



## **DIGITAL SKILLS NEEDED BY BUSINESS EDUCATION GRADUATES FOR UNEMPLOYMENT REDUCTION IN THE 21<sup>ST</sup> CENTURY**

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### **Abstract**

*The study was conducted to ascertain the digital skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century in Ogun State, Nigeria. A self-designed four rating scale questionnaire titled: Digital Skills for Employment Questionnaire (DSEQ) was used for data collection. The instrument was validated by experts and was also subjected to internal consistency testing using Cronbach Alpha, and the reliability coefficient obtained was 0.83. The population of the study comprised 470 Business education students: 165 males and 305 females in three colleges of education in Ogun State. The sample of the study comprised 216 (male 76 and female 140) respondents determined by using yaro yemen's model and proportionate sampling technique. Mean and standard deviation were used to analyze the data and find answers to the research questions, while t-test was used to test the research hypotheses. Findings of the study suggested that e-commerce, digital business analysis and digital communication skills are needed for unemployment reduction among business education graduates. The results of hypotheses testing revealed that there is no significant difference in the mean score of male and female business education graduates on e-commerce related skills; there is no significant difference in the mean score of business education graduates in federal and state owned colleges of education on digital business analysis related skills; and there is no significant difference in the mean score of business education graduates in public and private colleges of education on digital communicating skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century. It was recommended among others that colleges of education should continue to provide equal training for both male and female undergraduates to acquire e-commerce skills to be successful in the digital economy of the 21<sup>st</sup> century.*

### **Introduction**

Business education is a field of study concerned with how to teach business in vocational programs to students at various grade levels. In the opinion of Mansueto Ventures (2021),



Business education is a term that encompasses a number of methods used to teach students the fundamentals of business practices. Business education provides undergraduates with the knowledge, skills, and techniques to start up and manage small businesses effectively. Business education offers various skills training in business studies, commerce, word processing, computer, entrepreneurship education, accounting, business management, economics, marketing and office technology management (OTM) among others at various grade levels. In the assertion of McVay, Murphy, and Yoon in Badawia, Reyada, Khamisa, Hamdana, and Alsaltawia (2019), one of the major objectives of business education is to provide technical competencies to undergraduates to have a successful career as professionals. Similarly, Edokpolor and Egbri in Edokpolor and Owenvbiugie (2017:2) noted that the actual goals of business education shall be to:

1. Prepare students for specific career in office occupations;
2. Equip students with the requisite skills for job creation and entrepreneurship; and
3. Expose students with knowledge about business, including a good blend of computer technology, which incorporates Information and Communication Technology (ICT).

Skill is a vital aspect of business education training. It is the ability to perform a task with the minimum outlay of time, energy, or both. For Green (2015), skill is a personal quality with three key features, namely: Productive (using skill is productive of value); Expandable (skills are enhanced by training and development) and Social (skills are socially determined). What characterized a skill as captured by Proctor and Dutta in Nakayama and Sutcliffe (2017:6) include:

A skill is not innate, but must be learned.

A skill behavior is goal directed (A skill develops in response to some demand imposed by the task environment).

A skill is acquired when the behavior is highly integrated and well organized. Through experience, the components of the behavior become structured into coherent patterns. Cognitive demands are reduced as skill is acquired.

Generally, skills are classified into hard and soft. Hard skills are also referred to as technical skills; such skills focus more on practical abilities. Kagan and Kindness (2021) defined hard skills as learned abilities acquired and enhanced through practice, repetition, and education. For Doyle (2020b), hard skills are teachable abilities or skill sets that are easy to quantify and are learned in the classroom, through books or other training materials, or on the job. They can also be acquired through training programs, apprenticeships, short-term training classes, online courses, and certification programs. Teachable as used here mean that hard skills can be develop them through dedicated training over a time period. In the opinion of Cheary (2020), hard skills are specific abilities. Meaning that such skills cannot be transferred from one industry to another.

There are various types of hard or technical skills. Some include: proficiency in a foreign language, degree or certificate; typing speed; machine and equipment operation and computer programming (Doyle 2020a). Others are coding ability, bookkeeping, computer and ICT skills, marketing and accounting. Furthermore, the Skill Competencies Matrix for Malaysia ICT Industry in Kapur (2018:3) grouped hard skills to:



**Creative multimedia:** these are creative content pre-production, creative content production, creative content post-production and creative content management.

