



Evaluation of the efficacy organizational change effects on university employees' performance in Nigeria

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Abstract

Nigeria universities over the years, have adopted many changes ranging from structural, leadership and technological changes in an effort to meet up with the global best practices in the educational sector yet its efficacy is still uncertain. This study evaluated the efficacy of organizational change effect on university employees' performance in Federal University Wukari, Taraba State. Descriptive survey design was adopted by the study. A sample of 346 employees out of 1903 academic and non-academic staffs of the institution were surveyed in the study. The study used descriptive and inferential statistics to analyze the collected data. The inferential statistics used was simple linear regression. The study found that organizational change in terms of structural, leadership and technological changes had positive and significant effect on university employees' performance in terms of job efficacy, job effectiveness and service timeliness respectively. In line with the findings, the study recommended continuous use and adoption of structural, leadership and technological changes in the university system to ensure employees' efficient performance.

Keywords: employees' performance, leadership, structural and technological changes

Introduction

The dynamism of human behavior and complexity on managing organizations couples with competitions have made change to be inevitable in the life of organizations. Irrespective of owners of an institution, management are faced to bring about change that will increase employee performance to attain organizational objectives. The management of any change is widely varied and diverse in different forms of business. Advancement in technological change and rapid innovation has given rise to further resistance in the corporate culture that makes it imperative for the mitigation of the negative effects of employee reactions in the implementation of change in process, workflow, and technology (Craine, 2007). Organizations must change because their environments changes such as functions and strategy. Employees' readiness and willingness, support and commitment to the organizational ideals during the periods of significant internal and external shifts in the organization's structure to ensure organizational efficiency. Organizations must not rush in introducing a change, the process must be slow, steady and thorough (Fajana, 2002). According to Armstrong, (2004) ^[3] Change signifies the willingness of the affected parties to embrace and function in a newly established order and their commitment to effect and implement the changes.

Kitur (2015) ^[4] opined that change in an organization can be informs of merger, acquisition, joint venture, new leadership, technology implementation, organizational restructuring, and change in products or regulatory compliance in the organization. The causes of the change determine the length of the plan of the change. Change may be planned years in advance or may be forced upon an organization. It may be radical and alter the way

an organization operates, or it may be incremental and slowly change.

The increasing complex world has made change to become inevitable for organizations. The high rate of technological growth, globalization, competition and economic forces have fueled changes in the business environment. Universities also forced to changes in other to meet up with the global best practices. Organizations need to keep up with rapid developments across the globe in order to survive. Universities these days have become more technology driven than ever before. Thus, requires stakeholder to be open and willing to change and once the organizations decide to undergo a radical change, considerable effort is required to manage it for better result.

Statement of the Problem

The increasing complex world has made change to become inevitable for organizations. The high rate of technological growth, globalization, competition and economic forces have fueled changes in the business environment. Universities are also forced to changes in other to meet up with the global best practices. Organizations need to keep up with rapid developments across the globe in order to survive. Universities these days have become more technology driven than ever before. Thus, requires stakeholder to be open and willing to change and once the organizations decide to undergo a radical change, considerable effort is required to manage it for better result. The high rate of competition in educational environment across the globe has brought numerous changes in many businesses these days.

Managers of organization are now facing the challenge of coping up with the competition by initiating many changes.

Over the years, university environments have produce change in the workplace more suddenly and frequently than ever before ranging from new technology introduction, restructuring, and leadership changes, yet the contribution of such changes to the growing climate of education remain uncertain. Many universities still perform below expectation in terms of quality of students, timeliness on the job and employees' satisfaction. Therefore, it is important to evaluate the efficacy of organizational change effect on university employees' performance in Nigeria universities.

Objective of the Study

The broad objective of the study is to evaluate the efficacy of organizational changes effect on university employees' performance in Federal University Wukari while the specific objectives of the study are to;

1. Determine the effects of technological change on employees' job efficacy.
2. Verify the effects of leadership change on employees' job effectiveness.
3. Evaluate the effect of structural change on employees' service timeliness.

Research Questions

Based on the research problem and objectives, the following research

1. What is the effect of technological change on employees' job efficacy?
2. What is the effect of leadership change on employees' job effectiveness?
3. What is the effect of structural changes on employees' service timeliness?

Research Hypothesis

The followings hypotheses were formulated for testing by the study.

1. H₀₁: Technological change does not have a significant effect on employees' job efficacy.
2. H₀₂: Leadership change does not have a significant effect on employees' job effectiveness.
3. H₀₃: Structural change does not have a significant effect on employees' service timeliness.

Conceptual Framework

Concept of Organizational Change

The term organizational change has been conceptualized by many researchers in different perspectives though they projected the concept new approach to usual in an establishment. Change encompasses series of events which supports the process of development in organizations (Kassim, Tahajuddin, Shahzad, Isa & Mat, 2010) ^[15].

