TECHNOVATION AND PERFORMANCE OF SMALL SCALE ENTERPRISES IN BENIN CITY NIGERIA

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Abstract - This study discussed the impact of technovation and performance of small scale enterprises in Benin City Nigeria. Creative innovation and information communication technology were adopted to measure number of employee and profitability of technological enterprises. Quantitative research approaches were used, while cross-sectional and longitudinal survey research method was adopted to examine the effect of technovation on performance of small scale enterprises. The population for this study was six- thousand, eight hundred and fifty (6850) registered computer engineers in Benin City Nigeria. 5-Likert Scale close-ended Questionnaire was designed to collect data, the method of data analysis is multiple regression under the SPSS (Statistical Package for Social Science, version 21) application. Findings showed that creative innovation had a strong significant relationship with number of employee and profitability, while information communication technology had a strong significant relationship with number of employee and profitability of technological enterprises. This is shown through their probability value (0.000, 0.000, 0.000 and 0.000) which are less than the chosen 10% significance level. The study recommended that Nigerian computer engineers need to introduce creative ideas to improve business services which enhanced technological devices through business processes. They need to seek new marketing methods through creativity, by perceiving innovation as an opportunity. There should be team building through information technology and Nigerian technological platform needs strategic business plan for expansion. The study concluded that there are technological devices that can enhance business processes but engineers need to seek new marketing methods through creativity. Just few technological firms introduced creative ideas to improve their business services, which had affected their business growth. The use of Information and communication technology needs to be increased to facilitate increased use of internet services in Nigerian small scale enterprises.

Keywords - Technovation, Performance and Small Scale Enterprises

I. INTRODUCTION

1.1 Background to the Study

Technovation is a new wave of change in societies, where technology application and innovation have resulted an increased in corporate responsibility, survival, value and performance to comply with the new business challenges.

1.2 Statement of the Research Problem

Several Nigerian computer engineers don't make use of creative innovations that will aim at stimulating growth in small scale enterprises through entrepreneurship development.

Individual computer engineers have not been able to play an appropriate role of displaying creative innovation and entrepreneurial skills, the entrepreneurial capabilities have been limited compared to other multinational companies. This have also affected the entrepreneurial development of every states in Nigeria.

Ineffective utilization of information communication telecommunication from Nigerian entrepreneurs which have complicated solutions to different problems, which have not added value to the stakeholders and the covation capital creates a lot of crisis to economic problems.

Due to poor business design in information communication technology, many computers engineer's entrepreneurs have lost their customers to their competitors and as a result of this, it has reduced business profitability.

Regardless of the existence of a large and growing body of literature on technology entrepreneurship in general, there are still some inadequacies surrounding the practice and how it influences performance particularly in a small scale enterprise.

1.3 Research Questions; Arising from the statements of research problem, the following research questions were generated;

i. How does creative innovation influence number of employee in small scale enterprise?
ii. To what extent does creative innovation affect business profitability in small scale enterprise?
iii. How does information and communication technology enhance number of employee in small scale enterprise?
iv. To what extent does information and communication technology influence business profitability in small scale enterprise?

1.4 Objectives of the Study

The general objective of this study, examine the impact of technovation and performance of small

scale enterprise in Nigeria. The specific objectives of the study are to: -

i. examine the influence of creative innovation on number of employee in small scale enterprise.
ii. investigate the effect of creative innovation on business profitability in small scale enterprise.
iii. assess the impact of information and communication technology on number of employee in small scale enterprise.
iv. appraise the extent to which information and communication technology influence business profitability in small scale enterprise.

1.5 Hypotheses of the Study; For the purpose of this study, the below research hypotheses were tested in the following forms;

$H0_1$: There is no significant influence of creative innovation on number of employee in small scale enterprise.

$H0_2$: Creative innovation has no significant effect on profitability of small scale enterprise.

$H0_3$: Information and communication technology has no significant impact on number of employee in small scale enterprise.

$H0_4$: Information and communication technology does not have any significant effect on business profitability in small scale enterprise.

1.6 Significance of Study; The study provided knowledge to small scale enterprise on the relevance of technology entrepreneurship through building trustworthiness with the customer in their business endeavor.

1.7 Scope of Study

The study covered all the registered computer engineers in three local governments in Benin City that includes (Oredo, Egor and Ovia North East). The justification of selecting these local governments is that they have the highest number of technological advancements. The study was restricted to Global System for Mobile (GSM) and computer engineers in Benin City of Edo State.

