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## Utilization of Model Office Technologies for Business Education Students' Skills Acquisition in Enterprise Operations in Federal College of Education (Tech.), Omoku- Rivers State, Nigeria

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**Abstract:** This study evaluated the utilization of model office technologies for Business Education students' skills acquisition in enterprise operations in Federal College of Education (Tech.), Omoku- Rivers State, Nigeria. Two specific objectives, two research questions and two hypotheses guided the study. Evaluation research design was used for the study. The population of the study was made up of 118 NCE III Business Education students in Federal College of Education (Tech.), Omoku during the 2023/2024 academic session. The entire population of 118 made up of 56 male and 72 female was used as the sample size of the study because it was a manageable size. However, only 107 students made up of 48 male and 59 fully participated in the study. A structured questionnaire was used for data collection. The validated instrument was tested for reliability of stability using test-retest method. Pearson Product Moment Correlation Coefficient (PPMC) r - value was computed for the two generated data using Statistical Package for Social Science (SPSS) version 24.0 to obtain 0.82. Mean and standard deviation were used to answer the research questions. The null hypotheses 1 and 2 were tested at 0.05 level of significance using independent t-test. All computation will be done with the aid of SPSS version 20.0. The finding of the study revealed that both male and female business education students rated the utilization of model office technology platforms for skills acquisition in enterprise operation as highly relevant. They also both rated the extent of the skills acquired for enterprise operations due to the utilization of standard model office technology platforms as high. The finding also revealed that there is no significant difference in male and female business education students rating of the relevance of the utilization of the model office technology platforms and on the extent of skills acquired during th process. Based on the findings, it was recommended among others that Business education lecturers should endeavour to utilize relevant model office technology platforms empowered by android phone apps on Google play store to help their students develop skills for 21<sup>st</sup> century enterprise operations.

**Keywords**: model office, business office technology, utilization, development of skills, enterprise operations

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#### **INTRODUCTION**

In Nigeria, Colleges of Education has as one of the basic requirements enshrined in the minimum standard for accreditation of Business Education programme the provision of standard model office (National Commission for Colleges of Education (NCCE) (2020). The standard model office is a maker's space meant for the purpose of exposing and testing students in use the modern office equipment and technologies before graduation, the expectation is that such exposure should empower the students for self-reliance and employability. Consequently, to fulfill this mandatory requirement and ensure full accreditation of the Business Education programme, all Colleges of Education offering this programme provide a well equipped space with as model office usually equipped with office equipment and technologies. This space serves as a maker's space because it is used to train and turn students to competent office equipment and technologies operators and managers who confidently can perform enterprises operations using relevant modern office technologies.

In view of the foregoing, it is important to note that for the empowerment of Business Education students to acquire the knowledge, skills and attitude of using office equipment and technologies, the National Commission for Colleges of Education Minimum Standard (2020) outlined the following as essential office equipment and technologies needed for the programme: executive table with drawers, computers with relevant office software; projector and electronic board/projector screen; photocopier; spiral binding machine and laminating machine; scanner and printers; file trays – in and out; punch machine; shredder and wastepaper basket; file cabinets; adding and listing machine; and any other appropriate equipment and technology used in today's enterprises for office related functions. When these office equipment and technologies are adequately provided for, there is expectation that they should be utilized to train students and assist them acquire requisites skills and proficiencies for their future office operations. Taking such expectation into consideration, Amadi (2012) noted that demonstration within the model business office is mostly required to give students the opportunity of knowing how the available equipment and technologies are used in a step-wise manner to perform different personnel responsibilities in business enterprises.

