EFFECTS OF BUSINESS PROCESS RE-ENGINEERING ON PERFORMANCE OF SELECTED HOSPITALS IN LAGOS STATE.

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Abstract: This study investigated the effects of Business Process Reengineering on Performance of 2 selected Hospitals in Lagos State, Nigeria. Some Hospitals do not understand the importance of BPR in the development of work process and improvement of service performance. However, hospital needs to develop certain techniques in order to improve their service delivery. As such, BPR is among the management strategic tool used by organisations for competing in a dynamic environment and to achieved organisational survival. The study adopted survey research design. The target population of the study covered two selected hospitals, one private and one public (Subol Hospital Limited and Badagry General Hospital). These two hospitals were purposively chosen due to their span of team of services, more members of staff and getting enough information due to their long term of service in health sector. The instruments were distributed to the staff by employing convenient sampling technique. From the total number of the copies of the questionnaires administered, 126 copies of questionnaires were retrieved representing 61.76% were used to analyse data. Analysis was done using correlation analyses with the aids of Statistical Package of Social Sciences (SPSS). The findings shown that there is a positive correlation between business process renovation and operational effectiveness, also, the second hypothesis shown that there is a positive relationship between automation process and competitive advantage and finally, that management support has significantly positive effect on quality service delivery in the hospitals in Lagos State, Nigeria. The study recommended that management team of hospitals needs to focus more attention on service processes in the hospital by providing promotions to staff, giving out bonuses so that the staff can be readily to provide adequate and prompt quality service delivery.

JEL classification: O32, M15

Key words: Automation, Business Process Reengineering, Health Sector, Nigeria. Performance, Renovation

1. INTRODUCTION

There are many ways that organisations can improve their services to their customers, satisfy their workers/employees and remain globally competitive, one of such ways is Business Process Reengineering (BPR). The health sector in Nigeria today, demands for a drastic revolution in the design of the service processes going by what operates in the developed economies (Akam, Okeke, Kekeocha & Onuorah, 2018). Therefore, one the modern management method that can be used to redesign business operations is BPR (Omar & Talal, 2016). Graham (2015) posited that Business Process Reengineering is a useful tool that has been developed as the current major driver of change within many organisations and has played a vital role in the enhancement of healthcare services. The approach of BPR is to redesign and change the present practices or process in the organisation to achieve dramatic improvement in service performance such as quality improvement, lead time reduction, cost reduction and customers satisfaction (Hammer & Champy, 1993). BPR is also among one of the management techniques that hospitals can use to improve service delivery. Kapoor and Kavita (2019) defined BPR as the way in which every organisation become more functional in all activities by identifying the critical service processes, analysing and redesigning them for effective and efficient improvement.

However, the concept of BPR approach is developed for organisations to improve work and service processes. The hospitals need to considered service processes and determine on how to provide adequate and prompt service delivery for the improvement of organisational performance. As such, BPR can be use to achieved organisational performance in the health sector through redesign of service process (Omar, & Talal, 2016). Nadeem and Ahmad (2016) posited that business process reengineering approach is better due to the fact that it's focus on those goals, objectives and targets which are not only understandable but also easy to attain to reduce the cost, improve the customer satisfaction, loyalty and performance of organisations

The business world today experiences high volatile in competition. As such, any business organisation that wants to remain competitive must device high level competitive strategy or technique to enhance its' organisational effectiveness and efficiency. Organisations work hard to improve work and service processes in order to meets customer's demands. Several techniques, namely Business Process Re-engineering (BPR), Lean Management Technique (LMT), Total Quality Management (TQM), Business Process Improvement (BPI), Business Process Redesign (BPR), and Business Process Management (BPM) are being used as part of organisational performance improvement strategies. Amongst the performance improvement techniques, BPR is a radical management technique developed to bring about improvement of business entities (Ahlam, 2012).

