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PERCEIVED IMPACT OF OFFICE AUTOMATION ON UNIVERSITY GRADUATES

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ABSTRACT

This study aimed at investigating the impact of office automation on university graduates. The study adopted survey research design. The population of the study comprises of 896 University graduates from University of Nigeria Nsukka and ESUT, Enugu. Purposive sampling techniques was used to draw the sample. Random sampling method was employed to select a sample 60 University graduates. The instrument used for data collection in this study was questionnaire. The data collected was analyzed with mean statistics. 2.5 was set at agreed mean point. The hypotheses of the study was tested with chi-square at 0.05 level of significance. The study found that there is significant relationship between office automation and communication competence of University graduates. Also, it was observed that in hypothesis two that there is significant relationship between office automation and enhancing knowledge of university graduates on information processing. In the third hypothesis test, it was discovered that there is significant relationship between office automation and University graduates productivity in organization. The study concluded that office automation enhanced communication competence of University graduates aiding them in the dissemination of information, set correspondences for follow-up, enhance easy collaboration among them through e-mails and other messaging applications, it helps to send automated responses when they are out of office or unable to reply personally and enable the smooth dispersal of information at anytime of the day. That office automation helps University graduates reduce the amount of time spent on processing data, enhances the speed of production of copies of files, carries out multiple task at a given time, improved the accuracy of information produced through the use of the word processors and reduces the amount of resources utilized while processing information. Also, the study concluded that office automation promote University graduates productivity in organization, eliminating go over repetitive and tedious tasks, enhances work effectiveness, makes tasks easy and less time consuming, reduces stress and increases job satisfaction. Hence, this study recommended that University institutions in Nigeria should restructure their curriculum to include technical and vocational education and endeavour to implement the programme with adequate facilities. University graduates in Nigeria should undergo technical vocational training to acquire in necessary skills to enable them fit into 21st century labour market. Organizations should improve by providing adequate office automation for graduates.

Keyword: Impact, office, automation, university, graduates.

Introduction

The present day has witnessed a lot of advancement in the system of doing things and has introduced new opportunities and services into the office work. An office being a place where administrative services such as management and processing of information and clerical work take place requires application of office automation (Ajike, 2015). The managerial, clerical and financial activities of an office organization may not be efficient and accurate without office automation like photocopiers, printers, fax machines, electronic correspondence and image editing have their own knowledge and are used to execute tasks more efficiently in the modern day office (Dosunmu, Bukki & Akintola, 2018). Thus, office automation is

described as any equipment that can be used to facilitate office processes and archival functions. It is a machines or systems use for performing tasks in the office. Koko and Okogun (2020) defined office automation as the application of computer systems and software in delivery of office activities. Thus, office automation is the use of self-regulating devices to handle office activities which replaces manually or semi-mechanical methods. The automation of modern office has thus revolutionized the tasks procedure in modern offices and has greatly improved the way University graduates carry out their duties. Olugu (2016), opined that office automation uses computers to manage the administrative and information processing tasks in records offices, records centers, and archival institutions. It involves all processes that integrate ICT with the traditional manual processes. Kontos (2015) maintained that office automation is a conglomerate of all the separate office information processing technologies which include: word processing, data processing, micrographics, reprographics and telecommunications. It also refers to the various automated electronic methods by which information is gathered, processed, reproduced, communicated, stored or protected and retrieved in the organization**.**

The components of office automation system may be communication function, text processing function, personal application function. The automated office system is based on the interactive work station connected to communication network. The workstations, have intelligence and storage capacities managed either through a central computer or distributed to the network stations themselves. Work station function may be tailored to different roles such as managerial, professional and secretarial or even to individual. Each work station will have some degree of functionality of three components; communication, texts processing and personal applications. Texting processing capacities of office automation are in common use today. Texting processing prepare, edit and store texts in the future. It has the ability to file documents electronically with cross reference indexes and keywords searching. Aid for interpersonal communication include any facilities for distribution of correspondents to an electronic mailbox of the recipient. Upon transmission the message is immediately available for recipients, store and forwarded message systems based on radio recording available. Also, both the sender and recipient control the timing of their portion of the communication, thus eliminating the inefficiency of incompleteness call and minimizing the need for interruptions. Thus, personal application function includes the capacity to streamlining individual's administrative tasks and are used by individual at their own discretions. For instance, personal applications are on-line calendar and scheduling programs which can be used to keep a record of an individual's schedules and, if compare schedules of multiple individuals order to select meet times. Reminder systems can be used for the follow-up messages for reminder of appointments, based on the automatic calendar and for tracking of project schedules. Personal contacts may be filled with multiple reference indexes for retrieval in order to generate personal correspondence.

