

Digital Literacy and Entrepreneurial Returns Among Small Business Owners in Lagos State, Nigeria

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Abstract

Digital literacy is fundamentally changing business models, how work is performed and managed, and the kind of skills needed in the workplace. It is also changing the expectations we have of business owners' traditional leadership skills and models which are no longer enough to foster market-leading innovation and entrepreneurial returns. In view of this, the study set out to assess the effect of digital literacy on the entrepreneurial returns of small scale business owners in Lagos State. Data were gathered through a researcher's constructed structured questionnaire titled "Digital Literacy and Entrepreneurial Returns of Small Business Owners. Three research questions were raised, analyzed and tested for the study. Findings from the study revealed that digital literacy has a great influence on entrepreneurial returns of small scale business owners in Lagos State. The study employs a cross-sectional survey using a self-report questionnaire, Analysis of variance ANOVA, linear regression and multiple regression Analysis techniques to examine 250 survey responses. The reliability of the instrument was established with Cronbach Alpha method which yielded a reliability coefficient of 0.839. The result is consistent with earlier researches that digital literacy has a significant influence on small business owners' entrepreneurial returns. The study also finds out that social networking services have a positive significant effect on entrepreneurial returns of small business owners. In the same vein, digital literacy influence on the productivity of small scale business. Based on the findings of the study, therefore, recommended that small business owners need to go for technology development through either technology transfer or technological innovations through seminars and workshop this will increase the entrepreneurial return digital literacy on employee productivities. The government should reinvent the future of small business owners, by extending her current education reforms to make it more functional, digital literacy, relevant, need-oriented and driven. Emphasis should be on social networking services (such as Face book, Whatsapp, You tube) on how they can be used to foster entrepreneurial returns among SBOs.

Keywords: *Digital Literacy, Productivity, Entrepreneurial Returns, Small Business Owners*

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Background to the Study

Digital literacy is fundamentally changing business models, how work is performed and managed, and the kind of skills needed in the workplace. It is also changing the expectations we have of business owners. Today we live in an information society in which more people must manage more information, which in turn requires more technological support, which both demands and creates more information. These developments have affected the whole essence of an individual's life. Every individual uses digital devices from cell phones to digital camera and computers; they are changing our everyday lives, Apulu & Ige (2011). Computers are used for virtually every aspect of life. They are also used in banking, mass media, publishing, communicating and they bring about quality in music, photography, marketing, film making and other businesses. Ongori & Migir (2010).

Although there have been various arguments on what digital literacy should be, Buckingham (2006:3) referred to it as a set of skills that enables individuals operate effectively in information retrieval task in technology-oriented environment. Chong (2012) posits that digital literacy is critical for a nation's workforce within today's digital world. UNESCO (2011) defines digital literacy as the ability to access, use and disseminate information in the digital age.

Digital literacy as used in this study referred to as the use of e-business technologies in conducting and exploiting business opportunities in order to achieve higher entrepreneurial returns. In other words, digital literacy is about understanding information when it is presented in different formats, and figuring out how to use it in secure and productive ways. For instance, in running their businesses, digital technologies can be used to: sell goods or services (e-commerce, including apps), source materials, manage their finances and employees and market businesses online (including social media) in order to boost their entrepreneurial returns.

Entrepreneurial returns are the benefit derived by business owners as a result of investing their time, money and education into their business (Ojeomogha (2014). These benefits could be measurable in terms of gaining more customers, having more business outlets and making more profit. In developed countries, research has shown that both large enterprises and small businesses have successfully adopted digital literacy or skills to gain competitive advantage, transform business models and improve relationships with customers and suppliers Olakunle, Apulu & Latham (2009). These skills are essential success factor for many successful small business owners (SBOs). Digital literacy continues to be one of the major challenges faced by developing countries Babandi, (2017). Numerous research studies have been conducted on SBOs, and most findings maintained that despite their significant importance and contribution to economic growth, SBOs across the world over, and in Nigeria in particular, are still faced with numerous challenges that inhibit entrepreneurial growth. For instance, Kayode & Ilesanmi (2014) stated that despite the efforts of the government in creating small business development agencies in Nigeria, small businesses continued to face the challenges that threatened their survival. Although numerous interventions have been launched in Africa, specifically in Nigeria, to assist these entrepreneurs to grow sustainable businesses and become more digitally literate. Various agencies were created to do the job of stimulating the

development of the small business sector of the Nigerian economy including Small and Medium Enterprises Development Agency (SMEDAN) (Babandi, 2017). Others are National Directorate of Employment (NDE), Peoples Bank of Nigeria (PBN), Microfinance Banks, National Economic Reconstruction Fund (NERFUND), and National Bank of Commerce and Industry are the agencies with the mandate to develop the SBOs sector. In spite of the effort of the government in Nigeria, small businesses continued to face the challenges that threatened their survival. A study by Apulu & Ige (2011) stated 80% of small businesses fail within the first five years of formation.