Before the advent of BPR many organisations divided work processes into small and simple tasks. This led to dominance of functional structure organisations which later encountered some challenges that emanates mainly from changing competitive environment togetherness with changing taste of customers (Chen, 2001). Thus, organisations that probably do not change and adopt the modern approach like BPR in operations might completely go out of operation due to competition in the global business environment (O'Neill & Sohal, 1999 as cited in Amrita & Sheriff, 2016). Nevertheless, in the health sector, management staff or medical practitioners need to rethink new and better ways of work process that will reduce cost, ensure service delivery and maximize profit. However, some hospitals do not have the awareness of the efficiency of BPR in bringing improved service delivery, understand the importance of BPR in the development of work

process and improvement of organizational performance. Thus, re-engineering of healthcare service processes becomes importance, so that these factors such as competition, globalisation and information technology that have given rise to serious transformation in the business environment can be improved upon in the health sector which is the hallmark of enhancing healthy living for better business organisations (Omar & Talal, 2016)

Some researchers (such as Amrita and Sheriff, 2016; Orogbu, Onyeizugbe and Onuzulike, 2015) investigated the relationship between BPR and Performance in the manufacturing and banking sector. The outcomes of their studies are filled with mixed results. The mixed results of organisations that have implemented BPR prompted the study to conclude that this study need to investigate the effect of BPR on organisational performance in the health sector. Hence, this study intends to examine the effect of Business Process Reengineering on Performance of selected hospitals in Lagos State, Nigeria.

2. OBJECTIVES

The aim of this study is to examine the effect of BPR on performance of selected hospitals in Lagos State, Nigeria. while the specific objectives are to examine the relationship between business process renovation and operational effectiveness of hospitals in Lagos State, Nigeria. Also, to evaluate the relationship between automation process and competitive advantage of hospitals in Lagos State, Nigeria. And finally, to examine the effect of management support and service delivery of hospitals in Lagos State, Nigeria.

3. LITERATURE REVIEW

Concept of BPR

Omar and Talal (2016) posit that BPR is a method developed by organisation's managers to enhanced performance by increasing the efficiency and effectiveness of work processes. BPR approach is used within the organisation, by considering the organisation's operations to do the best building of these process to improve services. The term re-engineering comes from the process of taking apart an electronic material and designing a better version (Robbins, 1997). It is is seen as the process of dismantling the formal electronic machine and reproducing a new machine in a way that it will look more attractive for better improvement of the organisation's performance. This approach was used by Japanese to developed their technology. The Japanese gathered already made products from other countries of the world and dismantled them to redesigned and reproduced in a better way that is easier, cheaper and faster to manufacture, and to satisfy customers usage. It was from this method that the initiation of re-engineering came into the manufacturing industry.

Hamza (2015) asserts that BPR involves redesigning the rapid and radical administrative processes strategic plans and organizational structures to maximize support workflows and increase productivity in organisation are strange. Hammer and Champy (1993) as cited in Mohammad and Mollaei (2014) defined re-engineering as a fundamental thinking and redesigning of business processes to achieving dramatic developments in critical modern-day measures of performance such as quality, cost, service and speed.

The concept of reengineering has been adopted in both manufacturing and service industries (Akingbade, 2014). Reengineering is the radical redesign of an organisation's processes. Meanwhile, reengineering emphases on the entire process of workflow rather than to departmentalized work process, such as production, administrative, information,

accounting, marketing etc. The health service should be reengineered into a series of processes which involve four dimensions, which are, Innovative Rethinking (Drucker, 1993), Process Function (Hammer and Champy, 1993), Radical (Pamela & Stephen, 1995), and Organisational Development and Performance (Roberts, 2007).

The essential Elements of Re-engineering of an Organisation according to Ahlam (2012) include: Fundamental, Radical, Dramatic, and Operations. However, some of the benefits of BPR according to Alaleaoi (2013) cited by Omar &Talal (2016) are to improve the organisation's performance in the long and short-term, to increase customer satisfaction on products and services, to reduce the time of delivery of products and services, to improve the level of knowledge used in the organisation, to obtain accurate description of the core operations necessary to achieve the business strategy, to change the culture of the organisation, and finally to eliminate costs and increase the quality of the products or services.

Indicators of BPR

Business Process Renovation

It is the redesigning of service process for the purpose of improving organisational performance. Renovation process involves streamlining key business activities and to make continuity of progression of service processes (Sungau, Philibert & Joseph, 2013). However, it is important for every organisation to renovate their business or service processes, in order to avoid unnecessary interruption of non-adding value business processes (Debela, 2009). The redesign of the main business activities enable the organisation to renovate it's business procedure by recognising which business methods are dismissed and can be removed, grouping similar activities together, and replacing old system of operation with mew one (Magutu, Nyamwange, and Kaptoge (2010).