**System design and development:** these include, architectural design, system design and software engineering.

**Information Technology:** includes, software development, database management, technical support, IT consultancy, IT sales and marketing and IT management.

**Shared services and outsourcing:** this includes, contact center, human resources and finance and accounting.

Soft skills refer to behavior and personality abilities. They are self-developed attributes, which are not specific to develop for a particular task. According to Kagan and Kindness (2021), they are less tangible and harder to teach or judge quickly. Soft skills are also known as "people skills" or "interpersonal skills" because they allow an individual to get along with others easily, listening well, and engaging in interactive discussions. In general, soft skills enhances interaction among people. Examples are: creativity, persuasion, collaboration, adaptability, emotional Intelligence, communication, leadership, motivation, patience, negotiation, problem solving, teamwork, time management and many more.

Digital skills are defined as a range of abilities to use digital devices, communication applications, and networks to access and manage information (UNESCO, 2018). Digital skills goes beyond the ability to just use devices. It extend to production, selection, evaluation, sharing, and using digital devices, such as computers and smartphones as well as relevant applications. In this vein, the Cornell University in Burton (2016) defines digital skills as 'the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet. Chaouchi and Bourgeau (2020) noted that some digital skills are required to use and interact with technology in order to fulfil specific tasks, while others are required to design, create and maintain tools and solutions for different industries. The rapid growth of Internet access and connectivity has been attributed to the development of a digital economy across the world.

The relevance of digital skills in the 21<sup>st</sup> digital economy cannot be overemphasized. According to Burton (2016), digital age is expanding into all areas of our lives, and it is not just those who work in IT that will need to be alert of this change. Therefore, having digital skills that are highly valued now and shall continue to be in the future in the modern workplace, is very vital. According to UNESCO (2018), such skills enable people to create and share digital content, communicate and collaborate, and solve problems for effective and creative self-fulfillment in life, learning, work, and social activities at large. In addition, UNESCO noted that they are linked to higher earning potential, and experts have predicted a growing number of jobs for people with advanced digital skills. By way of affirmation, Teltscher (2020) revealed that 64 per cent of large enterprises and 56 per cent of small and medium-sized enterprises that recruited ICT specialists in 2018 reported that these vacancies were hard to fill. To this end, the Digital Marketing Institute (2017) had suggested that jobseekers require such specialized skills to help them stand out from the crowd. Because of the importance attached to digital skills, vocational institutions are already incorporating digital skills into their programs to match workplace requirements (Chaouchi and Bourgeau, 2020).

Graduates unemployment in the country is alarming. Many youths roam the streets each day looking for jobs that do not exist. Paradoxically, the demand for labor with digital skills exceed its supply. In this 21<sup>st</sup> century, the Bureau of Labor Statistics in Nakayama and Sutcliffe (2017) estimated that the demand for IT professionals, such as computer engineers, computer support specialists, database administrators, and systems analysts, would grow at rates



exceeding 70%. This suggest that industries and nations are having serious IT skills shortage. To find solution to this major problem, will eventually create an economic boom for individuals with IT skills which will translate into employment. Affirming this, Nakayama and Sutcliffe (2017) noted that firms will always use better talents and skills in critical areas of their business operations so they can become more competitive.

Depending on the type of career, one need additional skills that pertain to specific role. To this end, the Digital skills one may need in the workplace include original content creation, e-commerce, network and information security, digital marketing, social media marketing, digital business analysis, and data analytics. Others are communicating, programming and coding, human-robot interaction, voice control command systems, or virtual reality-based interactions with connected processes and artificial intelligence. The list of the type of digital skills is endless. However, as pertains to business education graduates, interest was given to e-commerce, digital business analysis and communicating skills

The internet has paved way for e-commerce activities to be successful. Many people are increasingly using the internet on a daily basis thereby providing a platform for the buying and sell of goods and services. E-commerce has the potential to overcome market barriers and connect consumers and businesses; especially as everything from shopping and banking to remote work have moved online. E-commerce skills are the ability to buy and sell goods or services on the internet. E-commerce skills facilitate online transactions such as transfer of money to complete transactions, display of products, and keeping in touch with customers among others. Roggio (2016) suggested some e-commerce skills to include: content marketing, data analysis, design, advertising, email marketing, marketing automation, and search engine optimization.

