EuroEconomica
Issue 1(41)/2022 *ISSN: 1582-8859*

EuroEconomica

Effects of Business Process Management on Organisational Productivity: A Study of Selected Banks

Adeoye, Abayomi Olarewaju[1], Odusanya, Kafiu Sunkanmi[2]

Abstract: This study investigated the effects of business process management on organisational productivity. The study adopted survey research design. The population of the study consisted of both male and female staff of Guaranty Trust Bank and United Bank of Africa. A sample size of two hundred and twenty-one (221) staff was selected. The study adopted Random Sampling Technique. Frequency description statistical method was used in analysing the data collected and all stated hypotheses were analysed using Pearson Correlation and the results revealed that there was a significant relationship between change in process and competitive advantage; also, the finding also revealed that there was a significant relationship between radical redesign and sales growth. The research therefore recommended that during the processes of reengineering, organizations should make frantic effort on their planning coupled with their strategies.

Keywords: Business process management; Change Process; Competitive Advantage; Radical Redesign; Sales Growth

JEL Classification: F44

1. Introduction

The concept of designing organizations was originally presented by Hammer (1990) as a radical redesign of processes to achieve critical improvement in expenditure, value, and services. For there to be a striking increase in effectiveness, efficiency, and productivity, severe alteration in the design of the organization's process and production cycles is essential. Organizational processes today are clearly not the same as what they were hundreds of years ago. It has been predicted that a hundred years ago, around nine out of ten employees moved and produced tangible material items. In the 1990s, the proportion was down to one out of five. The other four out of five laborers presently produce and deliver intangible products like information and service (Drucker, 1993). As of late, services are ruling the world. The bedrock of any organization is human resources and processes. On the off chance that individuals are inspired and working firmly, yet the operational measures are bad and not contributing additional values, the business daily routine will be bad (Orogbu, Onyeizugbe & Onuzulike, 2015).

Business process management (BPM) is considered a trending topic in the field of management, and it concerns information as regards operating contemporary processes or activities, upgrading and

[1] Department of Business Administration, Faculty of Management Sciences, Lagos State University, Ojo, Lagos, Corresponding author: abayomi.adeoye@lasu.edu.ng.
[2] Department of Business Administration, Faculty of Management Sciences, Lagos State University, Ojo, Lagos, E-mail: sunkanmiodusanya@gmail.com.

remodifying it in a manner that lessens the futile endeavor and magnifies the effectiveness, and executing possible change in the procedures of improving organizational measuring performance, where it integrates and combines information technological mediums and the processes of management mechanisms for the purpose of development, where the efficient coordination of processes is germane to take full advantage of the value of organizations (Aldiabat, Bataineh & Abu-Hamour, 2018). Enhancing the performance of an organization is the cardinal task of every top-level manager. Business process management (BPM) has emerged as a powerful concept in recent decades for achieving corporate goals. Today, practically all operational excellence programs adopted in various organizations in the world depend on the BPM idea. Resting on the corporate strategy, the business processes are the core aspects of every organization and, hence, they build the foundation for all further advances. For example, the improvement of information systems, the allocation of HR and so forth. Thus, BPM has become exceptionally pertinent for experts and management research.

The banking sector has become a critical driver of fiscal advancement for world markets by providing services such as enabling money transactions and guaranteeing that depositors' and lenders' funds are collected in a well-coordinated manner. The banking industry ensures the nations' fiscal growth and their long-term competitiveness. Although critical to global steadiness, the most recent sixty years have seen the sector witness serious fiscal difficulties, which have immensely influenced the economic performances of several countries. Globally, most finance houses are battling with numerous difficulties; complex and alienated policies, historical set-ups, disrupting plans and advances in technologies, promising competitors, as well as tense customers with continually evolving needs. This situation also occurs in East Africa. More so, the financial situations have decayed to a great extent in Nigeria, Kenya, and South Sudan, with different nations closing the year (2020) with unsatisfactory reports to tell due to the vulnerability, turbulent, and difficulties of the business world. The Nigerian financial sector is bedevilled by corruption, failure to reach most of the provincial populace, tax avoidance, system challenges, disintegration, deceitful activities, and ineffective management. These effects deteriorated to the point in Nigeria's financial structures where some banks engaged in ineffective acquisitions, consolidations, and mergers. Hence, the adoption of BPM.