Automation process

It is the mechanisation of business processes to improve efficiency of workflow by using ICT (Debela, 2009). Information Technology (IT) plays a major role in BPR as it provides processes automation. However, automation process allow services to be rendered to patient or customers in different branches and permits quick delivery system. Hammer (1990) posits that computerization is the use of IT in order to automate the renovated service processes. Automation involves the use of IT for allocating of customer or patient information from the database, facilitation of information flow and programming a device to function without frequent interaction of operator (Mile, Titzpatrick and O'neillb, 2002; HE, 2005). Information Technology has been developing very quickly, and nowadays it provide solutions for executing and implementing BPR in both manufacturing and service sector, such as: database, expert systems, simulation, telecommunication networks, experimental test, surgery operations. diagnose and extremely powerful computers. In action to IT, BPR requires consideration of organizational and managerial issues and structures, because re-engineering task involve cross-functional processes. The application of a new IT often enables reengineering process to be successful, (Davenport & short, 1990; Hammer and Champy, 1993).

Management Support

Management Support is among one the most widely critical issue that was rated at the highest level for business across the world (Liu & Seddon, 2009 cited in Ahmed, 2016). Management support plays an important role on organizational performance of

manufacturing and service sector. However, the success or failure of any hospital depends on the full dedicated support from the management (Ahmad, Muhamad, and Ahmad, 2016). As such, Medical Practitioners and staff in the hospital should have a direct link to the top management and directors to provide adequate resources, making decisions and develop competencies through training and development programs, for better achievement of service delivery (Kuesten, 2013). Moreso, through management support and good quality medical care, it makes people to get the full range support they needed to manage their healthy at different ages and stages of their lives (Health Foundation, 2015).

Concept of Organisational Performance

Wheelen and hunger (1998) they were in opinion that appropriate performance measures is based on the organisations mission and objectives i.e profitability, market share, competitive advantage, service delivery, customer satisfaction and cost reduction. Debela (2008) depicted that radical redesign has positive relationship with the organizational processes and its performance in the way the businesses effectiveness and services will enhanced, because the standard price of service will increase, while profitability will also increase due to implementation of business process reengineering (Nadeem and Ahmad, 2016).

Indicators of Organisational Performance

Operational Effectiveness

Sherman and Zhu (2006) as cited in Richard (2016) observed that operational effectiveness of an organisation is not only about efficiency, but rather the combination of efficiency and quality of service processes provided by organisation to customers. However, for organisations to remain effectiveness, the environment in which they operate must be conversant and respond quickly to customers demand or requests (Sambamurthy, Bharadwaj and Grover, 2003).

Competitive Advantage

Competitive advantage is gotten when an organization develop or acquires a set of qualities that allow it to outperform dawn its competitors in the market (Wang, 2014). According to Besanko, David and Mark (2000) cited in Mohammad and Masoud (2015) pointed out that a firm has the competitive advantage over its rivals, if it gains a higher economic profit than the average rate of profit in the business. However, competitive advantage simply means that the firm can produce goods or services that the customers seem them more valuable than those produced by other competitors (Saloner, Andrew and Jooel, 2001).

Service Delivery

Service delivery are supply chain structures which provide services such as training, access to inputs and financing of organisations to increase performance and sustainability. As such, quality service delivery to customers is one of the priorities of the organisations. The employees have a significant contribution on organisation services, and the achievement of organizational performance (Lucian, 2016).

Conceptual Model of the Research

A conceptual model was derived from literature. The model shown below in figure1, are the variable that was considered as the independent variable and is based on the dimensions of BPR which includes: Business Process Renovation, Automation Process

and Management Support. While the organizational Performance (OP) are: Operational Effectiveness, Competitive Advantage and Service Delivery.