The effective utilization of the available model office technologies to train business education students and help them acquire requisite skills and attitude for enterprise operations, behooves that lecturers saddled with the responsibility of guiding the students be competent in appropriate methodologies for facilitating learning. This is because learning using model office technologies which are the major concern of this study require guiding students appropriately in the procedures of utilizing and maintaining these facilities while performing any office operations. In addition, to ascertain whether the students have learnt, their abilities must be assessed by giving them opportunity to be engaged with the physical sequences demonstrated and subsequently demonstrating their mastery of the techniques and procedures for performing learned tasks (Nwankwo, 2021). Accordingly, to ensure smooth transition from school to the world of work, there is expectation that the office technologies provided and use by business education lecturer or instructor to guide students are the replica of those used in today's 21st enterprise operations. This is because as affirmed

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by Dambo and Umah (2018), utilization as the primary method by which performance can be measured and determined in most business context requires the use of appropriate tools and technologies.

Taking into considerations the discourse so far, in this study the utilization of model office technologies in educating and training Business Education students requires both the concerted efforts of lecturers to plan and design instructions that ensures practical training, and provide opportunities for students to use complementary technological platforms to fully engage in the learning processes. These efforts were meant to overcome inadequacies of the model office technologies provided in making the programme remain functional for the development of students' mental and manipulative skills for effective enterprise operations in Nigeria. This is due to the fact that unless the mental and psychomotor skills acquired by business education students through the utilization of model office technology and other technological platforms such as Microsoft office suit platforms, digital camera platform, digital photo printing platform, e-mail platform, sales and inventory management platform, graphic design platform, Wi-Fi hotspot platform, digital printing platform, electronic payment platforms and personnel management platforms guarantees their successful operations of self-owned or established 21st century technological driven enterprises in Nigeria, their chances of being economically empowered would be slim. In fact, most of skills acquired from the use of these model office technological platforms according to Coleman (2019) are life skills for success in 21st century business world. Giving credence to the relevance of these skills related to the use of these office technologies which include electronic accounting records keeping skills, digital marketing skills, electronic trading skills, electronic management skills, electronic communication skills and technopreneurship skills, Okon (2019) noted that the development of these skills remains essential to business education student's success in future enterprise operations, office occupation and personal lives.

The bottom-line therefore is that to add value to business education students' life, education and training sessions capable of providing them with opportunity to learn with and through model office technological platforms must always be ensured. Thus, the value of business education programme in today's Nigeria rest upon the quality of knowledge, skills, aptitude, thinking capabilities and other worthwhile experiences that students develop through learning with and through model office technological platforms to start and operate own enterprises successfully. Consequently, business education students used for this study received declarative knowledge and were allowed to engage themselves with available technologies in the model office complemented by other technological platforms accessible as applications on Google Play Store on their android phones in order to guarantee their acquisition of both mental and psychomotor abilities needed to confidently carry out business tasks for the success of own enterprise operations.

There is plethora of extant studies relating to the utilization of modern business office technologies and students' skills development in across the global with varying results. Otum (2018) examined facility utilization and employability skills acquisition among graduates of Business Education in Cross River State, Nigeria. The findings revealed that students rated that the utilization of information communication technology facilities such as: computer, television, scanner, printers, telephone, internet, photocopier, flash drive and modem had a significant joint influence on their employability skill acquisition in Business

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Education. Okoro, et al (2019) assessed the adequacy of exposure to modern office technology by graduating students of office technology and management in polytechnic in Imo State. Their findings revealed that graduating students rated their exposure to modern office technology such Microsoft office application, webpage design and management information system as relevant and adequate. Ahmad and Muhammad (2024) investigated the impact of utilizing technologies in modern office work environment and reported that the adoption and utilization of modern office technologies enhanced skills development and job performance, hence creating job opportunities among teaming youth. Okoye and Agu (2024) assessed the need for effective utilization of modern office equipment in realizing the objectives of business education and they affirmed the need to utilize modern office technologies to assist students develop requisites skills required of them at the point of graduation. However, a critical examination of the existing empirical studies conducted so far revealed that none has focused on the utilization of standard model business office technologies for Business Education students' skills development in enterprise operations. Consequently, the present study was conceived to fill this gap in existing literature.