1.8 Limitations of Study

The major constraints that was encountered was the reluctance and non-disclosure attitudes of the computer engineers to divulge the required information. The study overcame this through mechanism of persuasion and appeal to the respondents.

1.9 Operationalization of Constructs into Variables

The Independent var iable of this study is **Technovation** which **is** denoted by X while the dependent variable is **Performance of SSE** which is denoted by Y, model summary is stated below:

$y = f(x)$

X = Technovation

Y = Performance of SSE

x1 = Creative Innovation

y1= Number of Employee

x2 = Information Communication Technology y2= Profitability

1.10 Operational Definition of Terms

Technovation is an investment in a project that assembles and deploys specialized individuals and heterogeneous assets that are intricately related to advances in scientific and technological knowledge for the purpose of creating and capturing value for a firm

Creative innovation is the capability or act of conceiving something original or unusual.

Information Communication Technology (ICT) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on.

Small Scale Enterprises is a small-scale enterprise that employs small number of workers and does not have a high volume of sales. Such enterprises are generally privately owned and operated as a sole proprietorship, corporations or partnership. The number of workers employed are mostly not more than 20 for small scale business while 50 for medium scale enterprises

Number of Employee is a stage where the business reaches the point for expansion and seeks additional human resources to generate more profit..

Business Profitability is the ability of business to earn a profit. A profit is what is left of the revenue, a revenue a business generates after it pays all expenses directly related to the generation of the revenue such as producing a product and other expenses related to the conduct of the business activities. There are four key areas that can help drive profitability. These are reducing costs, increasing turnover, increasing productivity and increasing efficiency.

II. LITERATURE REVIEW

2.0 Preamble

This chapter looks at the impact of technological entrepreneurship on performance of small scale enterprises in Nigeria.

