



INFORMATION TECHNOLOGY MANAGEMENT COMPETENCIES AND THE PERFORMANCE OF UNIVERSITY WORKERS: A STUDY OF NIGER DELTA UNIVERSITY

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Abstract

The study was designed to examine the Information Technology Management and Competencies in workers' performance in University Workers: A study of Niger Delta University. The objective was to evaluate the influence of technical training, use of technology gadgets such as handling computer, and IT executive leadership on workers' performance in NDU. A survey research design was accepted for the research work. Primary data were composed for the study through the use of questionnaire. Statistics were evaluated using simple multiple regression analysis. The three hypotheses were formulated to guide the study and tested using simple linear regression statistical analysis. All the null hypotheses were rejected and the alternative accepted. The findings indicate that Information Technology Management knowledge tools like technical training, technology gadgets, the use of handling computer, and IT executive leadership have an influence on workers' competencies in NDU workers. In the process of the findings, it was suggested that in order to attained excellent workers' performance in the University workers, through appropriate training programs such as technical training, the use of handling computer, and IT executive leadership. Management should put in place, the right facilities and develop operative abilities in the Niger Delta University in Bayelsa State, thus, this will improve workers' competencies. Findings of this study showed that the need to explore information technology in various dimensions is to influence workers' performance in institutions or organizations. Also, it is a resounding success to use the tools of information technology management tools for organizational performance. It was recommended that institutions or organizations should put in more effort to trained workers on current technology for workers in their present job positions. Management of institutions or organizations should motivate workers by replacing outdated equipment. Management should also, encourage IT executives' leaders to use the right human resources to handle technology.

Keywords: Office and information management, technical training, computer, I.T executive leadership

Introduction

Information Technology Management usage have brought about new outcomes and increased of innovation of knowledge of technology participation in government, businesses, and institutions, also bring about development in the technique they function and the manner enterprises that is carried out. This is a way of fitting in to the worldwide economic and as a result, it brings about enhance efficacy and stay effective in high competent in employers' performance. Certainly, it is apparent that we are now entering an era where

unpredictable changed in information management equipment which will lead to ever-increasing sustenance organizational or institutional workers' performance. These changes will improve the way organizations or institutions function. Also, will lead to new business openings and create a need for prospects for new organizations, governments, public, and higher institutions do and will have to create policies, and set up, new facilities that will create connectivity for transmission of information management and technology for workers and patrons' effectively in business transactions and work performance. Normally, the essence of Information Technology is to enhanced work performance in comprising

the design, application, valuation, managing, and sustaining the course of vocation in the workplace or organizations, in order to maintain and progress in competence and to encourage high workers' performance. While, technology is the scientific application of tools, substances, and knowledge to solve problems, maintain, and to enhanced workers' performance.

Information Technology is basically, a technology that empowers, storage, processing networking other physical devices, communications and to generate, secure and exchange all forms of electronic data. Thus, it is the study to devise, growth, accomplishment, support, or managing of processors depending on information structures mostly software appliances and processor hardware that enables information flow in organizations or institutions.

Management competency is a useful method in which professional units use to advance competence intensity and output of its employees' performance. Therefore, IT supports employer execution to be incorporated in organizations to successfully advance in the performance and output of its employees.

Information technology such as Technical Training, Computer, and IT Executive Leadership), may enhance managerial handling, directing, and retaining a constant process work in the office of a business or institutions, which is imperative to accomplish the best services provided to the populace who determine to obtain a vast advantage (Wikipedia, 2013). Institutions generate valid capital once they come together technology and innovative methods of exploiting knowledge to make work effective.

Therefore, technology is aiding the tendency to assists to form institutions, in addition to the awaiting commercial principles that can be capable of been acknowledged (Bughin 2010; Kalakota and Robinson, 2001). Most importantly, for organizations or institutions with equipment is to observe the existence series (Utterback, 1994). Therefore, this paper examined how these variables include: technical training, Technology gadgets such as word processors, and information and IT executive leadership management competency on workers' performance of in NDU staff.

Statement of the Problem

An understanding of how to manage information management technology to be effectually and make it to possible has become an important topic for both scholars and practitioners in recent times in educational institutions. Though, it has been increasingly studied in academics, in spite of the vast innovation and development of consequent increased in venture of information management technology. It is somehow dispiriting that organizations and institutions in Nigeria seems to have problems with usage, technique, and managing information management technology, in performing their official functions. Though, if positive methods are not put in place to avert data security openings, unofficial individuals could gain contact in secret information, inadequate training or user skills, technical knowledge and

also, the right computer facilities such as to internet access, scanners, monitors, MS Office virus, when used could course a huge of quantity harm in higher institutions. Therefore, if the IT executive may not handle the usage properly it may lead to deception, also the intention why the technology is meant for, it might not serve the objective. Based on this, this study sets out to examine the Information Technology Management Competencies and the Performance of Universities Workers in Niger Delta University.