#### **Problem Statement**

The utilization of model office technologies and their related apps on android phones in business education programme should provide lecturers with the opportunity to expose their students to digital office operations engagements and assess them in practical learning activities capable of facilitating skills acquisition for future enterprise operations. However, a situation where the model office technologies stated in the minimum standard for this purpose are inadequately provided makes their utilization almost impossible or difficult for Business education lecturers especially when implementing courses such as office practice and office technologies and management education. This has continue to broadened the gap between content knowledge development and skills acquisition especially as it relates to the use of model office technologies in performing enterprise operations such as electronic accounting records keeping, electronic marketing, electronic trading, electronic management, electronic communication and entrepreneurship. It is important to imagine the spillover effect of the unskilled graduates of Business Education on the creation of enterprises and its effective management in the 21st century business world driven by technological platforms. This is due to the fact that such unskilled graduates of the programme will only end up joining the wagon of unemployed and unproductive citizens, as well will not be able to contribute meaningfully to national development. In addition, the researchers observed that there are many office technologies software customize apps (platforms) on Google Play Store and enabled using android phone that can download and utilized for instructions and learning in performing the earlier stated enterprise operations. Consequently, researchers decided to test the utilization of the available model office technological platforms complemented with the android phone enabling office technology applications (platforms) in addressing the highlighted problem of skills acquisition with regards to 21st century enterprise operations as visible in many tertiary institutions in Nigeria and Federal College of Education (Tech.), Omoku – Rivers State to be specific This is to be done with the intent of providing students with the necessary platforms for learning what they are supposed to learn in the ideal College's model offices and ascertaining its effect on skills acquisition for enterprise operations.

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## **Purpose of the Study**

The main purpose of this research was to evaluate the utilization of model office technology platforms for Business Education students' skills acquisition in enterprise operations in Federal College of Education (Tech.), Omoku – Rivers State. Specifically, the study sought to:

- i. Ascertain the rating of male and female business education students on the relevance of utilizing model business office technology platforms for skills acquisition in enterprise operations.
- ii. Determined the extent to which male and female business education students acquired skills for enterprise operations due to the utilization of model office technology platforms.

## **Research Questions**

The following research questions were raised to guide the study:

- i. What is the rating of male and female business education students on the relevance of utilizing model office technology platforms for skills acquisition in enterprise operations?
- ii. To what extent have male and female Business Education students acquired skills for enterprise operations due to the utilization of model office technology platforms?

## **Research Hypotheses**

The following null hypotheses were formulated and tested at 0.05 level of significance:

- H<sub>01</sub>: There is no significant difference in the rating of male and female business education students on the relevance of utilizing model office technology platforms for skills acquisition in enterprise operations.
- H<sub>02</sub>: There is no significant different in the extent to which male and female business education students acquired skills for enterprise operations due to utilization of model office technology platforms.

#### **Theoretical Framework**

The theoretical framework of this study was anchored on ACT-R theory of Skill Acquisition by Anderson, J. R. (1982) and Situated-Learning Theory by Jean Lave (1988). The ACT-R theory of skill emphasised the need for declarative knowledge and appropriate timing in the facilitating of skills acquisition for performing future task. Consequently, in this study, declarative knowledge was given to the participants to guide them on the utilization of each of platforms provided for learning. The situated learning theory was used to support the first theory because it provides that knowledge and skills are best acquired using the authentic activity within authentic context and using authentic culture of their application in real situation. Inferring from this theory, students were provided with authentic learning activities such as creating electronic accounting records, payroll computation, maintaining electronic bank statement, computing electronic financial ratios, creating website for their proposed businesses, creating social media page for marketing their products, and linking the social media pages to their websites, buying from online stores and selling through online platforms, designing office complementary cards, management emails, creating

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graphics and editing pictures, and managing personnel profiles electronically in close to real enterprise operation situations.