In every organization, there exist mission and vision and for organization to actualize them, there must be a well- designed and functioning organizational structure. It is inevitable for organizations to go through changes, because if there are flaws in the structure that will affect communication flow, unclear roles or role conflicts that is liable to lowers motivation and work morale of the employees. The changes in structure may arise as a

result of drift departments apart from common organizational goal, where decision making processes becomes slow and employee effectiveness disappears. McLagan (2002) ^[17] outlined three major types of changes in the organization structure which is known as 3Ts.

Transactional changes: this type of changes only need minor interventions, for example, training or changing the incentive system, switching software in an organization.

Transitional changes: Transitional change is a type of change that is complex in nature and require change in roles/responsibilities, power bases and systems. A good example of this type of change could be opening a new plant in another location, where more detailed planning and expertise is needed in the same organization.

Transformational changes: This Type of change requires redesigning the entire organization, especially the fundamental beliefs and norms, in order to adapt to global business demand in order to meet up with competitors.

According to McNamara, (2011) ^[18] organizational change means rightsizing, new development and change in technologies, rescheduling operations and major partnerships in organization. Organizational change occurs when the organization undergone a transfer of executive power (Haveman, Russo & Meyer, 2001) ^[11]. The concept specifically sees changes in only leadership perspectives without considering technological and other non-technological changes. Organizational change includes operational changes, structural change, technological changes and leadership change which may include change in leadership style. The excess of organizational change is to achieve organizational goal in order to attain its mission and vision. However, when there is a strategic change of organizational goal as a result of merger or acquisition therefore there is likely to be changes of mission and vision of the organization.

Reasons for organizational change

Many reasons ranging from globalization, economic, political, competition and dynamism of consumer test have necessitated changes in many organizations which universities are no exception. Jones, (2004) ^[13] opined that organizational change occurs as a reaction to an ever-changing environment or as a response to a current crisis situation in the organization. On the other hand, a more proactive viewpoint is that it is triggered by a progressive manager.

Organizational change can be explained by any of the following theories: teleological theory, life-cycle theory, and dialectical theory (Van de Ven & Poole 1995) ^[22]. Teleological perspective believes that organizational change is an attempt to achieve an ideal state through a continuous process of goal-setting, execution, evaluation, and restructuring in organization to attain its vision. Life-cycle theory is of the view that organization is an entity that depending on the external environment reaction, cycles through stages of birth, growth, maturity, and decline while dialectical theory argued that the organization is like a multi-cultural society with opposing values. When one particular force dominates over others, a new organizational value and goal is established that however, results on organizational change. The major factor causing change or being used as a change agent is change in technology (Rees & Porter, 2008) ^[20].

Leadership is also an influential force for change within organizations. The style of leadership impacts the group dynamic

and also interacts with its members. The leaders and followers in organization influence each other and thereby brings about change in the organization. For instance, the actualization of vision depends on the incorporation of suitable strategy and the organizational cultures. Therefore, in the process of organizational change, the “systematic viewpoint” has to be taken so that there will be synergy among parties to ensure change targets can be considered as a whole to achieve the organizational change successfully.

Types of organizational change

The major problem faced by many top management and contemporary managers of organizations and educational institution is the type of change to introduce and get positive and better result. The changes that managers can adopt to help their organizations achieve desired future status is categorized into two: evolutionary change and revolutionary change.

Evolutionary change according to George, and Jones, (2007) ^[13] is gradual, intermittent, and narrowly-focused change which aimed at making continuous improvement in order to adjust to the environmental changes. Revolutionary change is rapid, dramatic, and broadly focused change. This type of change happens when the current operation method can no longer fulfill the demand of the external environment, and a significant change has to be made in a short period of time to keep the organization working toward its goal (George, and Jones, 2007) ^[13].

A known type of evolutionary change is socio-technical systems theory, total quality management, and management by objectives (George, & Jones, 2002; Yang, Zhou, & Yu, 2009) ^[13]. Socio-technical systems theory emphasizes the relevant of the social and technological aspects in the organizational change process to ensure optimal partnership between members/workers of the organization and its technology. Total quality management (TQM) is an ongoing and constant effort by all the organizational functions to find new ways to improve the quality of the organization’s good and services (George, and Jones, (2007) ^[13]. Management by objectives (MOB) postulates the importance of regular meetings between management and its subordinates to assess future work goals, evaluate work performance, and discuss challenges and obstacles in an attempt to motivate work efficacy and coherence in an establishment (Cummings, & Worley, 2001) ^[8].

Organizational change processes

The processes of organizational change irrespective the type, either evolutionary or revolutionary change, managements face the problem of getting the organization to change. Force Theory of change proposed three-step process for successful organizational change: unfreezing, moving, freezing (as cited in George & Jones, 2002) ^[13].

Unfreezing starts from the members’ understanding of the organizational crisis or vision that motivates them to change, unfreezing however, need to go through three different stages.

1. There must be enough information indicating that the current organizational condition is not ideal.
2. The information has to be related to the important goal of the organization, thus elicits members’ anxious feeling.
3. Solution has to be proposed that will reduce the members’ insecure feeling and resistance to change (Schein, 1992) ^[21].

Moving on the other hand is taking certain actions to transform the organization to an expected condition. The moving process involves goal setting, support seeking, resource finding, planning and execution. The planning and execution must be channeled toward organizational goals. Moving is categorized into problem-solving orientation, and vision orientation. The organization may adapt either one based to their specific and peculiar situations.