Objectives of the Study

The main objective of this study is to investigate Information Management and Technology workers' performance in NDU. Specific objectives were as follows:

- i. To examine the effect technical training on workers' performance in NDU
- ii. To ascertain the effect of computer on workers' performance in NDU
- iii. To evaluate the influence of IT executive leadership on workers' performance of in NDU

Research Questions

- i. What is the effect of technical training on workers' performance in NDU
- ii In what way does the effect of computer on workers' performance in NDU
- iii Do IT executive leadership influence on workers' performance in NDU

Research Hypotheses

- i. Ho_i: There is no significant effect of technical training on workers' performance in NDU
- ii Ho_{ii}: There is no effect of the use computer on workers' performance in NDU
- iii Ho_{iii}: There is no significant influence of IT executive leadership on workers' performance in NDU

Review of Related Literature

Information Technology Management in particular, has proved to be tremendously essential empowered for effective and efficient application for establishing of high performance in organizational or institutional growth. However, it is realistic that efficiency and productivity are to be achieved in institutions or organizations, the adoption of ITM will drive effective performance. IT management is the only definite way through which such objectives can be achieved.

Technical Training as involvement in the direction of workers' performance in NDU Staff, therefore it resolute in the proficient function of the workers' output in the course of using IT career competencies and office technology. Nworgu (2007) stated that office and information Management Technology as wide foundation of know-how as well as, techniques that use in administration and function that sustains establishment, storage, exploitation, and communiqué of data. Also, Dajur and Okoro (2011), stated that Information Technology as electrical gadgets form as processors and telephones among different capabilities for data, has develop into modern administrative organization devices. Thus, it is possible for office managers,

administrative workers, and clerks where ICT amenities are accessible, this brings about timely accomplishment of speedily desire set goals. Though, it is a signal that office and information management changes have immensely advanced the role of worker's performance in institutions. In current era, contemporary offices are open to the elements to advance technology such as the internet which make duties simpler and improve skills convenience (Edwin, 2008). This tools' brings about sending messages easier through telex fax, video conferences, electronic mails on-line teaching, and learning. On the other hand, the improvement of office and information management is a guide to make employee to work easy. However, one of the most taxing features is the attainment of the information, skillfulness, and fitness in regulating to apply the most advantageous ICT materials at its consumption. Tentatively, for the worker to be current in the office with technical transformation is by embracing the new techniques. Thus, the worker requires' training and re-training to acquire the right skills for excellent performance. Though, it is apparent that intense training would be needed as a result in supporting the important objectives of the organization in the area of ITC competencies. Although training in an organization, is instrumental to influence organization's development, therefore training is essential for organizations that approves a high-quality training programme. The organizations' would have a controlled over running the business also, have suppleness in the achievement of its actions as well a matter of constant delivery and optimistic dynamic outcomes (Kulkarni, 2013).

(Mumini & Hawa, 2014). Duniya (2011) is of the view that the 21st-century office is furnished well through office technology strategies which enable effectiveness, accurateness, and of job productivity. The accessibility of these competences in the institutions are to increase workers influence on their performance, due to the course of using processors and software to administer numerous administrative jobs. Thus, as an effect of such performance which accredited that the office and information management professionals' have undertaken remarkable revolution. Atakpa, (2010), stated that organizational roles that were formerly carried out manually have now been automated. Factually, one of the resources of technological devices, for instance, the use of computer in management and information technologies, it is of great advantage in employees' performance. Employers depend more heavily on computers, the need for paper may also reduce, and this has brought about the reduced use of paper, which lead to paperless in various institutions/organizations. This increase speed and accuracy of work processes, which improves overall workers' efficiency. Thus, documents can be written and edited much more quickly with the aid of a word processing program, and procedures, such as billing and accounting, can also occur more rapidly and with fewer errors. Computers can produce reports with great speed and allow for the easy insertion of enhancements, such as charts, graphs, and pictures if desired. This aid business in managerial duties, mainly accurate records that are updated. Computers can improve communication both within the workplace and when dealing

with customers. An e-mail can convey a large amount of information at one time and can be viewed at the convenience of the recipient. This can eliminate sometimes and continual use of telephone labels as well as the tardiness of conveying on paper information via postal letters. As a result, organizations conduct business as well as how workers perform their various tasks effectively through the use of computers. Chris (2019), postulated that organizations employees can work from a far distance rather than in their official place of business, in addition, he said this is the influence of technology.