In recent years, the performance of commercial banks in Nigeria has not been impressive. Bank efficiency and productivity have been inconsistent and poor. This was linked to issues relating to corruption, disorderly directives, chronicled structures, disrupting models and innovations, new comers into the business world, a tense customer base with ceaselessly evolving needs, inability to get to the rural populace, tax avoidance, system challenges, disintegration, deceitful activities, and ineffective management. Hence, it requires the upgrade and reinforcing of financial institutions' core components; formulation of competitive techniques centered on advanced methods; and overhauling of production processes aimed at robust financial and environmental related actions. In view of this, BPM is seen as an ideal means for organizations as it is a powerful way to direct, coordinate, and streamline an organization's processes and activities. In the current banking industry, the adoption of BPM has been recognized as one of the few ways in which financial institutions can level up and support their sustainability through a consistent spotlight on their processes. The industry is in a severe situation where BPM is ceaselessly required to help augment the feat of industrial-related activities and the facilitation of entrepreneurial observation and harmonization.

There exists a shortage of research focusing exclusively on business process management (BPM) in the financial sector in Nigeria. A couple of studies that explored the theme of business process management (BPM) include Aldiabat, Bataineh, and Abu-Hamour (2018); and Kiruja and Kimencu (2020). All of these studies were carried out outside Nigeria. According to online research, no comparative studies on the topics of business process management (BPM) have explicitly chosen Nigerian banks. As a result, this study is being conducted to fill the established gaps in the literature. The objective of this paper is geared towards examining the effects of business process management on organizational productivity with reference to selected banks in Nigeria. This would help us to update the previous studies and fill the gap in literature. Other specific objectives of the study are to:

1. To investigate the relationship between change in process and competitive advantage.
2. To determine the relationship between radical redesign and sales growth,

2. Literature Review

2.1. BPM stands for Business Process Management

According to Bassam, Ashraf and Husam (2018), they viewed BPM as a contemporary management technique centered on some components, which included strategic alignment, information technology, employee involvement, and process improvement.

Domingos and Martins (2017) asserted that the business process is seen as a summation of jointly related actions and decisions that include some major players and assets that lead to some results that benefit the organization and its overall clients. In recent years, reports show that many organizations have adopted the concept of BPM in order to organize, coordinate, and harness their activities.

Nadarajah and Kadir (2013) opined that BPM is now seen as a significant connection that revolves around organizational components and its human-related assets, where organizations intend to augment the proficient utilization of their assets and accomplish their essential goals and clients' requirements. In view of some recent research (e.g., Jiraporn et al., 2017; Asmare, 2012; Hung, 2006), they highlighted the influential and persuading effects of BPM on organizational feats. However, different studies underscore the constructive effect of utilizing information technological infrastructures on human-related assets (Thabit & Jmealy, 2017; Fakhour, 2016).

2.2. Linkage between BPM and Organizational Productivity

BPM has happened to be a helpful instrument for an organization that is searching for enhancements in its present organizational productivity and plans to achieve competitive advantages in its operating business environment. For any organization that intends to work as productively as could reasonably be expected, the reengineering process remains a viable tool. It is imperative for organizations to reengineer their business measures so as to enhance productivity and achieve organizational growth (Siha and Saad, 2008).