E-commerce is still much a fertile ground for job creation in Africa and in the world generally. As predicted in the report by Boston Consulting Group (BCG) in Jacobs (2019), e-commerce could create around 3 million new jobs in Africa by 2025. In the assertion of the World Bank (2019), it can create jobs directly as well as through logistics services and other parts of the wider e-commerce ecosystem, improve household consumption and reduce inequality by bringing to people in rural areas the convenience, variety, and low prices enjoyed by urban dwellers, and contribute to economic growth by lowering the asymmetry of information and increasing economic efficiency. In the opinion of Shaw (2020), e-commerce has created employment opportunities in numerous sectors. By way of affirmation, AllAfrica (2020) noted that e-Commerce contributes more than 5% of total employment in China, as online purchases have become part of daily life for many Chinese households; and it also created job opportunities for many Nigerians within its logistics and supply value chain, who worked as last mile delivery agents, drivers and bike riders. Business education graduates can brace up to take job opportunities created by e-commerce by developing relevant skills.

Digital business analysis is another sellable skills highly needed in recent times. As Digital Skills Global (2021) noted, digital business analysis have become the hottest skills to have in the 21st Century. It is the skill that helps organizations to make the right decision by collecting and analyzing online mass business data. Pratt and White (2019) noted that Digital business analyst help guide businesses in improving processes, products, services and software through data analysis; they also bridge the gap between IT and the business to help and improve efficiency. They help organizations develop a digital ecosystem of technologies that will help drive digital transformation and business growth (Digital Skills Global, 2021). They are also responsible for overseeing the digital footprint of a company, which includes its website and social media content. Some notable digital business analyst skills include: Knowledge of agile development methodologies; deep understanding of digital technology; In-Depth business



knowledge; familiarity with customer-centric business models; design thinking; data capture, analysis, and strategy; cloud computing; Infrastructure (intelligent) automation; Vast domain knowledge; Social media strategy and online advertising; and web development (Daily Excelsior, 2020).

Communicating skills are those skills which are needed by a person to pass and receive information effectively through speaking and writing. For Digital Skills Global (2021), Communication is the number one skill an individual must learn to become an entrepreneur. With the advancement in technology in recent times, communication have move online. In this regards, Doyle (2019) maintained that most organizations today use a wide range of online channels from their website to mobile chat to blogs to connect with current and prospective customers, employees, and other stakeholders. In a similar way, (Pachițanu, 2016) stressed that online media is evolving continuously, occupying a more and more important place in organizations' marketing communication and it is becoming a very strong communication channel. With the existence of digital-based information technology, communication in the digital era and online corporate communications has been strengthened (Rozalena, Sulaeman, Mulyati and Gunawan, 2020).

Online communication involves the use of emails, social media, blogs and websites to relate with other persons or businesses; and it therefore requires skills in these areas. Some essential abilities here are **content marketing, digital advertising, data-driven marketing, search engine optimization (seo) and social media skills. it also include** the ability to have a clear, concise, objective, consistent, complete, relevant, and understanding of audience knowledge; and share content information online using online platforms. Individuals who have the understanding of how to effectively utilize these technological abilities have advantage. As Doyle (2019) noted, employers across industries are looking for digital communication professionals with a variety of specific skill sets. These individuals are highly need by business organizations for everything from creating online brand assets to building an engaged social media audience with the hope of promoting sales and increase profits.

Business education graduates considered in this study are basically male or females studying in public and private institutions. To this end it will be necessary to consider these variables in the study. For Borgonovi et al., in Verkroost, Kashyap, Garimella, Weber and Zagheni (2020) gender gaps disfavoring women in Internet access and basic digital skills can be sizeable, especially in less developed countries, gender gaps in high-level digital skills, such as those required to work in jobs in the information technology (IT) sector, are thought to be even larger in most countries. Similarly, Pawluczuk, Yates, Carmi, Lockley and Wessels (2020) found that ICT infrastructure often fail to reach women and therefore the digital gender gap persists. These findings can only be verified through an empirical study which this study intend to do.

### **Problem of the study**

With the high level of unemployment which has been worsen by the social distance syndrome brought about by COVID-19 pandemic in the country, it will be even more difficult for graduates to get job and fit into the digital economy of the 21<sup>st</sup> century without digital skills. As Teltscher (2020) noted, a large number of activities related to work, education, caring, shopping, socializing and other pastimes have been moved from the physical to the virtual world. Thus, a lack of digital skills opens citizens up to personal, social and financial risks; and limits their ability to operate as fully informed active citizens in a growingly digital society (Pawluczuk, Yates, Carmi, Lockley and Wessels, 2020). Therefore, being a person with digital skills, in the giving current economic situation, has never been more lucrative. It is on this basis that the study was conducted to ascertain the digital skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century



### **Research questions**

The study was guided by the following research questions:

1. What are the e-commerce skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century?
2. What are the digital business analysis skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century?
3. What are digital communicating skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century?

