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Cyber entrepreneurship and employment generation of small and medium enterprises in south-east Nigeria

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Abstract

The study evaluated influence of cyber entrepreneurship on employment generation of Small and Medium Enterprises in South-East Nigeria. Specifically, the study sought to: ascertain the effect of selling of digital information product on job creation of Small and Medium Enterprises and examine the effect of selling of physical product on employment generation of Small and Medium Enterprises. The study adopted descriptive research design. The study area was South-east Nigeria. Research design of the study was questionnaire survey research. The sample size of 387 respondents was taken from population of 13,455 staff among 204 small and medium enterprises (SMEs) operated in South-east Nigeria. The selected SMEs under study were as follows: Rokana Industries Ltd. Umualum- Nekede; Cutix Plc Umuanuka, Otolo, Nnewi; Juhel Nigeria Ltd Nkwubor Rd. Emene; Mikko Plastics Ind. Ltd Umuocham, Aba and Eze-Rome Oil Palm Abakaliki Ebonyi State. The research question were answered with simple percentage, mean and deviation while hypotheses were tested with single regression. The empirical results show that selling of digital information product has significant effect on job creation of Small and Medium Enterprises in South-East Nigeria (t-statistic; 6.484; P-value; 0.000 < Sig-value; 0.05) and selling of physical products have significant effect employment generation of Small and Medium Enterprises in South-East Nigeria (t-statistic; 11. 826; P-value; 0.000 < Sig-value; 0.05). The study recommended that government and organizations should as a way of empowerment, train and equip youths with the necessary skills and facilities that will aid their involvement in online application services.

Keywords: Cyber Entrepreneurship; Employment Generation; SMEs; Selling of physical product; Selling of digital information product

1. Introduction

The emergence of the Internet has necessitated a shift from traditional businesses to digital enterprises. Virtual businesses that operate strictly online have resulted from this shift, and the primary drivers in this new front are online entrepreneurs. In this digital era, the internet plays a vital role for many businesses for earning profit through various platforms. Cyber entrepreneurship is one of the unique phenomena in this digital world, a blended version of cyber and entrepreneurship. From the past decade, the cyber entrepreneurship industry has seen massive growth due to internet facilities. Cyberpreneurs leverage information data of their business products/services and provide access for selling that through various online platforms (Adam, Amy & Katrina, 2023). These professionals come with various ideas for advertising their products and make the consumers buy them online.

Cyberpreneurs can operate their business in all kinds of business models. Some of the main applications of Cyberpreneurship: selling digital information products – this one encapsulates the digital information through blogs,

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vlogs, e-books, videos, podcasts; selling physical products – entrepreneurs who create physical products and sell them on the internet (e-commerce platform); selling the sponsorship – creates loyal followers/community through a social media platform. Through this, cyber entrepreneurs receive sponsorship from companies who want to promote their products to these large communities; selling brands – cyber entrepreneurs will create and develop their business via a website. With the emerging digital business nowadays, cyber entrepreneurs have an option for selling their existing business. Many platforms offer to buy and sell the websites (for instance: Empire flippers, etc.) (Ede, 2024) The digital age helped revolutionize the business landscape, giving rise to virtual businesses that operate purely online. The primary drivers in this new front are cyber entrepreneurs depend on the speed and power of the internet to do business.

Entrepreneurship is an extended version of entrepreneurship where the cyber platform is the new method of doing business. The cyber entrepreneurship is solely using information technology and the internet as a stage for operating business (Anah & Asogwa, 2019). It is still in an emerging phase because the entrepreneurial process of opportunity exploration and exploitation. Thus, cyber entrepreneur development is one of the fundamental solutions for economic development and globalization. Developing necessary resources among emerging cyber entrepreneurs tends to have a great impact on the economic growth. In recent years, the interest in entrepreneurship activities via new technology so called –cyber|| that by means of the internet of things has increased remarkably. In general, the cyber entrepreneurship as the new approach is prominently basic of entrepreneurial self-efficiency for the future to strengthen the need for human capital development (Eze, Njoku & Mbah, 2023). It seems relatively new and still at a developing stage, both in practice and in terms of research. Nevertheless, this new technology in entrepreneurship is showing a positive sign in improving employment growth, hence indirectly improving the poverty rate in the community.

1.1. Statement of the Problem

National Bureau of Statistics, as of January 2024, reported that Nigeria has registered 103 million internet users, which corresponded to about half of the total population. Owing to that internet has become one of the greatest technological developments. While widely accepted for its ease and efficiency, it is also embedded with a multitude of vulnerabilities, which pose significant security threats to users and has led to the emergence of cybercrime.