By implementing BPM, organizations gain the upper hand. This reality has been demonstrated by examining the effect of BPM on some highly competitive measures, which include (a) customer service, (b) cost, (c) value, and (d) output. The organization portrayed perfection in all these areas after the implementation of BPM. The outcomes were very commendable in terms of process improvement and customer service (Belmiro, Gardiner & Simmons, 1997). Moreover, customers' satisfaction levels are directly influenced by the reengineering of business processes. Increased use of information technology, the proliferation of ATMs, and skilled labor all aided nationalized banks in gaining a competitive advantage (Dutta & Gupta, 2009). The vital reason behind the implementation of BPM in every organization is to enhance service delivery for the client, and information and communication technology regularly play a significant empowering part. Therefore, it is important to embrace sound and efficient techniques for harmonizing the core and investigate new alternatives for sustainable growth on a continuous basis, effecting relevant corrections whenever needed (Ranganathan & Dhaliwal, 2001).

In a situation where the re-engineering process is executed in a positive way as a means of organizational strategy, the probability of accomplishing high productivity increases. Researchers that adopt the principles of reactive approach methods often fail to accomplish the major critical performance objectives. The researchers have focused on the assumption that genuine procedures should be reintroduced from the client viewpoint and management must concentrate on the critical problems that can impede effective BPM implementation, such as: attitudinal change and organizational culture, ineffective communication, and opposition to change in all managerial cadres within the system, most especially within the middle management. Findings by researchers have supported prior findings that IT serves as an empowering agent in the implementation of BPM (Petrozzo & Stepper, 1994).

For any organization that intends to harness the rewards of information technology, there is a need to restructure their process. BPM is a new managerial approach and concept to adequately manage the changes that occurred because of the information technology revolution in the business environment. To survive in an exceptionally unpredictable business environment, organizations need to restructure, redefine, rebuild, and rethink their current strategies. BPM helps to reduce cost, enhance quality, and ensure speedy delivery of services. In this case, BPM is viewed as a technique that tends to ensure growth and value-making gains, which improves organizational progress (Belmiro, Gardiner, & Simmons, 1997). The major objective of BPM is to enhance work proficiency and eliminate waste. Inefficient and ineffective processes, low market share, growing levels of unsatisfied clients or confrontations with competitors are the rationale behind several organizations' desires for BPM adoption.

2.3. Process Change vs. Competitive Advantage

In the opinion of Khan and Hashim (2014), organizational change refers to the changes that emerge within the organizational system, such as technological change, change in process, rule and regulation change, or cultural change. Cao, Clarke and Lehaney (2003) opined that management makes changes within organizations for several reasons, which could be the need to change the organization's processes, the need to amend the organizational functions, the need to overhaul its value system, the need to amend human behavior, or the need to change organization authorizations and responsibilities. According to Elow, Langly, and Montreal (2013), numerous changes, such as production of goods and services, sales activities, culture, and technological change, have become an issue for successful management implementation.According to Iqbal (2011), he opined that the major essence of organizational change in an organization is to establish its reality and stability in the business environment, which could be achieved by the sustainable advancement and development of the business. In recent times, organizations are now operating in an extremely competitive and turbulent environment, which calls for organizational change.

Shahmansouri, Esfahan, and Nikki (2013) opined that competitive advantage is the selling point of any organization because it is a special pustule of the organization. This can be attained through the efficient utilization of the overall organizational resources in a well-coordinated manner. In addition to this, it is the ability of the organization to present valuable products and facilities at a lower price as compared to their competitors.

Dranove and White (1994) outlined the various ways of achieving a competitive edge, which include flexibility, value, cost, and delivery. In the opinion of Awwad, Khattab, and Anchor (2013), flexibility is defined as an organizational ability to change in line with circumstances. Flexibility was divided into essential flexibility (which is flexibility in a machine, product, and material), sufficient flexibility (which is flexibility in process, operation, and program), and competitive flexibility (which is flexibility in manufacturing, growth, and market).

H_1: There is a significant relationship between change in process and competitive advantage.

2.4. Radical Redesign vs. Sales Growth:

Traditionally, according to Damanpour (1991), radical redesign is the implementation of a technique, strategy, program, procedures, product, or service that is new to the organization.