### **Research Hypotheses**

The following research hypotheses guided the study and were tested at 0.05 Alpha level of significant:

1. There is no significant difference in the mean score of male and female business education graduates on e-commerce skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.
2. There is no significant difference in the mean score of business education graduates in federal and state owned colleges of education on digital business analysis skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.
3. There is no significant difference in the mean score of business education graduates in public and private colleges of education on digital communicating skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.

### **Methodology**

Descriptive survey design was adopted for the study. Three research questions and three hypotheses guided the study. A self-designed four rating scale questionnaire titled: Digital Skills for Employment Questionnaire (DSEQ) was used for data collection. The instrument was validated by experts and was also subjected to internal consistency testing using Cronbach Alpha, and the reliability coefficient obtained was 0.83. The population of the study comprised 470 Business education students: 165 males and 305 females in three colleges of education in Ogun State. The sample of the study comprised 216 (male 76 and female 140) respondents determined by using yaro yemen's model and proportionate sampling technique. Mean and standard deviation were used to analyze the data and find answers to the research questions, while t-test was used to test the research hypotheses. For any of the item in the research questions to be answered to, the individual item mean must not be less than 2.50, and so with the grand mean of each research question. Similarly, for any of the null hypotheses to be accepted, the calculated t-value must be less than the critical t-value at 0.05 level of significant, otherwise rejected.



## Results

### Research Questions

**Research Question 1:** What are the e-commerce skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century?

Table 1: *the mean and standard deviation score on e-commerce related skills*

S/N	E-commerce skills needed by business education graduates for unemployment reduction include the ability to:	Mean	Std	Decision
1	Make e-payments	3.27	0.47	Agree
2	Secure an electronic wallet	3.04	0.30	Agree
3	electronic funds transfer	3.56	0.49	Strongly Agree
4	supply chain management	3.13	0.34	Agree
5	online transaction processing	3.14	0.72	Agree
6	marketing automation	3.62	0.58	Strongly Agree
7	search engine optimization	3.29	0.45	Agree
<b>Grand Mean</b>		<b>3.29</b>	<b>0.47</b>	<b>Agree</b>

Table 1 show that item 1,2,4,5, and 7 were agreed to, while item 3 and 6 were strongly agreed to. Also, the grand mean of 3.29 was greater than the midpoint value of 2.50, indicating that e-commerce skills are needed for unemployment reduction among graduates.

**Research Question 2:** What are the digital business analysis skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century?

Table 2: *the mean and standard deviation score on digital business analysis related skills*

S/N	Digital business analysis skills needed by business education graduates for unemployment reduction include the ability to:	Mean	Std	Decision
8	Manage electronic data	3.02	0.17	Agree
9	Social media strategy	3.19	0.43	Agree
10	design thinking	3.04	0.30	Agree
11	data capture	3.07	0.48	Agree
12	Manage vast domain	3.02	0.23	Agree



13	Interpretation data	3.10	0.30	Agree
14	Analysis data	2.90	0.37	Agree
<b>Grand Mean</b>		<b>3.04</b>	<b>0.32</b>	<b>Agree</b>

Table 2 revealed that all the items were agreed to and the grand mean value of 3.02 was equally greater than the midpoint value of 2.50, meaning that digital business analysis skills are needed for unemployment reduction among graduates.

**Research Question 3:** What are the digital communicating skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century?

Table 3: *the mean and standard deviation score on digital communicating related skills*

S/N	Digital communicating skills needed by business education graduates for unemployment reduction include the ability to:	Mean	Std	Decision
15	Content organization	3.40	0.47	Agree
16	Email marketing	3.01	0.30	Agree
17	Online advertising	3.47	0.49	Agree
18	Maintain a chat group to connect with customers	3.13	0.34	Agree
19	Obtain feedback from customers	3.14	0.72	Agree
20	Answer customers satisfactorily	3.52	0.58	Strongly Agree
<b>Grand Mean</b>		<b>3.27</b>	<b>0.48</b>	<b>Agree</b>

In table 3, item 15 to 19 were agreed to while item20 was strongly agreed to by the respondents. The grand mean of 3.27 was greater than the midpoint value of 2.50, suggesting that digital communicating skills are needed for unemployment reduction among business education graduates.

