

Exploring Electronic Commerce Technology by Business Education Graduates for Employment Opportunities and Self-Reliance in Nigeria

Jossica Isioma Obimgbo¹, Friday Ekahe Abanyam^{2*}
and Robinson Osarumwense Owenvbiugie³

^{1,3}*Department of Vocational and Technical Education, Faculty of Education,
University of Benin, Benin City, Edo State, Nigeria*

²*Department of Business Education, Faculty of Education, Ambrose Alli University
Ekpoma, Edo State, Nigeria*

¹*jobimgbo@gmail.com,* ^{2*}*fabanyam@aauekpoma.edu.ng,*
³*osarumwenseowenvbiugie@uniben.edu.ng*

Abstract

Nigerian tertiary institutions churn out thousands of business education graduates on yearly basis, many of these graduates being unemployed. Nigeria has been on the lead as one of the nations with the highest number of awfully poor people. No wonder the jobless rate of youths in Nigeria has climbed to 33.3% from 27.1% recorded in the second quarter of 2020. To reduce this scourge of unemployment, there is a need to leverage the opportunities provided by e-commerce. Hence, this revision intended to explore e-commerce technology by business education graduates for employment opportunities and self-reliance in Nigeria. A survey design was employed. The participants for the study were 1303. The sample for the study was 475, comprising 138 workers of e-commerce vendors and 337 business education graduates across tertiary institutions in Nigeria. 55 questionnaire items tagged "E-commerce Technology for Employment Opportunities and Self-Reliant Questionnaire (ETEOSQ)" were raised for data gathering and certified by three experts in business education and online marketing vendors. Cronbach Alpha method of reliability was employed to ascertain the inner consistency of the instrument. The result showed coefficients of 0.92, 0.88, and 0.82 for sections A, B, and C of ETEOSQ respectively. The combined index of reliability was 0.89 meaning the questionnaire was very highly reliable. Data administration was done through online platforms. Data gathered were analyzed statistically using statistics such as mean, analysis of variance, and independent t-test statistics. The study found 15 benefits of exploring e-commerce technology, 22 e-commerce platforms, and vendors, as well as 18 practical activities needed to explore e-commerce technology. It was concluded that business education graduates can leverage the benefits provided by e-commerce platforms and vendors for employment and become self-reliant by following the basic activities involved in e-commerce. The study, therefore, recommended amongst others that business education graduates should weigh in on the benefits provided by e-commerce for gainful employment. This can be achieved by adopting the drop shipping strategies, which require no financial obligation in setting up.

Article history:

Received (October 14, 2021), Review Result (December 16, 2021), Accepted (February 9, 2022)

Keyword: *Business education program, E-commerce, E-commerce activities and benefits, E-commerce platforms and vendors, Self-reliance, Unemployment*

1. Introduction

It is interesting to note that in Nigeria, unemployment is now an endemic problem characterized as one of the solemn multipliers of poverty obstructions to high living standards. This represents a very high waste of manpower resources. Ibikunle et al. [1] affirmed the report by the World Bank that the Gross Domestic Product (GDP) at purchasing power parity of Nigeria was \$108 billion in 2018 indicating that in Nigeria, more and more people do not have purchasing power. Less consumption has led to lower production and economic growth has been hampered [2].

Unemployment, as posited by Bankole et al. [3], is a situation where people who are prepared and capable of working are incapable of securing suitable paid jobs. The higher the rate of unemployment, the higher the level of poverty and associated welfare challenges [4]. It may have long-term scarring effects on the working adults and far-reaching implications for the generation unborn. The persistence of the unemployment problem seems to demonstrate that standard economic policies have been insufficient. The need to create more entrepreneurship opportunities among business graduates becomes pertinent.

Business education at any of the tertiary levels of education, amongst others aimed at producing well qualified and competent graduates, who in this study refer to the final year business education students across the tertiary level education, whether male or female and can teach, work in the office as well as be self-reliance [5]. The robust nature of these goals is expected to go a long way in helping business graduates become creative-minded individuals to fulfill their potential in life. Creativity cannot be separated from a business education program if such a program must achieve its objectives.

Creativity, according to Omeke [6] is a mental activity assumed by an individual or group of individuals to solve specific issues of concern with the resultant effects of producing statistically infrequent solutions which are useful to the creator and the society at large. Creativity no doubt entails the display of some form of behavioural ability to perform a task and usually in an innovative manner. It involves evolving new technologies and ways of solving the problem. In a country like Nigeria where unemployment is at its peak, the creation of new ideas, methods, products, and markets is highly advocated. Okoro et al. [7] asserted that possession of creative and innovative skills gives rise to self-reliance. When somebody acquires skills in any occupation, such a person can establish his own business and even employ others. The person becomes self-reliant, self-sufficient, or self-employed.

Self-reliance is a situation where an individual has the economic capability to make available essential needs such as shelter, food, water, health care, personal safety, and education in a dignified and sustainable manner. Self-reliance has to do with developing and consolidating the livelihoods of persons of concern and plummeting their susceptibility and long-term reliance on humanitarian/external assistance. According to Abanyam et al. [8] self-reliance is expected to leverage strong social foundations and growing levels of social and economic activities as well as connecting with local communities. Business education graduates are expected to explore their environment to discover hidden opportunities, like those provided by electronic commerce.

Electronic commerce (e-commerce) in recent times has provided reliable platforms for businesses to thrive. E-commerce involves the use of computer systems, internet gadgets, and shareJ8he general public [10]. The outbreak of the coronavirus (Covid-19) across the globe

has aided in promoting e-commerce usage around the world. According to Abanyam and Onimwo [9], the lockdown deprived many of social activities but encouraged practices such as observing social distancing, quarantining of affected people, and avoiding public places with large gatherings of people. Hence, customers and marketers have resorted to a more convenient trading platform like e-commerce to sell and make purchases. Electronic commerce involves the exchange of data and conducting transactions via telecommunication devices. Electronic commerce dealings occur either as Business-to-Business (B2B), Business-to-Consumer (B2C), consumer-to-consumer or consumer-to-business [11].

The benefits of exploring e-commerce for gainful employment and self-reliance are such that Business Education graduates in Nigeria cannot ignore, most especially in the face of unending unemployment crises in Nigeria. The ability of e-commerce to allow business reaches a broader consumer range, as well as allows customers to buy products at periods of most convenience has given rise to e-commerce becoming the fastest-growing retail market [12]. According to Paris [13], e-Commerce helps organizations save costs, increase revenue, achieve better customer service, and provide faster delivery services. Similarly, Jamsheer [10] outlined some of the benefits of e-commerce to include large data storage for the sustenance of stock management control system, application of system analytics, tracking customer spending history, and personalized product and services recommendations. E-commerce platforms enable personalized product recommendations through advanced data linking plus analytics know-hows that help provide real-time personalized experiences and connections to customers. Therefore, Bain and Company [14] estimated that e-commerce possesses the tendency of reaching 300 to 350 million online shoppers by the end of the financial year 2025. Likewise, UNCTAD (2020) asserts that the pandemic, caused by COVID-19 resulted in a sales increase and patronage of e-commerce websites. Business Education graduates can leverage these benefits by engaging different e-commerce platforms and vendors to create jobs, which will, in turn, make them self-reliant.