Freezing is to stabilize the change achieved in organization’s moving stage. The individual, the department, and the organization, all have an inertial way of thinking and doing something, so therefore the change achieved in moving state will return to the status quo ante if freezing is not done. That however, become the new rules that regulate members’ new behavior directly, reinforce appropriate responses, to internalize the new value or behavior into the organizational culture.

Technological change

Technological change is the most rapid and fast spreading change in Nigeria universities and other organizations in Nigeria. Technological change comprises the use of automation and other capital-intensive production devices. Such change transforms the nature of human interaction with work (Krell, 2006). Many organizations have undergone a revolution in the adoption and application of complex technology to extract the greatest value that innovations and technology provides for organizations. The swift technology enhancement unintentionally reduces the presumed lifespan of many Information Technology (IT) systems (Wanza and Nkuraru 2016) ^[23]. Organizations build and rebuild their existing IT systems in response to market changes and gain competitive edge. Nowadays, there exist more technology than ever before with technological changes increasing at an accelerating pace also. The amalgamation of data processing, communications and the advances of software allows universities to gain a competitive advantage, improve performance of workers in terms of effeteness, timeliness and accuracy. The use of information technology is now shifting from a supportive role to a more strategically oriented role in organizations (Lucas & Turner, 2002).

The advent of Technology especially computer-based information systems and internet continues to revolutionize how customers are served, employees communicate and networks with each other and external stakeholders in an organization (Solocum & Heuriegel, 2007). Technological changes often result in considerable changes to systems and processes where different skills may require and new methods of working must be developed. The new skill can be acquired through recruiting new staff or training existing one. Technological change transforms the nature of the marketplace by changing the relative cost, features and availability of products (Armstrong, 2006) ^[3]. Therefore, it involves change on product quality and quantity. It is expected that such changes should improve the quality of university students and Nigeria graduates as well. Technological changes may be an extension of the skills base of the organization and its employees, including multiskilling however it could result in downsizing in an organization (Armstrong, 2006) ^[3].

Structural Change

Structure of organization is a framework for getting things done in an organization and consists of units, functions, divisions, departments and formally constituted work teams into which

activities related to particular processes, projects, products, markets, customers, geographical areas or professional disciplines are grouped together (Armstrong, 2006) ^[3]. In the university, the structure includes all the various unit in the administrative section under the registrar and the academic section, made up of faculties and departments. Structure is a statement from senior management indicating how the firm works (David 2006). Thus, the structure of the firm shows the chain of command and the flow of information within an organization. It is a trends towards team working, empowerment, total quality management, etc. a good structure facilitates these initiatives.

Organizational structure indicates who is accountable for directing, coordinating and carrying out these activities. It outlines and defines management hierarchies the 'chain of command' thus spelling out, broadly, who is responsible to whom, for what, and at each level in the organization (Armstrong, 2006) ^[3]. Organizational structure is a powerful tool in mobilizing resources in both an efficient and effective manner. Rees and Porter (2008) ^[20] opined that the impact of globalization and technology has led to the development of more flexible organization structures.

Employee's position in the organizational hierarchy is an important structural variable, which influences a range of organizational culture and employee attitudes and behaviours for instance, differences in the way organizational communication is perceived are often dependent on the superior or subordinate status of employees (Martin, Jones & Callan, 2006) ^[13]. In addition, Rees and Porter (2008) ^[20] state that changes in structure often have a significance on pay determination where devolution of authority to managers in semiautonomous business units has given greater control to ones' wages and work arrangement.

Organizational Leadership and Employee Performance

Over the years, employees have been recognized as the organizations' human resources which control all other resources of the organizations toward attainment of it goals. Employees are the most important assets in organizations, which without, the goals and objectives of the organizations may not be attained (Bello, 2012) ^[6]. Effectiveness of employees depends on the qualities of leadership the organization can offer. Leadership is one of the key driving forces for improving employee performance as well as firm performance. Leaders are the key decision-makers, determine the acquisition, development, and deployment of organizational resources, the conversion of these resources into valuable products and services to satisfy a need and also deliver the value to organizations' stakeholders.

Review of Empirical Literature

Structural Change and Employee Performance

Kansal and Singh (2016) ^[14] studied impact of organization change on employees' performance in maruti Suzuki. The study collected data from 200 employees using questionnaires. Chi square analytical tool was adopted for the study and the study revealed that both male and female employees are having deep impact of organizational change on their performance. It was also showed on the study that different departments are having effective impact of organizational change on their performance. Thus implies that organizational change influences employees' effective performance.

The study failed to state the population and how it derived the sample size of 200 employees. It could have analyzed data with regression to appropriately determine relationship of the variables. It was conducted in a private company and outside Nigeria giving room for replication of such in Nigeria public sector. The study failed to measure employee performance with any performance indicator thereby making the findings inappropriate to the objective of the study.

