlational designs utilize survey for generation of data. Thus, a survey was conducted on the units with a duly designed questionnaire. The study was specifically carried out in United Cement Company Limited/ Lafarge Calabar, Cross River State.

The population of the study comprised of all the four hundred and sixty three (463) staff of United Cement Company Limited (UNICEM)/ Lafarge Calabar. Simple random sampling was employed to allow impersonal choice in selecting the sample and to ensure that every unit of the population had equal chance of being selected. Thus, the Taro Yamane formula was applied to determine the sample size of 215 which accounted for 46.4 percent of the entire population. The study developed an instrument of 32 items titled Business Process Reengineering and Sustainability of Manufacturing Company: The Moderating Role of Technology Questionnaire, administered to staff of UNICEM Calabar with a 5 point Likert-like scale. The instrument was given to two experts in test and measurement in the faculty of management sciences, University of Calabar, to establish face and content validities. The reliability of the instrument was established by carrying out a trial study using 60 staff of Niger Mills Company limited Calabar. The reliability coefficient ranging from 0.78, 0.84 to 0.86 was obtained for the research variables using Cronbach Alpha. The data for the study was analyzed using simple linear regression and hierarchical regression in SPSS version 20.

## **Results of Data Analysis:**

### **Hypothesis 1**

There is no significant relationship between job redesign and opportunity exploitation. The result of the analysis is presented in tables one, the R-value of .522 shows the level of correlation between job

redesign and opportunity exploitation. The adjusted R<sup>2</sup>-value of .269 shows that 26.9 percent of the variance in opportunity exploitation has been explained by job redesign. The equation model of significance is shown thus: F(1,213) =79.782, p<.005 indicating that, the overall prediction of the independent variable to the dependent variable is statistically significant, therefore, the regression model is a good fit for, and provides sufficient evidence to conclude that job redesign enhances opportunity exploitation in the company. The equation line for using job redesign to predict opportunity exploitation is Y=.542+8.641 which is statistically significant with t=8.932 and p<.005, where .542 is the slope for job redesign and 8.641 is the y-intercept.

**Table 1**  
**Least square Regression Results for Opportunity Exploitation**

Variables	Beta	Standard Errors	T	Sig
(Constant)	8.641	1.098	7.871	.000
Job redesign	.542	.061	8.932	.000
R	.522			
R <sup>2</sup>	.272			
Adjusted R <sup>2</sup>	.269			
F-value	79.782			
Sig	.000			

a: predictor: Job Redesign  
b: dependent variable: opportunity exploitation  
Source: SPSS output

## Hypothesis 2

Technology does significantly moderate the relationship between business process reengineering and sustainability.

Test statistics: Hierarchical multiple regression.

Table 2 shows the moderating effect of technology on the relationship between business reengineering (job redesign) and sustainability (opportunity exploitation). The adjusted R<sup>2</sup> value of .587 which means that, 58.7 percent of the variability of overall opportunity exploitation is accounted for by this model. The R<sup>2</sup> change of .143 indicates that technology accounted for 14.3 percent of the overall increase in the company’s ability to exploit opportunity, which is statistically significant with p<.005, providing sufficient evidence to conclude that technology significantly moderates the relationship between business process reengineering and sustainability of the organization.

In this model when technology was introduced job redesign has ( $\beta=.109$ ,  $t= 1.463$ ,  $p>.005$ ) which is not statistically significant, while technology has a ( $\beta= .766$ ,  $t= 9.229$ ,  $p<.005$ ) that is statistically significant. Thus, when technology was introduced to the model, job redesign offered no unique contribution, implying that whatever job redesign offers, technology offers the same thing absolutely.

However, when the residual of job redesign was multiple with that of technology to show the interaction effect, job redesign made unique and positive contribution thus: Job redesign\_technology ( $\beta=.024$ ,  $t=15.861$ ,  $p<.005$ ), This implies that, with a technological system in an organization, job can be effectively designed, thereby enhancing opportunity exploitation for the organization. To give a vivid description of this interaction effect, technology was grouped into low, moderate and high as it is shown in the scatter plot below: Low group has a R<sup>2</sup> linear of 0.137, moderating level of technology has a R<sup>2</sup>