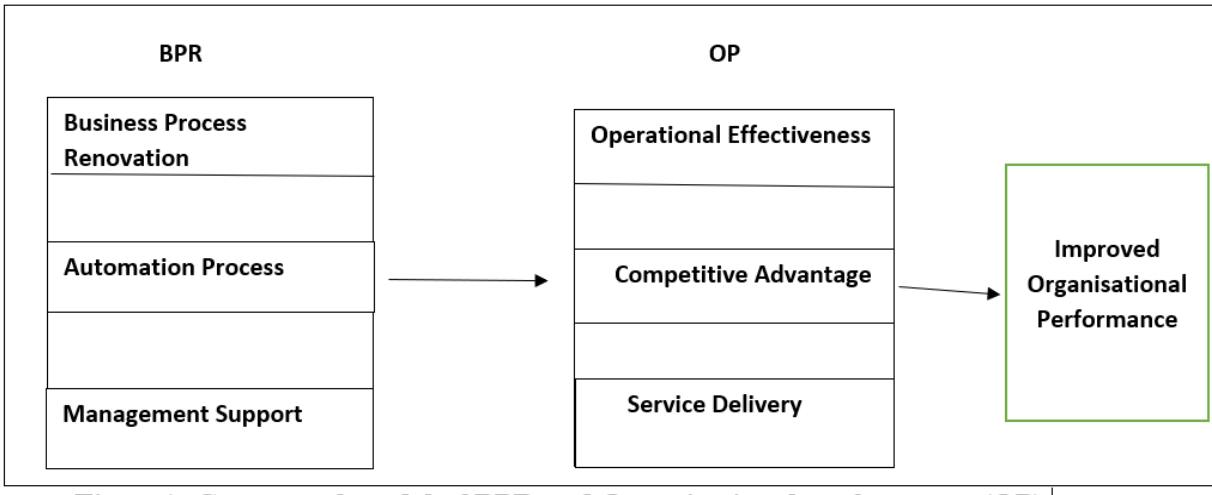

Figure1: Conceptual model of BPR and Organisational performance (OP)

Source: Adapted from Mohammad and Mollaei (2014). The Effect of Business Process Re-Engineering Factors on Organisational Agility Using path Analysis. Case Study of Ports 7 Maritime Organisation, 4(2).

3.1. THEORETICAL FRAMEWORK

The theory central to this study is Resource-Based View (RBV) theory. The theory believes that for organisations to achieve its set objectives and gain competitive advantage over its rivals, it needs to have better resources than their competitors. However, the Resource-Based View theory emphasises that an organisation's ability can be developed and employed to its internal resources, BPR to becomes a veritable tool for service restructuring, both an organisation and the process therein in a manner that becomes time minimise and money consuming. Majorly, the essence of business is to meet its target goals which include satisfying customers at a profit. The RBV theory becomes relevant to this study because for health sector to gain competitive advantage over it rivals the service processes need to be periodically redesign and restructure for better service delivery. And moreso, for hospitals to accomplish these tasks it needed resources. Therefore, availability of resources is a necessity to business process reengineering.

3.2. EMPIRICAL REVIEW

Several empirical studies have been carried out on BPR and organisational performance in different sectors like Manufacturing and Services of the economy. Researchers like Ahmadi (2004) that investigated the critical factors of BPR using seven-two firms in automotive and electronic industries in Iran to determine the effectiveness of BPR resources on organizational performance. Hierarchical regression techniques was adopted to analyses the data and the findings shown that resources like top management support, change management, centralization of decision making and formalization of procedures have positive association with BPR success. In the study of Devaraj and Kohli (2000) pointed out that radical change to enable organisation's IT and IS needs

organisations to have both financial capacities. The study to examine the effect of financial resources on the success of BPR using the size and types of BPR expenditure as the explanatory variables of BPR, and impact measures as the proxy for organizational performance. Eight (8) hospitals in US were used for the study. The results shown that both process change and IT investment has a positive strong effect on performance.

Ogbo, Attah, Ewurun and Ugbam (2015) studied BPR and performance of money deposit banks in north central, Nigeria. The study uses the sample size of five hundred and one from the population of 7977 in 12 selected money deposit banks in middle-belt, Nigerian. Survey research design methods was adopted and data were collected using primary source via questionnaire and structured interview. The analysis of data interpretation resulted to the following findings: speed improved the profitability of banks in north central Nigeria to a great extent, there was a significant positive relationship between organisational restructuring and competitive advantage; appropriate level of process knowledge and effective process reorientation were the critical success factors for a successful BPR exercise in the banking sector in north central Nigeria. The results shown that banks that adopted BPR have different success level on their performance. Magutu, Nyamwange and Kaptoge (2010) examined BPR on competitive advantage in Wrigley Company. The study was conducted by using Online questionnaires based to collect data from the employees of that company on the competitive measure and BPR implementation key success factors. The researchers established the Wrigley gained competitive advantage by implementing BPR. Ensermued and Moorthy (2013) investigated on assessing the effect of BPR on organizational performance. The purpose of the research was to assess the effect of BPR on organizational performance of Bureau Finance and Economic Development (BOFED). A structured questionnaire and interview were used for data collection and analysis were done with regression. The results shown that the customers of (BOFED) were satisfied with speed of service delivery and quality of service time.

