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CLOUD COMPUTING AS A DIGITAL ENTREPRENEURSHIP TOOL FOR PERFORMANCE ENHANCEMENT OF TEXTILE FIRMS IN NIGERIA

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ABSTRACT

This research examined Cloud computing as a Digital Entrepreneurship Tool for Performance Enhancement of Textile Firms in Nigeria. The study objectives were to identify the relationships between cloud computing and organizational productivity, competence and competitiveness respectively. The study was based on the descriptive survey method; it utilized the opportunity sampling technique and the Taro Yamane formular in obtaining the sample size of 317 respondents. Cronbach's Alpha test, multiple regression and the analysis of variance (ANOVA) were the statistical tools used in the study. The findings of the study showed that cloud computing have a positive effect on the organizational productivity of textile firms. The study concluded that digital entrepreneurship can enable textile firms in Nigeria to perform maximally. The study therefore recommended that textile firms in Nigeria should invest in the development of digital infrastructure in order to improve their organizational productivity, competence and competitiveness which will enable them to consistently boost their performance in a digitally evolving business environment.

Keywords: Cloud Computing, Digital Entrepreneurship, Tool, Performance Enhancement, Textile Firms, Nigeria.

Introduction

1.1 Background to the Study

Since the advent of the industrial revolution, the economies of nations and consequently the working population have been dependent on the development of business concerns. This scenario has made entrepreneurship one of the foremost contemporary issues. In today's digitally evolving environment, a new brand of entrepreneurship known as digital entrepreneurship is radically changing the business landscape. Dar, Ahmed & Raziq (2018) noted that in digital entrepreneurship, data, information and knowledge are the new factors of success that lead to new market opportunities and business models through their intelligent combination and networking with operational performance and service provision. This ranges from platform economics to support systems, as well as the use of new technologies to make processes more effective and elegant. Zhang & Peng (2018) stated that it is precisely the

exploration of promising opportunities and the creation of unique ideas that offer digital entrepreneurs the potential to successfully develop their business. The design of business models, the planning of the architecture of software and hardware components, as well as the storage of individual data, information, knowledge components, internet of things, video conferencing and social media form the core of the new digital entrepreneurial approach.

However, digital entrepreneurship is not limited to holding online meetings, paperless office or communication on social media. Rather, it must be seen as a holistic approach to thinking that encompasses all processes of an organisation, from product or service development to brand building, marketing, communication and sustainable growth (Kagermann, Wahlster&Helbig, 2019). It is a new approach to entrepreneurship that recognizes digital technology as the preeminent factor of production and thereby incorporates it into all facets of the organisational setup. Brynfolfsson&Hitt (2020) emphasized that the incorporation of digital technology into the entrepreneurial process is not merely trendy but a necessity due to the ongoing changes in the global economy with borderless finance, e-commerce and outsourcing services. In Nigeria today, the impact of digital entrepreneurship can be seen in various economic sectors like media, financial services, advertising due to the evolution of nascent trends like blogging, blockchain technology, digital marketing amongst others. However, one sector of the Nigerian economy where digital entrepreneurship is in dire need is the textile industry. The textile industry in Nigeria used to be one of the biggest employers of labour in the country. In the past few decades, the industry has been the most underperforming sub-sector of the economy which has led to the closure of several textile firms in the country (Olakitan, 2018). The reasons for this situation range from multiple taxation to unavailability of finance, unstable power supply, intense competition from Asian markets to supply chain issues. While these issues are legitimate and have bedeviled the development of other sectors of the economy, they can be effectively tackled using the digital entrepreneurship approach. This study is therefore poised to evaluate how digital entrepreneurship can affect the performance of textile firms in Nigeria.

1.2 Statement of the Problem

Several centuries ago during the onset of the industrial revolution, economists identified labour, land, capital and entrepreneurship as the factors of production. These remained true until the advent of the digital revolution overturned everything. The introduction of decentralized finance, outsourced manufacturing, cloud based supply chain management, digital marketing and several other emerging business trends has disrupted the entrepreneurial food chain. Thereby leading to questions about what constitute the new components for production with respect to digital entrepreneurship. Also within corporate organisations especially manufacturing firms, execution is everything. It's one thing to recognize the components of digital entrepreneurship and another to implement them effectively. Furthermore, there is the issue of whether the adoption of big data analytics, cloud computing, digital media and robotics can guarantee corporate success. There are a long list of digitally entrepreneurial concerns that are not performing optimally. These aforementioned issues are the problems of this study.