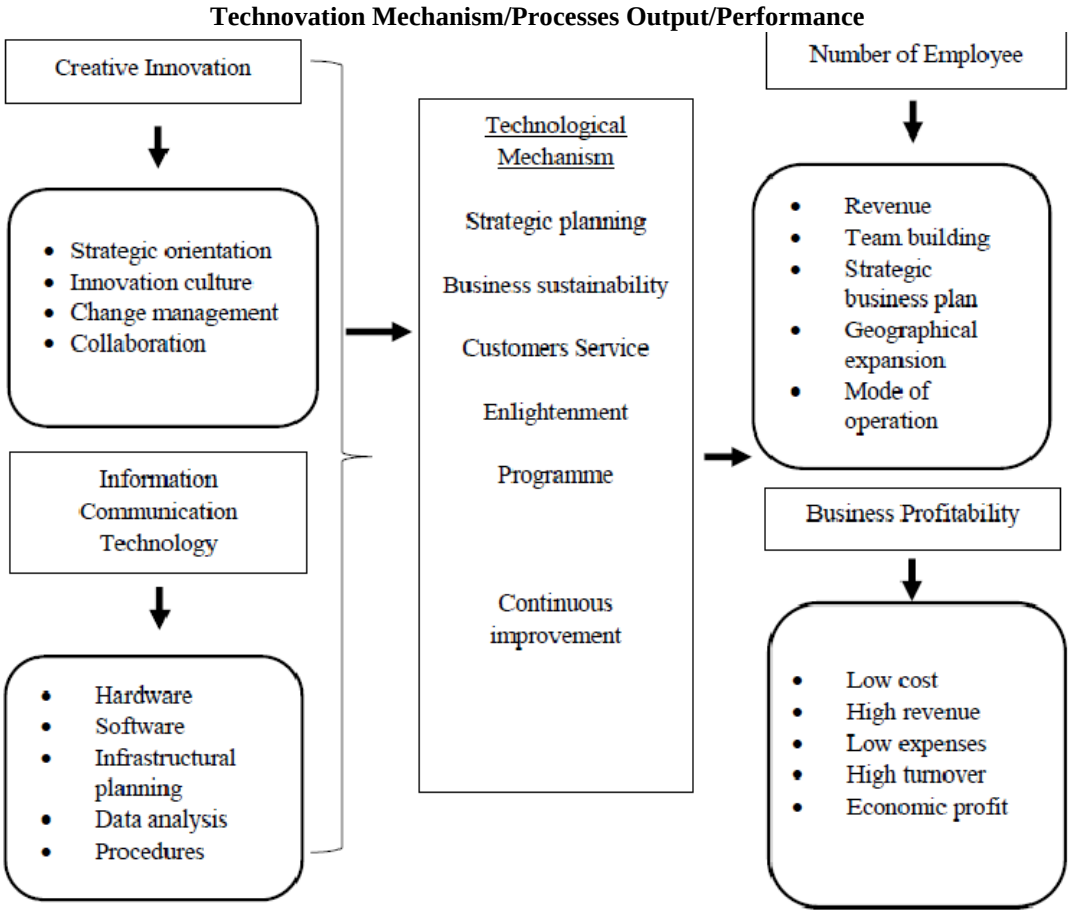
2.1 Conceptual Framework

2.1.1 Overview of Entrepreneurship

Entrepreneurship is presented as activity of people, carried out at their own risk with a view to profit. It is possible to consider the process of entrepreneurship on the other hand.

2.1.2 Understanding Technovation

Technology is not a neutral tool, but something that supports and constraints human action, thinking and even surpasses our deepest values.



Source: Authors Conceptual Framework (2019)

Fig. 2.1 Conceptual Framework of Technovation.

2.1.3 Creativity

Creative innovation is an employment strategy that can lead to economic self-sufficiency for people and organization.

2.1.4 Information Communication Technology Information and communication technologies (ICTs) have made accessing and sending information very easy in Nigeria. The use of ICT in entrepreneurship can bring changes to the poor and needy areas in an economy such as food security (Kumar & Sankarakumar, 2012).

2.1.5 Performance Output of Nigerian Small Scale Enterprises; Organizational performance is the combination of profitability, growth, efficiency, liquidity, size, and leverage, which are measured with relevant measures.

Organizational growth:- This is paramount for the performance of small scale enterprises

Organizational Profitability: - Organizational profitability is essentially a tool one for any business oriented enterprises, whose major significance is to ensure the continued valorization of expansion.

2.1.6 Number of Employee of Nigerian Organizations; This act of business growth is of entrepreneurial type, if it determines the entry of a firm into different newly identified markets.

2.1.7 Understanding Business Profitability; The profit-generating opportunities that guide the actions of entrepreneurs may source from the imbalances manifested on the market.

2.1.8 Creative Innovativeness of Technological Companies; Innovation is seen to be instrumental in increasing the country s competitiveness and wealth, and small scale enterprises are at the core of the economic growth of several industrial countries

2.1.9 Overview of Nigerian Small Scale Enterprises; The various finance institutions should be alive to their obligations by providing the needed financial and advisory services to graduates and non-graduates.

2.1.10 Challenges of Nigerian Small Scale Enterprises

a. Lack of Knowledge in the Basic Science and Technology:

b. Lack of Strong Patent Law: This is one of the examples of innovation capital. A serious challenge that small scale enterprises face in Nigeria is the level of competition from foreign producers.

c. High Cost of doing business in Nigeria: Small scale enterprises are in business (take risk) because they want to make profit..

2.2 Theoretical Review

2.2.1 Innovation Theory

This theory was a proponent of (Schumpeter1961) and was called the innovation theory of Schumpeter.

Rates of Adoption of Innovation Theory

Rate of adoption is seen as the speed that is used by the social system members for adopting an innovation..

2.3 Empirical Review; Empirical review of Innovation on Performance of Small Scale Enterprises from Developing Economies; Adesanaya, Ogunnaike, Subi, Onayemi, and Ayinla, (2017) examined a study titled Innovation Theory of Entrepreneurship; A Systematic Review.

2.4 Gaps in Literature; Most of the literatures also covers commercial leaving South-South State like Edo State, they cover large scale enterprises, multinational and global companies, however,

III. METHODOLOGY

3.0 Preamble; This chapter describes the methodology which discusses the methods employed for the research study. It majorly deals with research procedures of carrying out the study.

3.1 Research Design; The study adopts census and cross-sectional survey research design.

3.2 Population of the Study;

SN	Local Government	Population	Sample Size
1	Egor	1550	83
2	Oredo	2400	128
3	Ovia North-East	2900	154
Total		**6850**	**365**

Table 3.1 Population of the Study.

