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## **Operational Work System Design and Staff Performance in the Nigerian Construction Industry**

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#### ABSTRACT

**Objective**: The study investigated the impact of operational work system design on staff performance in selected construction firms in Nigeria.

**Research Design & Methods**: The study used primary data gathered with the use of a 5-point Likert scale questionnaire format administered to 138 respondents. A hypothesis was postulated to test the significance of the research problem. Data analysis was carried out using correlation and multiple regression analysis which proved the significance of the alternative hypothesis as a result of testing the hypothesis.

**Findings:** The findings show that there is a significant relationship between operational work system design and staff performance. The study concludes that operational job design can be advanced as a motivation tool, which is non-monetary in nature, to improve staff performance.

**Implications & Recommendations:** A key drive to improve performance is the satisfaction of staff coupled with an outstanding operational job design which takes into consideration the total physical and mental well-being of staff and its interaction with other organisational factors. The study recommends, among others, that there should be active participation of staff in the design of work in the organisation.

**Contribution & Value Added:** The study provides an empirical approach to enhancing performance in the construction industry and thereby developing an indigenous firm to compete favourably on a growing market.

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#### INTRODUCTION

The need to drive increased performance from staff starts with an organisationally focused approach which seeks to establish the expectation of the organisation towards staff; by determining what it wants them to do, how it wants them to do it and how it intends to communicate the expectation (Stevenson, 2012, p. 291). This makes performance measurement easy and creates the possibility to identify and take corrective measures on the basis of the observed deviations. The drive for improved performance should not be purely a management affair, as there is a need to carry employees along so that they got to understand the need for accomplishing an expected task and possible ways of having it done for the good of the organisation (Rathnakar, 2012, p. 10). This is the core of operational job design, as it seeks to take into cognisance the operational structures of the task and its impact on the staff performance and well-being.

Job Design theory has become relevant due to the failure of scientific management and the quest to handle employees' issues from a different perspective. Job design is centred on creating jobs which demand skills and some level of employee's initiative (Mbadou & Mbohwa, 2013, p. 234). It argues that boring and monotonous jobs with little worker discretion are counter-productive, both to individuals and organisations.

In the view of Slack, Chambers and Johnson (2007, p. 173), job design encompasses the process by which the job of an individual, the environment where the individual works and the technology in the organisation interface to achieve the set organisational goals and objectives. This definition broadens the scope of job design, as it introduces the human relation perspective of management in strict compliance with environmental and social events within the purview of the organisation which can affect staff performance and hinder the set organisational goals and objectives. This system envisages employees having detailed knowledge of the organisation's expectation, as it does not give any room for complaint and complacency. Operational job design can be also viewed as work structure which takes into consideration anticipated challenges for every human and offered as a future standard to measure or monitor performance for organisational effectiveness.

In Nigeria, the construction industry has witnessed quite a relative boost with the entrance of new organisations and the increasing development of indigenous construction companies, owing partly to the establishment of the Local Content Bill for construction services passed in April 2014 (NBS, 2015). The industry which was mainly dominated by foreign organisations is now open to all, as indigenous companies are now given big construction companies. The federal government of Nigeria remains the major investor in the Nigerian construction industry with the industry contribution of 3.05% to the country's gross domestic product (GDP) and the workforce of 6 913 536 as of 2012 (NBS, 2015). In spite of enormous government effort, indigenous construction companies are faced with a pyramid of challenges coupled with raising employee turnover and the low level of the development of human resources required for planning, designing, constructing and handling government projects (Isa, Jimoh & Achuenu, 2013, p. 4).

Therefore, this study seeks to examine the impact of operational work system design on staff performance in the Nigerian construction industry. This study is divided into 5 sections which cover the existing literature on the variables identified in the study, the materials and

methods adopted to carry out the study, discussion of the result , conclusions, recommendations for implementation. The study is quantitative in nature and it adopted a survey research method using a questionnaire. The objective of this paper is to investigate the impact of operational job design on staff performance. The hypothesis of the study to be tested in the paper is as follows: Operational job design does not influence staff performance.

#### LITERATURE REVIEW

#### **Conceptual Framework**

Work system design and job system design are used interchangeably. Stevenson (2012, p. 292) defined job design claiming that it "involves specifying the content and methods of jobs". This simply analysed job design as encompassing the structural outline of the basic requirement and expectation attached to a job. This makes a job designer focus on performance, productivity, safety of employees and the quality of worklife (Stevenson, 2012).