1.3 Objectives of the Study

The objective of the study is to identify the effect of cloud computing on organizational productivity of textile firms in Nigeria.

1.4 Research Question

1. What is the nature of relationship between cloud computing and organizational productivity of textile firms in Nigeria?

1.5 Research Hypothesis

H_{01}: There is no significant relationship between the deployment of cloud computing and organizational productivity of textile firms

1.6 Significance of the Study

Based on the rapid seismic shift that digital technologies are causing within the global entrepreneurial environment, this study is very vital. This work will be relevant to chief executive officers and stakeholders within the textile manufacturing industry, researchers and policymakers in government agencies. To chief executive officers and stakeholders within the Nigerian textile industry, this study will first furnish them with the relevant information about nascent digital technologies that are reinventing the global textile industry. It will also proffer proven insights on the impact of digital entrepreneurship in textile manufacturing. How the deployment of digital technologies such as big data analytics, digital media, cloud computing amongst others can give the Nigerian textile industry the competitive edge that will enable them to thrive in the foreseeable future.There is also an academic relevance to this study. The study will help researchers to better understand the practical applications of digital entrepreneurship beyond the frontiers of core technology companies like Apple, Microsoft, Google and the rest. Enabling them to possibly overhaul postgraduate curricula with emphasis on how digital entrepreneurship can shape the future of diverse industries. Furthermore, policymakers in government agencies can also benefit from this work. It will enable them to capture the centrality of digital entrepreneurship with respect to revitalizing the moribund textile industry in Nigeria. This will help them in creating government policies that can be enshrined within the textile manufacturing sector which will enable them to compete effectively with their Asian counterparts.

1.7 Scope of the Study

The study focuses on the interrelationship between digital entrepreneurship and the performance of textile firms in Nigeria. It emphasizes how the incorporation of digital technologies can impact the survival of textile firms. It is limited to digital technologies that have applications within the textile industry like cloud computing.

1.8 Limitation of the Study

Several challenges were encountered during the course of this study. The most prominent among them was the difficulty in identifying the right textile firm to be used as a case study. This is due to the fact that the few viable textile firms operating in the country have failed in incorporating digital technologies into their operations. However through due diligence and extensive research, four modern textile firms operating in Lagos were identified and the relevant information concerning their operations was acquired for this study.

Review of Related Literature

2.1 Conceptual Review

2.1.1 Digital Entrepreneurship

Digital entrepreneurship is a term that appears to have only a vaguely-settled meaning. Due to the rapid incursion of digital technologies into everyday living, the term has been misconstrued to imply the application of digital technology into the operating module of any entrepreneurial venture. The European Commission (2018) defined digital entrepreneurship as: all new ventures and the transformation of existing businesses that drive economic and/or social value by creating and using novel digital technologies. Digital enterprises are characterized by a high intensity of utilization of novel digital technologies (particularly social, big data, mobile and cloud solutions) to improve business operations, invent new business models, sharpen business intelligence, and engage with customers and stakeholders. They create the jobs and growth opportunities of the future. Thiel (2020) views digital entrepreneurship as the application or immersion of nascent digital technologies into the operating processes of business organizations. He emphasized that digital entrepreneurship involves more than the use of a few digital technologies like digital media and cloud computing in the operation of one or two areas of a business concern. Rather it is the inclusion of digital technologies into every facet of the organisation from product development, supply chain management to marketing, sales forecast and equipment optimization amongst others. Arguably, digital entrepreneurship is probably the most significant single manifestation of entrepreneurship and has flow-on effects into the structure of business itself (Lukac, 2017). In this regard, digital entrepreneurship appears likely to have a profound effect on all advanced economies. For example, the Australian Innovation System Report (2020) noted that the values of entrepreneurial organizations have mostly been heralded for employment generation and commercialization of new inventions. This is all changing with the rise of the knowledge and digital economy, where entrepreneurs and the organizations they create are uniquely positioned to exploit new opportunities, adopt new production methods and technologies, and reshape competition by penetrating new markets.