The reviewed of several studies have shown that BPR has a significant positive effect on organizational performance in both manufacturing and service sectors. However, their findings are able to prove that BPR is a management strategy which organisations can use to save costs, increase customers satisfaction and also to increase organisations competitive advantage in the market. Ultimately by analysing and rebuilding existing business BPR in the health sector can radically innovate and change the management approach to improve their service performance.

4. METHODOLOGY

Research Design

A descriptive survey research design was adopted for this study, because it gives accurate reason of the characteristic of the population, such as behaviour, opinion, abilities and knowledge of a particular individual situation.

Target Population

The population of the study covers the staff of Health Sector in Lagos State, Nigeria. The study was investigated in Lagos State because the State represents one of the highest populated State where there are more hospitals than other States in Nigeria and with relatively minimum standard hospital facilities. The population covers staff members of the selected hospitals which were drawn from various departments like Administrative, Emergency, Anti and post-natal, Human Resources, Dentist, Accounting, and Information department. The total staff members of Subol Hospital is 97 while that of Badagry General Hospital is 317. This yields a sample population of 414 (Human Resource Departments).

Sampling Technique and Sample Size

The staff of Subol Hospital Limited and Badagry General Hospital were purposively chosen for this study to examine the effect of BPR on their service performance, due to their span of team of services, more members of staff and getting enough information based on their long term of service in health sector. More meaningfully, in this particular research study, the researcher adopted Taro-Yamane formula to determine the sample size

Taro-Yamane Formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size
N = Total population
e = Error margin (0.05)

To determine the sample size using the formula above, thus:

$$n = \frac{414}{1 + 414(0.05)^2}$$
$$n = 203$$

A sample size of 203 was selected. The sampling technique that was used is convenient sampling technique to distribute the questionnaires to the staff members in various departments of the two selected Hospital.

Table no. 1: Showing the Sample Population: The questionnaires were distributed amongst the departments of the 2 selected hospitals.

	SEX (MALE)		SEX (FEMALE)		
DEPARTMENTS	**BGH**	**SHL**	**BGH**	**SHL**	**TOTAL**
Administrative	12	3	12	4	31
Emergency	11	3	12	4	30
Anti & Post Natal	11	3	12	4	30
HR	11	3	11	4	29
Dentist	11	3	11	3	28
Accounting	10	2	11	3	26
Information	11	3	11	4	29
TOTAL	**77**	**20**	**80**	**26**	**203**

KEYS: (1) BGH- Badagry General Hospital**. (2)** SHL- Subol Hospital Limited

Data collection instrument

The research instrument designed by Jimoh (2017) was adapted in this study. The instrument was modified to includes BPR in the health sector. The research instrument was structured into two segments. The first section of the questionnaire contains general questions relating to the respondents' bio-data information, while the second sections focused on information relating to Business Process Re-engineering and performance of Hospital in Lagos State, Nigeria. The questionnaire was designed in such a way that options were provided for the respondents to choose from and options were expected to expressed. The research instrument was structured in five (5) Likert scale measurement of 5 represent strongly agreed (SA), 4 - agreed (A), 3- undecided (U), 2 - disagreed (D), and 1 - strongly disagreed (SD).

Method of Data collection

The study used primary data and the questionnaires administered were used to gather primary data. Two hundred and three (203) copies of questionnaires were administered to the staff of Subol Hospital Limited staff and Badagry General Hospital. The two hundred and three sample size were proportionate distributed among the selected hospitals which comprises of the top, middle and lower level staff. The instruments adopted were distributed to the staff with the aid of convenient sampling technique. 126 copies of the questionnaires were retrieved representing 61.76% which is the sample size and used for the analysis in this study. Eighty-seven (87) out of 157 copies of the questionnaires were retrieved from Badagry General Hospital while thirty-nine (39) out of 46 copies of the questionnaires were also retrieved from Subol Hospital Limited.