Job design ensures that all organisational activities, both human and material resources are aligned to suit the organisational goals and objectives, as it seeks to specify the proportion of work for an individual, a team or a group in the organisation (Reid & Sanders, 2011). Job design is an operational activity tailored towards restructuring work to achieve a balance between machinery and a human in order to achieve set organisational goals and objectives. A compulsory operational and management responsibility determines who does what, when and how with the sole intent to align work to staff for organisational benefit.

Job design is the "process of laying out job responsibilities and duties and describing how they are to be performed" (Andrew, 2012, p. 224). A key factor in job design is that the job should seek to decrease the chances that it will physically harm the incumbent. When the job takes cognizance of the physical and mental challenges which the job may pose to their employees, it further strengthens the goal of the design. The willingness to want to do more and increase performance on a career path based on the satisfaction derived from the workplace structure and system is the key principle and the core of work system design.

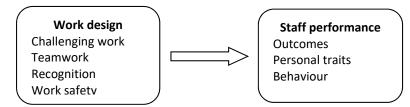


Figure 1. The conceptual framework for work design and staff performance Source: own elaboration.

### The Elements of Job Design

Slack, Chambers and Johnson (2007, p. 198) state that the elements of job design are the critical criteria and organisational questions which should guide job design. These elements are the bases which form the operation of people, machinery and organisation,

environment (both internal and external). The elements and the fundamental questions which border on job design in any organisation are:

## 1. What are The Environmental Conditions of The Workplace?

This emphasises the condition or state of affairs with respect to the environment of the organisation. The condition of the workplace will greatly influence the performance of the employees. This environmental condition can be both internal and external, which affects the well-being of the organisation's employees. Job design in the organisation must show a favourable ergonomic environmental design, as the wellbeing of the employees should be of utmost priority when designing.

## 2. What Technologies are Available and how Will They be Used?

This identifies the organisation's technological needs which, if acquired, will improve and increase performance and reduce stress. The acquisition of the technology has to match individual or human appropriateness, so that instead of helping it did not turn out to be a source of stress to employees. There is also a need to understand the procedure of the application of the technology in line with the ability of the available human resource to apply it. This makes training of the users or employees pertinent, irrespective of how complicated or non-technical the job is.

## 3. What Tasks are Allocated to Each Person in The Organisation?

In the job design process, there is a need to consider every unit, department, team and group present in the organisation. The organisation should focus on defining the task and ensuring effective presentation, allocation and communication to those expected to carry out the activities. The allocation should consider the specialisation and division of labour. There should be an emphasis on considering what an individual specialises in and what he/she is be able to do, considering both physical and mental abilities.

## 4. What is the Best Method to Perform Each Job?

There should be an emphasis on the best or most appropriate methods of performing a task, which should be approved. However, it is worth stating the fact that in determining the best and approved method to complete the task there should be the consideration of all factors, both human and material factors, which can influence negatively the task completion. The best method has to match the job, time, resources, customers and employees, while ensuring that it will not affect other jobs to be carried out and vice versa.

## 5. How Long will it Take and How Many People will be Needed?

This involves the measurement of work and is used to determine the time required to do a job and then to determine how many people will be required to carry out the work. However, it is quite difficult to measure work in the service industry, yet, the, emphasis would be placed on ensuring that the pressure of work does not overwhelm employees and also ensure that redundancy is not encouraged because of employing more people than it is required to carry out the task, as this may affect the profitability and performance of employees.

### 6. How do we Maintain Commitment?

This critical focus has the tendency to affect the organisation and its existence. The idea of critically establishing that point of satisfying employees remains a duct of challenges. However, in designing job system there should be an effort to consider how to ensure that employees will remain focused and dedicated to the organisation's goals and objectives. Job design should drive dedication, sacrifice and commitment to the duty.

According to Reid and Sanders (2011, p.261), the following are the critical factors to consider in the process of job designing, among many others:

- 1. **Technical Feasibility:** it is the critical analysis of the physical and mental ability of employees to carry out the assigned task. This survey seeks to know the individual's ability with respect to their other special abilities which may be applicable to the accomplishment of the job.
- 2. **Economic Feasibility:** it simply evaluates the cost implication of job design over the benefit to the organisation. It shows a cost benefit analysis which seeks to protect the interest of the organisation while weighing other variables available to the organisation. It measures the ratio of the value a job adds to the cost of having the job done and how it contributes to the profit of the organisation.
- 3. **Behavioural Feasibility:** An employee-focused study seeks to unravel what will contribute to make them committed and increase contribution to the organisation mentally and physically. It seeks to show the degree to which an employee derives intrinsic satisfaction from doing the job.