Birgit & Hess (2018) opined that digital entrepreneurship focuses on leveraging digital technologies or digital business models to explore and exploit entrepreneurial opportunities. A key component of digital entrepreneurship is how digital technologies and the process of digitisation transform how entrepreneurs can create new sources of value and wealth. However, digitalisation is also transforming what it means to be entrepreneurial and the skills and capabilities required. It is reasonable to conclude that digital entrepreneurs will have a profound influence on the further development of the internet and the digital economy. Digital entrepreneurship is reshaping business and communication with cloud services, augmented and virtual reality, artificial intelligence and blockchains as some of the technologies that comprise our increasingly digitised world (Zhang, Peng & Li, 2020). Shahbaz, Rasi, Ahmad &Sohu(2018) noted that the entire entrepreneurial process can focus on a digital venture as the content of an entrepreneurial journey. Digital entrepreneurship holds potential not just for the wealth of entrepreneurs and organisations but society as well through its close connection to sustainable development goals.

Industrial firms are also under severe pressure to innovate by leveraging the industrial Internet of things (IIoT) and emerging digital technologies. Digital entrepreneurship for existing organisations (corporate digital entrepreneurship) is a critical differentiating factor in

a highly competitive and disruptive environment (Homburg, Wielgos&Kuhnl, 2019) The rapid proliferation of digital technologies with new functionalities has profoundly changed competitive environments, reshaping traditional business strategies, structures and processes (Bharadwaj, 2017). For example, in the networked economy powered by digital technologies, many organizations are getting smaller, with one-person companies and partnerships proliferating. New digital technologies such as social media, big data, mobile and cloud solutions technologies give rise to new ways of collaborating, leveraging resources, product/service design, development and deployment over open standards and shared technologies (Markus &Loebecke, 2018). These technologies power the digital economy by bringing in a new range of opportunities with substantial potential business value and can dramatically reduce the cost for new ventures (Zhao, 2015).

2.1.2 **Applications of Digital Entrepreneurship in Manufacturing Firms**

Additive Manufacturing - Additive manufacturing, also known as 3D printing, builds products by adding material layer by layer. It was primarily used for prototyping but, this technology has evolved so much that it is now possible to produce any part using metal, plastic or mixed material at a larger scale. According to PWC Report (2021), more than two-thirds of US manufacturers use 3D printing. It has become one of the essential technologies that enable manufacturing firms to design products using less material, at lighting speed, and with greater flexibility. By leveraging 3D printing, firms can reduce product development costs by eliminating out-sourcing projects to third parties.

Internet of Things (IoT) - The Internet of Things (IoT) is an arrangement of electronic devices that are being connected to the internet, capable of receiving and sharing data without any human or computer interaction. Industrial IoT is bringing significant disruptions in the manufacturing industry. IoT-enabled predictive maintenance can prevent machines from breakdowns.For example, if machinery failure happens, the embedded sensors will locate the issue and automatically send a message to the manufacturer. Another great use of IoT devices is to track inventory locations. Usually, manufacturers bring inventories on a massive scale; searching and organizing these goods could take a while, causing inefficiency in the production process. By leveraging IoT, manufacturers can use these resources efficiently.

Cybersecurity- As more and more connected devices are being used in manufacturing, there is always a vulnerability to cyber intrusions such as malware and ransomware attacks. It is critical for manufactures of all types and sizes to be aware of these risks to build safeguards that are as robust and innovative as their manufacturing operations and products.

Augmented and Virtual Reality - When it comes to leveraging Augmented Reality (AR) and Virtual Reality (VR) in manufacturing, the possibilities are endless. These technologies impact areas like training and maintenance the most. AR- VR technology can be used with cameras and sensors for training, creating a much safer and lower risk process. These technologies allow maintenance technicians to carry out procedures from a remote location. Both AR and VR enhance efficiency by providing more significant insights and visibility to the multiple manufacturing processes.

Robotic Automation - Robotic automation has gained momentum in various areas of manufacturing, such as welding, assembly, and product packaging. Robotic automation

allows manufacturing companies to achieve maximum efficiency, safety, and competitive advantage in the market. The rise of robotics is described in a report published by the International Federation of Robotics (IFR, 2019), which highlights that 1.7 million new industrial robots will be installed in factories worldwide by the end of 2020. It is no surprise as robots save money, time and efforts by speeding up operations and making the manufacturing process smarter.