Table no. 2: Showing the sample size

Sectors	Hospitals	Populations	Ratio	Distribution of Questionnaires	Retrieved Questionnaires
Private	Subol	97	0.23	46	39
Public	BGH	317	0.77	157	87
Total		**414**	**1**	**203**	**126**

Keys: BGH - Badagry General Hospital and SHL- Subol Hospital Limited

Validity and Reliability of Research Instrument

Content validity was employed in this study to ascertain the content of the research instrument. In order to measure the BPR in the health sector. This study adapted research instrument by Jimoh (2017). The research instrument was design for BPR in the manufacturing industry. The instrument was modified by the researcher to include other aspects BPR of the health sector. Business process renovation was included to cover BPR in the health sector.

Table no. 3: Results of the Cronbach Alpha Test

S/N	VARIABLES	NO. OF ITEMS	COEFFICIENT ALPHA
1	Business process renovation and operational effectiveness	**5**	**0.757**
2	automation process and competitive advantage	**5**	**0.759**
3	management support and service delivery	**5**	**0.773**

Source: *Researcher's computation*

The test of reliability measures the internal consistency of the research instrument. Table 2 above, presents the Cronbach's alpha result. The coefficients of the cronbach's alpha of the variables; business process renovation and operational effectiveness is (0.757), automation process and competitive advantage is (0.759) and management support and service delivery is (0.773). Thus, since each of the coefficients lies between 0.7 and 1.00, this is an indicator of consistency that the responses measure the same characteristics of the same construct (business process renovation and organisational effectiveness, automation process and competitive advantage and management support and service

delivery). Therefore, there is consistency in the measurement scales given by responses. This implies that 75.7%, 75.9% and 77.3% of variance in these scores of the variables respectively is reliable.

Method of Data Analysis

Analysis was done using descriptive and inferential statistic tools. Descriptive analysis includes frequencies, percentage, mean and standard deviation to represent the response rate and information on the other variables that the study considered. The inferential analysis employed correlation analysis to test the hypotheses. The statistical Package of Social Sciences was used to analyse the data.

Data Analyses and Interpretations

The descriptive analysis which includes frequencies, percentage, mean and standard deviation of the responses and the variables that this study considered are presented in the appendix i, ii, and iii.

Bio - data Information of the Respondents

Table no. 4: Bio-Data and Type of Health Sector Cross tabulation

	SEX & TYPE OF HEALTH SECTOR						
	Sex Categories	Type of Health Sector					
		Private		Public		Total	
1		Frequency	%	Frequency	%	Frequency	%
	Male	17	13.5	46	36.5	63	50.0
	Female	22	17.5	41	32.5	63	50.0
	Total	**39**	**31.0**	**87**	**69.0**	**126**	**100**

17 respondents were male staff in subol Hospital representing 13.5% and 22 were female staff in the same hospital representing 17.5% that administered the questionnaires. While 46 respondents were male staff in Badagry General hospital representing 36.5% and 41 were female staff in the same hospital representing 32.5% that were properly filled and returned the questionnaires

	MARITAL STATUS & TYPE OF HEALTH SECTOR						
		Type of Health Sector					
	Marital Status Categories	Private		Public		Total	
2		Frequency	%	Frequency	%	Frequency	%
	Single	23	18.3	55	43.7	78	61.9
	Married	16	12.7	25	19.8	41	32.5
	Divorced	0	0	7	5.6	7	5.6
	Total	**39**	**31.0**	**87**	**69.0**	**126**	**100**

23 respondents of subol Hospital staff representing 18.3% were single, and 16 staff representing 12.7% were married. While 55 respondents in Badagry General Hospitals representing 43.7% were single, 25 staff representing 19.8% were married and 7 staff representing 5.6% were divorced

	AGE & TYPE OF HEALTH SECTOR						
		Type of Health Sector					
	Age Categories	Private		Public		Total	
3		Frequency	%	Frequency	%	Frequency	%
	Below 25 Years	2	1.6	3	2.4	5	4.0
	25 - 35 Years	20	15.9	36	28.6	56	44.4
	36 – 45 Years	17	13.5	47	37.3	64	50.8
	46 Years & above	0	0.0	1	0.8	1	0.8
	Total	**39**	**31.0**	**87**	**69.0**	**126**	**100**

2 staff in Subol Hospital representing 1.6% are below 25 years,20 staff representing 15.9% are ages between 25 to 35 years, 17 staff of the same private Hospital representing 13.5% are between the age of 36 to 45 years. While 3 staff in Badagry General Hospital representing 2.4% are below 25 years, 36 respondents representing 28.6% are age between 25 to 35 years, 47 respondents in Badagry General Hospital representing 37.3% are between the age of 36 to 45 years, and 1 staff representing 0.8 is above 46 years of age.

