

INFLUENCE OF DIGITAL ENTREPRENEURSHIP AND VOCATIONAL EDUCATION ON SUSTAINABLE ECONOMIC DEVELOPMENT IN SOUTH- EAST, NIGERIA

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Abstract

The study examined the influence of digital entrepreneurship and vocational education on sustainable economic development in Nigeria. Two research questions guided the study and one null hypothesis was tested at 0.05 level of significance. The study adopted descriptive survey research design. The population of this study comprised 315 Business Education Postgraduate Students in Ebonyi State university Abakiliki, Enugu State University of Science and Technology and Imo State University in the South East of Nigeria. Since the population of the study was manageable, there was no sampling. A twenty items structured questionnaire was used to collect data for the study. The questionnaire was subjected to face validity by three experts. The reliability of the instrument were established to ascertain the internal consistency of the instrument and coefficient of 0.87 and 0.89 was yielded. The data collected were analysed using mean and standard deviation, and the hypothesis was tested using multiple regression analysis at 0.05 level of significant. The findings of the study revealed that there was significant composite contribution of digital entrepreneurship and vocational education on sustainable economic development in the form of unemployment reduction in Nigeria; $R = 0.910$, $P < .05$. it was further indicated that (82.6% ($Adj. R^2 = 0.826$)) that is about 83% of the variance in unemployment reduction was accounted for by the linear combination of the independent variables. The study discovered that digital entrepreneurship and vocational education equips the unemployed youth with skills for achieving sustainable economic development in Nigeria. It was recommended that Government through the institutions' managements should develop a grant for students to commercialize their skills learnt in school to become employer of labour rather than seeking for unavailable white collar job.

Keywords: Digital Entrepreneurship, vocational Education, Unemployment, Sustainable Economic Development

Introduction

The issue of unemployment and poverty eradication has been top priority of many government and institutions especially in developing countries where extreme unemployment and poverty rate are conspicuous and pandemic. Anyadike, Emeh and Ukah (2012) submitted that one can conclude that Nigeria's youth unemployment problem poses a great threat to its development, security and peaceful co-existence. In Nigeria today, the increasing rate of poverty, unemployment, corruption and so many other societal vices have become worrisome to the government and to every well-meaning citizen. Hence, the urgent need for changes in education, because education is the pivot through which effective and sustainable individual and economic development can revolve.

One of the changes the government believes that will integrate into the curriculum of all the institutions of high learning that are responsible for producing large number of graduates annually is to equip them (graduates) with desirable skills, competencies required for job creation and self-employment. To ensure for actualization of the Federal Government dream, the ministry of education in collaboration with National Universities Commission (NUC), National Commission for Colleges of Education (NCCE) and National Board for Technical Education (NBTE) in early 2000 organized several workshops and seminars involving all the Directorate of Academic Planning from Nigeria Universities, Colleges of Education, Polytechnics and Monotechnics to produce a draft curriculum on entrepreneurial studies for all the tertiary institutions in Nigeria. The outcome of these workshops and seminar consequently led to the compulsory introduction of entrepreneurial education in all the tertiary institutions in Nigeria in an attempt to reduce graduates' unemployment trend by providing the needed training in entrepreneurial skills to students to enable the graduates set up business on their own on graduation.

Mahad, Muhammad, Muhammad, Muhammad and Najeeb (2023) saw digital entrepreneurship as one of the widely perceived technological revolutions around the world that has created opportunities for both entrepreneurship and vocational education. Exactly, digital entrepreneurship is the technological assets based on ICTs and internet that transform products, services and businesses into digital landscape. Graduates who have been equipped with vocational skills should be aware of these opportunities for continuous and consistent innovation. Transformation from conventional to digital businesses create many new ways that are important to drive novel innovation which lead toward value creation. However, Lusch and Nambisan (2015) argued that digital entrepreneurship is not just the adoption and usage of ICTs but it explores the entrepreneurial activities and its infrastructure through digital technologies to support all the entrepreneurial interaction amongst diverse stakeholders. Digital entrepreneurship is envisaged as a critical pillar for sustainable economic development, job creation and innovation in developed economies including the Members States of the European Union (Zhao and Collier, 2016). These states witnessed number of factories emerged by the use of digital entrepreneurship that help the economic development. They also argued that digital entrepreneurship is distinctive area for academicians because of its importance in society and economy.