#### RESEARCH METHODS

Evaluation research design was adopted for the study. This research design was deemed appropriate since data collected on the relevance of utilizing model business office technologies as well as on skills acquired were based on participants' self-assessment in line with Kirk Patrick evaluation model levels of assessment. In addition, Okoro (2005) noted that evaluation research designed is mostly used to investigate the value and worth of that issue or case under investigation. The study also adopted quantitative approach to the evaluation study in order to obtain responses for further statistical analysis.

The population of the study was made up of 118 NCE III Business Education students in Federal College of Education (Tech.), Omoku during the 2023/2024 academic session. The entire population of 118 made up of 56 male and 72 female was used as the sample size of the study because it was a manageable size. Consequently, no sampling technique was used since the population was not large enough to warrant doing so.

A structured questionnaire was developed by the researchers and titled "Utilization of Model Office Technology Platforms for Business Education Students' Skills Acquisition in Enterprise Operations Rating Scale (UMOTPBESSAEORS)". The instrument was divided into two sections. The first section contains 13 items assessing relevance of office technology platforms utilized, while the second section contains 15 items assessing the skills acquired for enterprise operations. The response pattern for first section was based on four-points rating scales of Highly Relevant (HR – 4points), Moderately Relevant (MR – 3points), Somewhat Relevant (SR – 2points) and Not Relevant (NR – 1 point). The response pattern for second section was also based on four-points rating scales of: Very High Extent (VHE -4points), High Extent (HE - 3points), Low Extent (LE - 2points) and Very Low Extent (VLE - 1point). The two sections of the instrument were answered by the participating students.

The instruments were validated by an expert in Educational Measurement and Evaluation and two lecturers of Business education, all from Federal College of Education (Tech.), Omoku – Rivers State. The reliability of stability for the instruments was ascertained using test-retest method. The data generated through the test-retest done in an interval of two weeks using group 10 NCE II Business Education students were used to compute Pearson Product Moment Correlation Coefficient (PPMC) r – value using Statistical Package for Social Science (SPSS) version 24.0. The computations gave PPMC r value of 0.82.

#### **Research Procedures**

The researchers inspected the model office technology available and asked student to download the following apps sales and inventory management app, graphic design app, electronic payment app, and personnel management app from Google Play Store to complement what has been provided. The

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researchers gave declarative knowledge to business education students on how to utilize each of the model office technology platforms in carrying out real enterprise operations. The instructions leading to the dissemination of the declarative knowledge which lasted for lasted for five weeks was followed by practical demonstration sessions within the College model business office. Every week, students were educated and shown how to use three model office technology platforms except for the last week when only one platform was utilized. At the end of the fifth week, students were given five weeks to perform similar real life tasks given to them using the same platforms. At the end of the tenth week, the participants were given the instrument developed to assess the relevance of the platforms used and the skills they acquired in line with Kirk Patrick's evaluation model framework levels. However, only two levels of the framework were assessed in this study, which are – reaction regarding the platforms used and the abilities acquired. It is important to note that only 107 students fully participated in the study as ethically none of them were

forced to be part of the study. This was made up of 48 male and 59 female.

#### METHODS OF DATA ANALYSIS

The data collected were analysed using mean and standard deviation to answer the research questions. The null hypotheses were tested at 0.05 level of significance using independent t-test. All computations were done with the aid of SPSS version 24.0, consequently, the interpretation for upholding or rejecting null hypotheses was based on p value > = 0.05 uphold and where p value < 0.05 reject.

#### RESULTS

**Research Question 1:** What is the rating of male and female business education students on the relevance of utilizing model office technology platforms for skills acquisition in enterprise operations?