### **Research Hypotheses**

**Research Hypothesis 1:** There is no significant difference in the mean score of male and female business education graduates on e-commerce skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.



**Table 4:** *t-test result of male and female business education graduates on e-commerce skills needed by business education graduates for unemployment reduction* *df =214*

ITEM	Gender	N	Mean	Std.	t-cal	t-critical	Decision
1	Male	76	3.28	0.48	0.26	1.97	Accept
	Female	140	3.27	0.47			
2	Male	76	3.03	0.30	0.76	1.97	Accept
	Female	140	3.04	0.31			
3	Male	76	3.56	0.49	0.80	1.97	Accept
	Female	140	3.57	0.49			
4	Male	76	3.13	0.34	0.22	1.97	Accept
	Female	140	3.14	0.35			
5	Male	76	3.13	0.73	0.17	1.97	Accept
	Female	140	3.15	0.72			
6	Male	76	3.61	0.58	0.12	1.97	Accept
	Female	140	3.62	0.57			
7	Male	76	3.30	0.46	0.15	1.97	Accept
	Female	140	3.39	0.45			
<b>Grand Mean</b>					<b>0.35</b>	<b>1.97</b>	<b>Accept</b>

In table 4 the grand mean of the calculated-t value of 0.35 was less than the critical-t value of 1.97. The null hypothesis 1 was retained. Meaning there is no significant difference in the mean score of male and female business education graduates on e-commerce skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.

**Research Hypothesis 2:** There is no significant difference in the mean score of business education graduates in federal and state owned colleges of education on digital business analysis skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.



**Table 5:** *t*-test result of business education graduates in federal and state owned colleges of education on digital business analysis skills on *df* = 177

ITEM	Public Institns	N	Mean	Std.	t-cal	t-critical	Decision
8	Federal	124	3.04	0.21	1.66	1.97	Accept
	State	55	3.00	0.00			
9	Federal	124	3.14	0.41	1.33	1.97	Accept
	State	55	3.23	0.42			
10	Federal	124	3.07	0.34	1.32	1.97	Accept
	State	55	3.00	0.33			
11	Federal	124	3.01	0.50	1.58	1.97	Accept
	State	55	3.14	0.48			
12	Federal	124	3.04	0.30	1.16	1.97	Accept
	State	55	3.00	0.00			
13	Federal	124	3.08	0.28	1.13	1.97	Accept
	State	55	3.14	0.35			
14	Federal	124	2.95	0.37	2.67	1.97	Reject
	State	55	2.78	0.41			
<b>Grand Mean</b>					<b>1.55</b>	<b>1.97</b>	<b>Accept</b>

Table 5 revealed that the grand mean of the calculated-t value 1.55 was less than the critical-t value of 1.97. Null hypothesis 2 was retained, suggesting that there is no significant difference in the mean score of business education graduates in federal and state owned colleges of education on digital business analysis skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.

**Research Hypothesis 3:** There is no significant difference in the mean score of business education graduates in public and private colleges of education on digital communicating skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century.



**Table 6:** *t*-test result on *DF* =214

ITEM	Ownership	N	Mean	Std.	t-cal	t-critical	Decision
15	Public	179	3.25	0.47	1.40	1.97	Accept
	Private	37	3.37	0.49			
16	Public	179	3.05	0.33	0.89	1.97	Accept
	Private	37	3.00	0.00			
17	Public	179	3.55	0.49	0.70	1.97	Accept
	Private	37	3.62	0.49			
18	Public	179	3.13	0.34	0.44	1.97	Accept
	Private	37	3.16	0.37			
19	Public	179	3.18	0.71	1.81	1.97	Accept
	Private	37	2.94	0.77			
20	Public	179	3.63	0.56	0.34	1.97	Accept
	Private	37	3.59	0.64			
<b>Grand Mean</b>					<b>0.93</b>	<b>1.97</b>	<b>Accept</b>

In Table 6, the grand mean of the calculated-t value 0.93 was less than the critical-t value of 1.97. The null hypothesis 3 was accepted and concluded that there is no significant difference in the mean score of business education graduates in public and private colleges of education on digital communicating skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century

### Discussion

Results in Table 1 show that the grand mean of 3.29 was greater than the criteria value of 2.50, which agreed with that e-commerce skills are needed for unemployment reduction among graduates. The finding mirrors the global trend of businesses in the 21<sup>st</sup> century which is largely aided by technology. It agreed that business activity are now easily carried out online and with the right skills an individual can be gainfully employed by e-commerce. The finding is in agreement with AllAfrica (2020) that online purchases have become part of daily life for many households; and it has also created job opportunities for many Nigerians within its logistics and supply value chain, who worked as last mile delivery agents, drivers and bike riders.