Electronic commerce platforms are software that makes it possible for the viable progression of buying and selling over the internet. An e-commerce platform, according to Taher [15], needs a search feature that allows for the specific product to be found by the customers, a cart feature that enables the customers to organize their orders and a protected payment feature. As posited, a business outfit may decide on using an e-commerce platform hosted by an e-commerce provider like Shopify or can host a custom e-commerce platform on their premises [16].

1.1. Statement of the problem

Nigerian tertiary institutions, both private and public, churn out thousands of business education graduates across a range of ages and gender on yearly basis; many of these graduates being unemployed. Nigeria, in recent times, has been in the lead as one of the nations with the highest number of awfully poor people [17]. According to the National Bureau of Statistics [18], the jobless rate of youths in Nigeria has climbed to 33.3% from 27.1% recorded in the second quarter of 2020. It is of interest to state that this is not just a short-run waste of human resources but a foundation of discontent among the graduates. A popular human capital assumption in Nigeria is that after graduation, a student should make a fruitful transition from the institutions of higher learning to become productively employed by others or be self-reliant entrepreneurs, good citizens, as well as live a healthy lifestyle.

Despite the business opportunities presented by e-commerce platforms, with less financial implications, Business Education graduates have not seen the need to leverage on the

opportunities provided by e-commerce, instead, there are struggling the spaces on the streets looking jobs, which are either not available or few in supply. As observed by Abanyam et. al. [8], this situation has caused serious low self-esteem and frustration amongst the majority of business education graduates in Nigeria, which has turned them into rubbers, hooligans, and other social vices. Unemployment has exposed business graduates to higher risks of lower future wages, economic costs, increased welfare costs, and unused investment in education and training. To address some of the unemployment challenges in Nigeria, there is, therefore, an urgent need for business education graduates in Nigeria to explore the opportunities inherent in electronic commerce. Leveraging on the statistics presented by Taher [15], who stated that e-commerce is growing yearly at 23%, hence, with e-commerce sales expected to top \$29 trillion globally at the end of 2022, which is a projection for the retail sector only. This assertion implies that several employment opportunities are available to anyone, including business education graduates, who can leverage them, since the market is wide enough to accommodate all categories of e-commerce users. Hence, the thrust of this study is to explore e-commerce technology for employment opportunities and self-reliance in Nigeria.

1.2. Research questions

To successfully carry out this research, questions, such as the following were answered:

1. What are the benefits of e-commerce technology for employment opportunities and self-reliance in Nigeria?
2. What are the e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria?
3. What are the e-commerce activities for employment opportunities and self-reliance in Nigeria?

1.3. Hypotheses

Hypotheses such as the following guide the study:

1. School types are not a significant source of difference on e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria;
2. Male and females do not significantly differ in their opinion on the benefits of e-commerce technology for employment opportunities and self-reliance in Nigeria; and
3. The opinions of e-commerce vendors and business education graduates do not differ significantly on e-commerce activities for employment opportunities and self-reliance in Nigeria.

2. Literature review

Electronic commerce came into existence in the 1960s. This happened when business organizations applied the usage of Electronic Data Interchange (EDI) technology to exchange data with other business establishments. In the year 1979, the exchange of documents using electronic networks to transact business was recognized globally [12]. In 1980, the use of electronic networks for transacting business activities continued to record tremendous growth until it resounded in the 1990s when eBay and Amazon platforms revolutionize online marketing [19]. At the moment, purchasing immeasurable autumn of items online from electronic vendors is now available to all consumers [20]. Interestingly, at the moment, e-

commerce is assumed a phenomenal concept that has changed the process of doing business and making marketing activities more enjoyable. For many organizations, electronic commerce has become a priority [21][22].

Electronic commerce has unlocked doors of several opportunities for business organizations to explore. It provides them with the opportunities of furthering improvements and advancing fundamental market position by conveying an inexpensive, more flexing operational delivery sequence for their products and/or services [23]. Exploring electronic commerce platforms also provides business organizations the capability of linking up with corresponding business organizations to reduce transaction delivery times.

Numerous categorizations of electronic commerce suffixed from different viewpoints. Therefore, e-commerce has been categorized as B2B, C2C, C2B, B2A, and C2A [24]. B2B process occurs when companies market their services to other companies. Forrester Research estimated that before the end of the 21st century, the B2B e-commerce usage is expected to exceed 1 trillion United State Dollars in the United States only. B2B method of e-commerce transactions has the capability of reporting for over 12 percent of business-to-business sales globally [23].

Similarly, C2C is a category of e-commerce that requires consumer sells their products or services to another consumer through an online network. Reeves and Sons [26] clarified that this type of transaction is performed when other consumers buy products after seeing the advertisement on e-commerce websites such as eBay or craigslist. Consumers deal in business directly with each other. Interestingly, C2B takes place when consumers sell their products to an organization [27]. Sometimes, it is a business prototype where users manufacture products or create services that are used by businesses and institutions.

Furthermore, B2A is a business to government electronic trade. As opined by [28], in B2A, business outfits make use of a foremost webpage to transmit and receive information as well as carry-on business dealings with governmental agencies. The transactions of B2A using online platforms are more proficient. On the other hand, the C2A e-commerce method of online business encourages customers to request information regarding public subdivisions direct to government establishments. This method of e-commerce of model, according to Taher [15], is adjudged one of the easiest avenues for customers or users to converse with governments promptly.

Business education graduates can further avail themselves of the opportunity of using Drop shipping to do e-marketing business. Drop shipping, according to Kurnia et al. [29], is a type of fulfillment in which businesses do not keep products on hand, rather they list their products for sale and forward customer's request to the supplier who then conveys the purchased items straight to the customer, while the seller of the goods would keep the difference between their sale price and that of the supplier's price. Without start-up capital, a graduate of business education from Nigerian universities can comfortably employ themselves and become self-reliant. Oliveira et al. [30] posited that starting an e-commerce business as a drop shipper requires the business owner to have an affiliation with the wholesalers or producers who are interested in providing drop shipping services. Wong [31] observed that most of the vendors are very prepared to drop-ship if there is an interested seller who makes contacts with them directly, even though others may prefer sellers contacting them through drop shipping apps or directories like AliExpress or Doba.