Cybercrime, which includes any crime committed with the aid of a computer and network (e.g. phishing, bank verification number scams, fraudulent emails, hacking, cyber harassment, spamming, ATM spoofing, social media hijacking etcetera), exploits vulnerabilities of both electronic devices and their users. In Nigeria, a number of key factors - such as a high rate of unemployment, the quest for wealth, a lack of strong cybercrime laws, and incompetent security on personal devices amongst others - have coalesced to make cybercrime a significant problem for the country. The estimated annual financial loss in Nigeria due to cybercrime was N250 billion (\$649 million) in 2017 and N288 billion (\$800 million) in 2018 (Nigeria Electronic Fraud Forum (NEFF) annual report, 2018).

Cybercrime destroys the reputation of a country and make business environment difficult for start-ups small and medium-sized enterprises. It also discourages investment in the economy by foreign companies. For individuals, cybercrime results in the loss of financial resources, intellectual property or personal confidential information, and the damages can be extreme, often targeting senior citizens and people who are vulnerable. Against these backdrops, there is need to examine influence of cyber entrepreneurship on employment generation of Small and Medium Enterprises in South-East Nigeria.

Objectives of the study

- The main objectives of this research work was to evaluate influence of cyber entrepreneurship on employment generation of Small and Medium Enterprises in South-East Nigeria. The specific objectives of this study were to:
- Ascertain the effect of selling of digital information product on job creation of Small and Medium Enterprises in South-East Nigeria.
- Examine the effect of selling of physical product on employment generation of Small and Medium Enterprises in South-East Nigeria.

1.2. Research Questions

Based on these objectives, the study would ask the following research questions;

- What is the effect of selling of digital information product on job creation of Small and Medium Enterprises in South-East Nigeria?

- To what extent does selling of physical products affect employment generation of Small and Medium Enterprises in South-East Nigeria?

1.3. Significance of the Study

The study would be beneficial and relevant to unemployed youth and society members.

The outcome of the study would help unemployed youth to identify new trend of job creation because cyber entrepreneurship and innovation enhances one's analytical and logical skills that enable one to solve any problem. Entrepreneurship mainly helps solve daily-life problems and eases pain points with the help of innovative products and services provided.

The outcome of the study would be very important because cyber entrepreneurship increase employment base of society in large and diversified dimensions. It brings about changes in society and promotes facilities like higher expenditure on education, better sanitation, fewer slums and a higher level of homeownership.

2. Conceptual Literature

2.1. Cyber Entrepreneurship

Cyber entrepreneurship refers to entrepreneurs who use digitalisation to start, promote their business/ services through innovative techniques to create and sustain growth in this competitive market (Himanshu, 2019). Cyber entrepreneurship is an area of knowledge that includes elements of attitudes, skills, and knowledge related to cyber business and industry. Cyber entrepreneurship deals explicitly with businesses that conduct their revenue-generating processes on the Internet. In other words, cyber entrepreneurs are entrepreneurs in e-commerce businesses (Omoyele, Ojo & Iriobe, 2022). Cyber entrepreneurs take advantage of information technology to develop new ways of selling their products and services to customers, thereby eliminating the stress of going to physical stores to carry out transactions. Cyber entrepreneurs understand that the world is all digital now, and they use this knowledge to create companies that could only exist online (Salini, Zailani, Wan, Shahaliza & Samsudin, 2018).

Cyber entrepreneurship booms because virtual businesses are more robust and efficient in handling customer management and providing service delivery free from stress. Many virtual businesses cannot protect their enterprise from digital threats owing to a lack of digital literacy and resources, and cyber entrepreneurs can help curb these threats by providing digital businesses with strategic digital defence. Cyberpreneurship is the love-child of the digital age and savvy entrepreneurs who recognized early on that the internet would be the juggernaut that it is today (Peterson, 2020). The primary drivers in this new front are Cyberpreneurs – entrepreneurs who leverage the speed and power of the internet to do business (Peterson, 2020). The digital age helped revolutionize the business landscape, giving rise to virtual businesses that operate purely online.

2.2. Employment generation of Small and Medium Enterprises

Generally, employment is a situation where a person is doing a job to earn income. Employment can also exist where a person is self-employed. Therefore, employment creation can be referred to as the provision of job opportunities for those who are willing and able to work (Anah & Asogwa, 2019). Employment opportunities are created by the entry of new units in the economy. When the existing units increase their production capacity, more employment opportunities are created. Current interest in small enterprises in most of the courtiers especially in developing ones, originates largely from the widespread concern over unemployment (Shobhit, Ganti & Vikki, 2023).

