UNIUYO JOURNAL OF BUSINESS EDUCATION AND ENTREPRENEURSHIP

Vol.3 No.1, March 2026

OFFICE TECHNOLOGIES AND WORKFLOW OUTCOMES OF JUNIOR EMPLOYEES IN UYO Local Government Area

By

Dr Abasienie Sampson Bassey & Kokomma Effiong Akpan
Department Of Business Education (Accounting Option)
University Of Uyo.
abasieniesbassey@uniuyo.edu.ng

Abstract

The purpose of this study was to determine the relationship between office technologies and work flow outcomes of junior employees of Uyo local government area. In order to achieve this, three (3) research objectives, three (3) research questions and three (3) null hypotheses were raised. A correlational survey design was utilized for the study. A population of 134 junior workers were used for the study as they were no sampling due to the manageable size of the population. The researcher structured questionnaire titled "Office Technologies and Workflow Outcomes Questionnaire (OTWEQ) was developed and utilized for the study. The instrument was validated by three research validates from the department of Business Education, University. Cronbach alpha was used to determine the reliability with a high index of .97 which was deemed high for the study. Pearson Product Moment Correlation ® was used for data analysis. It was discovered among others that there exist a relationship between the office technologies and workflow outcomes among junior staff of Uyo local government area of Akwa Ibom state. It is recommended among others that the state government should endeavor to improve upon the provision of modern office technologies to boost workflow outcomes.

Introduction

Organizations have tried in recent times to improve their workflow efficiencies which in turn can have a potential positive impact on the overall performances of these organizations. According to Bassey, Udo and Obayi (2024), workflow efficiency can be defined as the process employees follow to complete a given organizational task. Ido and Bassey (2016) sees workflow efficiency as the general pattern, process and performances which employees in organization must utilize to complete projects with automation. Workflow efficiencies can be defined by Ido and Bassey (2015a) as the task of identifying manual task for automation to drive improved productivity, reduced cost and improve data quality in an organization.

Bassey, Obayi and Agbaegbu (2024) opined that one of the techniques of ensuring or achieving optimum workflow efficiency on junior employees in Uyo local Government Council is through office technologies. Office technologies to Asuquo and Ukoima (2016) encompasses all the technologies employed for work efficiency. This includes but not limited to physical technologies such as computers, printers and wifi routers. It also includes cloud based software such as space management, access control and workflow systems. Kingsley (2023) also defined modern office technologies as a collection of methods, machinery and production process by mechanical method, usually embedded in electronic equipment to aid office functions. Ido and Bassey (2016) defined office technology to be a form of technology

that can be used in an office environment. That is why Uche (2023) sees office technology as all technologies a company or organization uses to operate smoothly. Yetunde (2024) also defined office technology as consisting of all equipment and products used in an office for technical purposes such as adding machines, checking machine, computing machines, printers etc. In another stead, Young, Bassey and Essien (2023) defined office technologies as the hardware and software used in a workplace to enhance productivity. There are several office technologies to be used by junior employees to boost workflow efficiency, chiefly among whom are computers, printers and wifi router.

One of the most visible and easily access office technologies in organization is the computer system. Ido and Bassey (2017) defined computer system to be a hardware and software system that is capable of converting raw data to a desirable output. Uwem (2019) opined that the computer system is a readily and available machine that is utilized for data management and processing. Data processing and information management are effectively utilized and implemented through the computer systems. The computer system is both a software and hardware systems that converts raw data to a verified information.

Another form of office technologies that can help boost workflow efficiency is the printer or printing machines. The printing machine is an electronic device that accepts text files or images from a computer and transfers them to a medium such as paper or film. It can be connected directly to the computer or indirectly via a network. According to Ido and Bassey (2015b), printers are classified as impact printers (in which the print medium is physically struck) and non-impact printers which have a number of pins on the print head that emerge to form a character. The printers are used in offices to channel workflow efficiency through the computer system connected to it.

Furthermore, the wifi router is another office technology that is frequently used in organizations. Ido, Bassey and Akpan (2018) and Etuk and Bassey (2016) defined the wifi-router as a device in the organization that sends information from the internet to personal devices like the computers, phones and tablets. Uboh (2019) defined the router as a device that provides wifi that is typically connected to a modem. Once a modem brings in information from the internet, a router distributes this data to different computers and personal devices. Wifi router needs a google wifi points to effectively direct workflow processes in the organization.