Wholesaling type of e-commerce is the reverse practice of drop shipping. In this case, the firm stocks goods and accomplishes orders all by itself [21]. More opportunities are given to wholesalers to create B2B associations since they can sell goods in large quantities or for use or further sale to other interested businesses. It is vital to note that majority of the online e-

commerce wholesalers only participate in B2B dealings, and in most cases, their business activities may be explicitly designed only for the gratification of wholesale orders [32]. Bhasin [33] observed that other e-commerce wholesalers sell their products only to B2C, either at normal price, discounted price, or somewhere in between.

Indisputably, e-commerce is strategic to meet the expectations of customers' personalized interfaces, interactions, and provisions. The e-commerce industries are primary areas of technology innovation, especially given the growing popularity of e-commerce platforms. According to a Pew Research Center survey, approximately eight-in-ten Americans do their shopping online; also, their findings showed that 79% have made an online purchase of any type, while 51% have bought something using a cellphone and 15% have purchased a product by following a link from social online sites.

With more customers becoming aware of the benefits associated with e-commerce, the percentage of online shoppers is expected to soar tremendously as the clock keeps ticking. Stakeholders in marketing business (customers, organizations, society) are already leveraging on the massive benefits provided by e-commerce applications. For instance, in the past years when traditional marketing systems have held swell, customers wasted enormous time, energy, and resources traveling to the physical shops, sometimes in distant places, to do their conventional shopping. However, with the establishment of e-marketing, most customers have now given up on the usual exhausting practices of taking a trip to the stores or malls to purchase their needed items. With the availability of modern online gadgets such as web-enabled computers, laptops, mobile phones/devices, and lots more, business dealings are very easier. This unconventional marketing practice permits customers to perform their shopping activities everywhere even when sitting comfortably in their house [28].

3. Methodology

3.1. Ethical consideration

In carrying out this research work, written approval was obtained from the various institutions with whom the authors used in gathering information. Also, the written informed consent form was completed by all the students used in this study, while permission was granted by the different admins of the platforms used in this study.

3.2. Population

Participants used to elicit information for this study totaled 1303 made up of 138 workers of e-commerce vendors, obtained from e-commerce hosting sites; and 1265 business education final year students of an online community domiciled in both public and private institutions in Nigeria. These online communities include Ambrose Alli University e-learning platform, Business Education UNN e-forum, T Camp Nigeria – Entrepreneur Aerial Development, Madonna University e-learning platform, University of Jos E-Learning, Ritman College E-Learning Platform, Sam Olutuase's Learning Management System, University of Lagos Distance Learning Institute, Sedam Consulting E-Learning Platform, Voyage International School, Abuja, the Federal Polytechnic Ado-Ekiti E-Learning Portal. Other institutions include Ahmadu Bello University Zaria e-portal, Covenant University e-Learning, and Bridgelink Institute's Course Management System Portal.

Since e-commerce technology has to do with exploring online platforms for the buying, selling, and transfer of goods, services, as well as observing online 'postings' and 'threads', it was vital to elicit a response from online users carrying on e-commerce activities as well as

those business students using online communities in Nigerian tertiary institutions. This technique is in line with Abanyam and Abanyam [34] who opined that data can be gathered from the field through the use of online platforms like netnography, or by offline practices or the amalgamation of both.

3.3. Sample

Before the commencement of this research, a sample size that resulted in high effect size was ascertained through the use of GPower 3.1 software constructed on effect size $d = 0.8$, power $(1 - \beta = .95)$, with an apportionment ratio of $N2/N1 = 1$ and statistical test (t-tests—mean: Difference between two groups [35]. Resulting from the analysis carried out, a sample of over 108 respondents will be considered adequate to give the needed power to embark on this study. Consequently, the sample for the study is 475, made up of 138 workers of e-commerce vendors and 337 business education graduates, who in this study are referred to as the final year students in business departments across tertiary institutions in Nigeria. The researchers could not retrieve data from 42 students; resulting in a 91.16% return rate on the population. Hence, 433 respondents were used for the study. Table 1 shows the frequency distribution of participants, while [Figures 1], [Figure 2], [Figure 3], and [Figure 4] show pictorial representations of the personal characteristics of the participants.

Table 1. Frequency distribution of the characteristics of respondents

S/no	Variables of interest		Frequency	Percentage	Cumulative percentage
1	School Type	Public University	198	45.7	45.7
		Private University	154	35.6	81.3
		Others	81	18.7	100.0
2	Gender	Male	216	49.9	49.9
		Female	217	50.1	100.0
3	Status	E-commerce Vendors	133	30.7	30.7
		Business Education Graduates	300	69.3	100.0

Source: the researchers

The respondents' data such as school type, gender, and status, is additionally illustrated graphically in [Figures 1], [Figure 2], and [Figure 3] below:

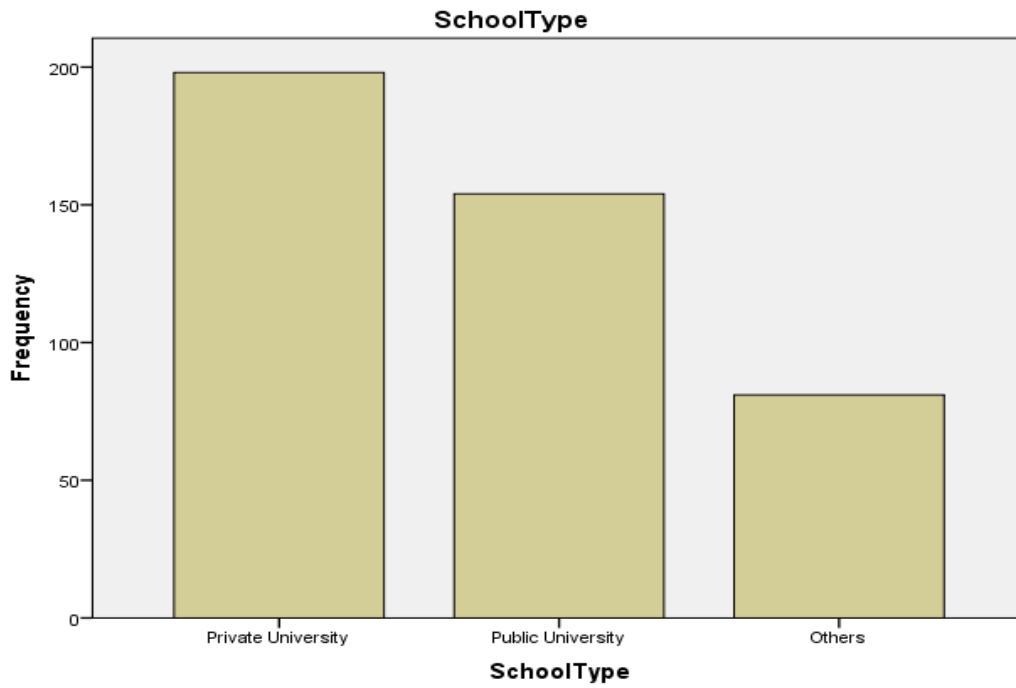


Figure 1. School type of respondents

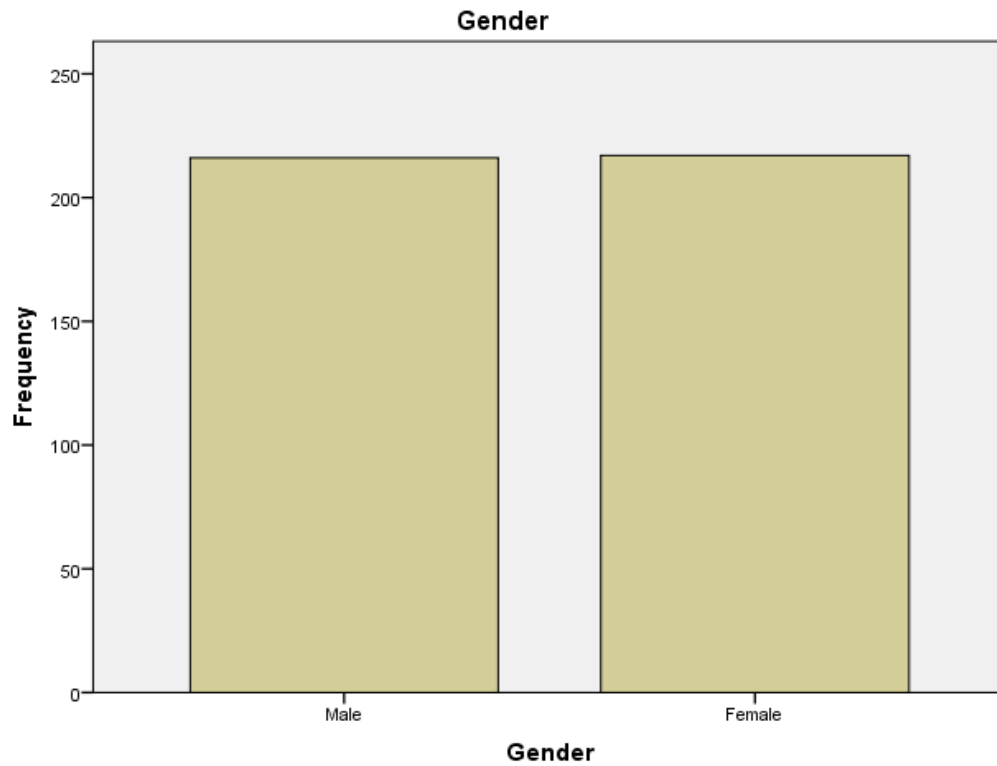


Figure 2. Showing respondents' gender

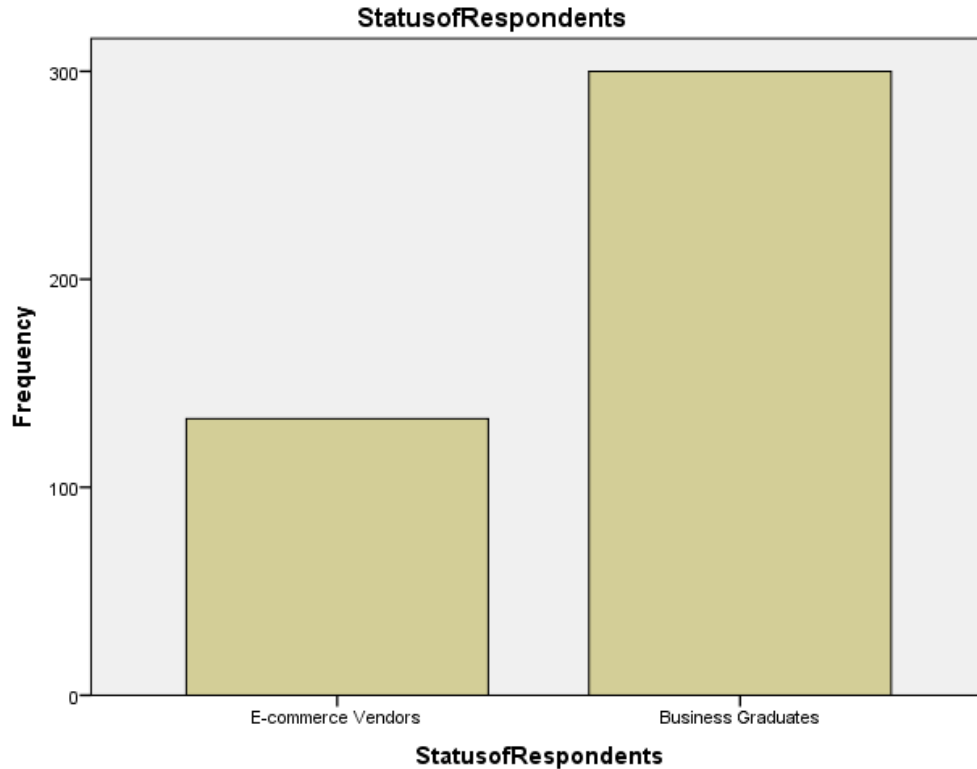


Figure 3. Showing the status of the respondents

3.4. Instrument

The researchers raised the questionnaire items used for data collection. These items were validated by seven experts in business education and online marketing. The questionnaire was tagged “E-commerce technology for employment opportunities and self-reliant questionnaire (ETEOSQ) with 55 items divided into parts I and II. Part I sought information on the participant’s characteristics. Part II, main while, was classified into clusters A, B, and C. Cluster A (15 items), Cluster B (22 items), and Cluster C with 18 items. Each of the three clusters (A, B, and C) was designed on a four-point scale and rating weights as follows: Strongly Agree (SA)-4, Agree (A)-3, Disagree (D)-2, and Strongly Disagree (SD)-1.

Cronbach Alpha reliability was employed in determining the internal uniformity of the instrument. The result showed an index of .92 for cluster A, .88 for cluster B, and .82 for clusters C of ETEOSQ. The combination of the reliability of the cluster produced a coefficient of .89 meaning the questionnaire was very highly dependable.

3.5. Procedure

This research was anchored on a survey design. Since this research did not receive any financial support, the researchers initially encountered difficulty in manually administering the questionnaire to all the business education graduates in both public and private institutions across the six Zones that make up Nigeria. To overcome this challenge, the researchers resorted to the use of an online method of data collection, which was made possible through Google form with less financial involvement. The respondents were instructed on how to fill the Google form sent into their respective online learning and business platforms. The data

were analyzed using mean, standard deviation, Analysis of Variance (ANOVA), and independent t-test statistics.

4. Results

The presentation and interpretation of results were done according to the questions and hypotheses which were raised to guide this study.