An entrepreneur creates lot of employment opportunities for different sections of society. By generating opportunities, the entrepreneur adds to the economic growth. Setting up a new venture leads to creation of new opportunism for labour, supplier of inputs, supplier of industrial equipments, marketing traders etc. All these sectors are benefited by the setting up of new enterprises of the expansion/diversification of existing ones. Employment opportunities are created by the entry of new units in the economy. When the existing units increase their production capacity, more employment opportunities are created (Omoyele, Ojo & Iriobe, 2022). Globally, the rate of unemployment seems to be rising, even in developed nations. Statistics in Nigeria showed that 65.5% of the youthful population are unemployed, this represents more than half of the youths in Nigeria. Also, between 2014 and 2020, youth unemployment averaged 25.87% recording the highest percentage of 53.40% and the lowest percentage of 11.7% in the fourth quarter of 2020 and 2014 respectively (NBS, 2020).

2.3. Contextual Literature

The main areas of Cyber entrepreneurship, according to Cyberpreneurs Institute website, are:

- **Selling digital information products:** It is all about producing and packaging content that can solve the problem of individuals in such a way that enables them to pay back for the information provided. This is the least entry barrier for any cyberpreneur and as a result, is highly competitive. This can be achieved by taking advantage of other platforms to distribute digital products or creating their platform (Tajvidi & Tajvidi, 2022).
- **Selling physical products:** Cyberpreneurs can also sell physical products with the advantage of having a target market ranging from local to global demand. They can be located in a part of the world and have customers in other parts. The availability of manufacturers such as in China, India or Vietnam can be leveraged to produce their products and brands, and their target market can be anywhere in the world, provided that the necessary logistic strategy and marketing that needs to be done are sorted out (Egunjobi, 2022).
- **Selling sponsorship:** Cyberpreneurs can build and maintain a thriving online community around their personal or business brand, which can take the form of a social media influencer, Facebook page, or YouTube channel with a sizable following. As a result, they can secure sponsorship or ambassadorship deals from businesses looking to market their brands, goods, or services to the cyberpreneurs' sizable followings (Osabohien, Haom; Adediran & Jahangeer, 2023).
- **Selling consultancy and services:** With the advent of the freelance platform with the existing market, Cyberpreneurs nowadays do not need to open their platform to market their skills. They can immediately find freelance jobs in the existing platform where they can offer their services to a vast online community who will need their services like graphic design, website building, data entry, etc.
- **Selling brands:** With the emerging digital business nowadays, Cyberpreneurs can leave their digital business and sell out to interested companies. Once a cyberpreneur has developed loyal followers of their brand, brand value will increase, resulting in interest from companies and organisations who want to buy the brand. The cyberpreneur can sell the brand over time and move on to develop another (Boma-Siaminabo, 2022).

2.4. Theoretical Review

2.4.1. Opportunity-Based Entrepreneurship Theory (OBET)

This research is based on Opportunity-Based Entrepreneurship Theory (OBET) which postulates that entrepreneurs do not cause change but exploit the opportunity that change (in technology, consumer preferences etc.) creates (Drucker, 1985). Prolific business management author, professor and corporate consultant, the opportunity-based theory was developed by Peter Drucker. He asserts that businesspeople are excellent at recognising and seizing opportunities brought about by social, technological, and cultural changes, mainly using the Internet to conduct and promote business. They look for, respond to, and take advantage of change as an opportunity. Entrepreneurs have an eye for change rather than the issues that opportunities bring about, according to Drucker's opportunity construct. Hence, entrepreneurs exploit the opportunities in cyberspace to solve societal problems despite the challenges of cost of technology, usefulness and lack of knowledge on the particular technology (bintiHasbolah & bin Abdullah, 2021).

2.5. Empirical Reviews

Ede, (2024) evaluated the Cyber-preneurship and productivity of business enterprises in Ogoja Cross River State. The specific objectives were to: examine the relationship between identifying opportunities and output; and evaluating the relationship between forecasting business changes and efficiency of business enterprises in Ogoja Cross River State. The study used the descriptive survey design approach. The primary source of data was the administration of questionnaire. A total population of seven hundred and forty-two (742) staff was used. The adequate sample size of 253, using Freund and William's statistic formula 204 staff returned the questionnaire and accurately filled. Data was presented and analysed by mean score and standard deviation using Sprint Likert Scale. The hypotheses were analysed using Z- test statistics tool. The findings indicated Identifying opportunities had significant positive relationship with the output of business enterprises in Ogoja Cross River State $r(95, n = 204), .643 < 933, p > .05$. Forecasting business changes had significant positive relationship with the efficiency of business enterprises in Ogoja Cross River State, $r(95, n = 204), .510 < 729, p > .05$. The study recommended among others that for effective business success there is need for identifying business opportunities to promote growth and productivity.