Tony, (2006), stated that processors had increased greatly individuals' workers output and information. Various organizations today utilize the use of processors as apparatus to create and portray designs, direct automated devices and methods in the course of programming, forms and replicate the design of a composite situation in undeviating information. Information technology should be properly managed by the IT executive and should appropriately handle the equipment to serve as intended. Thus, the equipment needs to be control rightly or else; workers might utilize it for reasons with the intention of not benefiting the institutes or organization.

Methodology

This study was based on the descriptive survey design. Nworgu (2006), descriptive survey research design is the procedure on how a particular research will be done and how data will be used to be collected the instrument that will be used, and the method of data analysis that will be used. The design helps the researcher to determine views and the ideas of the of the respondents on the study under study.

Data were collected, structured questionnaires was used and administered to thirty respondents who are department of information and communication technology and ITC department both permanent and temporary staff. Workers of Niger Delta University, especially the OIM and ITC department were part of the respondents. The data were analyzed using statistical packaged for social sciences (SPSS).

3.1 Population of the Study

The study population was workers of NDU, Department of Office and Information Management, and ITC Department with a total of 62 employees.

The main instrument employed for collecting primary data for this study is a structured questionnaire labeled: Information Technology Management Competencies and the performance of University Workers: A study of Niger Delta University.

3.2 Method of Data Collection

Sample percentage and frequency count were used for the data that as par collected. Pearson Correlation and Multiple Regression Analysis were used to test the hypotheses .05 level of significance using SPSS v.22

3.4 Method of Data Analysis

The data were analyzed using multiple regression statistical analysis with the aid of Statistic Software Programme known

as Statistical Package for Social Science (SPSS) version 25 R square (R^2) was used to measure. The goodness of fitness, while the t-statistics was used to measure the differences in the mean of 5% level of significance.

4. Results Discussion

Results and Interpretations

The simple linear regression analysis is also a bivariate regression analysis. The simple linear regression analysis is appropriate to test the study of cause-and-effect significant correlation among the independent and dependent variable.

Summary of Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898 ^a	.807	.803	.56579

a. Predictors: (Constant), TECHNICAL TRAINING

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	80.147	1	80.147	250.364	.000 ^b
	Residual	19.207	60	.320		
	Total	99.355	61			

a. Dependent Variable: WORKERS' PERFORMANCE IN NDU

b. Predictors: (Constant), TECHNICAL TRAINING

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.842	.362		21.678	.000
	TECHNICAL TRAINING	.446	.028	.898	15.823	.000

a. Dependent Variable: WORKERS' PERFORMANCE IN NDU

Source: Field Data (2020)

The simple regression analysis result in table one, which is the model summary table revealed that regression coefficient R-value is (.898) which shows a positive correlation among the independent (i.e., technical training) variable and dependent (i.e., workers' performance). The R-square (.807) which is the

Thus, it was used to test the three null hypotheses of the study at 0.05 percent level of significance

Test of hypotheses one.

Hypotheses 1

There is no significant outcome of technical training on workers' performance in NDU Workers

Table 1: Simple linear regression analysis of training on workers' performance in NDU Workers

coefficient of determination. This explains the percentage of variation of technical training accounts for 80.7 percent of the total variation on workers' performance. The variance workers' performance in NDU that is connected with technical training is referred to an explicated toward variance. The remainder of the total variance in workers' performance

that is not connected with technical training which is referred to as inexplicable variance.

The ANOVA table established the significance of regression model with F-ratio value of (250.364) shows statistical significance of on the whole regression model. This is statistically significant at 0.000 as it is less than 0.05 level of significance, while, the probability value (i.e., P-v 0.000 ≤ 0.05), we reject the null hypothesis and accept that, there is a statistically significant outcome of technical training on workers' performance. The F-ratio evaluates the sum of clarified variance to the inexplicable variance. The bigger the F-ratio values the extra variance in the dependent variable that is related with the independent variables, as a result, we reject null hypothesis. Also, the coefficient table indicates the regression coefficient for technical training, the column

tagged unstandardized with Beta is (7.842) and standard error is (.362). The t-statistics calculated by dividing the regression coefficient (7.842) by its standard error (.362) we have t-value of 21.678 significant at the 0.000 that is less than 0.05 level of significance. Thus, this cause every unit that technical training attributes increases, workers' performance in NDU will increase by .898 units.