The whole idea about digital entrepreneurship is about self-employment which will generate employment opportunities to others that may work with entrepreneur if he cannot work alone (Akuhwa, Gbande, Akorga and Adye, 2015). Digital entrepreneurship is the most

effective method of bridging the gap between science and the market place, creating new enterprises and bring new products and service to the market. These entrepreneurial activities significantly affect the economy of an area by building the economic base and providing jobs. Entrepreneurship is about taking a risk; it is the process of creating new values that did not previously exist; it is the practice of starting new organization, especially new business; it involves creation new wealth through implementation of new concepts (Biney, 2017). What entrepreneurs have in common is not personality traits but a commitment to originality.

To Roy, Tripathy and Tripathy (2017), entrepreneurship is the dynamic process of creating incremental wealth. This wealth is created by individuals who assume the major risks in terms of equity, time and/or career commitments of providing values for some product or service. The product or service may or may not be new or unique but value must be infused by the entrepreneur by securing and allocating the necessary skills and resources. For improvement to occur, the entrepreneur must have not only talent, ingenuity and knowledge, but he must also be hard working, focused and purposeful (Umaru and Ungbo, 2015). In other for digital entrepreneurship to have lasting and sustainable development impact, it must focus both on expansion to benefit more people and on becoming institutionalized in policies and programs (Egele, 2023).

Every nation desire to attend sustainable economic development, where there will be zero poverty, improved standard of living, quality education and drastic reduction in unemployment (Adebayo, Adekoya & Oladipe, 2023). Sustainable development is a process for meeting human development goals while sustaining the ability of natural systems to continue to provide the natural resources and ecosystem services (Provisioning; Regulating; Supporting and Culture) upon which the economy and society depends, (Egele, 2023). Hayton (2015) defines sustainable economic development in terms of removal of poverty, illiteracy, disease and changes in the composition of input and out increase in per capita output of material goods. Abdul (2018) contended that sustainable economic development is a process where low income national economies are transformed into modern industrial economies.

Although the realization of these aforementioned objectives may not be easily achieved or attained, but a serious nation which can invest heavily on education not just education, but entrepreneurship and vocational education may be on the right path towards attainment of sustainable economic development. It involves qualitative and quantitative improvements in a country's economy. Political and social transformations are also included in the concept of sustainable economic development in addition to economic changes.

Literally, sustainable economic development can be defined as passage from lower to higher stage which implies change that can leads to poverty reduction and increment in employment. Abdul (2018) pointed out that sustainable economic development is generally defined to include improvements in material welfare especially for persons with the lowest incomes, the eradication of mass poverty with its correlates of illiteracy, disease and early death, change in the composition of inputs and output that generally include shift in the underlying structure of production, from agriculture towards industrial activities, the organization of the economy in such a way that productive employment is general among working age population rather than the situation of a privileged minority, and the

correspondingly greater participation of broad based groups in making decision about the direction, economic and otherwise, in which they should move their welfare.

Klarin (2018), observed that, classical theories of development consider development within the framework of economic growth and development. That development is for economic growth that every state in a particular stage has to undergo, driven by the transformation of traditional agriculture into modern industrialized production of various products and services that is shifting from the traditional society to the stage of maturity and high consumption. These theories consider developing countries as countries limited by the poor allocation of the resources emerging as a result of the firm hand of government and corruption, inefficient and insufficient economic initiatives, but also political, institutional and economic austerity, whereby being captured in dependence and domination of developed wealthy states.

Vocational Education facilitates the acquisition of applied skills and basic scientific knowledge. It is a planned programme of course and learning experiences that begin with the exploration of career options, supports basic, academic and life skills, and enables the achievement of high academic standards, leadership, preparation for industry and continuing education (Amedu, 2013). However, the current situation of market environment in Nigeria where products and services are moving faster in online marketing required graduates to possess skills in digital entrepreneurship.