The key issues affecting the SBOs include: Lack of fund, low entrepreneurial and managerial capabilities; poor unreliable infrastructure; harsh business environment; poor services delivery and lack of access to modern technology Ojeomogha (2014). Furthermore, through the Central Bank of Nigeria (CBN) the government provide intervention programme through the provision of fund to channel low interest funds to the SBOs.

Contributing to the issues affecting the SBOs Adeniran and Johnston (2016) note that SBOs cannot only have ICT or dynamic capabilities. They must rather have a combination of the two to become successful in their businesses. A small business is defined as a small organization, corporate and non-governmental structure that is mostly managed by the owner. Small businesses are categorized according to their sector and size, as well as their income and asset value. They are further categorized as micro, very small, small or medium enterprises. This study focuses on micro-enterprises or entrepreneurs that are categorized as having no more than five employees. For this study; however, turnover and total asset value were never determined. Thus, only entrepreneurs or micro-enterprises with five employees and less were considered. SBOs are recognized as an important economic driver in the economy. People in this sector have been providing economic and job stability and employment to a significant proportion of the workforce the world over. Today, traditional leadership skills and models are no longer enough to foster market-leading innovation and entrepreneurial returns. This changing business environment presents particular challenges for SBOs in terms of their responsiveness to the market, globalization, and keeping abreast of technological advances. There is an increased need for small businesses to employ digital literacy to enhance their entrepreneurial returns. Digital Information Society and Media Group, (2008, p. 4) maintained that addressing digital competence within this workforce would potentially bring about productivity gains.

Furthermore, there have been many efforts to enumerate and describe the various initiatives and opportunities aimed at enhancing digital skills in this sector. Developing such capabilities within this sector however is not a trivial matter. In line with their key role as economic drivers, SBOs are encouraged to acquire digital skills in order to both foster entrepreneurship, innovation, and job creation and promote their competitiveness in a global context. Research shows that SBOs using digital literacy to conduct business have higher revenues (Nobre & Silva, 2014). On the other hand, there are also research findings that do not support the establishment of innovation in business leading to SBOs growth and productivity (Jagongo & Kinyua 2013). Productivity is a ratio to measure how well an organization (or individual,

industry, country) converts input resources (labor, materials, machines etc.) into goods and services. Productivity is per unit of output produce by number of employee employed at a period of time. Employee productivity relates to the ability of an individual or employee to produce the standard amount or number of products, services or outcomes as described in a work description (Umoru&Yaqub, 2013).

Productivity is the value added per employee divided by the average number of employees during the year converted into full-time equivalents (Bloom & Humair, 2010). It refers to the output relative to the inputs per person or system with reference to a point of time. Stated more clearly, productivity refers to the amount of goods and services produced with the resources used. Productivity is measured with the help of a formula which runs as follows:

$$\text{Productivity} = \frac{\text{Quantity of goods and service produce}}{\text{Amount of the resource use}}$$

If it is required to know the result in percentage then it is to be multiplied by 100. It gives the clear idea about the output because we are more familiar with percentage. Employee Productivity is the efficiency with which output is produced by a given set of inputs. Employee Productivity is generally measured by the ratio of output to input. An increase in the ratio indicates an increase in productivity. Conversely, a decrease in the output/input ratio indicates a decline in productivity.

A number of research studies have also focused on these barriers and have attempted to explain why SBOs will or will not adopt a technology. However, little research has been performed on their digital literacy and entrepreneurial returns.

Statement of the Problem

Small businesses are a driving force of our economy, and new technologies and online services are becoming an everyday part of how SBOs run their businesses. To this end, small businesses are expressing a strong need for basic skills and knowledge about how to use technology safely, securely, ethically and productively, given the role of small businesses in our economy. The question becomes: is it worth the time and effort for small businesses to invest in digital literacy? It is against this background that this study sought to examine the effect of digital literacy on the entrepreneurial returns of small business owners in Lagos State.