Csaszar (2008) ^[7] carried out a study to tested a model of how organizational structure influence organizational performance. The study conceptualized organizational structure as the decision-making structure among a group of individuals. The empirical setting was over 150,000 stock-picking decisions made by 609 mutual funds. The study revealed that organizational structure has relevant and predictable effects on a wide range of organization effectiveness.

Hao, Kasper and Muehlbacher (2012) ^[10] carried out study to investigate the relationship between organizational structure and performance Austria and China. Performance was measured through organizational learning and innovation. The study set up structural equation model through a questionnaire survey and sample of about 90 Austrian and 71 Chinese samples. Partial least squares were used in the analysis and the results were tested by bootstrap methods. The findings of the study reinforce the important infrastructure position of organizational structure on performance. It showed that organizational structure had more effects on organizational learning than on innovation, organizational learning has an indirect effect on performance through innovation, effectiveness, except the direct effect of structure on performance. The study concluded that no matter how big or small change is in organization it affects workers either positively or negatively.

Leadership Change and Employee Performance

Wanza and Nkururu (2016) ^[23] investigated the effects change management on the performance of employees in relation to technological changes, organizational leadership, structure and culture in University of Eldoret, Kenya. The study adopted research design and a sample size of 121 employees was selected from a population of 403 employees using simple random sampling technique. Primary data was collected using questionnaires and interview schedules and the data was analyzed using descriptive statistics. The study revealed that structural changes and organizational leadership influenced university employees' efficient performance positively. It was also discovered by the study that technological changes have great impact on employees' performance as it eases employee's work load as well as increases their efficiency and effectiveness at work place.

The study failed to present the analysis result and did not explain the type of descriptive statistics used in the study. The study would have used inferential statistics to determine the effect of independent variable on dependent variable. The study would have used a mathematical sample size to determine the minimum sample size instead of using simple random sampling technique. Hurduzeu (2015) ^[12] opined that effective leadership involves motivation, management, inspiration, remuneration and analytical skills. He argued that the present of involves motivation, management, inspiration, remuneration and analytical skills increase employee satisfaction that will

positively influences the productivity and profitability in the organization. Thus, the need to increase employee performance in the universities, management of universities need to promote creativity and innovation, stimulate the subordinates to challenge their own value systems and improve their individual performance contribution.

A study was carried out in university libraries in Jordan by Al-Jaradat, Nagresh, Al-Shegran and Jadellah (2013)^[2] to identify the impact of change management on employee's performance. The study used organizational structure, technology change and change in individuals to proxy change. Structured questionnaire was the primary data used for the study. 220 employees were randomly selected as the sample 220 questionnaires were distributed on the members of the sample. The study discovered that change in the organizational structure is not flexible, and existing organizational structure is not appropriate for the business requirements within the University Library, leading to overlapping powers and responsibilities. The study further revealed a positive relationship between the areas of change (organizational structure, technology, individuals) and the performance of workers at a level $\alpha = 0.05$ with 0.589, 0.648, 0.711 correlation coefficient respectively. The study recommended that in order to ensure the success of the change program, university management should focus on organizational structure, human relations and technology and there must be a balance between these aspects to improve the performance of employees and this in turn reflects the quality of productivity in the university.

Technological Change and Employee Performance

Olajide (2014)^[19] investigated the effects change management on organizational performance in Nigerian telecommunication industries. A sample size of 300 respondents from 1000 population comprising managers, supervisors, operating staff and customers of Airtel communication Nigeria was selected for the study. Data collected for the study were analyzed using One-way Analysis of Variance (ANOVA). The result revealed that changes in technology has a significant effect on performance and that changes in customer taste has a significant effect on customer's patronage while changes in management via leadership has a significant effect on employee's performance in terms of timely service delivery.

The study was conducted on telecommunication sector and the outcome cannot be generalized on public university which this study investigated.

Ayodeji and Adebayo (2015)^[5] carried out study on the nexus of change management on organizational performance and survival in Nigerian Universities using University of Ilorin as a case study. Questionnaire was the primary data used to collect data from 250 respondents that made up of 200 students and 50 staff of the University. The sample size of 250 was selected through the use of random sampling technique from various faculties (Arts, Social Sciences, Sciences, Engineering, and Agriculture) in the University. The data collected was analyzed using the parametric statistical technique, such as Spearman Rank order correlation and Pearson's product-moment correlation to test the formulated hypothesis. The study found a strong negative relationship between changes introduced through computer-based test in the University. This result further confirmed that a very strong

negative relationship exists between changes introduced through computer-based test in the University.

The researcher failed to establish the study objective in line with its top and thereby resulted to biased finding and recommendation. The study did not use any sample size formula like taro Yamane and Smith (1984) to arrive on its sample size and thereby reduced its value. It also failed to justify the proportion of 250 sample to of 200 students and 50 staff of the University.

Dauda and Akingbade (2011)^[9] carried out a study to examined the effect of employee relation on technological change management. The objective of the study was to determine the effective method of using technological innovation for improved performance in manufacturing industry in Nigeria. The formulated question based on the hypotheses 1256 questionnaires were distributed to the randomly select 30 manufacturing industry in beverages, textile, steel, cement and chemical industry in Nigeria. The study revealed that employee relations do not have significant relationship with technological change.