Radical design is viewed as a radical change in a business technological process that leads to new goods, services, or production techniques for new clients, potential clients, or emerging or current markets (Chen & Huang, 2009). While Garcia and Calantone (2002) viewed radical redesign as crucial changes and uniqueness in the product's development, radical redesigning is identified as the point of competitive advantage. Radical redesign creates a competitive advantage through the discovery of new markets and through generations of changes in client preferences (Tangkit & Panjakajornsak, 2016).

The concept of sales growth can be used as a way of improving sales profit measures. According to Dobbs and Hamilton (2007), they viewed growth as an increase in size over a certain period. Brush, Ceru, and Blackburn (2009) defined growth as geographical expansion, an increase in a series of products and services, and mergers and acquisitions.In the opinion of Coad, Frankish, Roberts, and Storey (2013), an organization experiences sales growth as a result of the efficient and effective usage of assets and capacities utilized to enhance growth by the organization. It included radical redesign, radical innovation techniques, acquired infrastructures, resources, and financial counseling, among other things.

Sales growth usually involves the increment in the revenue generated by an organization over a periodic period of time. This often occurs as a result of an increment in the product prices, by the selling of more goods or both. Moreover, sales growth can also occur because of price increments, which could also be linked to inflation and, therefore, may not be linked to real sales growth, per adventure, if cost remains infinitesimal, it definitely adds to the actual growth of sales.

H_2: There is a significant relationship between radical redesign and sales growth.

3. Theoretical Framwork

A. Resource-Based Theory

Resource Based View (RBV) was used as the underlying theory for this study. This theory holds the view that organizations are rent-seeking entities that formulate and convey materials (assets and capacities) to enhance their competitive edge. This theory explains the reasons why some organizations succeed or fail in their dealings. It dissected and interpreted the interior assets of the organization and placed much importance on the efficient usage of assets and capacities to plan and develop processes that achieve sustainable competitive advantages, which contribute to the improvement of organizational measuring parameters. Resources are seen as the possessions that a firm has in order to achieve its objectives or to excel in its basic achievement factors (Saqib and Rashid, 2013). According to the Strengths, Weaknesses, Opportunities, and Threats analytical view, resources included financial and non-financial assets, labor and technical assets, tangible assets, and other related concepts perceived as stamina (Bryson, 2007).

In the opinion of Dasgupta and Gupta (2009), Penrose (1959) postulated the idea of RBV on the ground that an organization and a collection of productive resources as a bundle of prospective services should be essential. With this statement, Penrose concurred that for every organization to withstand the emerging competition in today's external environment, they have to focus on their inner strength and capabilities as the major yardstick to survive and gain a competitive edge. This competitive advantage is very vital for strategic advantage, and it ought to be imitable.

Resource-based view theory posits that organizations should aim towards achieving competitive advantage with the external environment just like optimum utilization of their interior assets so as to make room and determine prospective opportunities (Armstrong, 2006).

4. Research Methodology

Survey research design was used in carrying out this study in order to achieve the goal of the study. The population of the study consisted of staff of some selected banks in Nigeria. The study adopted the random sampling technique, which was used to select two banks, namely Guaranty Trust Bank and United Bank of Africa. A total of two hundred and twenty-one (221) sample sizes were chosen. The data collection instrument that this study used was a questionnaire, which was used to obtain primary data from the field of study. The face validity test of the instrument was attained with the assistance of some experts whose professional opinions immensely served as a guide for the accomplishment of this work. The data gathered was analyzed with the aid of a descriptive statistical tool in order to summarize and dissect the data obtained from the questionnaires administered. Moreover, the collected data was analysed with the use of the Statistical Package for Social Sciences (SPSS; Version 20) software. The study made use of Pearson Correlation analysis to test hypotheses one and two, since they are measuring relationships between variables.