Research Questions

To achieve the objectives of the study, the following research questions were raised:

1. Does digital literacy have significant effect on SBOs productivity?
2. Which digital literacy is effective to foster entrepreneurial returns among SBOs?
3. Does digital literacy influence entrepreneurial returns of SBOs?

Methodology

The study adopted survey method by employing questionnaire to gather data. The survey instrument for this study consisted of a self-administered questionnaire. The questionnaire

was designed to capture digital literacy and entrepreneurial returns among small business owners in Lagos state. Descriptive survey method was adopted to investigate the study. This study was conducted on 250 small business owners in the informal sector in Lagos State, Statistical Package for Social Sciences (SPSS) was used to analyze the data ANOVA and regression methods were used for analyzing the data collected. The reliability of the instrument was established with Cronbach's Alpha method which yielded a reliability coefficient of 0.839.

Data Analysis, Results and Discussion

Table 1: Distribution of the Respondents Demographic and Personal Information

Demographic and Personal Information		Population of Respondents	
Variable	Information	Frequency (N)	Percentage (%)
Gender	Male	53	21.2
	Female	197	78.8
Total		250	100
Age	Below 26 years	16	6.4
	26- 30 years	51	20.4
	31- 35 years	64	25.6
	36- 40 years	52	20.8
	41-45 years	44	17.6
	46 Above	23	9.2
Total		250	100
Marital Status	Single	61	24.4
	Married	168	67.2
	Divorced	21	8.4
Total		250	100
Educational Qualification	SSCE	42	16.8
	OND/NCE	53	21.2
	B.Sc/B.ED/HND	137	54.8
	MSc / MBA	15	6
	PHD /DBA	3	1.2
Total		250	100
Level of the Business	5 years and below	121	48.4
	6 – 10years	91	36.4
	11 – 15 years	29	11.6
	20years above	9	3.6
Total		250	100

Source: Field Survey, 2019

From Table 1, demographic and personal data of the respondents as shown by gender revealed that 53 (21.2%) of respondents were male, while 197 (78.8%) were female. This shows that female respondents participated more in the study than male respondents. This signifies that female is more into SBOs than male. Demographic data for age also shows that 16 (6.4%) of the respondents were below ages of 26 years, 51 (20.4%) were in the age group of 26-30 years, 64 (25.6%) were between the ages of 31-35 years, 52 (20.8%) were between the

ages of 36-40 years, 44(17.6%) were between the ages of 41-45 years, while 23 (9.2%) were above 46 years of age. The age that participated more in the survey fall between 31-35 years.

Profile of respondents by marital status shows that 61 (24.4%) of the respondent surveyed were single, while 168 (67.2%) surveyed were married, and 21 (8.4%) were divorced by implication most respondents were married. Demographic and personal data of the respondents for educational qualification of respondents shows that 42 (16.8%) possessed West African Senior School Certificate also 53 (21.3%) of respondents possessed the Ordinary National Diploma (OND), 137 (54.8%) had the Bachelor's degree and Higher National Diploma, 15(6%) were Master degree holders, 3 (1.2%) of respondents are PhD/DBA holders. Therefore, it could be inferred that majority of the respondents that participated in this research are Bachelor's degree and Higher National Diploma. Demographic data of respondents by length of service also shows that 121 (48.4%) of the respondents were below 5 years, 91 (36.4%) were between the group of 6-10 years, while 29 (11.6%) were between the group of 11-15 years while 9 (3.6%) were above 20 years of length of Business.

Table 2: Reliability Analysis

Variable	Number of Valid items	Cronbach's Alpha	Cronbach's Alpha Comments
Digital literacy	4	0.881	Accepted
Entrepreneurial Return	5	0.872	Accepted
SBOs Productivity	5	0.765	Accepted

Overall Average Alpha for the instrument (α) 0.839

From the results as shown in Table 2 the constructs used in the study were for every objective which formed a scale. Amin (2005) established the Alpha value threshold at 0.7, thus forming the study's benchmark. The table shows that digital literacy schedules had the highest reliability ($\alpha=0.881$), followed by Entrepreneurial Return ($\alpha=0.872$) and small business productivity ($\alpha=0.8$). In the same vein, the overall average Alpha for the instrument (α) is 0.839. This illustrates that all the three variables were reliable as their reliability values exceeded the prescribed threshold of 0.7.

Question 1: Does digital literacy have significant effect on SBOs Productivity?
 Linear Regression Analysis of Digital literacy and SBOs Productivity.