Abbas, Muzaffar, Mahmood, Ramzan and Rizvi (2014)^[1] carried out empirical study to examined the effects of information technology on performance of Allied Bank employees in Pakistan. Primary data was used for the study and the data was gathered through unstructured interviews. It was discovered that technology greatly escalates the productivity of employees through time saving. It equally reduces the workload on employees and ensures control over mistakes and frauds. Abbas *et al.* opined that quick access to information and ease of use enables the bank employees to deliver quality and timely service. Abbas *et al.* also argued that organizations which implement new technology should provide proper training to its employees to increase their fast performance.

Theoretical Framework

Lewin's Three-Step Change Theory

Lewin (1951)^[16] developed three-step change model. Lewin as social scientist views behavior as a dynamic balance of forces working in opposing directions. That driving forces facilitate change because they push employees in the desired direction and restraining forces hinder change because they push employees in the opposite direction. Thus, to balance the direction of the planned change, these forces must be analyzed using Lewin's three-step model.

Lewin (1951)^[16] model outlined that the first step in the process of changing behavior is to unfreeze the existing situation or status quo. Unfreezing process mean that organization should get accustomed with a new organization and its procedures. The reason for unfreezing is to create the motivation to change. This phase is in support of cognitive learning theory that human behavior is established by past observational learning and cultural influences. Unfreezing is necessary to overcome the strains of individual resistance and group conformity. management need to devise ways to reduce the barriers to change during this stage. In the university system the resistance to change may not only come from employees but also from student.

The second step of the model in the process of changing behavior is movement. Because change involves learning, this stage entails providing employees with new information or new ways of looking at things.

The third step of according to Lewin’s three-step change model is refreezing. Refreezing is changing what needs to be changed (unfrozen and moving to a new state) and making the change permanent in the organization (refreezing). That thus makes change is stabilized and thereby help employees integrate the changed behavior or attitude into their normal way of doing things.

Lippitt, Watson, & Westley (1958)^[17] extend Lewin’s three-step change theory to seven-step theory that focuses more on the role and responsibility of the change agent than on the evolution of the change itself. The seven steps outlined by Lippitt, Watson, & Westley (1958)^[17] are:

1. Diagnose the problem.
2. Assess the motivation and capacity for change.
3. Assess the resources and motivation of the change agent. This includes the change agent’s commitment to change, power and stamina.
4. Choose progressive change objects.
5. The role of the change agents should be selected and clearly understood by all the parties so that expectations are clear.
6. Maintaining the change. Communication, feedback and group coordination are essential elements in this step of the change process.
7. Gradually terminate from the helping relationship. The change agent should gradually withdraw from their role over time. This will occur when the change becomes part of the organizational culture (Lippitt, Watson, & Westley 1958)^[17].

Methodology

Research Design

This study adopted survey research design to evaluate the efficacy of organizational change effect on university employees’ performance in Federal University Wukari, Taraba State.

Population of the Study

The population of the study is 1903 academic and non-academic staffs of Federal University Wukari, Taraba State.

Sample

In order to determine the appropriate sample that can properly represent the population, Yamane (1970) minimum sample size formula was used.

$$n = \frac{N}{1+Ne^2}$$

Where;

n = Minimum sample size;

N = Population size;

e= Level of precision required;

1 = constant

Note: Confidence interval = 95 % and e = Margin of error = 0.05

Below is the substitution of the formula to derive the minimum sample size for the study.

$$n = \frac{1903}{1+1903 \times 0.05^2} \quad n = \frac{1903}{1+1903(0.0025)} \quad n = \frac{1903}{1+1903(0.0025)} \quad n = \frac{1903}{1+4.7575} \quad n = \frac{1903}{5.7575} \quad n = 331$$

The minimum sample size of the study is 331 employees but the study sampled 360 employees of federal university wukari.

Instrument of the Study

The instrument of the study was primary data. Questionnaires were structured in a 5 Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to measure the three hypotheses formulated for the study. It was used for the study because qualitative analysis results provide support for anticipated directions of the effect between independent variable (organizational change) and dependent variables (performance). The instrument was subjected to validity and reliability text before it was administered for the study.

Validity

Content validity was adopted for the study. A professor and a senior lecturer both in business management in Nigeria university validated the structured questionnaire before it was administered to the respondents of the study.

Reliability

A pilot study was conducted in faculty of humanities, management and social sciences to ensure suitability and reliability of the instruments. The pilot study shows that the research instrument of the study is reliable for the study. Table below shows the reliability test result of the study.

Table 1: Result of Reliability Test

Variables	Cronbach's Alpha	No. of Items
Structural change	0.814	4
Leadership change	0.717	4
Technological change	0.826	4
Employees’ job effectiveness	0.831	4
Employees’ job efficiency	0.782	4
Employees’ timely service delivery	0.811	4

Source: Computed result using SPSS, 2019

Result of the reliability on the table one showed that the research instrument of the study reliable. The result shows that the Cronbach Alpha value for the structural change indicant was 0.814. The table equally showed that Cronbach Alpha value for leadership change instruments was 0.717. The result also revealed Cronbach Alpha value of 0.826 for technological change. Employees’ job effectiveness questions were equally tested and it yielded a Cronbach Alpha value of 0.831. Instruments on employees’ job efficiency and Employees’ timely service delivery recorded Cronbach Alpha value of 0.782 and 0.811 respectively. Thus implies that the instruments used in measuring the indicants were reliable enough to conduct the research hence their Alpha values were above 0.70 which is the minimum Alpha recommended by Cronbach (Schaums, 2003).