Table 1. Demographic Information

		Frequency	Percentage
Gender	Male	79	35.8 %
	Female	142	64.2 %
Marital Status	Single	112	50.7 %
	Married	105	47.4 %
	Divorced	4	1.9 %
Age	0-30 years	84	37.8 %
	31-50 years	126	57.2 %
	51 years above	11	5.0 %
Education	OND/NCE	69	31.4 %
	HND/B.Sc/B.Ed	111	50.3 %
	PGDE/M.Sc/M.Ed	40.4	18.3 %
Working Experience	0-5 years	91	41.3 %
	6-10 years	68	31.3 %
	11-15 years	28	12.8 %
	16 years above	32	14.6 %

From the demographic table shown in table 1, the gender analysis showed that 64.2% of the respondents were female folks while 35.8% were male, which implied that majority of the respondent were female. The marital status analysis also revealed that 50.7% of the respondents were single, while 47.4 % of the respondents were married and 1.9 % was divorced, and hence there are more single respondents. The age analysis revealed that 37.8 % falls between the age range of 0-30 years, while 57.2% falls within the range of 31-50 years and 5.0 % falls between 51 and above, and hence greater part of the respondents falls within the range of 31-50 years. Education analysis revealed that the 31.4% of the respondents were holders of OND/NCE, while 50.3% of the respondents were HND/B.Sc/B.Ed holders and 18.3% of the respondents were 18.3% were PGDE/M.Sc/M.Ed, and hence there is high literacy rate among the respondents. While the working experience analysis revealed that 41.3% of the respondent falls between 0-5 years, while 31.3 % of the respondents fall between 6-10 years, 12.8 % falls within the age bracket of 11-15 years and 14.6 % of the respondents fall within 16 years above.

5. Results & Discussion

Hypothesis One

1. **H_0:** There is no significant relationship between change in process and competitive advantage

Table 2. Descriptive Statistics Table

	Mean	Std. Deviation	N
Change in process	2.1719	1.27469	221
Competitive Advantage	2.0860	1.17428	221

Non parametric Correlations

Table 3. Correlations Table

		Change in process	Competitive Advantage
Change in process	Pearson Correlation	1	.868**
	Sig. (2-tailed)		.000
	N	221	221
Competitive Advantage	Pearson Correlation	.868**	1
	Sig. (2-tailed)	.000	
	N	221	221

**. Correlation is significant at the 0.01 level (2-tailed).

5.1. Interpretation of Result

The Pearson Product Moment correlation result above showed that, there is a significant relationship between change in process and competitive advantage (r = 0.868). This relationship is statistically significant because the generated p-value for the result (0.000) is less than the level of significant (0.05) used for the study.

Decision Rule: Null hypothesis is rejected while the alternative hypothesis is accepted. This infers that there is a positive significant relationship between change in process and competitive advantage.

Hypothesis Two:

2. H_0: There is no significant relationship between radical redesign and sales growth

Table 4. Descriptive Statistics Table

	Mean	Std. Deviation	N
Radical Redesign	2.1222	1.21674	221
Sales Growth	2.1041	1.26600	221

Non parametric Correlations

Table 5. Correlations Table

		Radical Redesign	Sales Growth
Radical Redesign	Pearson Correlation	1	.936**
	Sig. (2-tailed)		.000
	N	221	221
Sales Growth	Pearson Correlation	.936**	1
	Sig. (2-tailed)	.000	
	N	221	221

***. Correlation is significant at the 0.01 level (2-tailed).*

5.2. Interpretation of Result

The Pearson correlation analysis revealed that, there is a significant relationship between radical redesign and sales growth (r = 0.936). This relationship is statistically significant because the generated p-value for the result (0.000) is less than the level of significant (0.05) used for the study.

Decision Rule: The null hypothesis was rejected while the alternative hypothesis was accepted. This inferred that there is a significant relationship between radical redesign and sales growth.