Table 1: Summary of Mean and Standard Deviation on the Relevance of Utilizing Model Officer Technology Platforms for Skills Acquisition in Enterprise Operations

			Male = 48			Female = 59		
S/N	Modern Office Technology Platform items	Mean	SD	Decision	Mean	SD	Decision	
1	Microsoft office suit platforms	3.90	0.96	HR	3.57	0.68	HR	
2	Digital camera platform		0.79	HR	3.64	0.77	HR	
3	Digital photo printing platform	3.65	0.77	HR	3.81	0.88	HR	
4	Wixsite.com webpage creation platform	3.05	0.32	MR	3.17	0.74	MR	
5	Social media platforms	3.00	0.00	MR	3.47	0.68	MR	
6	Email platforms	3.66	0.57	HR	3.63	0.75	HR	
7	Sales and inventory management platform	3.55	0.64	HR	3.90	0.96	HR	
8	Graphic design software	3.66	0.78	HR	3.65	0.77	HR	
9	Wi-Fi hotspot platform	3.79	0.87	HR	3.70	0.79	HR	
10	Digital printing platform	3.65	0.71	HR	3.55	0.32	HR	
11	Document binding platform	3.35	0.62	MR	3.00	0.00	MR	
12	Electronic payment platforms	3.60	0.72	HR	3.66	0.57	HR	
13	Personnel management platform	3.52	0.63	HR	3.68	0.71	HR	
	Cluster mean and standard deviation	3.55	0.65	HR	3.57	0.66	HR	

Source: Field Survey, 2024

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Table 1 shows that both male and female business education students opined that modern office technology platforms such as Microsoft office suit platforms, digital camera platform, digital photo printing platform, e-mail platform, sales and inventory management platform, graphic design platform, Wi-Fi hotspot platform, digital printing platform, electronic payment platforms and personnel management platforms utilization are highly relevant for skills development in enterprise operations with mean scores of 3.90, 3.57, 3.70, 3.64, 3.65, 3.81, 3.66, 3.63, 3.55, 3.90, 3.66, 3.65, 3.79, 3.70, 3.65, 3.55, 3.60, 3.66, 3.52, 3.68 and standard deviation scores of 0.96, 0.68, 0.79, 0.77, 0.77, 0.88, 0.57, 0.75, 0.64, 0.96, 0.78, 0.77, 0.87, 0.79, 0.71, 0.32, 0.72, 0.57, 0.63 and 0.71 respectively. In addition, both the male and the female business education students also opined that modern office technology platforms such as Wixsite.com webpage creation platform, social media platforms and document binding platform utilization are moderately relevant for skills development in enterprise operations with mean scores of 3.05, 3.17, 3.00, 3.47, 3.35, 3.00 and standard deviation scores of 0.32, 0.74, 0.00, 0.68, 0.62, 0.00. Nevertheless, when the cluster mean scores of 3.55, 3.57 and their standard deviation at 0.65 and 0.66 are considered, it can be concluded that both male and female business education students opined that the utilization of model office technology platforms for skills development in enterprise operation is highly relevant in their education and training.

**Research Question 2**: To what extent have male and female Business Education students acquired skills for enterprise operations due to the utilization of model office technology platforms?

**Table 2:** Summary of Mean and Standard Deviation on the Extent to which Male and Female Business Education Students Acquired Skills for Enterprise Operations due to the Utilization of Model Office Technology Platforms

		Male n = 48			Female $n = 59$		
S/N	Skills developed for Enterprise operations	Mean	SD	Decision	Mean	SD	Decisio
							n
1	I can create, review, format and save	2.55	0.64	HE	2.90	0.96	HE
	Microsoft word documents in any version						
2	I can create and merge Excel workbook with	2.66	0.78	HE	2.65	0.77	HE
	Microsoft word documents						
3	I can compute various financial records such	2.79	0.87	HE	2.70	0.79	HE
	as cash and bank statement, cost estimates,						
	assets accounts and sales records using						
	Excel						
4	I can design and make presentation using	2.65	0.71	HE	2.55	0.32	HE
	Microsoft PowerPoint platform						
5	I can design, edit and print various forms of	2.35	0.62	LE	3.00	0.00	HE
	documents using Microsoft office publisher						
6	I can snap pictures using my mobile phone	2.60	0.72	HE	2.66	0.57	HE
	camera or any digital camera						