Data Collection

Three hundred and sixty (360) structured questionnaires were randomly administered to the respondents (both academic and non-academic staffs) of federal university wukari. A total of 252 (70%) of the instrument was randomly administered by the researcher directly to academic staffs of the university in the various departments while 108 (30%) of the instrument was also randomly administered to non-academic staffs in the various units of the university. The parity on the proportion of the respondents is based on the estimated proportion of the academic and non-academic staffs in the institution. The direct contact of

the researcher and the targeted respondents helped in achieving the respondents' corporation for effective and efficient return the questionnaires.

Analysis

The information generated from the respondents were numerically coded for analysis. Descriptive and inferential statistic were used to analyze the coded data. Ordinary least square (OLS) simple regression through the help of SPSS was used for the study. It was used because ordinary least square (OLS) is the best linear unbiased estimator (BLUE) which has the capacity to estimate the effect of independent variable on the dependent variable.

Model Specification

From the inference taking on empirical findings and theories, which has been derived from the theoretical exposition and then making employees' performance central to the equation, a model was drawn up to determine university employees' performance in federal university Wukari. In-line with the three hypotheses earlier formulated for the study, the model of the equation is expressed as:

$$UEP = \beta_0 + \beta_1 SC + \mu$$

$$UEP = \beta_0 + \beta_1 LC + \mu$$

$$UEP = \beta_0 + \beta_1 TC + \mu$$

Where;

UEP = University Employees' Performance

SC = Structural Change

LC = Leadership Change

TC = Technological Change

β_0 = Unknown constant to be estimated

β_1 = Unknown coefficients to be estimated

μ = Error term

Presentation of Results and Interpretation

A total of three hundred and sixty (360) structured questionnaires were distributed academic and non-academic of Federal University Wukari (the respondents). Only 346 (96%) of the questionnaires were completely filled and returned. The researcher however, used them for analysis because the 96% returned (346) is above the minimum sample size (331) of the study from Yamane sample size formula calculated above.

Table 2: Sex of the Respondents

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
Male	202	58.4	58.4	58.4
Female	144	41.6	41.6	100.0
Total	346	100.0	100.0	

Source: Field Survey, 2019.

Table two outlined the sex of the respondents and showed that out of 346 employees of Federal University Wukari that were sampled for the study, 202 representing 58.4% are male while 144 respondents representing 41.6% are female. Following outcome of the random sampling technique, it implies that more males were employed in the university than female.

Table 3: Age of the Respondents

Age	Frequency	Percent	Valid Percent	Cumulative Percent
Below 25 Years	11	3.2	3.2	3.2
25 - 34 years	47	13.6	13.6	16.8
35 - 44 years	132	38.2	38.2	54.9
45 - 54 years	105	30.3	30.3	85.3
55 - 64 years	51	14.7	14.7	100.0
Total	346	100.0	100.0	

Source: Field Survey, 2019.

Table three above revealed the age grade of the respondents. It showed that out of 346 employees of federal University Wukari sampled for the study, 11 of them representing 3.2% are below the age of 25 years, 47 of the respondents representing 13.6% are between the age range of 25 to 34 years, 132 of the respondents representing 38.2% are between 35 to 44 years old. The study also showed that 105 respondents representing 30.3% are within the age range of 45 to 55 years while 51 of the respondents representing 14.7% of the respondents are within the age range of 55 to 64 years old.

Table 4: Academic Qualification of the Respondents

Qualification	Frequency	Percent	Valid Percent	Cumulative Percent
SSCE	23	6.6	6.6	6.6
NCE/OND	36	10.4	10.4	17.1
B. Sc./HND	39	11.3	11.3	28.3
Masters/PGD	115	33.2	33.2	61.6
Ph. D	133	38.4	38.4	100.0
Total	346	100.0	100.0	

Source: Field Survey, 2019.

Table 4 showed academic qualifications of the respondents, the study revealed that 23 of the employees sampled for the study representing 6.6% of the total respondents are SSCE holders. Also noted is that 36 of the respondent representing 10.4% are either NCE or OND holders. 39 of respondents representing 11.3% of the respondents are either B. Sc. or HND holders. It also showed that 115 of the respondents representing 33.2% of the respondents are either Master Degree or Post Graduate Diploma (PGD) holders while 133 of the respondents representing 38.4% are Ph. D holders. The outcome showed that majority of the employees sampled attended post graduate school while the implication is that they are experience employees.