(1) Question one

Table 2. Showing mean and standard derivation of responses on the benefits of e-commerce technology for employment opportunities and self-reliance in Nigeria

S/no	Item statement	Mean	SD	Remark
1	Buying 24/7 all year long	3.70	.60	SA
2	A convenient way to do shopping	3.97	.21	SA
3	Time-Saving	3.29	.80	SA
4	Provides the consumers more opportunities to view different price options and features for better decision making	3.29	.83	SA
5	provides the history of customers' purchases	3.45	.55	SA
6	clients can easily search all categories of merchandise	3.68	.81	SA
7	No Geographical Limitations	3.00	.91	SA
8	Improves service quality as well as reduces the cost of operations	3.10	.94	SA
9	Increasing efficiency of in business operation	3.04	.97	SA
10	Laser-targeting market	3.28	.82	SA
11	Ease in starting and administering an enterprise	3.15	.96	SA
12	It helps the enterprise achieve a higher return on advertisements	3.15	.86	SA
13	Customers can transact business dealings from anywhere and at any time	3.12	.91	SA
14	It aids governments in delivering communal services	3.65	.54	SA
15	allows rural areas access to goods not previously available	3.73	.49	SA

Key: S/No=Serial Number; SD= Standard Deviation; SA= Strongly Agree

[Table 2] presentation shows that all the items ranging from 1-15 have mean scores of between 3.00 and 3.97 which were higher than the cut-off scores of 2.50, meaning that all the items are benefits of exploring e-commerce technology for employment opportunities and self-reliance in Nigeria. In addition, the results of the standard deviation designate a value range of between 0.21 and 0.97, implying the respondents agreed in their opinions that the 15 items are benefits of exploring e-commerce technology for employment opportunities and self-reliance in Nigeria.

(2) Hypothesis one

Table 3. ANOVA comparing opinions of respondents based on School type

	Sum of squares	Df	Mean square	F	Sig.
Between Groups	.068	2	.034	.781	.459
Within Groups	18.613	430	.043		
Total	18.680	432			

[Table 3] presents ANOVA results comparing opinions of respondents' School type to ascertain if significant differences exist in their opinion on e-commerce benefits for employment opportunities and self-reliance in Nigeria. thus, with a significant value of 0.459 as well as an F-ratio of 0.781, the result implies no is significant difference exists among their opinions of respondents in private universities, public universities, and other institutions in Nigeria on e-commerce benefits for employment opportunities and self-reliance in Nigeria. Hence, hypothesis one was accepted. The result is further presented in [Figure 4] below:

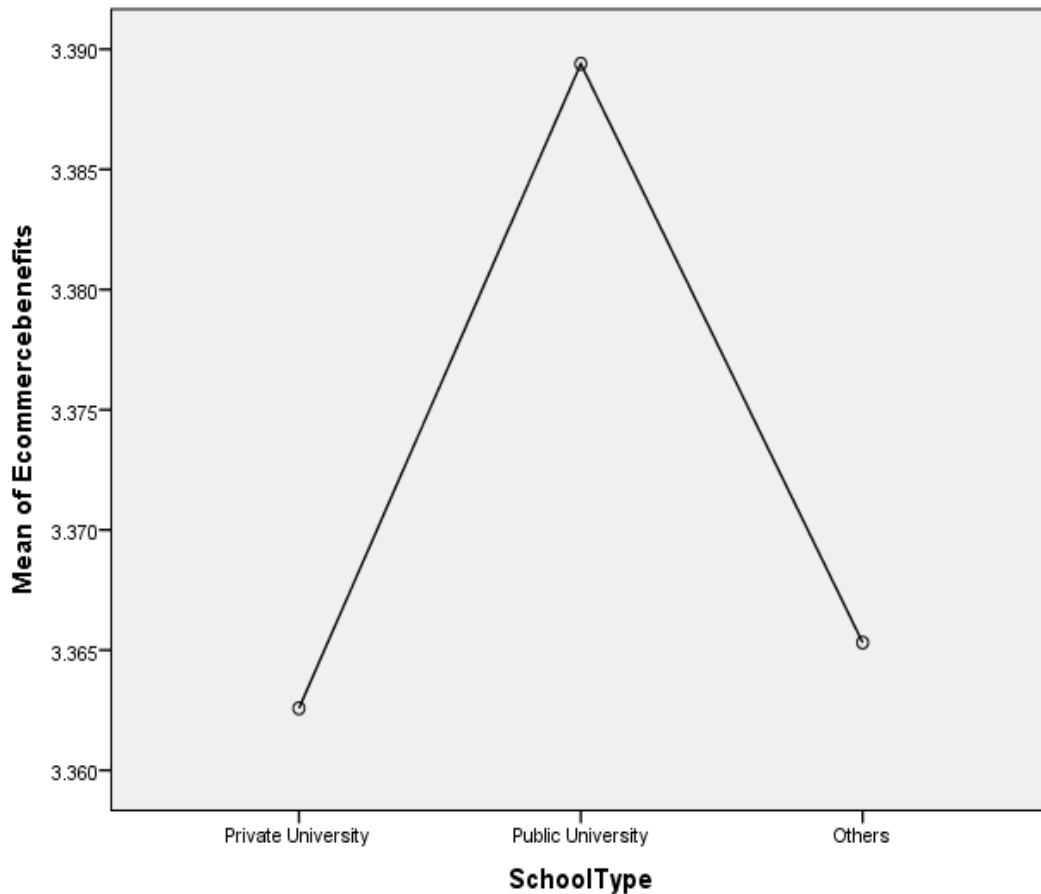


Figure 4. Graphical representation of respondents; opinion based on school types

(3) Question two

Table 4. Mean and standard deviation on e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria

S/no	Item statement	Mean	SD	Remark
1	Amazon	3.08	.93	SA
2	eBay	3.12	.89	SA
3	Jumia	3.12	.99	SA
4	Walmart Marketplace	3.69	.68	SA
5	Konga	2.72	1.32	SA
6	Chewy	3.36	.85	SA
7	Wayfair	3.47	.81	SA
8	Newegg	3.13	.90	SA
9	Alibaba	3.21	.84	SA
10	Etsy	3.13	.91	SA
11	Overstock	3.34	.89	SA
12	Rakuten	3.06	.90	SA
13	Shopify	3.12	.90	SA
14	WooCommerce	3.45	.73	SA
15	Magento	3.32	.88	SA
16	Squarespace	3.42	.90	SA
17	BigCommerce	3.10	.90	SA
18	Ecwid	3.04	.93	SA
19	Salesforce Commerce Cloud	3.53	.71	SA
20	Doba	3.41	.81	SA
21	AliExpress	3.42	.79	SA
22	Jiji	3.48	.74	SA

Key: S/No=Serial Number; SD= Standard Deviation; SA= Strongly Agree

[Table 4] sought information on the e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria. The result indicates that Items 1-22 have mean scores of between 2.72 and 3.69 which were higher than the benchmark of 2.50, meaning that all the 22 items are e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria. Furthermore, the results of the standard deviation indicates value range of 0.71 to 1.32, implying the respondents agreed in their opinions that the 22 items are e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria.