Ali-Vafaei-Zadeh,, Venisri, Haniruzila, Ai-Ping and Ramayah, (2023) investigated the factors affecting cyber-entrepreneurial intentions among final-year students of public universities in Malaysia. The quantitative survey-based research method was adopted to conduct the study using both final-year undergraduate and postgraduate students from business and management schools to test the proposed research framework. A total of 364 useful responses were

received to be analyzed for this study. Results showed that attitude toward entrepreneurship, entrepreneurial creativity, entrepreneurial knowledge, entrepreneurial orientation, entrepreneurial self-efficacy, and opportunity recognition were positively correlated with cyber-entrepreneurial intentions except for personal innovativeness in technology and subjective norm, which was insignificant. This study provides insights into the way individual's intention towards cyber-entrepreneurship could be ameliorated as a career choice, particularly for final-year undergraduate and postgraduate students of business and management schools in Malaysian public universities.

Osabohien, Haom, Adediran and Jahangeer, (2023) examines the extent of social entrepreneurship and its impact on future employment in Nigeria. The study engaged descriptive statistics to estimate logit regression and propensity score matching (PSM) to achieve its objective. The descriptive statistics show that only 3.15 per cent of entrepreneurship in Nigeria is a social enterprise. In addition, the mean age of business owners is about 31 years, with 83.14 per cent being male. The result from the logit regression shows that ICT utilisation, access to loans, level of education, and gender of business owners are other significant and positive determinants of future employment. The result from the PSM shows that social entrepreneurship is a significant and positive driver of future employment. It shows that social entrepreneurship will contribute not less than 21 per cent to employment in Nigeria in the next five years. The study stated that access to ICT by business owners should be enhanced to improve business performance towards contributing to future employment. The government should adopt measures to aid business owners in securing loans to finance business activities and improve their performance.

Tajvidi and Tajvidi, (2022) explore cyber entrepreneurship in the food industry and its opportunities for entrepreneurs in epidemics such as COVID-19. This study using a case study approach identifies and explores the fundamental aspects of cyber entrepreneurship. This study employs empirical research with a holistic overview of the existing literature to define the different forms of entrepreneurship in the current digital age, focusing on COVID-19 implications for cyber entrepreneurship. The result of this paper provides a better understanding of a new form of entrepreneurship in cyberspace as innovative practice for firms. This study reveals that cyber entrepreneurship can develop community engagement during pandemic circumstances, such as COVID-19 in the food industry. The study recommended that Youths and other individuals should equip themselves with trending requisite skills that enhance the utilization of the internet in marketing of products and services. The benefits of internet-mediated marketing should be harnessed by youths so as to achieve a considerable level of financial freedom.

Egunjobi, (2022) explored creating entrepreneurs via social media platforms and employment generation in Nigeria. Specifically, the study explores the potential need and benefits inherent in the use of social media as an instrument for creating entrepreneurs and generating employment amongst youths in Nigeria given the high youth unemployment rate. 92 youths who are social media users selected through survey responded to structured questionnaire via Google forms. The data was analysed using statistical descriptive tools and Chi square test. Findings revealed that in Nigeria, social media can promote on-line trading and create a source of livelihood for youths though, the enormous potentials of doing business through social media platforms locally and internationally are fairly explored. Also, trading via social media significantly impact employment creation and such trading does not significantly increase profits and reduce cost of doing business. The study recommended a reliable, affordable telecommunication network and combined efforts of government and the private sector to facilitate online trading and training in ICT entrepreneurship skills.

Omoyele, Ojo and Iriobe, (2022) examined the role of Cyberpreneurship in the Growth of Virtual Businesses in Nigeria. Specifically, the study sought to assess the roles of cyberpreneurship in the growth of virtual businesses in Nigeria using an online survey research design to collect data from 107 respondents. The results indicate that drivers of cyberpreneurship in Nigeria include the unrestricted freedom it offers, low operation cost, access to international markets granted to the entrepreneurs, and stress-free service delivery to customers. The study also illuminated the characteristics of cyberpreneurs as risk takers, flexible and innovative persons who know how to identify and seize opportunities. It also elucidates on the advantages of cyberpreneurship over traditional businesses--cheaper start-up, flexible and efficient customer engagement. The study concludes that cyberpreneurship plays an essential role in the growth of virtual businesses and recommends that increasing cybersecurity and introducing stringent measures would ensure that cybercriminals are adequately punished to reduce incidence of cybercrime