Table 3: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Between groups	227.043	1	227.043	35.386	.000
Within group	2406.098	375	6.416		
Total	2633.141	250			

Source: Field Survey, 2019

P<0.05= significant. Dependent Variable: SBOs productivity
Predictor: Digital literacy

Table 3 above indicate that the output of the ANOVA analysis has a statistically significance between groups since the $f(cal)35.386$ is greater than the $f(tab) 1.960$. Also, the calculated significance level 0.000 is less than the default significance level of 0.05. This implies that digital literacy has significant influence on small business owners' productivity.

Table 4: Analysis between Digital literacy and SBOs Productivity

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	9.778	.867		11.280	.000
digital literacy	.330	.055	.294	5.949	.000

Source: Field Survey, 2019

P<0.05= significant

Dependent Variable: Small Business Productivity

Predictors: Digital Literacy

Table 4 shows that there is positive significant effect between digital literacy and employee productivities, the P value of well-being is 0.000 which is less than 0.05. This implies that digital literacy is significant. The coefficient value reported from the analysis which is (.330) shows that there is a positive effect between digital literacy and SBOs productivity. The value of Beta which captures the correlation value also indicates positive relationship between literacy and SBOs entrepreneurial returns. A constant value (alpha) of 9.778 which is the predicted value of the dependent variable measure (SBOs productivity) when the predictor is set at 0 and the coefficient of independent variable (beta = 0.33) the size of the coefficient of independent variable measure giving that the size of the effect it has on the dependent variable

is 0.330. The prediction component as shown in Table 4 is the t-value and significance. The t-statistic is the coefficient divided by its standard error. If 95% of the t-distribution is close to the mean than the t-value, then the coefficient will have a p-value of 5%. The p-value indicates that the independent variable measure the digital literacy. It must be noted that the size of the p-value for coefficient says nothing about the size of the effect of that variable on the dependent variable. It also shows that the F-value which is the mean square model divided by the mean square residual yielded $F=35.386$.

Question 2: Which digital literacy is effective to foster entrepreneurial returns among SBOs?

Table 5: Regression Model Coefficients

Model	Un-standardized Coefficients			Standardized Coefficients	
	B	Std. Error	Beta	T	Sig
(Constant)		0.307	0.520	0.590	0.556
Social networking services (e.g; Face book, , Watzapp, Youtube	0.431	0.135	0.312	3.203	0.002
Blogs (e.g. Blogger)	0.118	0.120	0.091	0.983	0.328
Photo sharing sites (e.g Picasa)	0.350	0.095	0.316	3.683	0.000
Web search engines (e.g Google)	0.209	0.043	0.296	4.880	0.000

Source: Field Survey, 2019

Dependent Variable: Entrepreneurial Returns

The findings from the study uncover that majority of the respondents have adequate knowledge of digital literacy. Table 5 shows how each of the variables used to capture digital literacy affect entrepreneurial returns. All the variables are significant except Blogs has the level of significant that is more than 0.005. The result shows that social networking services are the most effectives to foster higher entrepreneurial returns among SBOs.

Question 3: Does digital literacy influence entrepreneurial returns of SBOs?

Similarly, the result from Table 5 shows that all the variables have positive effect on entrepreneurial returns, but social networking services (e.g; Face book, Watzapp, You tube) have a strong influence on entrepreneurial returns The p-value (0.002) was lower than the significance level. This can be statistically given as $P\text{-value } 0.002 < \alpha = 0.05$ and this is significant.

Discussion of Findings

The first objective of the study was to determine the significant effect of digital literacy on employee productivity. The output of the AVOVA analysis has a statistically significance between groups since the $f(\text{cal})$ 35.386 is greater than the $f(\text{tab})$ 1.960. Also, the calculated significance level 0.000 is less than the default significance level of 0.05. This implies that digital literacy has significant effect on small business owners' productivity. This corroborates the finding of Peng (2017) that juxtaposed that digital literacy has significant influence on SBOs productivity. In addition, Ferreira (2009) confirms that online social networking has positive effect on workers' productivity.

The second objective is to determine what digital literacy is required to foster entrepreneurial returns among SBOs. In order to achieve this objective, the multiple regression shows that all the variables (Face book, Watzapp, You tube) have significant effect on entrepreneurial returns expect one, (Blogs). In same vein, the finding of Awolusi (2012) revealed that social networking services have positive significant effect on small business owners' entrepreneurial returns.