Test of Hypotheses

Three null hypotheses were formulated and tested in this study. In testing the hypothesis which partly satisfies the objective of this study, the study adopts 5% level of significance and conclusion would however, be taken based on the probability values (PV). The decision rule is that we shall accept the null hypothesis if the P-value is greater than the 0.05 (5% level of significance) otherwise, we reject the null hypothesis. This implies that if the PV is less than 5% or 0.05 (that is $PV < 0.05$), the variable in question is statistically significant at 5% level and null hypothesis should be rejected.

Hypothesis One

H₀₁: Structural change has no significant effect on employees' job efficiency in federal university Wukari

Table 5: Model Summary on Structural Change effect on University Employees' Job Efficiency

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.725 ^a	.526	.525	.90018

a. Predictors: (Constant), Structural Changes
 Author's Computation Using SPSS, 24 (2019)

Table 6: ANOVA on Structural Change effect on University Employees' Job Efficiency

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	309.356	1	309.356	381.768	.000 ^b
Residual	278.751	344	.810		
Total	588.107	345			

a. Dependent Variable: Employees' Job Efficiency
 b. Predictors: (Constant), Structural Changes
 Author's Computation Using SPSS, 24 (2019)

Table 7: Coefficients on Structural Change effect on University Employees' Job Efficiency

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.031	.100		10.300	.000
Structural Changes	.744	.038	.725	19.539	.000

a. Dependent Variable: Employees' Job Efficiency
 Author's Computation Using SPSS, 24 (2019)

The result of the regression indicates structural change effect on university employees' job efficiency in Federal university Wukari, Taraba State Nigeria. The result showed a high and positive relationship (R=0.725) between the independent variable (structural change) and the dependent variable (employees' job efficiency). The result showed R-squared value of 0.525 indicating that structural change explains 52.5% of the total variance in the employees' job efficiency in Federal university Wukari. The analysis of variance result indicates that the model is fit given the F-test (381.77, p=0.000) indicating a statistically level of significance as p<.05. This implies that structural change has significant effect on employees' job efficiency in Nigeria university.

The model's coefficient values from the regression, shows the model was fitted as $Y = 1.031 + 0.744X$; Where Y= employees' job efficiency; X = structural change. This implies that given the model, when all the other factors are constant, employees' job efficiency will have 1.031% increase when structural change increases by 74.4. The standardized beta coefficient provides that structural change contributes 72.5% to employees' job efficiency in Federal university Wukari. Therefore, we reject the null hypothesis and concludes that structural change has significant effect on employees' job efficiency in Federal university Wukari.

Hypothesis Two

H02: Leadership change has no significant effect on employees' job effectiveness in Federal University Wukari

Table 8: Model Summary on Leadership Change effect on University Employees' Job effectiveness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.838 ^a	.703	.702	.68830

a. Predictors: (Constant), Leadership Change
 Author's Computation Using SPSS, 24 (2019)

Table 9: ANOVA on Leadership Change effect on University Employees' Job Effectiveness

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	384.937	1	384.937	812.518	.000 ^b
Residual	162.973	344	.474		
Total	547.910	345			

a. Dependent Variable: Employees' Job Effectiveness
 b. Predictors: (Constant), Leadership Change
 Author's Computation Using SPSS, 24 (2019)

Table 10: Coefficients on Leadership Change effect on University Employees' Job Effectiveness

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.789	.096		8.233	.000
	Leadership Change	.811	.028	.838	28.505	.000

a. Dependent Variable: Employees' Job Effectiveness
 Author's Computation Using SPSS, 24 (2019)

The regression result above indicates the leadership change effect on university employees' job effectiveness in Federal university Wukari, Taraba State Nigeria. The result showed a high and positive relationship (R=0.838) between the independent variable (leadership change) and the dependent variable (employees' job effectiveness). The result showed R-squared value of 0.703 indicating that structural change explains 70.3% of the total variance in the employees' job effectiveness in Federal university Wukari. The analysis of variance result indicates that the model is fit enough given the F-test (812.518, p=0.000) indicating a statistically level of significance as p<.05. This implies that leadership change has significant effect on employees' job effectiveness in Nigeria university.

The model's coefficient values from the regression, shows that the model was fit as $Y = 0.789 + 0.811X$; Where Y= employees' job effectiveness; X = leadership change. This implies that given the model, when all the other factors are constant, employees' job effectiveness will have 0.789% increase when leadership change increases by 81.1. The standardized beta coefficient provides that structural change contributes 83.8% to employees' job effectiveness in Federal university Wukari. Therefore, we reject the null hypothesis and concludes that leadership change has significant effect on employees' job effectiveness in Federal university Wukari.