3. Methodology

The study adopted descriptive research design. The study area was South-east Nigeria. Research design of the study was questionnaire survey research. The sample size of 387 respondents was taken from population of 13,455 staff among 204 small and medium enterprises (SMEs) operated in South-east Nigeria (National Bureau of Statistics, 2020). The selected SMEs under study were as follows: Rokana Industries Ltd. Umualum- Nekede; Cutix Plc Umuanuka, Otolo, Nnewi; Juhel Nigeria Ltd Nkwubor Rd. Emene; Mikko Plastics Ind. Ltd Umuocham, Aba and Eze-Rome Oil Palm Abakaliki

Ebonyi State. The research question were answered with simple percentage, mean and deviation while hypotheses were tested with single regression.

3.1. Data Presentation

Table 1 Comprehensive Demographic distribution of the Respondents

Title	Frequency	Percentage
Questionnaire Distributed	387	100%
Returned Questionnaire	358	92%
Not Returned Questionnaire	29	08%
Gender		
Female	213	59.5%
Male	145	40.5%
Age Bracket		
20-30 Years	153	42.7%
31-40 Years	111	31.0%
41-50 Years	66	18.4%
51Years – above	28	7.8%
Marital Status		
Married	223	62.3%
Single	125	34.9%
Widow/widower	7	1.9%
Divorce	3	0.8%
Educational Qualification		
HND/B.sc	230	64.2%
MBA/M.sc	125	34.9%
Ph.D	3	1.10%

Sources: Field Survey, 2024

Three hundred and eighty seven (387) copies of questionnaire were designed and distributed to the respondents. Out of the 387 Questionnaires distributed, 358 (92%) were completed and returned while 29 (08%) were not returned. Therefore, 92 percent respondents were a good representation. The table showed the respondents profile in frequency and percentage distribution of gender, age bracket, marital status and educational qualification.

3.2. Data Analysis

Question One: What is the effect of selling of digital information product on job creation of Small and Medium Enterprises in South-East Nigeria?

This table showed the opinion of respondents on what is the effect of selling of digital information product on job creation of Small and Medium Enterprises in South-East Nigeria.

The respondents are in agreement with all the items. The study thereby revealed that selling of digital information product has significant effect on job creation of Small and Medium Enterprises in South-East Nigeria since cyber-entrepreneurship provides a medium to reaching large number of people through chat, social media, email, blogs, and videos (The grand mean 4.255 was greater than the cutoff point 3).

Table 2 Mean rating of respondents on what is the effect of selling of digital information product on job creation of Small and Medium Enterprises in South-East Nigeria.

S/N	Question Items	SA (5)	A (4)	U (3)	D (2)	SD (1)	Total	Mean	SD
1	Cyber-entrepreneurship has the advantages of having lower operating costs and lower threshold for startups compared to traditional business models	900	400	144	46	7	1497	4.18	0.0030
		180	100	48	23	7	358		
		50%	30%	13%	6%	1%	100%		
2	Cyber-entrepreneurship provides a medium to reaching large number of people through chat, social media, email, blogs, and videos.	630	632	192	40	10	1504	4.20	0.0030
		126	158	64	20	10	358		
		35%	44%	18%	5%	2%	100%		
3	Cyber-entrepreneurship increased exposure of varieties of products and service and provides timeliness of delivery to end-users	1000	404	135	18	3	1560	4.36	0.0033
		200	101	45	9	3	358		
		59%	28%	13%	2%	0.8%	100%		
4	Cyber-entrepreneurship provides 24/7 websites and fast shopping for goods and service and provides boundless universal accessibility of goods and service	950	444	105	24	10	1533	4.28	0.0032
		190	111	35	12	10	358		
		53%	31%	9%	3%	2%	100%		
Grand Mean								4.255	0.0031

Source: Field Survey, 2024

Question Two: To what extent does selling of physical products affect employment generation of Small and Medium Enterprises in South-East Nigeria?