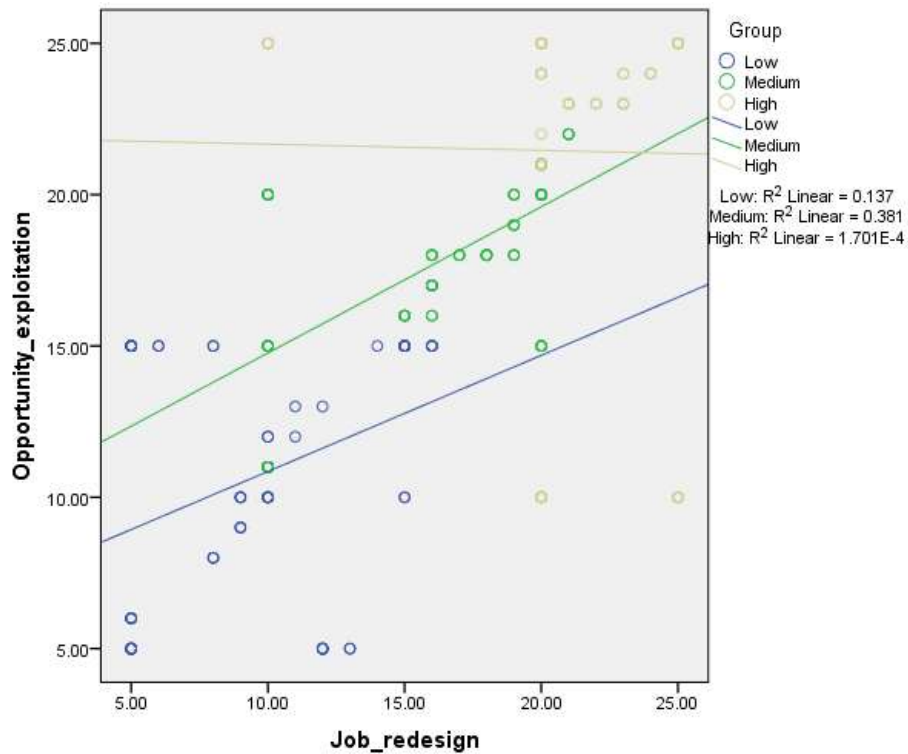


linear of 0.381 while the high group has R<sup>2</sup> linear of 1.701 which implies that a high level of technology in the organization has a high level of correlation with job redesign and opportunity exploitation.

**Table2**  
**Moderating Effect of Technology on the Relationship Between Business Reengineering and Sustainability of a firm**

Variables	Beta	Standard errors	T	Sig
(constant)	.151	.947	.160	.873
job redesign	.109	.075	1.463	.145
technology	.766	.083	9.229	.000
job redesign technology	.024*	.002	15.861	.000
R <sup>2</sup>	.589			
Adjusted R <sup>2</sup>	.584			
R <sup>2</sup> change	.143			
F-value	174.340			
F-sig	.000			

Source: Spss Output



### Discussion of Findings

The result of the first hypothesis indicates a significant positive relationship between job redesign and opportunity exploitation. This means that adequately reengineering business processes enhances sustainability of organization through exploitation. This finding also resonates with the findings of

Opiyo, Isaac and Silas (2014) that task identity, task variety and task significance affected the performance of employees of commercial banks in Kisumu. Job redesign is creating a satisfying and motivating job as well as providing autonomous responsibility for a meaningful and large structured activities. This is also agrees with Orogbu, Onyeizugbe and Onuzulike (2015) who pointed out that process innovation influences employee retention and this enhances organization's success. Supporting of this observation, Albert (2007) postulates that job redesign is the restructuring of the elements of work, responsibilities, tasks and duties of employees to make the job more inspiring and encouraging. The idea is to maximize output and increase the level of satisfaction through placing the right person on the right job (Slocum & Sims, 2000).

The result of the second hypothesis indicates a significant moderating relationship between business process reengineering and organizational sustainability. This shows that with a high level of technology in an organization, jobs can adequately be designed in a manner that enhances opportunity exploitation. This finding is in agreement with Ringim, Razalli and Hasnan (2012) position that information technology capability plays a crucial role in moderating the relationship between business process reengineering and organizational performance. Thus, managers of organizations should restructure job activities to improve performance. In consensus with this finding, Aluko, Odugbean, and Osuagwu (2004) postulated that the effect of technological changes on organizations is profound, because it leads to chain of reactions. It changes the organizational structure, which consequently alter behavior in organizations, especially in terms of social interaction pattern. Linked with technological changes in the manufacturing companies are changes in working hours, changes in the quality and type of supervision, disruption of informal work groups, change in the extent of an employee's jurisdiction over a given area of work and changes in employee's perception of job security and acceptable performance.

## **Conclusion**

There is exists positive relationship between business process reengineering and sustainability of organizations, through primarily redesigning jobs in a way that enhances opportunity exploitation and conforms to the present stage of technology. Organizations that adapt to swift changes in technology (in terms of the processes, procedures, techniques and system) will enjoy improvements in the quality of product, productivity and sustainability.

## **Recommendations**

1. The management of United Cement Company Limited / Lafarge should ensure adequate redesigning of jobs by describing employees line of duties and place the right person on the right job to enhance adequate utilization of resource and opportunity exploitation.
2. The management of United Cement Company Limited / Lafarge should adapt to changes in technology and training their employees in order to acquaint themselves with the current technologies of different organizations so as to have an edge over their competitors and in turn enhances their sustainability.