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7	I can download pictures snapped using digital camera into Microsoft office picture	3.35	0.48	HE	2.99	0.12	HE
0	manager for editing and printing	2.25	0.44	ш	2.20	0.40	ш
8	I can edit and print any size of pictures using	3.25	0.44	HE	3.38	0.49	HE
0	digital picture printing device	2.00	0.00	ш	2.24	0.42	LE
9	I can navigate Wixsite.com webpage	3.00	0.00	HE	2.24	0.43	LE
10	creation platform to create own web page	2.00	0.00	TD	2.25	0.42	T.F.
10	I can create appealing graphic designs for	2.00	0.00	LE	2.25	0.43	LE
	website pages and offline advertisement						
1.1	using CorelDraw	2.42	0.50	H	2.22	0.47	H
11	I can customize Wixsite.com to create a web	3.43	0.50	HE	3.32	0.47	HE
10	page for any form of business	2.50	0.50	110	2.50	0.51	110
12	I can create social media pages using	2.50	0.50	HE	2.50	0.51	HE
	Facebook, WhatsApp, and Instagram for						
10	promoting businesses.	2.52	0.50	H	0.56	0.00	H
13	I can link my social media pages to	2.52	0.50	HE	2.56	0.00	HE
	Wixsite.com pages to create traffic and						
1.4	optimize business opportunity	2.56	0.50	TTE	2.00	0.00	TTE
14	I can link my e-mail account to online	2.56	0.50	HE	3.00	0.00	HE
	Wixsite.com platform for visibility and easy						
	contact	• 40	0.40			^ <b>~</b> 1	
15	I can create, maintain and control sales and	2.40	0.49	LE	2.47	0.51	LE
	inventory using software such as Invex						
	Inventory, QuickBooks, Zoho and						
	Sumtracker						
	Cluster mean and standard deviation	2.70	0.52	HE	2.57	0.43	HE

Source: Field Survey, 2024

Table 2 shows that both the male and female business education students opined that to a high extent they developed ability to create, review, format and save Microsoft word documents in any version; create and merge Excel workbook with Microsoft word documents, compute various financial records such as cash and bank statement, cost estimates, assets accounts and sales records using Excel, design and make presentation using Microsoft PowerPoint platform, snap pictures using my mobile phone camera or any digital camera, download pictures snapped using digital camera into Microsoft office picture manager for editing and printing, edit and print any size of pictures using digital picture printing device, customize Wixsite.com to create a web page for any form of business, create social media pages using Facebook, WhatsApp, and Instagram for promoting businesses, link my social media pages to Wixsite.com pages to create traffic and optimize business opportunity, and link my e-mail account to online Wixsite.com platform for visibility and easy contact with mean scores of 2.55, 2.90, 2.66, 2.65, 2.79, 2.70, 2.65, 2.55, 2.60, 2.66, 3.35, 2.99, 3.25, 3.38, 3.43, 3.32, 2.50, 2.50, 2.52, 2.56, 2.56, 3.00 and standard deviation scores of 0.64,