Table 3 Mean rating of respondents on what extent does selling of physical products affect employment generation of Small and Medium Enterprises in South-East Nigeria

S/N	Question Items	SA (5)	A (4)	U (3)	D (2)	SD (1)	Total	Mean	SD
1	Cyber-entrepreneurship opens the possibility to a market through personalization and provides better service at low price	630	632	192	40	10	1504	4.20	0.0030
		126	158	64	20	10	358		
		35%	44%	18%	5%	2%	100%		
2	Cyber-entrepreneurship provides trade at comfort and convenience and provides avenue to attend to a large of end-users at a time	580	632	222	26	17	1477	4.13	0.0029
		116	158	74	13	17	358		
		32%	44%	21%	3%	2%	100%		
3	Cyber-entrepreneurship provides service faster responses to marketers and the end users and provides interactive website to pass and receive information	900	400	144	46	7	1497	4.18	0.0030
		180	100	48	23	7	358		
		50%	30%	13%	6%	1%	100%		
4	Cyber-entrepreneurship provides better service at extremely low risk and remove delays and mistake on the part of staff in the discharge of duties	985	416	111	24	8	1544	4.31	0.0032
		197	104	37	12	8	358		
		55%	29%	10%	3%	2%	100%		
Grand Mean								4.205	0.0030

Source: Field Survey, 2024

This table showed the opinion of respondents on what extent does selling of physical products affect employment generation of Small and Medium Enterprises in South-East Nigeria. The respondents are in agreement with all the items. The study thereby revealed that selling of physical products have significant effect employment generation of Small and Medium Enterprises in South-East Nigeria since cyber-entrepreneurship provides service faster responses to marketers and the end users and provides interactive website to pass and receive information (The grand mean 4.205 was greater than the cutoff point 3).

3.3. Test of Hypotheses

The two hypotheses were formulated for this study and will be tested and a decision taken is based on the rule below. Decision rule: Reject H_0 if P-value > 0.01

3.3.1. Hypothesis One

- H_2 = Selling of digital information product has no significant effect on job creation of Small and Medium Enterprises in South-East Nigeria.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.931a	0.866	0.865	0.26055

Predictors: (Constant), Selling of digital information products

ANOVAa						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.465	1	29.465	9.604	.000b
	Residual	1095.276	357	3.068		
	Total	1124.741	358			

a. Dependent Variable: Job creation ; Predictors: (Constant), Selling of digital information products

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.819	0.009		9.111	0.000
	Selling of digital information products	0.484	0.008	0.931	6.054	0.000

a. Dependent Variable: Job creation

In testing this hypothesis, selling of digital information product was regressed against job creation of Small and Medium Enterprises. The result of the single-regression analysis showed the model to ascertain the effect of selling of digital information product on job creation of Small and Medium Enterprises in South-East Nigeria.

$$\text{Job creation} = 0.819 + 0.484 \text{ selling of digital information product}$$

The empirical result showed that the coefficient of selling of digital information product has positive effect on job creation of Small and Medium Enterprises; it means that selling of digital information product has positive and direct effect on job creation of Small and Medium Enterprises. The results of the t – statistics denoted that the coefficient of selling of digital information product was statistically significance. This is because observed values of t – statistics (6.054) was greater than its P-values (0.000). The results of the F – statistical test showed that the overall regression of the hypothesis two was statistically significance. This was because observed value of the F – statistics (9.604) was great than its P-value (0.000). Again, our empirical result showed that the Pearson product moment correlation analysis (r) was 0.931. The strength of relationship between the two variables was high. However, we rejected the null hypothesis and concluded that selling of digital information product has significant effect on job creation of Small and Medium Enterprises in South-East Nigeria.

3.3.2. Test of Hypothesis Two

- H₂ = Selling of physical product has no significant effect on employment generation of Small and Medium Enterprises in South-East Nigeria.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.879 ^a	0.866	0.865	0.26055

a. Predictors: (Constant), Selling of physical product

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	43.789	1	43.789	9.184	0.000 ^b
	Residual	1702.176	357	4.768		
	Total	1745.965	358			

a. Dependent Variable: Employment generation; b. Predictors: (Constant), Selling of physical product

b.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.418	0.075		5.568	0.000
	Selling of physical product	0.201	0.017	0.969	11.826	0.000

a. Dependent Variable: Employment generation

In testing this hypothesis, selling of physical product was regressed against employment generation of Small and Medium Enterprises. The result of the single-regression analysis showed the model to examine the effect of selling of physical product on employment generation of Small and Medium Enterprises in South-East Nigeria.

$$\text{Employment generation} = 0.418 + 0.201 \text{ Selling of physical product}$$

The empirical result showed that the coefficient of selling of physical product has positive effect on employment generation of Small and Medium Enterprises; it means that selling of physical product has positive and direct effect on employment generation of Small and Medium Enterprises. The results of the t – statistics denoted that the coefficient of selling of physical product was statistically significance. This was because observed values of t – statistics (-11.826) was greater than its P-values (0.000). The results of the F – statistical test showed that the overall regression of the hypothesis three was statistically significance. This was because observed value of the F – statistics (9.184) was greater than its P-value (0.000). Again, our empirical result showed that the Pearson product moment correlation analysis (r) was 0.879. The strength of relationship between the two variables was high. However, we rejected the null hypothesis and concluded that selling of physical product has positive and significant effect on employment generation of Small and Medium Enterprises in South-East Nigeria.