Ilesanmi (2010, p.7) stated that the following factors affect job design:

- Technology of the organisation.
- The process of intrinsic motivation.
- The characteristics of the task structure.
- The motivating characteristic of jobs.
- The implications of group activities.

Slack et al. (2013) stated that the following are the techniques of job design:

- 1. Combining tasks means increasing the number of separate elements or activities allocated to individuals.
- 2. Forming natural work units means putting together activities which make a coherent (preferably also a continuing) whole.
- 3. Establishing client relationships means that staff make contact with their internal customers directly rather than exclusively through their supervisors.
- 4. Vertical loading means including 'indirect' activities (such as the maintenance, scheduling and general management of the job) in the tasks allocated to the individual.
- 5. Opening feedback channels means ensuring not only those internal customer feedback perceptions of performance directly to staff but also that staff are provided with information regarding their overall performance.

Job design does not seem to have a well-stated procedure of implementation; however, it is based on the nature and structure of the organisation, which is also dependent on the organisational goals and objectives. Therefore, applying it in the construction industry requires a more dedicated approach, structured and articulated, to provide the needed information required for the implementation. In Volunteer Canadian Handbook (2001), five steps were identified in implementing and understanding job design. The implementation involves five-step processes, which are to:

- 1. Review the mandate or mission of the organisation.
- 2. Look at how various functions/components/tasks are carried out to achieve the mission/mandate.
- 3. Consider current and potential staff, and establish the qualities which will be needed to perform various components or tasks, as defined (skill analysis, skill variety, and autonomy).
- 4. Identify and describe discrete volunteer assignments (job descriptions).
- 5. Match volunteers to jobs or assignments.

#### Staff Performance

Staff performance can also be referred to as employees' performance and Jex (2002) defined employee performance as "all the behaviours employees engage in while at work". This definition shows that employee's set of actions is what directly or indirectly forms its performance in the organisation. Therefore, the attitude of an employee held to the organisation or task performance can hinder the organisation. However, there have been problems of manager's inability to manage staff performance and align individual goals to a common organisational vision (Ayandele & Isichei, 2013, p.2). Milkovich and Wigdor (2001) stated that historically, there have been three approaches to define the dimensions of job performance, perceived:

- as a function of outcomes,
- as a function of behaviour,
- as a function of personal traits.

#### **Theoretical Framework**

Oldham's Job Characteristics Model and Herzberg's Two Factor Theory are the two major theories mostly used in explaining work system design (Marwa & Muathe, 2014, p.48). This study will however rely on the Herzberg theory as the framework for the analysis of work system design and staff performance due to the focus of the study.

Frederick Herzberg developed Herzberg theory and the theory was named after him. He conducted studies of employees to identify what satisfied and dissatisfied them in their work. The theory is also known as the *two-factor theory* (James, Brad and Kenneth, 2008).

The theory is anchored on two major factors that the research discovered. Herzberg called them hygiene factors and motivators. He discovered that some factors of a job give people a chance to satisfy higher-level needs (Andrew, 2012, p.399).

**Hygiene factors** are job factors which dissatisfy when absent but do not contribute to satisfaction when they are present. Examples of hygiene factors are the amount of pay and fringe benefits, work conditions, rules, and the amount and type of supervision. Hygiene factors can create dissatisfaction but cannot improve satisfaction (Andrew, 2012, p.340).

**Motivators** are factors which increase job satisfaction. The study discovered that employees were motivated by factors such as positive comment, challenging work, recognition, achievement, accomplishment, increased responsibility, and personal development (Andrew, 2012).

Andrew (2012) stated that "the two-factor theory thus underlies the philosophy of job design through job enrichment and the job characteristics model" which explains the view of Richard (2014) that "Job design is the application of motivational theories to the structure of work for improving productivity and satisfaction".

#### **Empirical Framework**

Nisbat and Muhammad (2014, p. 75) carried out a survey which affirms that there is a significant relationship between job design and staff performance and which invariably will lead to employees' retention in an organisation. Ngirande and Musara (2014, p. 25) discovered that well-designed jobs determine employees' retention and commitment to the organisational goals and objectives while reducing labour turnover. This shows that individuals' personal interests do not conclude what their ability or inabilities are but all depends on what makes them happy as this is a long way to trigger inner strength in them.