(4) Hypothesis two

Table 5. Independent t-test result comparing respondents' opinions based on gender

Variable	Gender	N	Mean	Std. D	T	Df	F	Sig. Value	Remark
E-commerce platforms and vendors	Male	216	3.32	.23					
	Female	217	3.21	.28	4.22	431	10.110	.002	Not Sig.
					4.52	416.27		.	

[Table 5] presents the outcomes of the analysis of Independent t-test analysis of male and female respondents on e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria. Table 5 shows an F-ratio of 10.11 and a significant figure of .00, which is below the significant value of .05. This implies that both male and female genders significantly differ in their opinions on the e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria. Hence, the null hypothesis was not upheld.

(5) Question three

Table 6. Mean and standard derivation on e-commerce activities for employment opportunities and self-reliance

S/no	Item statement	Mean	SD	Remark
1	A smooth shopping experience	3.10	.91	SA
2	Fast-loading web pages	3.15	.87	SA
3	Easy checkout	3.35	.76	SA
4	Flexible movements of products and orders	3.25	.85	SA
5	Detailed product information	3.19	.82	SA
6	High-quality product photos	3.18	.79	SA
7	Ability to review purchases and leave the site when not needed	3.23	.72	SA
8	Shipping returns and privacy policies are identified	3.27	.82	SA
9	Possess skills to save selected items into the shopping cart for future use	3.21	.87	SA
10	Inventory management	3.44	.53	SA
11	Order processing	3.85	.57	SA
12	Maintaining customer and order records	3.11	.89	SA
13	Providing customer service	3.13	.95	SA
14	Possess skills in managing sales returns with refunds or store credit facilities	2.94	.97	SA
15	Holding promotional discount events	3.37	.72	SA
16	Sending automatic order status notifications	3.18	.92	SA
17	Social media and email marketing	3.21	.84	SA
18	Sales tax management	3.15	.89	SA

[Table 6] elicited information on the e-commerce activities for employment opportunities and self-reliance in Nigeria. The result indicates that Items 1-18 recorded mean scores of between 2.94 and 3.85 which were all higher than the benchmark score of 2.50, implying that all the 18 item statements are agreed to be e-commerce activities for employment opportunities and self-reliance in Nigeria. Moreover, the results of the standard deviation present scores ranging from .53 to .97, inferring the respondents were not in disagreement with each other in their opinions that the 18 items are e-commerce activities to be explored by business education graduates for employment opportunities and self-reliance in Nigeria.

(6) Hypothesis three

Table 7. Independent t-test result comparing responses of vendors and business education graduates on e-commerce activities for employment opportunities and self-reliance

Variable	Status	N	Mean	Std. D	T	Df	F	Sig. Value	Remark
E-commerce Activities	E-commerce Vendors	133	3.23	.22	-.52	431.00	.17	.68	Not Significant
	Business Graduates	300	3.21	.28	-.51	245.98			

The result shown in [Table 7] represents the analysis of the Independent t-test of vendors and business education graduates on e-commerce activities for employment opportunities and self-reliance. The outcome of the result reveals an F-ratio of .17 and a significant value of 0.68, implying that vendors and business education graduates do not significantly differ in their opinions on e-commerce activities for employment opportunities and self-reliance. As such, the null hypothesis as stated was upheld.

Based on the data analyzed, the study found:

- (1) 15 items as benefits of exploring e-commerce technology for employment opportunities and self-reliance;
- (2) no significant difference exists among the opinions of business graduates in private, public, and other institutions in Nigeria on e-commerce benefits for employment opportunities and self-reliance in Nigeria. Hence, hypothesis one was accepted;
- (3) 22 items as e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria;
- (4) That both male and female genders significantly differ in their opinions on the e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria. Hence, the null hypothesis was not upheld;
- (5) 18 items as e-commerce activities to be explored by business education graduates for employment opportunities and self-reliance in Nigeria; and
- (6) That vendors and business education graduates do not significantly differ in their opinions on the e-commerce activities for employment opportunities and self-reliance. As such, the null hypothesis as stated was upheld.

4. Discussion

4.1. Benefits of exploring e-commerce by business education graduates

The findings reveal that e-commerce stores are always available to customers and sellers to access. Customers can buy products at all hours of any day, including weekends and holidays. In this regard, customers, most particularly those with less time on their hands and energy to engage in conventional shopping, can carry out any kind of purchase anytime by visiting the relevant website. This finding affirms the positions of Aonerank [28]; Oliveira et al. [30]; and Al-Abrow et al. [36] who disclosed that e-commerce is ideal for those customers working longer hours and are not able to create time to visit traditional retail stores.

The finding also reveals that e-commerce provides a very convenient way to transact business. This supports the assertion of [28] that with such a stress-free manner of doing business, consumers painlessly select goods from different various without any physical limitations. It was further found that e-commerce facilitates the buying and selling process, as such, reduces the amount of time put into shopping. With e-commerce technology, consumers have more opportunities to review different products features and price points to select less expensive and better options. Relating choices in a traditional marketing system can be very stressful to the customers. But, with e-commerce transactions, everything is clear in front of users.

Again, the study found that e-commerce makes the available detailed history of customers' transactions when needed with a huge amount of data. These findings further aligned line with McKinsey and Company [37], and Clarke [24] who in their opinions clarified that customers do not only observe exhaustive information about a product within seconds, never less are correspondingly able to revise their previous transactions. Hence, e-commerce allows customers to explore product information, equate their costs and benefits as well as pass judgment on their values before performing the completing transactions. This is challenging in a traditional market shop since a large quantum of data is demanding and in some instances impossible to be exhibited to customers. With e-commerce technology readily available, customers can easily search and locate diverse product classifications to leverage on benefits of the provided by using the webpage's search tools which in no time; the customer can locate the anticipated product [38].

4.2. Electronic commerce platforms and vendors

The study reveals that e-commerce platforms include online marketplaces such as Amazon and eBay that simply mandate users to register to obtain an account with little to no information technology implementation. SaaS is an alternative e-commerce platform that allows store owners to apply to "rent" space in a cloud-hosted service that does not necessitate in-house development or on-premises infrastructure. Some of the e-commerce platforms come as open-source platforms that require a hosting environment, comprehensive manual execution, and maintenance. Other e-commerce marketplace platforms as revealed in this study include Amazon, eBay, Walmart Marketplace, Chewy, Wayfair, Newegg, Alibaba, Etsy, Overstock, and Rakuten. The findings further revealed some vendors offering e-commerce platform services for clients hosting their online store sites include: Shopify, WooCommerce, Magento, Squarespace, BigCommerce, Ecwid, Salesforce Commerce Cloud. Any of these platforms and vendors are available to business graduates to explore to remove them from the scourging unemployment conundrum bedeviling Nigerian graduates.