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0.96, 0.78, 0.77, 0.87, 0.79, 0.71, 0.32, 0.72, 0.57, 0.48, 0.12, 0.44, 0.49, 0.50, 0.47, 0.50, 0.51, 0.50, 0.00,0.50 and 0.00 respectively. The male and female business education students also opined that to a low extent they have developed the ability to create appealing graphic designs for website pages and offline advertisement using CorelDraw, and create, maintain and control sales and inventory using software such as Invex Inventory, QuickBooks, Zoho and Sumtracker with mean scores of 2.00, 2.25, 2.40, 2.47 and standard deviation scores of 0.00, 0.43, 0.49, 0.51. However, the male business education students opined that to a low extent they developed ability to design, edit and print various forms of documents using Microsoft office publisher with mean score of 2.35 and standard deviation score of 0.62, while their female counterpart opined that to a high extent they developed same ability with mean score of 3.00 and standard deviation score of 0.00. Similarly, the male opined that to a high extent they developed the ability to navigate Wixsite.com webpage creation platform to create own web page with mean score of 3.00 and standard deviation score of 0.00, while their female counterpart opined they can do same to a low extent with mean score of 2.24 and standard deviation score of 0.43. Nevertheless, when the cluster mean scores of 2.70, 2.57 and their standard deviation at 0.52 and 0.43 are considered, it can be concluded that both male and female business education students opined to a high extent they have developed skills for enterprise operations due to the utilization of model office technology platforms.

## **Test of Hypotheses**

**Hypothesis 1**: There is no significant difference in the rating of male and female business education students on the relevance of utilizing model office technology platforms for skills acquisition in enterprise operations.

**Table 3:** Summary of Independent t-test on the Difference in the Rating of Male and Female Business Education Students on the Relevance of Utilizing Model Office Technology Platform for Skills Acquisition in Enterprise Operations

Variable	N	Mean	Std. Deviation	df	Std Error	t	Sign for 2 tailed p-value
Male	48	3.55	0.62	105	0.12	0.16	0.41
Female	59	3.57	0.66	105	0.12	-0.16	0.41

Table 3 reveals t = -0.16, df = 105, p > 0.05 at 0.41. Therefore, since p value calculated at 2-tailed test of 0.41 is greater than the p-value provided at 0.05, the null hypothesis is accepted. Therefore, it means that there is no significant difference in the rating of male and female business education students on the relevance of utilizing model office technology platforms for skills acquisition in enterprise operations. This results emanated from the fact that both male and female business education students opined that the utilization of model office technology platforms for skills development in enterprise operation is highly relevant in their education and training.

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**Hypothesis 2:** There is no significant difference in the extent to which male and female business education students acquired skills for enterprise operations due to utilization of model office technology platforms.

**Table 4:** Summary of Independent t-test on the Difference in the Rating of Male and Female Business Education Students Acquired Skills for Enterprise Operations due to Utilization of Model Office Technology Platforms

Variable	N	Mean	Std. Deviation	df	Std Error	t	Sign for 2 tailed p-value
Male	48	2.70	0.52	105	0.00	1.20	0.17
Female	59	2.57	0.43	105	0.09	1.39	0.17

Table 4 reveals t = 1.39, df = 105, p > 0.05 at 0.17. Therefore, since p value calculated at 2-tailed test of 0.17 is greater than the p-value provided at 0.05, the null hypothesis is accepted. Therefore, it means that there is no significant difference in the extent to which male and female business education students acquired skills for enterprise operations due to utilization of model office technology platforms. This result emanated from the fact that both male and female business education students opined to a high extent they have acquired skills for enterprise operations due to the utilization of model office technology platforms.

#### DISCUSSION OF MAJOR FINDINGS

The major findings of this study are discussed under each of the specific purposes they addressed as follows: Rating of male and female business education students on the relevance of utilizing model office technology platforms for skills acquisition in enterprise operations:

The results related to this specific purpose revealed that male and female business education students opined that the utilization of model office technology platforms for skills acquisition in enterprise operation is highly relevant in their education and training. The results of hypothesis related to this specific purpose also revealed that there is no significant difference in the rating of male and female business education students on the relevance of utilizing model office technology platforms for skills acquisition in enterprise operations. This finding emanated from the fact that male and female business education students opined that modern office technology platforms such as Microsoft office suit platforms, digital camera platform, digital photo printing platform, e-mail platform, sales and inventory management platform, graphic design platform, Wi-Fi hotspot platform, digital printing platform, electronic payment platforms and personnel management platforms utilization are highly relevant for skills acquisition in enterprise operations. The finding of this study is supported by the finding of Okoro, et al (2019) when they revealed that graduating students rated their exposure to modern office technology such Microsoft office application, webpage design and management information system as relevant and adequate. The finding of this study is also supported by the finding of Okoye and Agu (2024) when they affirmed the need to utilize modern office

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technologies in order to assist students develop requisites skills required of them at the point of graduation. Inferring, from the foregoing discourse, it behooves business education lecturers to help their students leverage on the enabling power of the various model business office technologies for their learning and skills acquisition.