Technical and Vocational education and Training (TVET) is the systematic and orderly transmission of knowledge, skills and values to develop a workforce that is able to enhance productivity and sustain competitiveness in the global economy (Dukk, 2022). It encompasses the ability to accelerate economic growth, provide marketable labour supply, minimize unemployment and underemployment, infuse technical knowledge and reduce poverty. TVET refers to all measures whereby people acquired skills that provide them better access to employment and income. Majumdar (2012), opined that TVET is understood to be:

- An aspect of lifelong learning and preparation of responsible citizenry.
- An avenue to prepare for occupational fields for participation in the world of work.
- An important part of education and an instrument for development.

TVET has numerous goals which vary from country to country. In Nigeria, TVET is part of the formal education system incorporated in the three levels of education (primary, secondary and tertiary) with a view to meeting the nation's needs for skilled manpower and enhance the economic status of the individual and nation in general.

The goals of technical and vocational education according to Federal Republic of Nigeria as provided in the National Policy on Education (FRN, 2013) are to:

- Provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical levels;
- Provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development and to
- Give training and impart the necessary skills to individual who shall be self-reliant economically.

From the foregoing, it is important to note that skills and knowledge are the engines of economic growth and social development of any nation (Goel, 2010). According to Odu (2011), TVET involves those experiences whereby an individual is equipped to carry out any useful occupation successfully. These experiences may be organised and institutionalized or unorganized and haphazard. TVET is that aspect of education that exposes the learner to acquisition of demonstrable skills that could be transformed into economic benefits.

Statement of the Problem

Technical and Vocational Education and Training (TVET) has been an integral part of national development strategies in many societies because of the impact on human resources development, productivity and economic growth. Nigerians do not seem to accord vocational technical education the attention it deserves despite its proven contributions in other nations. Technical Vocational Education Training (TVET) has been an integral part of national development strategies in many societies because of its impact on productivity and economic development. University graduates who have spent at least cognitive four years for learning will graduate and be searching for unavailable white collar job. Most of the university graduates nowadays find it difficult to be self-reliance by commercializing those skills they have acquired while in school. One may begin to wonder the cause of these graduates not being able to become self-reliance.

Opinions poll and literature have shown that most of the university courses used to train these graduates were based on theoretical background and the issues of how to venture into small and medium scale business (SME's) may have not been taught (Dukku, 2022). Graduates must learn to blend theory and practical in its education because theories alone cannot serve any useful purpose. Despite government efforts towards reducing graduates' unemployment through the introduction of entrepreneurship education as compulsory subject for all categories of undergraduates in tertiary institutions; National Bureau of Statistics recorded an increase in the national unemployment rate from 23.1 per cent in 2018 to 33.3 per cent in 2020 and 37.7 per cent in 2022. This study is an attempt to look into how digital entrepreneurship and vocational education could be used to achieve sustainable economic development in the form of unemployment reduction in Nigeria.

Purposes of the study

The main purpose of the study is to examine the extent to which digital entrepreneurship and vocational education could be used to achieve sustainable economic development in the form of unemployment reduction in Nigeria. Specifically, the study sought to:

1. Identify the influence of digital entrepreneurship towards achieving sustainable economic development in the form of unemployment reduction in Nigeria.
2. Ascertain the influence of vocational education towards achieving sustainable economic development in the form of unemployment reduction in Nigeria.

Research Questions

The following research questions guided the study:

1. What are the influence of digital entrepreneurship towards achieving sustainable economic development in the form of unemployment reduction in Nigeria?
2. What are the influence of vocational education towards achieving sustainable economic development in the form of unemployment reduction in Nigeria?

Hypothesis

H⁰: Digital entrepreneurship and vocational education do not significantly influence sustainable economic development in the form of unemployment reduction in Nigeria.