Test of hypothesis two

Hypothesis 2

There is no significant effect of use of computer on workers' performance in NDU

Table 2: Simple regression analysis of use of computer on workers' performance in NDU

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.644 ^a	.415	.405	.98426

a. Predictors: (Constant), USE OF COMPUTER

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41.228	1	41.228	42.557	.000 ^b
	Residual	58.126	60	.969		
	Total	99.355	61			

a. Dependent Variable: WORKERS' PERFORMANCE IN NDU

b. Predictors: (Constant), USE OF COMPUTER

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.088	1.136		5.360	.000
	USE OF COMPUTER	.539	.083	.644	6.524	.000

a. Dependent Variable: WORKERS' PERFORMANCE IN NDU

Source: Field Data (2020):

Table 2 result indicate that the coefficient of the constant terms (i.e., the explanatory) which is the usage of computer has R-value of (.644) which shows strongly positive correlation among the explanatory variable and the criteria variable. The R-square which is coefficient of determination value is (.415). Thus, it indicates that 41.5 percent of the variation in workers' performance in NDU do explained from the independent variable (use of computer). The table also explains the adjusted R-square for the model as (.405). The adjusted R-square is useful mainly in multiple regression

analysis where it adjusts the R-square by the number of explanatory variables in the model. This alteration accept the simple assessment of the descriptive influence of the models with diverse facts of independent variables.

The F-ratio in the ANOVA table explains the on the whole regression effect in the model. The F-ratio value is 42.557 which is significant at 0.000 and is less than 0.05 percent level of significance. Therefore, we reject the null hypothesis and accept the technical training attribute contribute towards workers' performance in NDU.

Test of hypothesis three

Hypothesis 3

There is no significant influence of IT Executive Leadership on workers' performance in NDU

Table 3: Simple regression analysis of IT Executive Leadership on workers' performance in NDU

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.837 ^a	.700	.695	.70492

a. Predictors: (Constant), IT EXECUTIVE LEADERSHIP

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	69.540	1	69.540	139.945	.000 ^b
	Residual	29.815	60	.497		
	Total	99.355	61			

a. Dependent Variable: WORKERS' PERFORMANCE IN NDU

b. Predictors: (Constant), IT EXECUTIVE LEADERSHIP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.802	.737		6.518	.000
	IT EXECUTIVE LEADERSHIP	.660	.056	.837	11.830	.000

a. Dependent Variable: WORKERS' PERFORMANCE IN NDU

Source: Field Data (2020):

Computed by the researcher using data obtained from the respondents of office and information management department and ITC department

The simple linear regression analysis result in table 3 revealed that positive correlation exists between the independent (IT Executive Leadership) and the dependent (workers' performance in NDU) variable with R-value of (.837). The R-square is the coefficient of determination is (.700). This shows the independent variable (70.0) in predicting the percentage of effect on the dependent variable (workers' performance in NDU). In other word, 70.0 percent of the variation in the dependent variable can be clarify from the independent variable (IT Executive Leadership).

However, the F-ratio value in the ANOVA table is 139.945 which is significant at 0.000, since the probability value (0.000) is less than 0.05 percent level of significant. We reject the null hypothesis and accept the alternative that IT Executive Leadership feature essentially added to workers performance in NDU

Discussion

The analysis of research question one reveals that Technical Training added towards workers' performance in NDU Staff, therefore, it is resolute by the competent functions of the

workers' performance in the course of the use of IT career competencies, and office technology. This proportion of peculiarity of technical training accounts for 80.7 percent of the total variation on workers' performance. All though, workers have the skill of computer usage, which enable them to help in creating and proceeded in the use of IT on their job performance.

The analysis of research question two reveals that workers in NDU, which shows strongly positive correlation among the explanatory variable and the criteria variable. This shows that the use of computer empowered workers to be more effluent on their performance. The result in table 2 indicate that the coefficient of the constant terms (i.e., the explanatory) which is use of computer has a R-value of (.644) which shows strong positive relationship between the explanatory variable and the criteria variable.

Analysis of research question three reveals that The simple linear regression analysis result in table 3 revealed that positive association exists between the independent (IT Executive Leadership) and the dependent (workers' performance in NDU) variable with R-value of (.837). The R-square is the coefficient of determination is (.700). This shows the independent variable (70.0) in predicting the percentage of effect on the dependent variable (workers' performance in NDU). In other word, 70.0 percent of the variation in the

dependent variable can be explained from the independent variable (IT Executive Leadership).

Conclusion

Findings of the study, it is evident that the need to explore information technology in various dimensions for the successful influence of workers' performance in institutions or organizations. Also, it is a resounding success to use the tools of information technology management tools for organizational performance.

Recommendation

Based on the findings the following recommendations are made.

1. It is recommended that institutions or organizations should put in more effort to trained workers on current technology for workers not be obsolete in current dimension on workers jobs.
2. Management of institutions should motivate workers by replacing obsolete computers.
3. Thus, management should encourage IT executives' leaders to use the right personals and technology.

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