4.3. Electronic commerce activities for employment opportunities and self-reliance

The study reveals that a hinged free shopping experience; webpages that process transactions very fast, flexibility in checking out; high-level movement of products and categories; comprehensive information about a product; high-quality product pictures; review of products after selection, and; clarity in marking return and privacy policies; and saving selected items into the shopping cart for future use are basic activities of e-commerce for employment opportunities and self-reliance in Nigeria. the findings lay credence to the positions of Abdulaali et al. [22], Dan [32], and McKinsey and Company [37], posited that the types of tasks business graduates need to explore e-commerce transactions include stock management; the processing of orders made; preserving customer demand details; adequate

customers' service provisions; processing returns along with promotional discount events; sending automatic order status notifications and lots more. These activities reflect essential mechanisms with necessary tools and features for exploring e-commerce and making online transactions as flexible as possible.

Researchers have reaffirmed that as the customers place an order, the web browser will frequently interact with the online server housing the website. Information relating to the purchase request will then be conveyed to the ordering officer, who then forwards to databases that manage stock levels [15][29][30]. This will ensure store inventories and funds of customers are enough for the purchase request to be treated. When the order made by the customer is authenticated, the officer notifies the vendor's web server to show a message of notification to the customers informing them of the success of their purchase request. The order manager will then convey the purchase request data to the fulfillment department, to effectively transmit such information to the customer. It is at this stage that whether soft/intangible or hard/tangible products can be transported to the customer who ordered such goods. Nevertheless, access to a service requested may be granted to the user.

This finding implies that business education graduates will continue to flood the streets looking for jobs that do not exist, hence, increasing the unemployment rates in Nigeria. However, the timely exploration of e-commerce technology by business education graduates, taking into consideration the detailed e-commerce activities as enshrined in this study, would go a long way to achieving self-employment and reliance.

Findings from the hypothesis comparing opinions of respondents' School type reveal significant differences never existed among the views of students in public universities, private universities, and other tertiary institutions offering business education courses in Nigeria on e-commerce benefits for employment opportunities and self-reliance. This result implies that not minding the type of tertiary institution one attends, e-commerce exploration would go a long way to creating employment opportunities for business graduates to be self-reliant.

Correspondingly, findings on the assertions of male and female respondents on e-commerce platforms/vendors for employment opportunities and self-reliance showed that both genders significantly differ in their claims on the e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria. Resulting from this, therefore, the null hypothesis was not upheld. This result supports the findings of Abanyam et al [9] and Kurnia et al. [29]. On the other hand, the results of the Independent t-test reveal that e-commerce vendors and business education graduates do not significantly differ in their opinions on e-commerce activities for employment opportunities and self-reliance. The implication is that both categories of respondents affirm that if business graduates can adapt to the activities outlined in this study, they would have been able to overcome the unemployment challenges they are faced with.

Though this study has established that exploring the benefits, platforms, and e-commerce activities by business education graduates is the keys to achieving employment opportunities as well as achieving self-reliance, there are some limitations of this study. First, the researchers used only business education graduates who have access to internet facilities in their institutions. Those who were unable to access their online platforms were excluded from this study. This has limited the generalization of the findings of the study to other students in tertiary institutions and organizations outside the study areas.

Secondly, since only quantitative means of collecting data were adopted, the impact of respondents' bias would have been large. This has limited the generalization of the findings of the study to other tertiary institutions in other geographical zones of the country and the world

at large. Hence, it is suggested that a similar study be undertaken in other climes of the country to determine if there will be any significant difference in the findings when compared with the findings of this study even using a different design to the one used for the study.

4. Conclusion

Based on the findings of this research, it is affirmed that business education graduates can explore the identified: 15 benefits provided by e-commerce technology for employment opportunities and self-reliance; 22 e-commerce platforms and vendors that business education graduates can use in performing online transactions, which have the potentials to provide them with gainful employment opportunities for self-reliance in Nigeria; and 18 detailed e-commerce activities to guide business education graduates who intend to explore e-commerce technology for employment opportunities and self-reliance in Nigeria. The study also concludes that school types, whether public, private or any other, as well as e-commerce vendors, do not significantly differ in their views. But then, both male and female genders significantly differ in their opinions on the e-commerce platforms/vendors for employment opportunities and self-reliance in Nigeria. Hence, the null hypothesis was not upheld. Above all, the timely exploration of the various e-commerce platforms would greatly reduce the unemployment rate of not just business education graduates, but the graduates from other fields that would leverage on benefits provided by this laudable and timely online marketing platform for employment opportunities and self-reliance.

6. Policy recommendation

It was recommended as follows:

(1) Business education graduates should leverage the benefits provided by e-commerce for gainful employment. This can be achieved by adopting the drop shipping strategies, which require no financial obligation in setting up.

(2) Business education graduates should carefully select the best platforms and vendors to transact business online. These vendors can be seen locally or internationally. Therefore, the right decision on the choices to make becomes vital.

(3) Business education graduates should study the procedure entails in carrying out successful e-commerce transactions to avoid unnecessary complications. Hence the various security measures and payment procedures should be effectively put in place before delving into the e-commerce business.

Acknowledgment

The researchers got no sponsors, grants, or support from any funding agency or individual. However, the authors appreciate our respondents and the university authorities, and all the online vendors for giving us access to using their platforms to successfully carry out this online research work.