These information technologies are usually accessed by the junior workers in their workflow efficiency. The junior workers are classes of workers that do not possess a degree or its equivalent to be classified into the senior cadre. The junior workers are those classes of staff with first school leaving certificate(FSLC), the Junior School Certificate(JSC), the National Diploma(ND) and their equivalents. They belong to salary grades of 1-7 in the civil service salary structure.

The findings of the study when completed will be beneficial to staffers of Local Government Councils, Heads of Council, students and the general public. This study when completed will be of immense benefit to the staffers by making them know the various office technologies to utilize and help workflow efficiencies. Furthermore, the findings of the study will be of immense benefit to the heads of councils in the State to help them understand the need to acquire office technologies to help staffers achieve workflow efficiencies in the work place.

Statement of the Problem

One of the challenges confronting Uyo local government area in specific is the ineptitude caused by lack of modern office technologies by junior staffers of the local government. The attitude of the junior workers is very poor as most of these staffs often time complain of lack of office equipment and other information processing machineries to aid their workflow process. This ineptitude has resulted to poor job performances by these staffers, truancy and low productivity. These had culminated to bureaucratic red-tapism which often time has led to the perceived poor workflow outcomes of these junior staff.

Moreover, it is quit disheartening to note that most junior staffers do not know the various office technologies that would greatly influence workflow in the offices in local government. Furthermore, the researcher has observed with dismay the perceived research gaps in terms of poor or limited literature reviews on the subject matter. It was against these shortcoming that this present research was conducted to fill in the perceived gaps.

Purpose of the study

The main purpose of the study was to examine the relationship between office technologies and workflow outcomes among junior staff of Uyo Local Government Area in Akwa Ibom State. Specifically, the study examined the relationship between:

1. Computer systems utilization and workflow efficiencies of junior staff of Uyo Local Government Area of Akwa Ibom State
2. Printing machines utilization and workflow efficiencies of junior staff of Uyo Local Government Area of Akwa Ibom State
3. Wifi router utilization and workflow efficiencies of junior staff of Uyo Local Government Area of Akwa Ibom staff

Research Questions

The following research questions were asked to guide the research process;

1. What is the relationship between computer system utilization and workflow efficiencies of junior staff of Uyo Local Government Area of Akwa Ibom State?
2. To what extent does printing machines utilization influence workflow efficiencies of junior staff of Uyo Local Government Area of Akwa Ibom State?
3. To what extent does wifi router influence workflow efficiencies of junior staff of Uyo Local Government Area of Akwa Ibom State?

Null hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. Male and female junior staff do not significantly differ on their mean ratings on the influence of computer on workflow efficiencies
2. Male and female junior staff do not significantly differ on their mean rating on the influence of printing machine influence workflow efficiencies
3. Male and female junior staff do not significantly differ on their mean rating on the ------ ---------- ---------- ---------- ----------influence of wifi router influence workflow efficiencies

Concept of Office Technology

Office technology refers to the tools and systems that enhance productivity, communication, and collaboration in the workplace. Key components of office technology according to Ido and Bassey (2017) include:

1. Computers and Laptops Essential for data processing, communication, and running various applications.
2. Software Applications Tools like word processors, spreadsheets, and presentation software facilitate task automation and efficient data management.
3. Communication Tools Email, instant messaging, and video conferencing systems enable swift and effective communication among teams and clients.
4. Cloud Computing Services like Google Workspace and Microsoft365 allow for remote collaboration and secure data storage, promoting flexibility in work environments.
5. Printers and Scanners Provide hard copies of documents and digitize physical records for easy sharing and access.
6. Project Management Tools Applications like Trello or Asana help in tracking progress, assigning tasks, and managing deadlines.
7. Security Systems Firewalls, antivirus software, and secure access tools protect sensitive information from cyber threats.
8. Ergonomic Office Equipment Desks, chairs, and computer accessories designed to optimize comfort and reduce strain can improve employee well-being and productivity.

Computer Systems and Workflow Outcomes

A system is formed of parts where each part interacts with the other parts to achieve some common purpose. In general terms, the common purpose for a computer system is to convert data (raw facts) into information (organised and useful data) by performing operations on that data. This can be represented as follows. Consequently, computer systems can be viewed as consisting of three main components:

Hardware – Hardware are the 'touchable' parts of a computer system: for example, keyboard, mouse, barcode wand, CD-ROM, printer, screen, scanner, etc.