Hypothesis Three

H03: Technological change has no significant effect on employees' service timeliness in Federal University Wukari

Table 11: Model Summary on Technological Change effect on University Employees' Service Timeliness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.785 ^a	.616	.615	.86939

a. Predictors: (Constant), Technological Changes
Author's Computation Using SPSS, 24 (2019)

Table 12: ANOVA on Technological Change effect on University Employees' Service Timeliness

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	417.797	1	417.797	552.757	.000 ^b
Residual	260.009	344	.756		
Total	677.806	345			

a. Dependent Variable: Employees' Service Timeliness

Predictors: (Constant), Technological Changes

Author's Computation Using SPSS, 24 (2019)

Table 13: Coefficients on Technological Change effect on University Employees' Service Timeliness

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.730	.097		7.555	.000
Technological Changes	.865	.037	.785	23.511	.000

a. Dependent Variable: Employees' Service Timeliness

Author's Computation Using SPSS, 24 (2019)

The regression analysis above shows the technological change effect on university employees' service timeliness in Federal university Wukari, Taraba State Nigeria. The result showed a high and positive relationship ($R=0.785$) between the independent variable (technological change) and the dependent variable (employees' service timeliness). The result showed R-squared value of 0.616 indicates that technological change explains 61.6% of the total variance in the employees' service timeliness in Federal university Wukari. The analysis of variance result indicates that the model is fit enough given the F-test (552.757 , $p=0.000$) indicating a statistically level of significance as $p<.05$. This implies that technological change has significant effect on employees' service timeliness in Nigeria university.

The model's coefficient values from the regression, shows that the model was fit as $Y = 0.730 + 0.865X$; Where Y = employees' service timeliness; X = technological change. This implies that given the model, when all the other factors are constant, employees' service timeliness will have 0.73% increase when technological change increases by 86.5. The standardized beta coefficient provides that structural change contributes 78.5% to employees' service timeliness in Federal university Wukari. Therefore, we reject the null hypothesis and concludes that technological change has significant effect on employees' service timeliness in Federal university Wukari.

Discussion of Findings

This study was carried out to evaluate the efficacy of organizational change effect on university employees' performance in Nigeria. The study was of the view that,

Organizational change has no significant effect with University employees' performance. To statistically verify the above, Linear Regression with the aid of SPSS was used to analyze data collected from respondents to test the three hypotheses earlier formulated for the study. On the hypothesis one, the study found that there is positive and significant effect of structural change on university employees' job efficiency in Federal University Wukari. Therefore, we reject the null hypothesis and concludes that structural change has significant effect on employees' job efficiency in Federal university Wukari. This implies that structural change in terms of unit creation, departmentalization etc. enhance employees' job efficiency in Federal university Wukari. This finding is in agreement with the findings of Hao, Kasper and Muehlbacher (2012) ^[10] that investigated the relationship between organizational structure and performance of Austria and China firms and found that organizational structure aids firms' efficiency.

On the hypothesis two, the study found that leadership change has positive and significant effect on employees' job effectiveness in Federal university Wukari. This implies that changes in the head of affair and job rotation increases employees' job effectiveness in the university. The finding is in line with the previous finding by Wanza and Nkuraru (2016) ^[23] who investigated the effects change management on the performance of employees in relation to technological changes, organizational leadership, structure and culture in University of Eldoret, Kenya.

The third hypothesis which investigated technological change and employees' service timeliness, found that technological change has significant effect on employees' job effectiveness in Federal university Wukari. This implies that adopted new technologies in the universities increases employees' service timeliness thereby increases their productivities. This finding concurred with the finding of Olajide (2014) ^[19] who investigated the effects change management on organizational performance in Nigerian telecommunication industries. Also in agreement with the finding is the finding of Ayodeji and Adebayo (2015) ^[5] investigated the nexus of change management on organizational performance and survival in Nigerian Universities using University of Ilorin as a case study, both study found positive relationship between technological change and employees' performance.

Conclusion

The study investigated the effect of organizational change on university employees' performance in Nigeria university. The study conceptualized organizational change into structural change, leadership change and technological change while employees' performance was proxied by employees' job efficiency, employees' job effectiveness and employees' service timeliness. The study concluded that, organizational change has significant effect on employees of Federal university Wukari's performance. The conclusion is based on the hypotheses result. On the first hypothesis, the regression analysis in the table indicates the $p = 0.000$. This analysis results support the rejection of null hypothesis and uphold the alternative hypothesis since the probability value (p -value) is less than 0.05 ($p = 0.000 < 0.05$). Therefore, the alternative hypothesis which states that structural

Change has significant effect on employees, job efficiency was accepted.

On the second hypothesis, the linear regression analysis in the table gives results of p-value = 0.000. Thus, because the probability value (p-value) is less than 0.05 ($p = 0.000 < 0.05$) which is the minimum level of null hypothesis acceptance, the null hypothesis is rejected and the alternative hypothesis is accepted. This implies that, leadership change has significant effect on employees' job effectiveness.

The third hypothesis was tested in linear regression analysis and the results showed p-value of 0.000. Thus, because the probability value (p-value) is less than 0.05 ($p = 0.000 < 0.05$) which is the minimum level of null hypothesis acceptance, the null hypothesis is rejected and the alternative hypothesis is accepted. This implies that, technological change has significant effect on employees' service timeliness.

Recommendations

Based on the findings of the study, the study recommends the followings:

1. Management of universities should sustain structural change that will give employees a shorter span of control and make them efficient on their job.
2. The study recommends that leadership position should be flexible and subject to changes to ensure employees' job effectiveness.
3. The study also recommends that university system should continue to embrace technological growth by adopting newer technologies on its management practices hence, technological changes has proved positive effect on employees' service timeliness.

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