A university graduate is a person who pass through university education and has been awarded degree certificate such as B.sc, B.ED and among others. However, office automation has thus revolutionized the work procedures of organizations and has greatly improved the way University graduate employees carry out their duties. Abang (2009) opined that University graduate employees have vital roles to play in enhancing the attainment of organizational goals. Lee and Brand (2005) asserted that office automation fastens task completion, eliminates offline data storage, lowering the number of workers within each department and sharing office resources and collaboration

between graduate employees from different areas of the organization. Although most of them nowadays would not necessarily be expected to understand as much about the business in hand as their executives, they are increasingly being expected to have some understanding of the significance and effective management of the correspondence, reports and instructions and processing of information that pass through their desks. The trained University graduate employees with knowledge of office automation can easily handle computers, photocopiers, printers, fax machines, electronic correspondence, envelope opening machines, scanning machines and image editing, data extraction, data capture, data storage, conversion from unstructured to structured data, and document classification in the cause of carrying out administrative, managerial and clerical activities of the organization.

However, the integration of office automation into office work has greatly improved the speed and efficiency in which information is processed in organization. The office automation helps University graduate employees in collecting office information, processed and stored as well as disseminated to support decision making in organization. Okeke (2013), added that University graduates who are gainfully employed in a modern office organization is required to be a professional in the use of ICT equipment like the ability to manipulate hardware, software, database and communication to input data, process and bring out output. He maintained that office automation can improve the communication abilities of University graduate employees in organization. In the aspect of productivity, studies have shown that office automation greatly improve the operational efficiency levels of University graduates in organizations (Chalykoff John & Nohria Nitin, 1998; Khalil Omar, Melcher & Jessie, 1994). This is true in the sense that activities in the operational level tend to be routine, repetitive and tedious in nature. Thus, the middle management are improved by office automation to some extent but little or no effect is evident at the strategic level of the organization (Azma Fereydoon, Izanlou Ali & Mostafapou Mohammad Ali, 2012; Alain Pinsonneault & Kenneth Kraemer, 1993; Nikov Alexander, Matarzzo Giacinto & Orlando Antonino, 1993). So, University graduate employees at the top or strategic positions are not affected by office automation since they are engaged in strategic decision making and planning and these ad hoc or strategic tasks need different equipment available at the operational level of the organization (Rajput & Gautam, 2010; Por Fernando Sáez Vacas y Gustavo Alonso García, 2014).

On other hand, the abilities of university graduates to communicate not only beong an indicator of good foundation in education, but also as an ensuring tool necessary for their performance in the organization. Agboola and Ademiluyi (2011) opined that communication is more than passing information to a receiver and involves dialogue and social exchange. They added that through the integration of office automation, communication can be effective because it is by it that intended message is disseminated, received, correctly interpreted, understood, accepted and appropriately acted upon by the receiver and confirmed by feedback. However, studies have indicated that the extent to which this truth practiced has not been proven by University graduates employed to work in various organizations in Nigeria and Enugu state in particular.

Majority of University graduates today lack the requisite knowledge and competence to operate modern office automation. The problem is not the graduates, but the Universities they pass through could not impart the necessary technical and vocational skills needed in various sectors of present data industries in Nigeria. This result to high level of graduates unemployment and declined productivity by those employed in the labour

market. Besides, the industries in today labour market carry out administrative tasks that affect technologically oriented which university graduates can cope with. Hence, the utilization of office automation can be measured on the efficiency and effectiveness of university graduates to handle office technologies and perform assigned tasks. The degree to which office automation enhance university graduates productivity may dependent on their educational qualifications and years of work experience at work (Emeasoba, 2014). Thus, this assertion may be because of high graduates turn over in today's labour market. Hence, this study aimed at investigating the impact of office automation on university graduates.

Purpose of Study

The broad purpose of this study is to investigate the impact of office automation on university graduates. The specific purposes are to;

1. Examine the impact of office automation in enhancing communication competence of University graduates.
2. Examine the impact of office automation in enhancing knowledge of university graduates on information processing.
3. Examine the impact of office automation in promoting University graduates productivity in organization.

Research Questions

1. What are the impacts of office automation in enhancing communication competence of University graduates?
2. What are the impacts of office automation in enhancing knowledge of university graduates on information processing?
3. What are the impacts of office automation in promoting University graduates productivity in organization?

Research Hypotheses

Ho1: There is no significant relationship between office automation and communication competence of University graduates.

H1: There is no significant relationship between office automation and communication competence of University graduates.

Ho2: There is no significant relationship between office automation and enhancing knowledge of university graduates on information processing.

H2: There is significant relationship between office automation and enhancing knowledge of university graduates on information processing.

Ho3. There is no significant relationship between office automation and University graduates productivity in organization.

H3. There is significant relationship between office automation and University graduates productivity in organization.