Data – Data are the raw facts entered into a computer system, which are later processed or retrieved to produce information: for example, bibliographic data converted into a stock take report.

Software – Software is the set of instructions telling the computer what to do. They allow computer operators to use the hardware to input, process, and store and retrieve data: for example, word processors, database management applications, and operating system software. The vast majority of this chapter is devoted to a more detailed look at each of these three components.

Printing Machines and Work Flow Outcomes

Managed print services (MPS) have become a popular solution for businesses seeking to streamline their document management process. By outsourcing the management of printing devices, businesses aim to reduce costs, improve workflows, and increase security. However, choosing a managed print solutions provider is an important decision that should not be taken lightly. This is because while the right MPS provider can be a valuable asset, the wrong provider might not make much impact on your business operations.

Wifi Router and Workflow outcomes

Wi-Fi routers play a crucial role in enhancing work efficiency in both professional and personal environments. Here's how:

1. Stable Connectivity: A reliable Wi-Fi router ensures a strong and stable internet connection, minimizing interruptions during online meetings, video calls, and collaborative work.
2. Increased Speed: With the latest technology, modern routers offer faster data transmission speeds, allowing for quicker downloads, uploads, and seamless streaming of content. This boosts productivity by reducing time spent waiting for files to transfer or applications to load.
3. Enhanced Coverage: Wi-Fi routers with extended range capabilities eliminate dead zones in offices or homes, ensuring that all areas have internet access. This allows employees to work from various locations without losing connectivity.

RESEARCH METHODS

Design of the Study

The correlational survey design was adopted for this study. The design became imperative as the researcher was interested in assessing the relationship between the two groups through the use of research questionnaire (Usoro, 2018).

Area of the Study

The study was conducted in Uyo Local Government Area of Akwa Ibom State. Uyo is the capital of Akwa Ibom State with a land mass of 36km^2 squared metre. It has a population of 1,393,000 people. The people are Ibibio speaking tribe. Local government council with latitude of 5.02^0 North. The choice of Uyo springs from the level of complaints by citizens on the poor work efficiency of junior workers in the council and it's environs and the fact that Uyo is closer to the researcher.

Population of the study

The population of this study consisted of all 134 junior workers in the Uyo local government council according to the Government Records (2024)

Sample and Sampling technique

A total of 134 junior workers in the Uyo Local Government area were selected for the study. There was no sample since the population was small in size in which the researcher was able to manage them.

Instrumentation

The researcher structured questionnaire titled "Office Technology and Workflow Outcomes Questionnaire (OTWOQ) was utilized for data collection. The questionnaire was divided into two (2) sections, section A and section B. Section A deals with bio-data of respondents while section B that was segmented into very high Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent tested the questionnaire item proper.

Validation of the instrument

The research instrument was validated by three research experts in the department of Business Education, University of Uyo and department of Office Technology and Management, Akwa IbomState Polytechnic, Ikot Osurua. Suggestions, opinions and corrections were incorporated into the final draft.

Reliability of the Instrument

In order to ensure reliability of the instruments, a test retest method was used. The questionnaire was administered to 80 Business Education students who were not part of the study, after two weeks, the same instrument was administered to same students. A high r value of .87 was gotten for the study.

Administration of the study

The research instrument was administered to the respondents through the use of a research assistant. The administration rate was 95% of the respondents refined their questionnaire.

Data Analysis technique

The mean and standard deviation were used to answer the research questions while the independent t test was used to test the null hypotheses.

RESULTS

Research Question 1

What is the relationship between availability of computer system and workflow efficiency among junior staff of Uyo Local Government Area?

Table 1: Pearson product moment correlation(r) of the relationship between computer system efficiency workflow N = 134

Variable	ΣX ΣY	ΣXY	ΣX^2 ΣY^2	ɤ	Decision
Computer systems (x)	1429		13,416		Positively
		12,326		.84	
Workflow outcomes(y)	1618		14,624		Related

Data analysis on table 1, had shown that the summation between the two variables is 12,326. The r-value of .84 showed that there exist a positive relationship between availability of computer system and workflow efficiency among junior workers of uyo local government area.

Research Question 11

What is the relationship between availability of printing machines and workflow efficiency among junior staff of uyo local government area?