Cloud Computing - Cloud computing is a network of internet-connected remote services that store, manage, and process data. Manufacturers are increasingly executing cloud computing software to share data with their manufacturing facilities located in various geographical areas in real-time.Manufacturing is evolving, not only do you need to be more efficient, but you also need to be fast and responsive. To keep up with changing customer demands, modern manufacturing, and supply chain, you need a cloud platform to access your business and operation data. Investing in the cloud platform reduces operational cost, increases speed, and facilitates reliable insights.

2.1.3 Concept of Organizational Performance

There are possibly as many interpretations of the term organizational performance as the studies that have used the construct. Luo (2019) who conducted a meta-analysis of organizational performance suggested that it should be measured in economic and operational terms. The economic performance looks at financial and market outcomes which assess the profits, sales, return on investment for shareholders, and other financial metrices. The operational performance, on the other hand, focuses on the observable indices like customer satisfaction and loyalty, the firm's social capital, and competitive edge derived from capabilities and resources.Organizational performance is measured for different levels of hierarchy and can be assessed for individuals, groups, and the entire organization as a whole (Knies, Jacobsen &Tummers, 2016).A systematic literature review of 213 studies published in reputed journals or a period of only three years (2016-09) revealed 207 different measures used for assessing performance (Richard, 2019).Eventually, the researchers settled on a multi-dimensional construct of organizational performance with financial performance, product market performance, and shareholder return forming three crucial aspects. Kanter& Brinkerhoff (2019) emphasized that the measures for organizational performance depend on who is asking the questions and why they need to measure performance. Some of the reasons why professionals need to measure and report organizational performance are to justify the valid use of investors' money, guide managerial decision making by pointing out the trouble areas, compare performances of different functions, projects, and people, and to exercise control. Therefore, the definition of organizational performance can change as per the use it is put to.

2.1.4 An Overview of Textile Industry in Nigeria

The Nigerian textile sector in the past was the largest employer of labour after government and had always been a major player in the manufacturing sector of the economy as it employed over one million Nigerians and secured captive market of 250,000 tons of raw cotton for growers and generates over N1 billion revenue to the federal government of Nigeria (Central Bank Report, 2017). It was also a major consumer of high percentage of local raw materials such as cotton and polyester. Report have shown that before 1997 the Nigeria Textile Industry was the second largest in Africa after Egypt with

above 250 vibrant factories and over 50 percent capacity utilization (Gompil, 2017). Abimbola (2019) reported that by the 1970s and the 1980s, the Nigerian textile industry had grown to become the third largest in Africa. Between 1985 and 1991, it recorded an annual growth of 67% and employed about 25% of workers in the manufacturing sector. These era could be described as the golden period of Nigeria's textile industry. Some of the textiles companies that enjoyed the boom in the golden era then include Kaduna Textile Ltd (KTL), Arewa Textiles Plc, United Nigerian Textile Plc, Supertex, Nortex Nigerian Ltd and Finetex Nigerian Ltd. Others include Gaskiya Textiles Mill, Kano Textile Ltd, Aba Textiles, Zamfara Textiles Ltd, Asaba Textiles Ltd, African Textile Mill Plc, Tofa Textiles and several others such as Afprint, Atlantic Textiles Mill, Spintex, 5-Stars and Speco Mills Ltd. The story however changed in the early nineties and the sector took a massive dive into an industrial abyss. These companies began to close down one after the other. At a point during the crisis in the sector, from about 180 thriving textile companies, the number came down to 100 down to almost zero, with textile giants such as United Nigerian Textile PLC bowing to the pressure imposed by a hostile operating environment. In Lagos State, the list of closed textile mill companies include: Aswani Textiles, NSF, Diamond Spinners, Rheka Industries, Emar Textile, Mayfair, Aflon, Arcee, Texlon, Royal Spinners and Tarpaulin Nigeria Limited. Some of the Textile firms that have closed down most recently include the International Textile Industry (ITI) with factories in Isolo and Ikorodu, both in Lagos, with 800 people sent to the already saturated labour market. First Spinners Limited, Ikorodu, Lagos, with about 500 employees; Bhojson Textile Industry with about 700 people and Reliance Textile, Ikeja, Lagos, with about 500 employees have also folded up (Abimbola, 2019). The folding up of textile industries in the country poses a major threat to government's efforts to reduce unemployment among Nigerians. Investigations (Olakitan, 2018) revealed that the loss of jobs in the sector hit about 100,000 when the largest textile company in the country, the United Nigerian Textile PLC in Kaduna State closed down with about 5,000 people forced into the labour market, and many other textile producers were also forced to close shop due to unfriendly economic and political environment, massive smuggling and importation of textiles.