Research Method

This study adopted survey research design. The study was conducted in Enugu state. The population of the study comprises of 896 University graduates from University of Nigeria Nsuka and ESUT, Enugu. Purposive sampling techniques was used to draw the sample. Random sampling method was employed to select a sample 60 University graduates. The instrument used for data collection in this study was questionnaire. The questionnaire was titled “impact of office automation on university graduates” (IOAUG). The questionnaire was divided in two sections A and B. Section A collected the personal data of the respondents. Section B collected data on the relevant research questions of this study. The instrument was validated through experts' judgment in which one expert is from Business Education Department while the other expert was from Education Foundation Department, Faculty of Education Nnamdi Azikiwe University, Awka. Pre-test method was employed to test the reliability of the instrument. Five (5) copies of questionnaire was administered by

the researcher to 5 respondents in Unizik which was outside the study area. The data collected was tested using SPSS version 21 to determine the reliability of the instrument. The result was obtained 0.80 showing that the instrument was reliable in carrying out the study. Mean statistics was used to analyze the data. A mean point of 2.5 was set for agree meaning that any mean point less than 2.5 was rejected. The chi-square statistics was employed to test the hypothesis at 0.05 level of significance.

Results and Discussion

This section present and analyze the data collected from the respondents through questionnaire. The results were interpreted and summary of findings were discussed.

Research Question 1: What are the impacts of office automation in enhancing communication competence of University graduates?

Table 1: Mean responses on the impacts of office automation in enhancing communication competence of University graduates.

S/N	Items	SA 4	A 3	D 2	SD 1	$\bar{X}$	Remarks
1	Office automation aid University graduates in the dissemination of information.	29	26	2	3	3.4	Agreed
2	Office automation helps University graduates set correspondences for follow-up	40	20	0	0	3.5	Agreed
3	It enhances easy collaboration among University graduates through e-mails and other messaging applications.	27	25	5	3	3.8	Agreed
4	Office automation enables University graduates send automated responses when they are out of office or unable to reply personally.	34	26	0	0	3.6	Agreed
5	It enables the smooth dispersal of information at anytime of the day	25	21	2	2	2.8	Agreed
	Total					3.4	Agreed

Source: Field survey, 2024

In table 1 above, the overall mean value of the respondent was 3.4>2,5. With this, the respondents agreed that office automation enhanced communication competence of University graduates aiding them in the dissemination of information, set correspondences for follow-up, enhanced easy collaboration among them through e-mails and other messaging applications, enables them send automated responses when they are out of office or unable to reply personally and enables the smooth dispersal of information at anytime of the day.

Question 2: What are the impacts of office automation in enhancing knowledge of university graduates on information processing?

Table 2: Mean responses on the impacts of office automation in enhancing knowledge of university graduates on information processing

S/N	Items	SA 4	A 3	D 2	SD 1	$\bar{X}$	Remarks

6	Office automation helps University graduates reduce the amount of time spent on processing data.	40	20	0	0	3.7	Agreed
7	It enhances the speed of production of copies of files.	39	21	0	0	3.5	Agreed
8	Office automation helps University graduates to carry out multiple task at a given time.	38	20	1	1	3.6	Agreed
9	Office automation helps University graduates improve the accuracy of information produced through the use of the word processors.	35	25	0	0	3.6	Agreed
10	It reduces the amount of resources utilized while processing information.	31	27	1	1	3.5	Agreed
	Total					3.6	Agreed

Source: Field survey, 2024

Table 2 above, shows that the calculated mean was 3.6>2.5 point for agreed. By implication, the result indicated that office automation helps University graduates reduce the amount of time spent on processing data, enhances the speed of production of copies of files, carry out multiple task at a given time, improved the accuracy of information produced through the use of the word processors and reduces the amount of resources utilized while processing information. This truth is agreed since all the individuals mean are above 2.5.

Question 3: What are the impacts of office automation in promoting University graduates productivity in organization?

Table 3: Mean responses on the impacts of office automation in promoting University graduates productivity in organization.

S/N	**Items**	**SA 4**	**A 3**	**D 2**	**SD 1**	**X**	**Remarks**
11	Office automation helps to eliminate go over repetitive and tedious tasks.	40	20	0	0	3.7	Agreed
12	Office automation enhances work effectiveness.	27	25	5	3	3.3	Agreed
13	It makes tasks easy and less time consuming.	32	28	0	0	3.5	Agreed
14	It reduces stress.	25	23	7	5	3.1	Agreed
15	It increases job satisfaction.	34	26	0	0	3.6	Agreed
	Total					3.4	Agreed

Source: Field survey, 2024

The analysis in table 3 indicated that the calculated mean was 3.4>2.5 point for agreed. By implication office automation promotes University graduates' productivity in organizations eliminating go over repetitive and tedious tasks, enhances work effectiveness, makes tasks easy and less time consuming, reduces stress and increases job satisfaction.