Similarly, in table 4 the grand mean of the calculated-t value of 0.35 was less than the critical-t value of 1.97. The null hypothesis 1 was retained. Meaning there is no significant difference in the mean score of male and female business education graduates on e-commerce skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century. This find explain the value of e-commerce to both males and females. E-commerce is a business open to all a sundry and can be profitable to the males as well as females. This finding is supported by the World Bank (2019) that it can create jobs directly as well as through logistics



services and other parts of the wider e-commerce ecosystem, improve household consumption and reduce inequality by bringing to people in rural areas the convenience, variety, and low prices enjoyed by urban dwellers, and contribute to economic growth by lowering the asymmetry of information and increasing economic efficiency.

Table 2 revealed that all the items were agreed to and the grand mean value of 3.02 was equally greater than the midpoint value of 2.50, meaning that digital business analysis skills are needed for unemployment reduction among graduates. This finding captures the importance of analysis to a business. Proper business analysis enables the firm to make good decisions. More so, individuals who are capable of gathering, analysis, present and manage digital data are of great value to companies.

Furthermore, Table 5 revealed that the grand mean of the calculated-t value 1.55 was less than the critical-t value of 1.97. null hypothesis 2 was retained, suggesting that there is no significant difference in the mean score of business education graduates in federal and state owned colleges of education on digital business analysis skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century. By extension, the business education graduate from either federal or state owned collages of education can become a digital data analyst. These findings aligned with Digital Skills Global (2021) that digital business analysis have become the hottest skills to have in the 21<sup>st</sup> Century. Meaning it can create jobs for people including business education graduates who possess these skills.

Results in Table 3 suggested that digital communicating skills are needed for unemployment reduction among business education graduates. This remain a fact as communication is key to the success of any business organization. By way of agreement, the Digital Skills Global (2021) revealed that communication is the number one skill an individual must learn to become an entrepreneur.

Also, in Table 6, the grand mean of the calculated-t value 0.93 was less than the critical-t value of 1.97. The null hypothesis 3 was accepted and concluded that there is no significant difference in the mean score of business education graduates in public and private colleges of education on digital communicating skills needed by business education graduates for unemployment reduction in the 21<sup>st</sup> century. Every institution of learning, public or private is responsible for training the manpower need of the society; and training the manpower that can be gainfully be employ is an applause. Therefore, there is no distinction between the publicly and privately owned colleges of education especially when it comes to training students in business communications. The finding also revealed that digital communication is one area that can reduce graduates unemployment and graduate with these skills are looked for by companies. This agreed with Doyle (2019) that employers across industries are looking for digital communication professionals with a variety of specific skill sets. These individuals are highly need by business organizations for everything from creating online brand assets to building an engaged social media audience with the hope of promoting sales and increase profits.

## **Conclusion**

Unemployment remains an evil that threatens graduates' social and economic welfare. With the trend of technology, it will be even more difficult for graduates to get job and fit into the digital economy of the 21<sup>st</sup> century without digital skills. As findings show, a large number of activities related to work, education, caring, shopping, socializing and other pastimes have been moved from the physical to the virtual world. Thus, the lack of digital skills opens citizens up to personal, social and financial risks; and limits their ability to operate as fully informed active citizens in a growingly digital society. Therefore, being a person with digital skills, in the giving current economic situation, has never been more lucrative. It is on this basis that the study carried out to ascertain the digital skills needed by business education graduates for



unemployment reduction in the 21<sup>st</sup> century. The study revealed that e-commerce, digital business analysis and digital communication skills are needed for unemployment reduction among graduates.

### **Recommendations**

Based on the finding of the study, it was recommended that:

1. Colleges of education should continue to provide equal training for both male and female undergraduates to acquire e-commerce skills to be successful in the digital economy of the 21<sup>st</sup> century.
2. Digital business analysis should be inculcated in the business education curriculum to enable institutions in the proper training of undergraduates to fit into the digital age.
3. Owners of colleges of education running business education program should provide funds for the purchase and maintenance of ICT facilities to the learning of digital communication skills.

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