2.3 Theoretical Framework

This study is anchored on the resource based theory (RBT) proposed by Michael Porter in 1995. The resource based theory postulates that technology resources or capabilities are becoming the core components of the value creation process for corporate organizations. Concurrently, the theory view technology resources as the competitive capability of the firm. It is further pointed out that the firm's human technology skills, technology infrastructure and reconfigurability are the firm's unique resources which when efficiently blended into the firm's operations will lead to increased process efficiency, cost reduction, marketing and sales amongst others. Digital entrepreneurship as discussed before implies the consummate utilization of digital technologies in the overall operations of a business organization. Based on the theory, since technology resources can improve the operational efficiency and effectiveness of business organizations then they can consequently boost the performance of business organizations.

2.3 Empirical Review

Imran, Hameed &Haque (2018) conducted a study on the impact of digital entrepreneurship on the performance of textile firms in Pakistan. The study reviewed the data from 13 textile

firms producing consumer clothing materials between 2011 - 2016. The study utilized Pearson Correlation as the analytical tool with cloud computing, digital marketing, sales volume and and profitability as subvariables. The findings of the study showed that digital entrepreneurship focused on the use of digital marketing was pivotal to increase in sales volume and profitability of the textile firms. The study therefore recommended that textile firms should adequately utilize digital marketing to grow their revenues. Bharadwaj, Sawy&Pavlou (2020) conducted a study on the effects of digital entrepreneurship on textile firms operating in Bangladesh between 2014-2018. The study surveyed 478 workers from 6 renowned textile firms using multiple regression for its data analysis. The findings of the study showed that the textile firms that effectively utilized robotic automation and cyber security systems outperformed their contemporaries by an average 31% in production volume during the time under review. The researchers recommended that textile companies should invest in robotic automation and cyber security in order to boost their productivity. Chen, Preston & Swink (2018) carried out a research on the prospects and challenges of digital entrepreneurship within the textile industry in India between 2016-2017 using Ordinary least squares. The study was based on internal data obtained from 11 textile industries in the Indian city of Mumbai. The study reviewed the utilization of big data analytics and its effects on the textile industries. The findings of the study showed that big data analytics enabled 7 out of the 11 companies to reduce waste, effectively manage supply chain and inventory thereby increasing their net profits although the development of the digital infrastructure increased their operating costs by 12.3%. The study therefore recommends that big data analytics is a game changer for textile firms. A study was conducted by Chen, Preston & Swink (2018) on the effect of business digitalization on the competitiveness of textile manufacturing firms in Vietnam with a review of 23 textile manufacturers. The study utilized multiple regression and Pearson Moment Correlation for the analysis of the data obtained from 1,145 respondents who staff members of the selected firms. The business digitalization variables were cloud computing, social media marketing and 3D based manufacturing while the competitiveness variables included market share and profit margins. The findings of the study showed that business digitalization especially with specific focus on social media marketing increased the market share of the companies but had negligible effect on profit margins. The study recommends that textile companies should increase their visibility on social media in order to increase their market share.

2.4 Summary of Empirical Review

The empirical review shows that several studies have been conducted on the relationship between digital entrepreneurship and performance of textile firms around the world especially in Asia. The study conducted by Imran, Hameed & Haque (2018) focused on cloud computing and digital marketing which both showed to positively affect sales volume and profitability of textile firms. Bharadwaj, Sawy&Pavlou (2020) showed through their study that robotic automation and cyber security are effective in increasing the productivity of textile firms. The study done by Chen, Preston & Swink (2018) showed that digital entrepreneurship in the form of the incorporation of big data analytics helps to reduce waste, manage inventory and supply chain thereby increasing net profits. Chen, Preston & Swink (2018) study emphasized the role of business digitalization in the form of 3D manufacturing and social media marketing in improving the performance of textile firms. However, the effect of digital entrepreneurship on the survival of textile firms in Nigeria remains an overlooked area of study. This is the knowledge gap in this subject and that is why it is the focus of this study.