# Extent to which male and female business education students' developed skills for enterprise operations due to the utilization of model office technology platforms:

The results related to this specific purpose showed that both male and female business education students opined to a high extent they have developed skills for enterprise operations due to the utilization of standard model office technology platforms. The results of hypothesis testing related to this specific purpose also showed there is no significant difference in the extent to which male and female business education students developed skills for enterprise operations due to utilization of model business office technology platforms. This finding emanated from the fact that both the male and female business education students opined that to a high extent they developed ability to create, review, format and save Microsoft word documents in any version; create and merge Excel workbook with Microsoft word documents, compute various financial records such as cash and bank statement, cost estimates, assets accounts and sales records using Excel, design and make presentation using Microsoft PowerPoint platform, snap pictures using my mobile phone camera or any digital camera, download pictures snapped using digital camera into Microsoft office picture manager for editing and printing, edit and print any size of pictures using digital picture printing device, customize Wixsite.com to create a web page for any form of business, create social media pages using Facebook, WhatsApp, and Instagram for promoting businesses, link my social media pages to Wixsite.com pages to create traffic and optimize business opportunity, and link my e-mail account to online Wixsite.com platform for visibility and easy contact. The finding of this study is supported by the finding of Otum (2018) who reported that students rated that the utilization of information communication technology facilities influence on their skill acquisition in Business Education. The finding of this study is also supported by the finding of Ahmad and Muhammad (2024) when they affirmed that the utilization of modern technologies related to office work environment enhanced skills development and job opportunities among teaming youth. Consequently, the consistency of findings revealing that the utilization of model office technology platforms enhances skills acquisition suggests the need for business education teachers to always provide their students with the opportunity to utilize such technologies during their education and training.

#### **CONCLUSIONS**

Based on the findings of this study, it can be concluded that business education students as participants in this study rated the various model office technology platforms they utilized as highly relevant. It can also be concluded that the utilization of model office technology platforms enhanced business education students' skills acquisition in enterprise operations. Consequently, the need to replicate and sustain efforts used in this study to empower business education students with requisite skills for enterprise operations cannot be overemphasized.

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#### **Recommendations**

Based on the findings and the conclusions drawn, the following recommendations are put forward for implementation:

- 1. Business education lecturers should endeavour to utilize relevant model business office technology platforms empowered by android phone apps on Google play store to help their students develop skills for 21<sup>st</sup> century enterprise operations. The apps should relate to Microsoft office suit platforms, digital camera platform, digital photo printing platform, e-mail platform, sales and inventory management platform, graphic design platform, Wi-Fi hotspot platform, digital printing platform, electronic payment platforms and personnel management platforms relevant to business education programme.
- 2. Business education lecturers should design and implement learning activities such as creating, reviewing, formatting and saving Microsoft word documents; creating and merging Excel workbook with Microsoft word documents; computing various financial records such as cash and bank statement, cost estimates, assets accounts and sales records using Excel; designing and making presentation using Microsoft PowerPoint platform, snapping, editing and printing digital pictures using mobile phone camera, Microsoft office picture manager and digital picture printing device; customizing Wixsite.com or any other opened website to create a web page for marketing any form of business, creating social media pages using Facebook, WhatsApp, and Instagram for promoting businesses, linking social media pages to web pages to create traffic and optimize business opportunity, and linking e-mail account to online web platform for visibility and easy contact among others to help their students develop skills for 21st century business operations.

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