Mam and Macf (2010, p.11) confirmed that the nature of a job is a critical factor in organisational work system design for enhanced employee's performance and stated that the key variables of job design are not just highlights but necessary tools to serve as motivators which can be a non-monetary motivator to propel increased performance. Amina and Shehla (2009, p. 9) in a similar vein stated, "Comfortable and ergonomic office design motivates the employees and increases their performance substantially". Mbadou and Mbohwa's (2013, p. 236) study on the impact of work design and stress on employees' productivity at a call centre empirically demonstrated and discovered that work design is a silent influencer of an employee's productivity.

Saeed, Lodhi, Mussawar, Igbal, Hayab and Yassen (2013) carried out a survey on 200 employees to examine the factors affecting their performance in the workplace. Job content as a variable in the study proved to be positive and significant. In a similar study Lookman and Jacobs (2005) confirmed that task characteristics has significant effect on job performance in the study carried out on 500 public accountants.

#### MATERIAL AND METHODS

As it was mentioned above, the objective of the study is to investigate the impact of operational job design on staff performance. Therefore, the following research hypothesis was adopted to be tested:

**H:** Operational job design does not influence staff performance.

In achieving the above stated objectives, this research adopted a survey research design due to the research problem and the objectives of the study. The survey research design provides a quick, efficient and accurate means of assessing information about a population.

The population of the study consisted of the major construction companies in the federal capital territory in Abuja, Nigeria. Abuja was chosen because FCT is the capital city of Nigeria and there are many ongoing construction works daily, both from the government and private individuals. In addition, most construction firms in Nigeria have their head office in Abuja as the capital city, since all major government functional agencies are in the city.

The sample frame is a probability-based technique and equal chance given to each selected sample from the population of the study. Thirty major construction compa-

nies registered with the FCT and the equal number of local and foreign construction companies participated in the study and simple random sampling technique was used to select them. A self-developed questionnaire was administered to five supervisory staff, each randomly selected of the 30 construction firms Out of one hundred and fifty (150) questionnaires administered to the construction firms, 138 were completed and returned. This represents the 92 percent response rate.

The study used both secondary data and primary data. Secondary data were obtained from journals, textbooks and newspaper columns. Primary data were obtained through a questionnaire survey as the research instrument. This is due to the belief that the questionnaire serves as the foundation for both empirical and behavioural research.

The study employed a self-administered questionnaire consisting of 20 close-ended multiple choice questions for the survey. The instrument comprises 15 questions related to the constructs of this study and 5 questions related to demographic variables. All the questions were prepared in the English language. The questionnaire survey was designed in the Likert scale format ranging from Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), to Strongly Disagree (1). Multiple regression analysis and t-test were adopted for the study. The study used statistical package for social sciences (SPSS). Given the nature of the structure of the research instrument used for the study, and to make it suitable for a parametric purpose, we justified reliability and validity of the instrument. This made it possible to transform the variables of individual items into semi-continuous data using the arithmetic mean, thereby making it suitable for a parametric analysis (Brown 2011, p.12; Brown, 2001, p. 41; Allen & Seaman, 2007 as cited by Wach, & Wojciechowski, 2016).

#### **Operationalisation, Measurement and Validity of Variables**

The dimensions to measure work design in this study are challenging work, teamwork, recognition and work safety. The study used a 5-point Likert scale. Three items each were on the scale to measure the subscales. The theoretical framework of the study supports this dimension. The study adopted Cronbach alpha coefficient to test the reliability of the work design scale. Coefficients alpha of the subscales are ranging from 0.835 to 0.865.

The study operationalised and measured staff performance using a performance scale comprising three performance criteria derived from Milkovich and Wigdor (2001). The criteria are: outcomes, behaviour and personal traits. Three items were on the scale of 5 points to each of the outcomes, behaviour and personal traits. The study adopted Cronbach alpha coefficient to test reliability of staff performance. Coefficients alpha of the subscales are ranging from 0.65 to 0.70.

The study used content validity to evaluate the instrument for appropriateness. The researchers subjected the instrument to review by reviewers who understand work design just to determine the extent to which the empirical measurement reflected the content of the study and ensure that the survey items include the core of the study.