4

EDUCATIONAL QUALIFICATION & TYPE OF HEALTH SECTOR

Educational _Q Categories	Type of Health Sector					
	Private		Public		Total	
	Frequency	%	Frequency	%	Frequency	%
SSCE	-	-	-	-	-	-
OND/NCE	2	1.6	27	21.4	29	23.0
BSc/HND	37	29.4	48	38.1	85	67.5
Master	0	0	12	9.5	12	9.5
Others	-	-	-	-	-	-
Total	**39**	**31.0**	**87**	**69.0**	**126**	**100**

2 respondents of Subol Hospital representing 1.6% are OND/NCE holders, 37 respondents representing 29.4% were BSc/HND holders. While 27 respondents representing 21.4% in Badagry General Hospital are OND/NCE holders, 48 respondents representing 38.1% are BSc/HND holders, and 12 respondents representing 9.5% are Masters' holders.

5

EMPLOYMENT STATUS & TYPE OF HEALTH SECTOR

Employment Status Categories	Type of Health Sector					
	Private		Public		Total	
	Frequency	%	Frequency	%	Frequency	%
Mgt. Staff	13	10.3	13	10.3	26	20.6
Senior Staff	21	16.7	58	46.0	79	62.7
Junior Staff	5	4.0	16	12.7	21	16.7
Total	**39**	**31.0**	**87**	**69.0**	**126**	**100**

13 respondents of Subol Hospital staff representing 10.3% belong to Management staff, 21 staff representing16.7% are senior staff and 5 staff representing 4.0% belong to junior staff. While 13 respondents in Badagry General Hospital representing 10.3% were belongs to management staff, 58 respondents representing 46.0% are senior staff and 16 respondents representing 12.7% were belongs to junior staff.

6

WORKING EXPERIENCE & TYPE OF HEALTH SECTOR

Working Experience Categories	Type of Health Sector					
	Private		Public		Total	
	Frequency	%	Frequency	%	Frequency	%
1 – 5 Years	18	14.3	37	29.4	55	43.7
6 – 10 Years	21	16.7	18	14.3	39	31.0
11 – 15 Years	0	0	21	16.7	21	16.7
16 Years Above	0	0	11	8.7	11	8.7
Total	**39**	**31.0**	**87**	**69.0**	**126**	**100**

18 respondents in Subol Hospital representing 14.3% had 1 to 5 years working experience, 21 respondents representing 16.7% has 6 to 10 years' experience. While 37 respondents in Badagry General Hospital representing 29.4% had 1 to 5 years' experience, 18 staff representing 14.3% has 6 to 10 years' experience, 21 staff representing 8.7% has 11 to 15 years' experience and 11 respondents representing 8.7% has 16 years and above working experience.

Source: *Field Survey, 2019*

Test of Hypotheses

Test of Hypothesis I

H_O: There is no significant relationship between business process renovation and operational effectiveness.

Table 5: Result of correlation analysis between business process renovation and operational effectiveness

		BUSINESS PROCESS RENOVATION	OPERATIONAL EFFECTIVENESS
BUSINESS PROCESS RENOVATION	Pearson Correlation	1.000	.704*
	Sig. (2-tailed)	.	.030
	N	126	126
OPERATIONAL EFFECTIVENESS	Pearson Correlation	.704*	1.000
	Sig. (2-tailed)	.030	.
	N	126	126

Source: *Researcher's computation using SPSS* *. Correlation is significant at the 0.05 level (2-tailed).

Table 5 presents the correlation between business process renovation and operational effectiveness. The Pearson Correlation coefficient (r = 0.704, N = 126) indicates that there is a substantially positive correlation between business process renovation and operational effectiveness. The test of the correlation is also significant since the p-value (0.030) is less than 5% (0.05) indicating the rejection of the null hypothesis. This implies that there is a significant positive relationship between business process renovation and operational effectiveness of hospitals in Lagos State.