Methodology

3.1 Research Design

The study utilized the descriptive survey research design. This involved the use of designated research materials to collect needed information from a selected sample of the research population. This is done with the objective of evaluating the relationship between the research variables.

3.2 Area of Study

The four selected textile firms operate within Lagos State in the Southwestern region of Nigeria. This region comprises of five more states including Osun, Ogun, Oyo, Ekiti and Ondo.

3.3 Population of Study

The population was drawn from the four textile firms operating in Lagos State with an estimated (1,531) workforce.

Table 1: Population Structure of Study

S/N	TEXTILE FIRM	WORKFORCE
1.	United Nigeria Textile plc	562
2.	Dangote General Textile Products Limited	383
3.	Afprint Nigeria plc	355
4.	Mabol Industrial Services Nigeria Limited	231
TOTAL	**531**	

Source - Personnel Department Database of the four firms (2022)

3.4 Determination of Sample Size

Due to the difficulty in covering the entire population within limit, the researcher had to select four textile firms with estimated (1531) of working staff, through opportunity sampling to constitute the study population. Given the population of about (1531) of working staff from the four selected textile firms for this study using Yamane's (1967) formula for sample size determination. The Taro Yamane formular can be represented mathematically as:

$n= N/(1+N[e]^2$

Where:

n= Sample size

N= Population size

e= Percentage error

$n= 1531/(1+1531(0.05)^2$

n= 3560/(1+3.8275)

n= 317

The sample size is 317

3.5 Sample Technique

Convenient samplingtechnique was used for sample selection. This was because of the unpredictable operating nature of manufacturing firms which makes the availability of staff members for questioning by researchers very to fluctuate from one firm to the other. for the

3.6 Method of Data Collection

The study utilized the instantaneous or on the spot method of data collection. The response for each item in the questionnaire were based on a 5-point Likert scale of strongly agreed, agreed, undecided, disagreed and strongly disagreed with a corresponding nominal value of 5,4,3,2 and 1 respectively.

3.7 Validity of the Instrument

The validity of data refers to the exactness to which the data measures what it was intended to measure. The instrument was subjected to diligent content analysis to ensure that the entire scope of the study including the dependent and the independent variables were covered in the instrument.

3.8 Reliability of the Instrument

To ensure the reliability of the instrument, the Cronbach's Alpha reliability test was used for the study. A reliability coefficient of 0.7 and above was deemed acceptable. Therefore, a benchmark of 0.7 was used for the study.

Table 2: **Reliability Result for Digital Entrepreneurship**

Reliability Statistics

Cronbach's Alpha	N of Items
.774	4

The Cronbach's Alpha score of the reliability statistics for digital entrepreneurship is 0.774 which is greater than 0.7, therefore the instrument is deemed to be reliable.

Table 3: Reliability Result for performance of Textile Firms

Reliability Statistics

Cronbach's Alpha	N of Items
.782	4

The Cronbach's Alpha score of the reliability statistics for the performance of textile firms is 0.782 which is greater than 0.7, therefore the instrument is deemed to be reliable.

3.9 Method of Data Analysis

The data collected were analyzed using multiple regression methods powered by SPSS. In answering the research questions, the real limits of numbers was used for decision making as follows; 4.50 – 5.00 = strongly agreed, 3.50 – 4.49 = agreed; 2.50 – 3.49 = undecided; 1.50 – 2.49 = disagreed; 1.00 - 1.49 = strongly disagreed. The test of hypothesis was carried out using Analysis of Variance (ANOVA). The decision rule for testing the hypothesis was based on the p-value. A hypothesis of no significant correlation was rejected for any cluster of items whose p-value was equal to or less than the p-value of 0.02 while it was accepted for any cluster of items whose p-value was more than the p-value of 0.02 at 5% significance level.