The last objective of the study states that: Does digital literacy influence entrepreneurial returns of small business owners? Result from the finding, revealed that digital literacy has a positive influence on entrepreneurial returns. This means that when there is increase in digital literacy of the small business owners, there will be an increase in their entrepreneurial returns. Buick & Ian. (2003) findings affirm that digital literacy has significant effect on their entrepreneurial returns.

Conclusion and Recommendations

From the theoretical findings and empirical findings above, the research objectives of embarking on this research has been achieved and then the following recommendations are made based on the findings of this study:

1. Universities should open their doors to small business owners for technological development and innovations through diploma programmes, seminars and work shop. This can help to increase their entrepreneurial returns.
2. Government should reinvent the future of small business owners, by extending her current education reforms to make it more functional and need –oriented driven.
3. Emphasis should be on social networking services (such as Face book, Whatsapp, You tube) and how they can be use to foster entrepreneurial returns among SBOs.

References

- Adebayo, O. S., Balogun, O. J., & Kareem, T. S. (2013). An investigative study of the factors affecting the adoption of ICT in SMEs in Oyo State, Nigeria. *International Journal of Business and Management Invention* 2(9), 13-18.
- Adeniran, T. V., & Johnston, K. A. (2016). The impacts of ICT utilization and dynamic capabilities on the competitive South African SMEs. *International Journal of Information Technology and Management* 15(1), 59-89.
- Apulu I., & Ige, E. O. (2011). Are Nigerian SMEs effectively utilizing ICT? *International Journal of Business and Management* 6(6), 207-214.
- Apulu I., & Latham, A. (2009). ICT Adoption: Challenges for Nigerian SMEs, *TMC Academic Journal*, 2009, 4(2) 64-8.
- Ashrafi, R., & Murtaza, M. (2008). Use and impact of ICT on SMEs in Oman. *Electronic Journal of Information Systems Evaluation*, 11(3), 125-138.
- Awolusi, F. (2012). The impacts of social networking sites on workplace productivity. *Journal of Technology, Management & Applied Engineering*, 28(1).
- Babandi, I. G. (2017). Critical challenges facing small business enterprises in Nigeria: A literature review. [International Journal of Scientific and Engineering Research](#) 8(8), 796-808.
- Buckingham, D. (2006). Defining digital library: What people need to know about digital media? *Digital Kompetanse* 4(1), 263-276.
- Buick, I. (2003). Information technology in small Scottish hotels: Is it working? *International Journal of Contemporary Hospitality Management*, 15(4), 243-247.
- Chong, W. Y. (2012). Critical success factors for small and medium enterprises: Perceptions of entrepreneurs in urban Malaysi . *Journal of Business and Policy Research*, 7, 204-215.
- European Commission (2007). *E-skills for the 21st century: Fostering competitiveness, growth and jobs*. Retrieved on the 20th of February from http://ec.europa.eu/enterprise/sectors/ict/files/comm_pdf_com_2007_0496_f_en_ac
- Jagongo, A., & Kinyua, C. (2013). The social media and entrepreneurship growth. *International Journal of Humanities and Social Science*, 3(10), 213-227.
- Kayode, K. B., & Ilesanmi, A. O. (2014). Determinants of factors influencing capacity of small and medium enterprises (SMEs) in employment creation in Lagos State, Nigeria. *International Journal of Financial Research*, 5(2), 133-141.

- Nobre, H., & Silva, D. (2014). Social network marketing strategy and SME strategy benefits. *Journal of Transnational Management*, 19(2), 138-151.
- Ojeomogha, T. O. (2014). *Resource investment and entrepreneurship returns among self-employed artisans in Lagos State, Nigeria: A non-formal education perspective*. Unpublished Dissertation University of University of Lagos, Akoka
- Ongori, H., & Migiyo, S. O. (2010) Information and Communication technology adoption: A literature review. *Journal of Chinese Entrepreneurship*, 2(1), 93-104.
- Peng, G. (2017). Do computer skills affect worker employment? An empirical study from CPS surveys. *Computers in Human Behavior*, 74, 26-34.
- Umoru, D. & Yaqub, O. (2013). Labor productivity and health capital in Nigeria: The empirical evidence. *International Journal of Humanities and Social Science*, 3 (4), 199-222.
- UNESCO IITE Policy Brief (2011). *Digital libraries in education*. UNESCO Institute for Information Technologies in Education.