Test of Hypotheses

Ho1: There is no significant relationship between office automation and communication competence of University graduates.

H1: There is significant relationship between office automation and communication competence of University graduates.

Contingency table 4:

Respondents	**Feq.**				**N**
Office automation and communication competence component of University graduates	29	26	2	3	60

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Using $X^2 = \sum_{2} (o-e)^2$

Where X^2 = Chi square
O = Observed frequency
E = Expected frequency

df = (c-1) (r-1)
5-1 X 2-1 = 4 X 1= 4

$= \frac{(29-15)^2}{15} + \frac{(26-15)^2}{15} + \frac{(2.15)^2}{15} + (3-15)^2$

$= 13.07 + 8.07 + 11.27 + 9.6 = 92.01$

Crit t-value = 0.549.
Computed value. 92.01.

In table 4, the computed value of chi-square was 92.01> critical t-value at 0.549. with 0.05 level of significance. Thus, since 92.01>0.549, we reject null hypothesis and accept that there is significant relationship between office automation and communication competence of University graduates.

Hypotheses 2: There is no significant relationship between office automation and enhancing knowledge of university graduates on information processing.

H_2: There is significant relationship between office automation and enhancing knowledge of university graduates on information processing. Contingency table 5:

Respondents	**Feq.**				**N**
Office automation and enhancing knowledge of university graduates on information processing.	39	21	0	0	60

. Using $X^2 = \sum_{2} (o-e)^2$

Where X^2 = Chi square
O = Observed frequency
E = Expected frequency

df = (c-1) (r-1)
5-1 X 2-1 = 4 X 1= 4

$= \frac{(39-15)^2}{15} + \frac{(21-15)^2}{15} + \frac{(0.15)^2}{15} + (0-15)^2$

$= 38.4 + 2.4 + 15 + 15 = 70.8.$

Crit t-value = 0.549.
Computed value. 70.8.

In table 5, the computed value of chi-square was 92.01> critical t-value at 0.549. with 0.05 level of significance. Thus, since 70.8>0.549, we reject null hypothesis and accept that there

is significant relationship between office automation and enhancing knowledge of university graduates on information processing.

Hypotheses 3: There is no significant relationship between office automation and University graduates productivity in organization.

H3. There is significant relationship between office automation and University graduates productivity in organization.
Contingency table 5:

Respondents	**Feq.**				**N**
It makes tasks easy and less time consuming.	32	28	0	0	3.5

. Using $X^2 = \sum_{2} (o-e)^2$

Where X^2 = Chi square
O = Observed frequency
E = Expected frequency

df = (c-1) (r-1)
5-1 X 2-1 = 4 X 1= 4

$$= \frac{(32-15)^2}{15} + \frac{(28-15)^2}{15} + \frac{(0.15)^2}{15} + (0-15)^2$$

$$= 19.3 + 11.3 + 15 + 15 = 60.6.$$

Crit t-value = 0.549.
Computed value. 60.6.

In table 6, the computed value of chi-square was 60.6> critical t-value at 0.549. with 0.05 level of significance. Thus, since 60.6>0.549, we reject null hypothesis and accept that there is significant relationship between office automation and University graduates productivity in organization.

Discussion of Findings

From the hypothesis test conducted, we found that the result shows that the computed value of the chi-square was 92.01> the table value at 0.549. This indicated there is significant relationship between office automation and communication competence of University graduates. Also, it was observed that in hypothesis two that there is significant relationship between office automation and enhancing knowledge of university graduates on information processing. In the third hypothesis test, it was discovered that there is significant relationship between office automation and University graduates productivity in organization.

Conclusion

Based on the result obtained from the data analysis, this study concluded that office automation enhanced communication competence of University graduates aiding them in the dissemination of information, set correspondences for follow-up, enhance easy collaboration among them through e-mails and other messaging applications, it helps to send automated responses when they are out of office or unable to reply personally and enables the smooth dispersal of information at any ltime of the day. That office automation helps University graduates reduce the amount of time spent on processing data, enhances the speed of production of copies of files, carry out multiple task at a given time, improves the accuracy of information produced through the use of the word processors and reduces the amount of resources utilized while processing

information. Also, the study concluded that office automation promotes University graduates productivity in organization, eliminating go over repetitive and tedious tasks, enhances work effectiveness, makes tasks easy and less time consuming, reduces stress and increases job satisfaction.

Recommendations

Based on the findings made, the paper recommends the following;

1. University institutions in Nigeria should restructure their curriculum to include technical and vocational education and endeavour to implement the programme with adequate facilities.

2. University graduates in Nigeria should undergo technical and vocational training to acquire necessary skills to enable them fit into 21st century labour market.

3. Organizations should improve by providing adequate office automation for graduates. This will enable graduates to improve productivity in organizations.

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