#### **RESULTS AND DISCUSSION**

Serkaran and Bougie (2010) recommend that the score of less than 2.33 is low level, 2.33 to 3.67 are moderate level and 3.67 and above are regarded high level. The table below presents the variable used in the study. Challenging work has the highest mean (M=4.15,

SD=.830), on the other hand, work safety recorded the least mean (M=3.51, SD=1.026). Eventually, the entire variable means were on the high level as evident in Table 1 below.

	Mean	Std. Deviation	N		
Staff Performance	4.0870	0.72975	138		
Challenging Work	4.1594	0.83050	138		
Team Work	4.1377	0.85600	138		
Recognition	4.0290	0.80093	138		
Work Safety	3.5145	1.02690	138		

Table 1. Descriptive Statistics of the variables showing the impact of work system design on staff performance in the Nigerian Construction industry

Source: Field survey (2015), SPSSv20 output.

#### **Test and Restatement of the Hypothesis**

The study used regression analysis to investigate the influence between the independent variable and the dependent variable, which are operational work system design and staff performance of construction companies in Nigeria. For the successful conduct of regression analysis, the study used a considerable number of responses and all the assumptions of one-way ANOVA and linear regression were fulfilled.

The table below shows that the analysis of variance of the fitted regression equation is significant with F value of 23.992. This is an indication that the model is a good one. Since the p-value is less than 0.05, it shows a statistically significant relationship between the variables at the 95% confidence level. The results also indicate that operational job design actually influences staff performance of construction firms in Nigeria. Therefore, the null hypothesis of no significant impact is rejected. Thus, job design has a significant impact on staff performance.

To examine the relationship among the variables, the study conducted a regression analysis. Four predictor variables including challenging work, teamwork, recognition and work safety were examined to see their contribution towards staff performance. The results below show that R= 0.647, R<sup>2</sup>= 0.419, adjusted R<sup>2</sup>= 0.402. The multiple correlation coefficient between the predictors and the criterion variable was 0.647; the predictors accounted for 64.7% of the variance in staff performance. The value of R<sup>2</sup> is large and the generalisation of this model to the population was 0.419.

The beta values helped in comparing the contributions of various independent variables (challenging work, teamwork, recognition and work safety) to explaining the dependent variable (staff performance). From the table below, the variable with the largest beta value coefficient challenging work (0.267) is the variable with the strongest unique contribution to explaining the dependent variables, when the variance explained by all other variable in the model are controlled for. The variable with the least beta value coefficient (recognition=0.097) has the least contribution to explaining the dependent variable (staff performance). Therefore, the null hypothesis of no significant impact is rejected. Thus, job design has a significant impact on staff performance.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.647(a)	0.419	0.402	0.56447
	4	-		

## Table 2. Model Summary result showing the impact of work system design on staff performance in the Nigerian Construction industry

Source: Field survey (2015), SPSSv20 output.

# Table 3. ANOVA result showing the impact of work system design on staff performance in the Nigerian Construction industry

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	30.579	4	7.645	23.993	0.000(a)
-	Residual	42.378	133	0.319	-	-
-	Total	72.957	137	-	-	_

Source: Field survey (2015), SPSSv20 output.

# Table 4. Coefficients (a) table presenting the impact of work system design on staff performance in the Nigerian Construction industry

Independent variable	Standard error	Beta	t-value	Р	
Challenging Work	0.078	0.267	3.012	0.003	
Team Work	0.069	0.233	2.876	0.005	
Recognition	0.066	0.097	1.327	0.187	
Work Safety	0.054	0.252	3.297	0.001	

Source: Field survey (2015), SPSSv20 output.

Correlation is significant when the value is less than 0.05. The result below shows that there is high correlation between job design and staff performance as given by the R-value = 0.647 or 64.7%. As a result, job design correlated with staff performance at the value of 0.000. Therefore, the null hypothesis is rejected and the alternative one is accepted, which implies that there is a significant relationship between job design and staff performance. Further, the results are significant and there is a positive relationship between challenging work and staff performance with a correlation value of (0.555).

The results below also prove that teamwork correlated with staff performance at the value of 0.000. The results are significant and show there is a positive relationship between teamwork and staff performance with a correlation value of (0.495).

In addition, recognition correlated with staff performance at the value of 0.000. The results are significant and show that there is a positive relationship between recognition and staff performance with a correlation value of (0.345).

Finally, the significance level of work safety with staff performance is 0.000. The results are significant and show that there is a positive relationship between safety and staff performance with a correlation value of (0.485). Staff performance correlated with organisational work challenge, recognition, work safety and teamwork and they proved significant.