References

- [1] G. Ibikunle, E. R. Orefuwa, and A. B. Mafo, "Analysis of the causes and effects of unemployment in Nigeria towards a solution for graduate idleness and poverty alleviation," *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, vol.24, no.2, pp.36-44, (2019)
- [2] O. I. Eme, "Insecurity and Nigeria's business climate," *Journal of Policy and Development Studies*, vol.7, no.1, pp.81-98, (2013)
- [3] K. Bankole and F. E. Oyeibisi, "Unemployment and its effects on economy. A case study of Munich," GRIN, Verlag, (2020), <https://www.grin.com/document/539365>
- [4] J. J. Isah, "Poverty alleviation and students' academic performance in public senior junior secondary schools in Lagos state education district (V)," M.Ed Dissertation, Department of Business Education, Lagos State University, Ojo. (2014)
- [5] C. U. Njoku, "Business education and value orientation for national economic empowerment and development," Paper presented at the Owo 2006 Annual Conference of the Association of Business Education of Nigeria (ABEN), (2006)
- [6] F. C. Omeke, "Concept and process of creativity," In Ezendu, C. E., Agbo, E. U., and Odigbo, G. O., *Introduction to entrepreneurship*, pp.34-78, Center for Entrepreneurship Development and Research, UNN, Nigeria, (2011)
- [7] I. F. Okoro and O. I. Ursula, "The teacher and skills acquisition at basic education from the perspective of cake making in home economics," *International Journal of the Common Wealth Research and Capacity Education Initiative (IJCWRCEI)*, vol.3, no.3, pp.112- 123, (2012)
- [8] F. E. Abanyam, N. I. Edeh, and V.A. Abanyam, "Repositioning technical vocational education and training (TVET) and entrepreneurship education for self-reliance in Nigeria," *Journal of Association of Vocational and Technical Educators of Nigeria (JAVTEN)*, vol.21, no.2, pp.265-273, (2016)
- [9] F. E. Abanyam and J. A. Onimwo, "Green netnographic marketing strategy for eliminating contact research practices in Nigerian Universities: A post-Corona virus paradox," *Journal of Technology and Humanities*, vol.1, no.2, pp.1-12, (2020)
- [10] K. Jamsheer, "Impact of e-commerce on society: Advantages and disadvantages," (2019), <https://acowebs.com/impact-e-commerce-society/>
- [11] R. Kalakota and A. B. Whinston, "Electronic commerce: A manager's guide," Wesley, Addison
- [12] Hinduja Global Solutions, "4 essential components of an e-commerce platform," (2018), <https://www.prnewswire.com/news-releases/4-essential-components-of-an-e-commerce-platform-300619459.html>
- [13] D. L. Paris, M. A. Bahari, N. Noorminshah, and I. W. Ismail, "Systematic literature review of e-commerce implementation studies," *Journal of Theoretical and Applied Information Technology*, vol.89, no.2, pp.420-438, (2016)
- [14] Bain and Company, "Bain and Flipkart foresee 350 million online shoppers by 2025, (2020), <https://www.consultancy.in/news/3139/bain-and-flipkart-foresee-350-million-online-shoppers-by-2025>
- [15] G. Taher, "E-commerce: Advantages and limitations," *International Journal of Academic Research in Accounting Finance and Management Sciences*, vol.11, no.1, pp.153-165, (2021)
- [16] H. Abdullah, I. Ismail, A. Alnoor, and E. Yaqoub, "Effect of perceived support on employee's voice behavior through the work engagement: A moderator role of locus of control," *International Journal of Process Management and Benchmarking*, vol.11, no.1, pp.60-79, (2021)
- [17] R. Olurounbi, "Nigeria unemployment rate rises to 33%, second highest on global list," (2021), <https://www.bloomberg.com/news/articles/2021-03-15/nigeria-unemployment-rate-rises-to-second-highest-on-global-list>
- [18] National Bureau of Statistics, "Nigeria unemployment report 2021," <https://nigerianstat.gov.ng/>

- [19] Z. M. El Gawady, "The impact of e-commerce on developed and developing countries," Egypt and United States. Misr University of Science and Technology. Gizza, Egypt, **(2005)**
- [20] A. Khurana, "Introduction to e-commerce," **(2019)**, <http://www.ddegjust.ac.in/studymaterial/mcom/mc-201.pdf>
- [21] A. Y. Nanekaran, "An introduction to electronic commerce," International Journal Of Scientific and Technology Research, vol.2, no.4, pp.1-9, **(2013)**
- [22] A. R., Abdulaali, A. Alnoor, and B. Eneizan, "A multi-level study of influence financial knowledge management small and medium enterprises," Polish Journal of Management Studies, vol.19, no.1, pp.21 31, **(2019)**
- [23] S. Abbas, A. A. Hadi, H. O. Abdullah, A.A. Inoor, Z. Z. Khattak, and K. W. Khaw, "Encountering COVID-19 and perceived stress and the role of a healthy climate among medical workers," Current Psychology, pp.1-14, **(2021)**
- [24] R. Clarke, "Electronic Commerce Definition," <http://www.rogerclarke.com>
- [25] L. Zhu, S. M. B. Thatcher, and M. E. Thatcher, "Institutional environment for business-to-business (B2B) e-commerce usage: Toward an understanding in the Chinese context," Journal of Information Technology Case and Application Research, vol.16, pp.127–154, **(2015)**
- [26] Reeves and Sons, "E-commerce definition. What is e-commerce?," **(2019)**, <https://ecommerce-platforms.com/glossary/ecommerce>
- [27] H. Al-Abrow and A. Alnoor, "The impact of locus of control and relationship quality in counterproductive work behavior through trust in the leader and psychological empowerment: An empirical study on workers in public hospitals in Basra," Jordan Journal of Business Administration, vol.13, no.2, pp.201-231, **(2017)**
- [28] A. Aonerank, "Benefits of e-commerce for customers, digital marketing learning," **(2019)**, <https://www.aonerank.com/digital-marketing-learning/benefits-ecommerce-customers/>
- [29] S. Kurnia, R. J. Karnali, and M. M. Rahim, "A qualitative study of business-to-business electronic commerce adoption within the Indonesian grocery industry: A multi-theory perspective," Information and Management, vol.52, pp.518-536, **(2015)**
- [30] T. Oliveira and G. Dhillon, "From adoption to Routinization of B2B e-commerce," Journal of Global Information Management, vol.23, pp.24-43, **(2015)**
- [31] L. Wong, "E-commerce advantages and disadvantages," **(2017)**, <https://blog.apruve.com/e-commerce-advantages-and-disadvantages>
- [32] C. Dan, "Electronic commerce: State-of-art," American Journal of Intelligent System, Beijing University of Technology, vol.4, no.4, pp.135-141, **(2014)**
- [33] H. Bhasin, "16 disadvantages of e-commerce - Problems with e-commerce," **(2019)**, <https://www.marketing91.com/disadvantages-of-e-commerce/>
- [34] F. E. Abanyam and V. A. Abanyam, "Green marketing in South-South Nigeria consumer sustainability: The distribution and physical practice on polythene manufacturing companies," Journal of Contemporary Issues and Thought, vol.1, no.1, pp126-140, **(2021)**
- [35] Faul, E. Erdfelder, A. G. Lang, "G*power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences," Behavior Research Methods, vol.39, pp.175-191, **(2007)**
- [36] H. Al-Abrow, A. Alnoor, and H. Abdullah, "Socio-technical approach, decision-making environment, and sustainable performance: Role of ERP systems," Interdisciplinary Journal of Information, Knowledge, and Management, vol.13, pp.397-415, **(2018)**
- [37] McKinsey and Company, "True gen': Generation Z and its implications for companies," **(2019)**, <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/true-gen-generation-z-and-its-implications-for-companies>
- [38] A. Abdallah, M. Rosli, T. Abdallah, and A. I. Noor, "What drives global B2B e-commerce usage: An analysis of the effect of the complexity of trading system and competition pressure," Technology Analysis and Strategic Management, **(2018)**, DOI:10.1080/09537325.2018.1432853

- [39] F. E. Abanyam, "Self-employment skills possessed by business education students of colleges of education for sustainable development in Cross River State, Nigeria," M.Ed. thesis, Department of Vocational Teacher Education, University of Nigeria Nsukka, Nigeria, (2014)