6. Summary of Findings

The research was based on effects of business process management on organisational productivity. Based on this relevant data were gathered and analyzed. Moreover, two hypotheses were tested and the two alternative hypotheses were accepted. Hypothesis one revealed that there exists a significant relationship between change in process and competitive advantage; the result of this study agrees with the finding of Ozcelik (2010); who posited that radical redesign strikingly increases productivity, efficiency and profitability, when change in structure and process is implemented. Hypothesis two revealed that there is a significant relationship between radical redesign and sales growth; this finding agrees with the finding of Belmiro, Gardiner and Simmons (1997) who posited that BPM helps in sales boom, decline in cost, whereas quality, speed and service are also significantly enhanced. It was also found that BPM is an instrument that ensures growth and value generation, where it success chances increases in any organization.

7. Conclusion

In view of this study, findings were made and conclusions were drawn where it showed that business process management is the redesigning of business structures and processes, the associated process and structures in order to achieve a rapid and gradual improvement in organizational performance. Work process innovation overhauling will assist the organization to be more organized in their technique by utilizing teams to smooth out their process by training these work force in highly specialized approaches and conducive working conditions, making the work process more demanding, aggressive and fascinating, consequently improving the worker retention and firms' performance. The process of redesigning centered on improvement of overall process, by improving its individual steps and sub-processes. It involves steadily improving an existing structures and process by decreasing the time, unpredictability and administrative structures of the individual steps and sub-structures and processes, subsequently giving more obligations and power to the worker which enhances workers' job satisfactions.

8. Recommendations

The following recommendations were made:

i. The study firmly recommended that firms should focus in carrying out the formulation and execution of relevant strategies and techniques during reengineering of business processes and structures.

ii. Firms should put into cognizance the involvement and engagement of their workforce, as participative management revealed a well-built impact and prerequisite for reengineering of business activities.

iii. During the processes of reengineering, firms should concentrate on planning techniques in as much as strategies because a cordial relationship was found between firms' strategy and value improvement.

iv. Decision makers should invest immensely on strategies and structures that ensure changes in market place vis-a-vis its abilities and strengths to attain its optimum prospects and strength. Management must also provide appropriate platform and mechanism to afford a robust framework for business activities that positively affects the operations of the firms.

References

Aldiabat, B. F.; Bataineh, A. & Abu-Hamour, H. M. (2018). The impact of business process management on Job performance. *Journal of Business and Retail Management Research (JBRMR),* 13, (2), p. 45.

Armstrong, M. (2006). *A hand book of human resource management* (10th ed.). London: Kogan Page Limited Practice.

Asmare, E. (2012). *The effect of business process reengineering on public sector organisation performance: A developing economy context*. Unpublished doctoral thesis. RMIT University.

Awwad, A S., Khattab, A7. A. & Anchor, J. R. (2013). Competitive priorities and competitive advantage in Jordanian manufacturing sectors. *Journals of Service Science and Management,* pp. 69-79.

Bassam, F. A.; Ashraf, B. & Husam, M. J. (2018). The impact of business process management on Job performance. *Journal of Business and Retail Management Research (JBRMR),* 13, (2), p. 218.

Belmiro, T.; Gardiner, P. D. & Simmons, J. (1997). Business process re-engineering: A discredited vocabulary. *International Journal of Information Management, 17*(1), pp. 21-33.

Brush, C. G.; Ceru, D. J. & Blackburn, R. (2009). Pathways to entrepreneurial growth. The influence of management, marketing, and money. *Business Horizons*, 52, (5), pp. 481-491.

Bryson, J. M. (2007). Putting the resource-based view of strategy and distinctive competencies to work in public organizations. *Public administration review*, pp. 702-717.

Cao, G.; Clarke, S. & Lehaney, B. (2003). Diversity management in organizational change: Towards a systematic framework. Systems Research and Behavioural Science, 20, pp. 231-242.

Coad, A.; Frankish, J.; Roberts, R. G & Storey, D. J. (2013). Growth path and survival chances: An application of Gamblers's ruin theory. *Journals of Business Venturing*, 28, (5), pp. 615-632.

Damanpour, F. (1991). Organisational innovations: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34 (3), pp. 550-590.