The hypothesis findings show that the analysis of variance of the fitted regression equation is significant with F value of 23.992, indicating that the model sufficiently explains the dependent variable. Given the *p*-value is less than 0.05; hence, it indicated a statistically significant relationship between the variables at 95% confidence level, thus, leading to the rejection of the null hypothesis and indicating that job design has a significant impact on staff performance. This finding is similar to the findings of Saeed, et al. (2013) who car-

ried out a survey on 200 employees on the factors affecting their performance in the workplace. The multiple regression analysis result showed that job content as a variable in the study proved positive and significant to employees' performance. The findings also agreed with Burchell, Mankelow, Day, Hudson, Ladipo, Reed, Noan, Wichert and Wilkinson (1999), as cited by Marwa & Muathe (2014, p. 47) that job design significantly influences employees' performance. Garg and Rastogi's, (2006) study on the influence of a new model of job design to motivate employees' performance showed that a well-designed job has the capacity to influence positively employee satisfaction and the quality of work performance. The findings support the theoretical framework discussed earlier that the hygiene factors have the tendency to improve performance. However, this finding differs from the findings of Oghojafor and Adebakin (2012) as their study on job design and job satisfaction conducted among 167 doctors and nurses in Lagos hospitals using regression analysis shows that job design does not contribute in more than 5% to explaining job satisfaction.

Variables and Correlations		Staff Performance	Challenging Work	Team Work	Recogni- tion	Work Safety
Staff	Pearson Correlation	1	0.555(**)	.495(**)	.345(**)	.485(**)
Performance	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	Ν	138	138	138	138	138
Challenging	Pearson Correlation	0.555(**)	1	.575(**)	.377(**)	.468(**)
Work	Sig. (2-tailed)	0.000		0.000	.000	.000
	Ν	138	138	138	138	138
Team Work	Pearson Correlation	0.495(**)	0.575(**)	1	.271(**)	.326(**)
	Sig. (2-tailed)	0.000	0.000		0.001	0.000
	Ν	138	138	138	138	138
Recognition	Pearson Correlation	0.345(**)	0.377(**)	.271(**)	1	.337(**)
	Sig. (2-tailed)	0.000	0.000	.001		0.000
	Ν	138	138	138	138	138
Work Safety	Pearson Correlation	0.485(**)	0.468(**)	.326(**)	.337(**)	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	Ν	138	138	138	138	138

Table 5. Correlation results showing the impact of work system design on staff performance in the Nigerian Construction industry

Source: Field survey, (2015) SPSSv20 output.

#### CONCLUSIONS

To sum up, the study has established a relationship between job design and employees' performance and that job design can be advanced as a motivation tool for employees' enhanced performance. All variables of the independent proved contributory to growing and sustaining improvement of employees' performance.

The study reached a number of conclusions based on the research, as the instruments for measuring work system design and staff performance are reliable and valid, and other researchers can adopt it to test the effects of operational work design on other areas of staff performance. We may conclude that there is a significant relationship between operational job design and staff performance. The impact of operational job design is significant; therefore, it is a good predictor of staff performance. The study discovered that operational job design can be advanced as a motivation tool which is non-monetary in nature to improve staff performance.

However, the study had a number of limitations, namely, the sample size is small, the data used for the study were gathered using a structured questionnaire while another method could be used for collecting data for the study and the number of variables in the consideration could be expanded.

The following recommendations, if considered and implemented, will enhance staff output, behaviour at work and commitment to organisational goals and objectives.

- 1. There should be active participation of staff in the design of work in the organisation.
- 2. Work design should take into consideration the physical and mental ability of staff.
- 3. A practical balanced managerial approach which encourages staff to work and meet their higher-level needs.
- 4. There should be a technology -human fit in the organisation.

The study provided relevant implications for management implementation, as it identifies that a key drive to improve performance is satisfaction of staff coupled with an outstanding operational job design which takes into consideration the total physical and mental well-being of staff and its interaction with other organisational factors. It is worth stating that if our local construction companies want to compete favourably with the international companies in the country, their managers must develop a strategic organisational work design which ensures human and technological fit for the good of all.

Further study should consider a larger sample size to give a clearer picture for the proper understanding of how the variables interplay. Also, there is a need to take into consideration other variables of operational work system design, not captured in this study, and how they interplay to determine the improved performance of the organisation.

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