4. Discussion of Findings

4.1. Effect of selling of digital information product on job creation of Small and Medium Enterprises in South-East Nigeria

The findings of the study revealed that selling of digital information product has significant effect on job creation of Small and Medium Enterprises in South-East Nigeria since cyber-entrepreneurship provides a medium to reaching large number of people through chat, social media, email, blogs, and videos (t-statistic; 6.484; P-value; 0.000 < Sig-value; 0.05).

The outcome of the study is not in line with the study of Ede, (2024) that evaluated the Cyber-preneurship and productivity of business enterprises in Ogoja Cross River State. The specific objectives were to: examine the relationship between identifying opportunities and output; and evaluating the relationship between forecasting business changes and efficiency of business enterprises in Ogoja Cross River State. Data was presented and analysed by mean score and standard deviation using Sprint Likert Scale. The hypotheses were analysed using Z- test statistics tool. The findings indicated Identifying opportunities had significant positive relationship with the output of business enterprises in Ogoja Cross River State $r(95, n = 204), .643 < 933, p > .05$). Forecasting business changes had significant positive relationship with the efficiency of business enterprises in Ogoja Cross River State, $r(95, n = 204), .510 < 729, p > .05$).

4.2. Effect of selling of physical product on employment generation of Small and Medium Enterprises in South-East Nigeria

The findings of the study revealed that selling of physical products have significant effect employment generation of Small and Medium Enterprises in South-East Nigeria since cyber-entrepreneurship provides service faster responses to marketers and the end users and provides interactive website to pass and receive information (t-statistic; 11. 826; P-value; 0.000 < Sig-value; 0.05).

The outcome of the study is not in line with the study of Osabohien, Haom, Adediran and Jahangeer, (2023) that examines the extent of social entrepreneurship and its impact on future employment in Nigeria. The study engaged descriptive statistics to estimate logit regression and propensity score matching (PSM) to achieve its objective. The result from the logit regression shows that ICT utilisation, access to loans, level of education, and gender of business owners are other significant and positive determinants of future employment. The result from the PSM shows that social entrepreneurship is a significant and positive driver of future employment. It shows that social entrepreneurship will contribute not less than 21 per cent to employment in Nigeria in the next five years.

Summary of Findings

The following are the major findings of the study:

- The study revealed that selling of digital information product has significant effect on job creation of Small and Medium Enterprises in South-East Nigeria since cyber-entrepreneurship provides a medium to reaching large number of people through chat, social media, email, blogs, and videos (t-statistic; 6.484; P-value; 0.000 < Sig-value; 0.05).
- The study revealed that selling of physical products have significant effect employment generation of Small and Medium Enterprises in South-East Nigeria since cyber-entrepreneurship provides service faster responses to marketers and the end users and provides interactive website to pass and receive information (t-statistic; 11. 826; P-value; 0.000 < Sig-value; 0.05).

5. Conclusion

The study concluded that there is positive and significant effect cyber entrepreneurship on employment generation of Small and Medium Enterprises in South-East Nigeria. Cyber-entrepreneurship has the advantages of having lower operating costs and lower threshold for startups compared to traditional business models; cyber-entrepreneurship provides a medium to reaching large number of people through chat, social media, email, blogs, and videos; cyber-entrepreneurship increased exposure of varieties of products and service and provides timeliness of delivery to end-users and cyber-entrepreneurship provides 24/7 websites and fast shopping for goods and service and provides boundless universal accessibility of goods and service.

Cyber-entrepreneurship opens the possibility to a market through personalization and provides better service at low price; cyber-entrepreneurship provides trade at comfort and convenience and provides avenue to attend to a large of end-users at a time; cyber-entrepreneurship provides service faster responses to marketers and the end users and provides interactive website to pass and receive information and cyber-entrepreneurship provides better service at extremely low risk and remove delays and mistake on the part of staff in the discharge of duties.

Recommendations

Based on the findings of this study, the following recommendations were made.

- Government and organizations should as a way of empowerment, train and equip youths with the necessary skills and facilities that will aid their involvement in online application services. Young entrepreneurs in South-

east Nigeria should utilize the self-employment opportunities embedded in online application services in order to have a good financial standing..