Table 2: Pearson product moment correlation(r) of the relationship between printing machines and workflow efficiency N = 134

Variable	**ΣX ΣY**	**ΣXY**	**ΣX^2 ΣY^2**	**ɤ**	**Decision**
Printing machines (x)	1238		11,682		Positively
		13,424		.91	
Workflow outcomes (y)	1618		14,624		Related

Data analysis on Table 2, had shown that the summation between the two variables is 13,424. The r-value of .91 has shown that there a positive relationship between availability of

Printing machines and Workflow efficiency among junior workers of Uyo Local Government Area.

Research Question 3

What is the relationship between the availability of wifi router and workflow efficiency among junior employees of Uyo Local Government Area?

Table 3: Pearson product moment correlation(r) of the relationship between wifi router and workflow efficiency N = 134

Variable	ΣX ΣY	ΣXY	ΣX² ΣY²	ɤ	Decision
Printing machines (x)	1314		12,178		Positively
		14,628		.78	
Workflow outcomes (y)	1618		14,624		Related

Data analysis on Table 3, had shown that the summation of the two variables is 14,628. An r-valueof .78 indicates that there exist a positive relationship between availability of wifi-router and workflow efficiency among junior workers of Uyo Local Government Area.

Testing of Hypotheses

Research Hypothesis 1

There is no significant relationship between availability of computer systems and workflow efficiency among junior employee of Uyo Local Government Area.

Table 4: Pearson product moment correlation(r) of the relationship between computer systems and workflow efficiency N = 134

Variable	ΣX ΣY	ΣXY	ΣX² ΣY²	ɤ-cal	r-crit	df	Decision
Printing machines (x)	1429		13,416				
		12,326		.84	43	132	S^x
Workflow outcomes (y)	1618		14,624				

s^x-) significant of 0.05 level of significance

Data analysis on Table 4 has shown that the r-calvalue of .84 was higher than the r-crit value of .43, degree of freedom of 132 and at 0.05 level of significance. This therefore shows that there exist a significant relationship between availability of computer systems and workflow efficiency among junior employees of Uyo Local Government Area.

4.2.2 Research Hypothesis 2

There is no significant relationship between availability of printing machines and workflow efficiency among junior employee of Uyo Local Government Area.

Table 5: Pearson product moment correlation(r) of the relationship between printing machines and workflow efficiency N = 134

Variable	ΣX ΣY	ΣXY	ΣX² ΣY²	ɤ-cal	r-crit	df	Decision
Printing machines (x)	1238		11,682				
		13,424		.91	43	132	S^x
Workflow outcomes(y)	1618		14,624				

s^x-) significant of 0.05 level of significance

Data analysis on Table 5 has shown that the r-calvalue of .91 was higher than the r-crit value of .43, degree of freedom of 132 and at 0.05 level of significance. This implies that the null hypothesis is rejected this, there exist a significant relationship between availability of printing machines and workflow efficiency among junior employees of UyoLocal Government Area.

4.2.3 Research Hypothesis 3

There is no significant relationship between availability of wifi-router and workflow efficiency among junior employee of uyo local government area.

Table 6: Pearson product moment correlation(r) of the relationship between wifi-router and workflow efficiency N = 134

Variable	ΣX ΣY	ΣXY	ΣX^2 ΣY^2	ɤ-cal	r-crit	df	Decision
Printing machines (x)	1314		12,178				
		14628		.78	.43	132	S^x
Workflow outcomes (y)	1618		14,624				

s^x-) significant of 0.05 level of significance

Data analysis on Table 6 has indicated that the r-cal value of .78 was higher than the r-crit value of .43, degree of freedom of 132 and at .05 level of significance. This implies that the null hypothesis is rejected this, there exist a significant relationship between availability of printing machines and workflow efficiency among junior employees of UyoLocal Government Area.

Discussion of Finding

Computer System and Workflow Outcomes

Data analysis on Table 1 and 4 had shown that there exist a positively and significant relationship between computer systems and workflow outcomes among junior employee of Uyo Local Government Area. This findings showed that junior workers who utilizes computer systems usually have an effective workflow outcomes.. This finding agrees with the findings of Bassey(2024) who postulated that computer systems had the capacity to make tedious works easier.

Printing Machine and Workflow Outcomes

Data analysis on table 2 and 5 has indicated that there exist a positive and significant relationship between availability of printing machines and workflow outcomes among junior employee of uyolocal government area. The study had shown that the availability of printing machine can aid workflow efficiency. This findings is in consonance with Uboh (2019) who opined that the availability of printing machines help process document relating to organization.