## **References**

- Albert, J. (2007). *An exploratory study of the benefits and costs of job enrichment*. Unpublished Doctoral Dissertation. University Park, PA: The Pennsylvania State University.
- Aluko, M. Odugbesam, O. Gbadamosi, G. & Osuagwu, L. (2011). *Business policy and strategy (3<sup>rd</sup>ed.)*. Ikeja: Learn African Plc.
- Arora, K. C. (2009). *Total quality management*. New Delhi: Kataria & Sons.

- Boodre, J. & Ramstad, P. (2005). Talentship, talent segmentation and sustainability: A new decision science paradigm for a new strategy definition. *Human Resource Management*, 44(2), 129-136.
- Bhaskar, H. L. (2018). Business process reengineering: A process based tool. *Serbian Journal of Management*, 13(1), 63-87.
- Bhaskar, H. L. & Singh, R. P. (2014). Business process reengineering: A recent review. *Global Journal of Business Management*, 8 (2), 24-51.
- Business dictionary (2017). *What is competitive advantage/ definition and meaning*. Retrieved from: <http://www.businessdictionary.com/definition/competitive-advantage.html>
- Choi, Y. R. & Sheperd, D. A. (2004). Entrepreneurs' decision to exploit opportunities. *Journal of Management*, 30(3), 377-393.
- CIPD (2012) *Responsible and sustainable business: HR leading the way a collection of thought process*. London: CIPD.
- Colbert, B. & Kurucil, E. (2007). Three conceptions of triple bottom line business sustainability and the role for HRM. Retrieved from: [www.stakeholderresearch.com/document/grathree-conceptions](http://www.stakeholderresearch.com/document/grathree-conceptions)
- Davenport, T. H. (1996). *Process innovation: Reengineering work through information technology*. Boston: Harvard Business School Press.
- Dyllick, T. & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130-141.
- Eke, G. J. & Adaku, N. A. (2014). Business process reengineering in organizational performance in Nigerian banking sector. *Academic Journal of Interdisciplinary Studies*, 3(5).113-124.
- Hackman, J. R. & Oldham, G. R. (1976). Motivation through the design of work: test of a theory. *Journal of Organizational Behavior and Human Performance*, 16, 250-279.
- Hammer, M. & Champy, J. (1993). *Reengineering the corporation: A manifesto for business revolution*. New York: Harper.
- Inyang, B. J. (2007). *Management theory: principles and practices* (2<sup>nd</sup>ed.). Calabar: MERB PUBLISHERS.
- Kanyi, B. N. (2004). *Factors influencing the opportunity exploitation by entrepreneurial tree farms in Lari district of Kiambu country, Kenya*. A thesis submitted to the school of business of Kenyatta University Kenya.
- Luciano, M., Barbara, G. & Rafael, B. (2006). Competence for organizational sustainability: A proposal for an analytical tool for assessing eco-efficiency. *Business Management Dynamics*, 1(9), 30-43.
- Mahmoud, M. & Mollaei, E. (2014). The effect of business as process reengineering factors on organizational agility using path analysis: Case study of Ports and Maritime organization in Iran. *Asian Economic and Financial Review*, 4(12). 1849 – 1864.
- Opiyo, E. & Isaac, O. (2014). Effect of job redesign on employees performance in commercial bank in Kisumu, Kenya. *Greener Journal of Business and Management Studies*, 4(4), 115-137.
- Orugbu, O. L. Onyeizugbe, C. U. & Onuzulike, N. F. (2015). Business process reengineering and organizational performance of selected automobile firms in south east of Nigeria. *European Journal of Business, Economic and Accountancy*, 3(5), 12-43.
- Ringim, J. K., Razalli, M. R. & Hasnan, N. (2012). Moderating effect of information technology (IT) capability on the relationship between business process reengineering factors and organizational performance of bank. *African Journal of Business Management*, 6(16), 5551-5567.
- Sapiarza, H. J. & Guptar, A. K. (1994). Impact of agency risks and task uncertainty on ventures capitalist –entrepreneur relations. *Academy of Management Journal*, 37, 1618-1632.
- Slocum, J. & Sim, H. (2000). A typology for integrating technology, organization and job design. *Human Relations*, 33, 193-212.
- Taylor, F. W. (1911). *Principles of scientific management*. New York: Harper & Row.
- Turner, A. & Lawrence, R. (2005). *Industrial jobs and the workers*. Boston: Harvard Graduate School of Business Administrative.

- Von, Bertalanffy (1972).The history and status of general systems theory.*Academy of Management Journal*, 15, 407-426.
- Walker, O. & Ruckert, R. (1995).Marketing interaction with other functional units.A conceptual framework and empirical evidence..*Journal of Marketing*, 58 (1), 1-19.
- Wiklund, J. (2015). *Opportunity exploitation*.Retrieved  
onlinelibrary.wiley.com/doi/10.1002/9781118785317.wcom030076/abstract.