- Young entrepreneurs who engage in online application services should be encouraged by way of honest and continuous patronage by individuals, organizations and government. The benefits of internet-mediated marketing should be harnessed by young entrepreneurs so as to achieve a considerable level of financial freedom. Young entrepreneurs should equip themselves with trending requisite skills that enhance the utilization of the internet in marketing of products and services.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Adam, H., Amy, D., & Katrina, M. (2023). What is an entrepreneur? Retrieved from <https://www.investopedia.com/terms/e/entrepreneur.asp>.
- [2] Alton, L. (2020). Fascinating pros and cons to an online business you must know for success. <https://smallbiztrends.com/2018/07/ecommerce-advantages-and-disadvantages.html> Retrieved June 17, 2021.
- [3] Anah, S., & Asogwa, O. S. (2019). Impact of Entrepreneurship Development on Economic Growth of Enugu State: A Study of Registered Entrepreneurs in Enugu State, Nigeria. *International Journal of Economics, Business and Management Research*, 1(02).
- [4] Drucker, P. (1978). *Innovation and entrepreneurship: Practice and principles*. New York: Harper and Rowe.
- [5] Eze, F. O., Njoku, K. K., & Mbah P. C. (2023). Effect of online marketing on Sales of Consumer Goods in Enugu State: A study of shopping malls in Enugu metropolis. *European Journals of marketing and Management Sciences*, 6(05), 13-35.
- [6] Himanshu, J. (2019). Cyberpreneurship, a new age tool in cyber security. Retrieved from <https://www.entrepreneur.com/en-au/technology/cyberpreneurship-a-new-age-tool-in-cyber-security/328964>
- [7] Omoyele, S. O., Ojo, A. A., & Iriobe, O. C. (2022). Role of cyberpreneurship in the growth of virtual businesses in Nigeria. *Journal of Management and Social Sciences*, 5(1); 24-31,
- [8] Peterson, P. (2020). What is cyberpreneurship and why is it important for entrepreneurs? Retrieved online from: <https://www.potential.com/articles/cyberpreneurship-and-itsimportance-for-entrepreneurs/> Retrieved June 17, 2021.
- [9] Saaasbpm. (2024). Why is business change important, and how to implement it. Retrieved from <https://saasbpm.com/business-change/>.
- [10] Salini, A. M., Zailani, A., Wan, A. I., Shahaliza, M., & Samsudin, M. R. (2018). A conceptual development of cyberpreneurs intention among higher education students. *International Journal of Digital Information and Wireless Communications*, 8(3), 203.
- [11] Shobhit, S., Ganti, A., & Vikki, V. (2023). Entrepreneurs and entrepreneurship: Definitions and Examples. Retrieved from <https://www.investopedia.com/arties/ig514/entrepreneur-vs-small-business-owner-defined.asp>
- [12] Omoyele, O. S. Ojo, A. A. and Iriobe, O. C. (2022) Role of Cyberpreneurship in the Growth of Virtual Businesses in Nigeria; *Redeemer's University Journal of Management and Social Sciences*; 5 (1); 34-43.
- [13] Ede, T. E. (2024) Cyber-Preneurship and Productivity of Business Enterprises in Ogoja Cross River State; *Annals of Management Studies*; 11 (1); 12-22.
- [14] Boma-Siaminabo, H. (2022) Assessing the effect of cyberpreneurship on youth self-reliance; *Advanced Journal of Accounting, Management and Marketing*; 8 (4); 108-120.

- [15] Tajvidi, R. and Tajvidi, M. (2022) The growth of cyber entrepreneurship in the food industry: virtual community engagement in the COVID-19 era; *British Food Journal*; 34 (12); 102-110.
- [16] Egunjobi, T. A. (2022) Creating Entrepreneurs via Social Media Platforms and Employment Generation in Nigeria *Journal of Applied Economics and Business Studies (JAEBS)*; 6 (3); 1-22
- [17] Ali-Vafaei-Zadeh,, Venisri, G. Haniruzila, H. Ai-Ping, T. and Ramayah, T. (2023) Cyber-entrepreneurial intention among students in Public Universities: evidence from an Emerging Country; *Journal of Applied Economics and Business Studies*; 6 (3); 1-22
- [18] Osabohien, R. Haom W.; Adediran, O. and Jahangeer, A. S. (2023) Social entrepreneurship and future employment in Nigeria; *Redeemer’s University Journal of Management and Social Sciences*; 5 (1); 34-43.
- [19] Ali-Vafaei-Zadeh,, Venisri, G. Haniruzila, H. and Ai-Ping, T. and Ramayah, T. (2023) Cyber-entrepreneurial intention among students in Public Universities: evidence from an Emerging Country; *Annals of Management Studies*; 11 (1); 12-22.