Wifi Router and Workflow Outcomes

Data analysis on tables 3 and 6 had shown that there exist a positive and significant relationship between wifi-router availability and workflow outcomes of junior employees. The study had shown that junior employee of Uyo local Government had utilized wifi-routers to aid group proving and optimum workflow efficiency. This finding agrees with the printings of Uwem (2019) who opined that wifi routers had helped organization achiever optimum workflow outcomes..

Conclusion

This study was interested in establishing the relationship between office information systems and workflow outcomes on junior employee of UyoLocal Government Area. The researcher utilized three (3) research questions and three (3) null hypotheses to guide the study. A correlational survey design was utilized. A simple random sampling technique was used to select a sample size of 134. The researcher structural questionnaire titled "Office Information System and Workflow Outcomes Questionnaire (ISWOQ)" was utilized for data collection. Test-retest method was used to obtain reliability of the instrument. A high index reliability of .88 was obtained. Pearson product correlation was used to analyze the null hypotheses. It was discovered that computer system significant, relate positively with workflow outcomes,, printing machine availability relates signification and positively with workflow outcomes and lastly, there exist a significant relationship between wifi-router availability and workflow outcomes among junior employees of Uyo Local Government Area.

Recommendations

Based on the findings of the study, the following are the recommendation put forward.

1. The Akwa Ibom State government should as a matter of urgency equip its offices with modern information technology (IT) system to boost workflow efficiency.
2. The Akwa Ibom State government should as a matter of necessity embark on training and re-training of its junior employees on modern technology utilization to aid to workflow efficiency.
3. The curriculum of business education programs in our tertiary institution should be upgraded to reflect on the trendy and modern information communication and technology (ICT) tools which will help business education students acquire modern and trendy skills.
4. Finally, the state government should improve on the funding of business education programmes to boost transfer of learning.

REFERENCES

Bassey, A. S, Udo, D. U and Obayi, A. U. (2024) Assessment of Sokoku Skills Acquired by Business Education Students in Federal Universities in South- South Nigeria. *AAU Journal of Business.*4(1). 359-366.

Bassey, A.S, Obayi, A. U and Agbaegbu, C.N(2024). An Assessment of sudoku proficiencies for spreadsheet applications among Business Education students in federal

Universities in South South Nigeria. *AAU Journal of Business Education.* 4(2) 182-188.

Etuk, O. U and Bassey, A. S(2016) Study Habits and Students Academic Performance in Financial Accounting in Secondary Schools in Uyo Educational Zone. *Journal of sustainable Education.* 7(1) 64-80

Asuquo, E. E. and Ukoima, E. F. (2016). Adequacy of office technology facility for skill development of business education students in University, South–South, Nigeria. *Journal of Research and Development in Education*, 6(1):112-121.

Ido C.F and Bassey, A. S (2015b) Research in Business Education; A panacea for Employment Generation through Entrepreneurship. *Journal for Sustainable Education.* 6(1) 160- 166

Ido, C. F and Bassey, A. S (2016) TVET Partnership and profitability of small scale business in Akwa Ibom State: A panacea for economic growth. *Journal of Association of Vocational and Technical Educators of Nigeria.* 21(2), 47-55.

Ido, C. F and Bassey, A.S (2015a) Challenges of Business Education in achieving Economic Efficiency. *Journal of Qualitative Education.* 2(1) 56-61

Ido. C. F, Bassey, A. S and Akpan, N. A (2018) *Principles of Business Operations and Finances.* Uyo: Delightsome publications

Kingsley, V. (2023) *Principles of office Technology*. Lagos, Ajems publications

Uboh, C. (2019) *Element of Office Administration*. Uyo: Peculiar Publisher

Uche, J. (2023) Influence of Job Skills on Job Performance. *Journal of Business.* 3(2) 172-168

Uwem, I. (2019) *Relationship between Job Skills and Career progression in Uyo LGA*. Unpublished.

Yetunde, V. (2024) Office Skills Need for 21st Century Job Performance. *Journal of Education.* 2(2) 136 – 140

Young, R.G, Bassey, A.S and Essien, C (2023) Utilization of digital social technology skills on the effective management of small scale businesses in Akwa Ibom North East Senatorial district. *International Journal of Education Benchmark* 23(1) 82-90