Methods

The study adopted the descriptive survey research design. This is because the study ascertained the opinions of the Business Education Postgraduate students towards achieving the objectives of the study. The population of this study comprised 315 Business Education Postgraduate Students in Ebonyi State university Abakiliki, Enugu State University of Science and Technology and Imo State University. The choice of the 3 States was informed by the fact that they have vast potential for entrepreneurial development as well as several tertiary institutions offering business education programmes. Since the population of the study is manageable, there was no need for sampling. The whole population was studied. A 20 item structured questionnaire was used for the purpose of collecting data for the study. The questionnaire was divided into three main sections. Section A dealt with the demographic characteristics of the respondents. Section B dealt with research question one which examined items on the benefits of digital entrepreneurship. The section covers questionnaire items 1 – 12. Section C dealt with research question two. The section covers questionnaire 13 – 20 which examined items on benefits of vocational education towards achieving sustainable economic development in the form of unemployment reduction. The questionnaire utilized a 4-point scale of Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD) with the assigned scores of 4, 3, 2 and 1 respectively.

The questionnaire was subjected to face validity by three experts. Their suggestions and opinions were incorporated into the final copy of the instrument. The reliability of the instrument was determined using Cronbach Alpha to ascertain the internal consistency of the instrument and coefficients of 0.87 and 0.89 were obtained for the items in the instrument. The researcher distributed and collected the questionnaire with the help of 3 research assistants. A total of 315 questionnaires were distributed across the 3 universities, however, only 255 copies were retrieved. The retrieval rate was 80.65%. The data collected were analysed using mean scores and standard deviation, while the hypothesis was tested using multiple regression analysis at 0.05 level of significance.

Results

Table 1: Mean and Standard Deviation of Respondents on the influence of digital entrepreneurship towards achieving sustainable economic development in the form of unemployment reduction in Nigeria.

		<u>S/N</u>		
<u>Items</u>		<u>\bar{x}</u>	<u>SD</u>	
<u>Remark</u>				
1.	Digital entrepreneurship gives room for legal online business	2.99	0.98	Agree
2.	Encourage students to learn trade	3.04	0.80	Agree
3.	Development of creativity and innovative ideas among Students	2.89	0.98	Agree
4.	It provides students with skills, knowledge and motivation	2.88	0.78	Agree
5.	Quick access to a global market	3.41	0.73	Agree
6.	Digital entrepreneurship help business growth	3.06	0.97	Agree
7.	Enhances business freedom	2.75	0.98	Agree
8.	Encourages business flexibility	3.17	0.97	Agree
9.	Products to reach greater number of potential customers	3.19	0.94	Agree
10.	Help business adaptability	2.77	0.67	Agree
11.	Create smooth transition from traditional to a modern industrial economy	3.18	0.98	Agree
12.	Reduction in rural-urban migration	3.65	0.87	Agree

Data on Table 1 showed that all the 12 items were among the benefits of digital entrepreneurship towards achieving sustainable economic development in the form of unemployment reduction in Nigeria.

Table 2: Mean and Standard Deviation of Respondents on the benefits of vocational education towards achieving sustainable economic development in the form of unemployment reduction in Nigeria.

<u>S/N</u>	<u>Items</u>	<u>\bar{x}</u>	<u>SD</u>	
	<u>Remark</u>			
13.	Improvement of business creative ideas	3.52	0.84	Agree
14.	Increase source of income	3.19	1.12	Agree
15.	Boosting business networking ideas	2.98	0.88	Agree
16.	Exposure to practical business experience	2.78	0.92	Agree
17.	Encourages hand-on environment	2.75	0.98	Agree
18.	Enhances ability to join workforce quick	3.25	0.87	Agree
19.	Create a sustainable care development	2.95	0.76	Agree
20.	Develop the right skill for economic survival	3.33	0.60	Agree

Data on Table 2 reveal that the entire 8 items relating to the benefits of vocational education received positive answers from the respondents with the mean scores of 2.72. This is greater than the bench mark of 2.50 ($2.72 > 2.50$).