Test of Hypothesis II

H_O: There is no significant relationship between automation process and competitive advantage.

Table no. 6: Result of correlation analysis between automation process and competitive advantage

		AUTOMATION PROCESS	COMPETITIVE ADVANTAGE
AUTOMATION PROCESS	Pearson Correlation	1.000	.540*
	Sig. (2-tailed)	.	.016
	N	126	126
COMPETITIVE ADVANTAGE	Pearson Correlation	.540*	1.000
	Sig. (2-tailed)	.016	.
	N	126	126

Source: *Researcher's computation using SPSS* *. Correlation is significant at the 0.05 level (2-tailed).

Table 6 presents the correlation test between automation process and competitive advantage. The Pearson Correlation coefficient (r = 0.540, N = 126) indicates that there is a moderate positive correlation between automation process and competitive advantage. The test of the correlation is also significant since the p-value (0.016) is less than 5% (0.05) indicating the rejection of the null hypothesis. This implies that there is a significant positive relationship between automation process and competitive advantage in both private and public hospitals.

Test of Hypothesis III

H_0: Management support does not have effect on service delivery in the health sector.
This hypothesis was tested using regression and correlation analyses.

Table no. 7: Result of correlation analysis between Management support and service delivery

		MANAGEMENT SUPPORT	SERVICE DELIVERY
MANAGEMENT SUPPORT	Pearson Correlation	1	.633**
	Sig. (2-tailed)		.000
	N	126	126
SERVICE DELIVERY	Pearson Correlation	.633**	1
	Sig. (2-tailed)	.000	
	N	126	126

Source: *Researcher's computation using SPSS* **. Correlation is significant at the 0.05 level (2-tailed).

Table 7 presents the correlation test between Management support and service delivery. The Pearson Correlation coefficient (r = 0.633, N = 126) indicates that there is a moderate positive correlation between Management support and service delivery. The test of the correlation is also significant since the p-value (0.00) is less the 5% (0.05) indicating the rejection of the null hypothesis. This implies that there is a significant positive relationship between Management support and service delivery of hospitals.

5. DISCUSSION OF FINDINGS

The main purpose of this study was to examined the effects of BPR on performance of selected Hospitals in Lagos State, Nigeria. The findings shown that BPR has a positive effect on performance of hospitals in Lagos State, Nigeria. The result of hypothesis one showed that there is a positive correlation between business process renovation and operational effectiveness in the hospitals. However, this finding is aligned with the study of Hammer and Champy (1993) as cited in Mohammed and Mollaei (2014) posited that the fundamental reconsideration of renovation of work process is to help the organisation to achieve drastic improvement on current performance.

Hypothesis two revealed that there is a significant positive relationship between automation process and competitive advantage of hospitals in Lagos State. This finding collaborates with the study of Makokha, Micheal and Wepukhulu, (2013) they suggested that automation process helps organisation to improve workflow and achieve long term strategy on organisational growth and performance.

And finally, hypothesis three, revealed that management support has significantly positive effect on quality service delivery in the hospital in Lagos State. This result also collaborated with the study of Kuesten (2013) pointed out that there should be a direct link from the top management to other levels in the organisation and to provide adequate resources, making decisions and to develop competencies among the staff for better achievements of quality services delivery

6. CONCLUSION

Based on the findings, conclusions were drawn that BPR is a management technique in which managers in private and public hospitals used to achieved a dramatic improvement on service delivery. Specifically, the adoption of BPR in the hospital in Lagos State has improved service processes and increased the commitment of top management to creates enabling working environments for staff in order to provide better services. This study posited that the use of BPR technique is a strategic management method in which hospitals can use to enhance organisational effectiveness, better service delivery, satisfy patients and gain competitive advantage in the economy.

Having discussed the findings, the following recommendations are made:

i. The management team of both private and public hospital needs to focus more attention on service processes in the hospital by providing promotion to staff, giving out bonuses so that the staff can be readily to provide adequate and prompt service delivery.

ii. It's also recommended to the hospitals in Nigeria, that service process needs to be periodically improved upon in order to enhance quality service processes.

iii. More so, Business Process Reengineering must be well communicated from the top of the managerial ladder to the bottom in the hospital, as this will help for achieving better service delivery.

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