3.3 Sample Size Determination; The sample size determination was derived using research advisor's table (attached as appendix 2). The total population of the study is **6850** respondents from registered computer engineers who reside in Benin City. The sample size was determined using 5% error margin. Therefore, from the research advisor's table the sample size is **365.** The formula used for these calculations is:

$$n = \frac{X^2 \times N \times P \times (1\ P)}{(ME^2 \times (N\ 1) + (X^2 \times P \times (1\ \ P)}$$

Where:
n = sample size
X2 = Chi- square for the specified confidence level at 1 degree of freedom
N= Population Size
P= Population Proportion (.50 in the table)
ME = desired margin of error (expressed as a proportion)

3.4 Sampling Technique

To obtain an accurate result in this study, simple random sampling techniques was

3.5 Research Instrument

The study employs the use of a structured questionnaire which was divided into two sections in reference to the objectives of the study, bearing close ended questions. Five Point Likert scale of 1-5 (strongly agree, agree, disagree, strongly disagree and neutral) was used to design the questionnaire.

3.6 Validity of Research Instrument

The content validity of the instrument was determined by the experts to test and measured the variables of the instruments with the research questions in order to determine whether or not the instruments measured what they were supposed to measure.

3.7 Reliability of Research Instrument

Cronbach's alpha was employed to measure the reliability of the research instrument because it measured the internal consistency and scale reliability of a research instrument.

3.8 Source of Data Collection

Primary data was the source of this study, which was gotten from the administered questionnaires. The questionnaires were administered by the researcher and research assistants who are based in the metropolis.

3.9 Method of Data Analysis The study employed standard multiple regression analysis on the data collected,

3.10 Ethical Considerations The purpose of the research is to explain adequately to the respondents and assured them of utmost .

IV. DATA PRESENTATION AND ANALYSIS

4.0 Preamble: This chapter presented how the quantitative data collected from the targeted respondents were analyzed and interpreted.

4.1 Data Presentation

Respondents	Frequency	Percentage %
Completely Filled Questionnaire	353	96.7
Ineligible	7	1.9
Unreachable	5	1.3
Total	**365**	**100**

Source: Field Survey, 2019

Table 4.1 Administered Questionnaires

4.2 Test of Research Hypotheses

4.2.1 Hypothesis One

H_{o1} There is no significant influence of creative innovation on number of employee of small scale enterprise

Source: Field Survey, 2019
Source: Field Survey, 2019

Source: Field Survey, 2019

Source: Field Survey, 2019

4.2.3 Hypothesis Three

Ho_3 Information communication technology has no significant impact on number of employee in small scale enterprise

4.2.4 Hypothesis Four

Ho_4 Information communication technology does not have any significant effect on business profitability in small scale enterprise

Source: Field Survey, 2019

4.3 Discussion on Findings

This study has some major findings based on demographic, descriptive, inferential, questionnaires and hypothesis tested,

V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Preamble

The study examined impact of technovation and performance of small scale enterprises in Benin City.

5.1 Summary

Lastly, fourth objective which demystified the extent to which information communication technology influence business profitability in small scale enterprise. Respondents agree that ICT services have improved the telecommunication industry. Information technology have enhanced team building in your industry. Business mode of operation is well specified through information communication technology.

5.2 Conclusion

Based on the findings that were highlighted in the formulated hypotheses. The study can conclude that creative innovation and information communication technology influences a number of employee and profitability.

5.3 Recommendations

1. Nigerian computer engineers need to introduce creative ideas to improve business services which will enhance technological devices through business processes.

5.4 Delimitation

The foremost limitations are the difficulty of getting access to primary data, most of the respondents (computer engineers) were reluctant to collect and fill the copies of the questionnaires administered to them. The respondents were working at their various destinations, so it took a lot of persuasion from the side of the researcher to make them comply. Questionnaires were also returned without being filled while others were lost in the process and some respondents failed to answer the questions correctly

5.5 Suggestions for Further Study

Hence, the following areas of research could be suggested:

1. Impact of Technological Entrepreneurship Initiatives on Performance of Telecommunication Firms in Benin City.
2. Effect of Entrepreneurial Technology on Performance of Mobile Phones firms in Benin City.

5.6 Contributions to Knowledge

This study examined the impact of technovation and performance of small scale enterprises in Benin City, it provides information that are relevant to technological entrepreneurs. It is crucial to researchers carrying out a study on creative innovation, information communication technology on number of employee and profitability.

REFERENCES

[1] Acedo, F. J., Barroso C. V., & Galan, J. L. (2006). The resource-based theory: Dissemination and main trends. *Strategic Management Journal, 27(7),* 621-636.
[2] ACS, Z. J., & Storey, D. J. (2004) Introduction: Entrepreneurship and economic development. *International Business Journal, 9(6),* 2-4.
[3] Adebayo, E. A., Olashebikan A. T., Agumadu, M. A., Peter, A. O., Akinsulire, H. W., & *Management*. New Delhi.

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