Table 3: Regression results on the composite contribution of digital entrepreneurship and vocational education on sustainable economic development in the form of unemployment reduction in Nigeria (Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistic			Sig. Change	
					R Square	F Change	df1	df2	
1	.910	.828	.826	2.80353	.828	592.558	2	247	.000

a. Predictors: (Constant), digital entrepreneurship, vocational education

Table 4: Regression result on the composite contribution of digital entrepreneurship and vocational education on sustainable economic development in the form of unemployment reduction in Nigeria (ANOVA)

Model		Sum of Square	Df	Mean Square	F	Sig.
	Regression	9314.733	2	4657.367	592.558	.000 ^b
1	Residual	1941.363	247	7.860		
	Total	11256.096	249			

a. Dependent Variable: unemployment reduction

b. Predictors: (Constant), digital entrepreneurship, vocational education

Table 3 and 4 showed that there was significant composite contribution of digital entrepreneurship and vocational education on sustainable economic development in form of unemployment reduction in Nigeria; $R = 0.910$, $P < .05$. the table further indicated that (82.6% (Adj. $R^2 = 0.826\%$)) that about 83% of the variance in unemployment reduction was accounted for by the linear combination of the independent variables. The ANOVA results from the regression analysis showed that there was significant of the independent variables on the dependent variable; $F(2,247) = 592.558$, $P < .05$.

Discussion

The findings of this study revealed that legal online business helps products to reach greater number of potential customers, encourages business flexibility, development of creativity and innovative ideas among students, reduction in rural-urban migration, help business adaptability were among the influence of digital entrepreneurship towards achieving sustainable economic development in the form of unemployment reduction in Nigeria. The findings were in consonant with that of Apeh, Apeh, Tikon and Onyekulu (2023) who indicated that digital entrepreneurship represents new ways that entrepreneurs adopt in making their business digital, positively contributed to youth empowerment and national growth through job creation as well as that of Nebech, Osinachi and Nwabueze (2017) who found that digital entrepreneurship played an important role in the creation of job opportunity.

Based on the research question 2, the findings of the study revealed that improvement of business creative idea, increases source of income, boosting business networking ideas, exposure to practical business experience, encourages hand-on environment, enhances ability to join workforce quick, create a sustainable care development and develop the right skills for economic survival were among benefits of vocational education towards achieving sustainable economic development in the form of unemployment reduction in Nigeria. These findings were in correlate with that of Olaleye (2023) who found that vocational technical education directly enhance the attainment of sustainable economic development through reduction in unemployment, providing relevant knowledge, skills and competencies for employability, quality living and learning outcome.

Based on the hypothesis, the findings of the study revealed that there was significant composite contribution of digital entrepreneurship and vocational education on sustainable economic development in the form of unemployment reduction in Nigeria. These findings corroborate with Ojeomogba (2019) who revealed that social networking services have an entrepreneur returns of positive significant effect on small business owners. Yusuff and Soyemi (2012) indicated vocational education is necessary but not sufficient condition for sustainable economic development.

Conclusion

The study examined how to attain sustainable economic development through unemployment reduction using digital entrepreneurship and vocational education. The study review literature, theoretical framework and previous empirical studies as well primary method of data collection was used. The following conclusions were drawn based on the findings of the study, that if all things being equal, digital entrepreneurship and vocational education have tendency towards the attainment of sustainable economic development in the form of unemployment reduction in Nigeria and that about 83% of the variance in unemployment reduction was accounted for by the liner combination of the digital entrepreneurship and vocational education.

Recommendations

The following recommendations are made:

1. Digital entrepreneurship should be embedded into the curriculum of entrepreneurship education in university education system to equip students on the necessary technical skills needed towards success in digital enterprises.
2. Department of Vocational Education should be equipped by government with modern industrial teaching materials to aid industrial delivery and motivation for learning.
3. Government through the institutions' managements should develop a grant for students to commercialize their skills learnt in school to become employer of labour rather than seeking for unavailable white collar job.
4. Reinvention of vocational education by Federal government of Nigeria in order to empower graduates for self- reliance and self-employment.

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