Data Presentation and Analysis

4.1 Data Presentation and Analysis

Table 4: Table of Returned and Unreturned Questionnaire

	Frequency	Percentage %
Returned Questionnaire (Valid)	311	98
Unreturned Questionnaire	6	2
Total Questionnaire Administered	317	100

Source: Field Survey, (2022)

Table 5 Respondents Profile

Designation	Number of respondents	(%)
Production staff	251	79
Managerial staff	12	4
Administrative staff	17	6
Quality Control staff	31	11
Total	311	100
Experience (years)		
1-5	175	32
6-10	67	19
11-15	42	36
16-20	21	7
21 and more	6	6
Total	311	100

Source: Field Survey, (2022)

Research Question: The relationship between cloud computing and organizational productivity

TABLE 6 REGRESSION ANALYSIS

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.884	0.124		4.683	0.000
	Cloud computing	0.490	0.806	0.190	-0.477	0.634
Dependent variable: Organizational Productivity						

Source: Field Survey, (2022)

Multiple regression was applied which determines the degree of 9 and direction of the linear relationship among research variables. The regression analysis results exhibited in Table 6 indicate the relationship between cloud computing and organizational productivity of textile firms in Nigeria. According to the analysis presented above, cloud computing enhances the organizational productivity of textile firms in Nigeria by 49% when adopted. This implies that textile firms in Nigeria utilizing cloud computing services are likely to be more productive than their peers by a margin of about 49%.

Test of Hypothesis

H_0: There is no significant relationship between the deployment of cloud computing and the organizational productivity of textile firms

Relationship between cloud computing and organizational productivity of textile firms in Nigeria

Table 3 - ANOVA Regression coefficients of the Independent and Dependent Variables

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
2 (Constant)	32.208	1.004		32.075	0.00
Cloud computing	.040	.025	.082	1.603	0.02

Organizational productivity of Textile Firms

Source: Field survey, (2022)

The multiple correlation coefficient which is the level of determination for cloud computing is low (R= 0.158). The entire model is however significant at a 5% interval (p= 0.02) showing an acceptable relationship between the two variables as stated earlier. The coefficient of cloud computing itself is significant 5% as shown in the model (p= 0.082). The relationship between the two variables was strong indicating cloud computing can determine the organizational productivity of textile firms in Nigeria thereby rejecting the null hypothesis.

Discussion of Findings

The findings of the study with respect to the research question were in consonance with the empirical review which identified cloud computing as a component of digital entrepreneurship that is pivotal for textile firms. The findings of Chen, Preston & Swink (2018) showed that big data analytics enabled 7 out of the 11 companies to reduce waste, effectively manage supply chain and inventory thereby increasing their net profits. This compares positively with the findings of the study with respect to the second research question. Further findings of the study are in agreement with the study conducted by Imran, Hameed & Haque (2018) which showed that digital entrepreneurship focused on the use of cloud computing was pivotal to increase in sales volume, profitability and consequently the performance of textile firms. Also the findings from the regression analysis showed that cloud computing positively affected the survival of textile firms in Nigeria. This is in alignment with the study conducted by Bharadwaj, Sawy&Pavlou (2020) which showed that the textile firms that effectively utilized cloud computing outperformed their contemporaries by an average 31% in production volume during the time under review.

Summary, Conclusion and Recommendations

Summary

Some decades ago, the internet was virtually an unknown subject, computers were not very efficient and industrial processes were carried in analogue fashions. The growth of the internet upended virtually everything pushing the world into an era of unprecedented innovation and change. Digital entrepreneurship is becoming a necessary for entrepreneurship for virtually every industry and sector. Several companies in various sectors has failed as a result of their reluctance digitize their business processes. This study which focused on textile firms in Nigeria showed that Cloud Computing is one of the most important components of digital entrepreneurship within the textile industry. It is pivotal to the survival of textile firms in Nigeria. A retrospective view of the Nigerian textile industry showed that in the past few decades, the textile firms that failed were those that refused to digitize their operations.

Conclusion

The results obtained from the regression analysis conducted showed that several Nigerian textile firms are actively involved in digital entrepreneurship. The study showed that the textile firms in Nigeria that deployed digital entrepreneurship by utilizing certain digital technologies like cloud computing has prospered overtime. It can be concluded that digital entrepreneurship enhances the performance of textile firms in Nigeria.

Recommendations

Based on the findings of this study, the following are recommended:

- Textile firms in Nigeria should view digital technologies as the most vital and efficient means of productivity.
- Textile firms in Nigeria should actively engage in digital entrepreneurship by investing in the development of digital infrastructure in order to improve their organizational competence in a digitally evolving business environment
- The government should provide tax incentives for textile firms that digitize operations since it will ensure their competitiveness which will ensure their performance and consequently lead to both job security and creation.

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