Dasgupta, M. & Gupta, R. K. (2009). Innovations in organizations: A review of the role of organizational learning and knowledge management. *Global Business Review*, 10 (2), pp. 203 -224. https:/doi.org/10.1177%2F097215090901000205

Dobbs, M. & Hamilton, R. T. (2007). Small business growth: Recent evidence and new directions. *International Journal of Entrepreneurship and Research*, 13(5), pp. 296- 322.

Domingos, D. & Martins, F. (2017). Using BPMN to model internet of things behavior within business process. *International Journal of Information System and Project Management*, 5(4), pp. 39-51.

Dranove, D. & White, W. D. (1994). Recent theory and evidence on competition in hospitals. *Journal of Economic and Management Strategy,* 5 (1), pp. 169-209.

Drucker, P. (1993). *The discipline of innovation*. Harvard Review.

Dutta, S. K. & Gupta, A. (2009). Business process reengineering (BPR): As a driver of customer satisfaction: A study with reference to selected Indian nationalized banks. *Vidyasagar University Journal of Commerce*, *14*, pp. 12-39.

Ellow, A.; Langly, A. & Montreal, H. (2013). Process studies of change in organization and management: Unveiling temporary activity. *Academy of Management*, 56 (1), pp. 1-13.

Fakhouri, H. (2016). *The impact of the re-engineering of administrative processes on the performance of employees as a means to achieve competitive advantage in the telecommunications sector.* Unpublished master thesis. Yarmouk University.

Garcia, R. & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: A literature review. *Journal of Product Innovation Management*, 19, pp. 110-132.

Hammer, M. (1990). *Re-engineering the corporation: A manifesto for business revolution*. London: Nicholas Brealey.

Hung, R. (2006). Business process management as competitive advantage: A review and empirical study. *Total quality management & business excellence*. 17 (1), pp. 21–40.

Iqbal, R. (2011). Impact of Organisational change to achieve competitive edge. *European Journal of Business and Management*, 3 (4).

Khan, M. A. & Hashim, M. (2014). Organisational change: Case Study of General Motors. *Paper presented at the ASEE Zone 1 Conference*, University of Bridgeport, Bridgeport, CT, USA.

Kiruja, K. C. & Kimencu, L. (2020). Effects of business process management practices on financial performance of commercial banks in Nairobi County, Kenya. *International Academic Journal of Human Resource and Business Administration* 3, (9), pp. 1-2.

Nadarajah, D. & Kadir, S. (2014). A review of the importance of business process management in achieving sustainable competitive advantage. *The TQM journal*, 26 (5), pp. 522-532.

Orogbu, O. L.; Onyeizugbe, C. U. & Onuzulike, N. F. (2015). Business process reengineering and organizational performance of selected automobile firms in southeast of Nigeria. *European Journal of Business, Economics and Accountancy*, 3, (5), p. 45.

Petrozzo, D. & Stepper, J. (1994). *Successful engineering*. New York: Van Nostrand Reinhold.

Ranganathan, C. & Dhaliwal, J. S. (2001). A survey of business process reengineering practices in Singapore. *Information and Management*, *39*(2), pp. 125-134.

Shahmansouri, S.; Esfahan, M. D. & Niki, N. (2013). Explain the theory of competitive advantage and comparison with industries based on advanced technology. *International Journal of Economy, Management and Social Science*, 2, (10), pp. 841-848.

Siha, S. M. & Saad, G. H. (2008). Business process improvement: Empirical assessment and extensions. *Business Process Management Journal*, 14, pp. 778– 802.

Tangkit, K. & Panjakajornsak, V. (2016). *The radical innovation affecting competitive advantage of the Thai furniture industry.* In Proceeding of the Management and Innovation Technology International Conference, 12-14 October, Chonburi, Thailand, pp. 204- 208.

Thabit, A. & Jmealy, A. (2017). The use of IT infrastructure and its impact on the performance of human resources in public universities. *A field study at the University of Diyala. Journal of accounting and financial studies*, 12, (38), pp. 236-263.