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TECHNOPRENEURSHIP FACILITATORS AND BUSINESS PERFORMANCE: A MODERATING ROLE OF GOVERNMENT SUPPORT POLICIES OF SOME SELECTED MANUFACTURING FIRMS IN SOUTH SOUTH NIGERIA

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ABSTRACT

This study examined the relationship between technoprenuership facilitators and business performance of some selected manufacturing firms in South-South, Nigeria. The study adopted the cross-sectional research survey design. Primary data were generated through structured questionnaire. The population of this study consisted of the 50 selected manufacturing companies, registered with the Manufacturers Association of Nigeria. The hypothesis was tested using the Spearman's Rank Order Correlation Statistics while the partial correlation was used to test the moderating effect. The findings showed that there is a significant relationship between technoprenuership facilitators and business performance of manufacturing firms in south south Nigeria. The study concludes that technological innovation positively enhances business performance of manufacturing firms in South-South, region of Nigeria. Based on the above, it was recommended that manufacturing firms should develop regularly assess and update the strategy to address evolving technological and market landscapes, encourage and organize industry-specific networking events, conferences, and workshops to facilitate collaboration among manufacturing firms.

Keywords: Technoprenuership Facilitators, Business Performance, Government Support Policies

INTRODUCTION

Several businesses had embraced the usage of technology in their daily operations during and after the covid -19 pandemic. Technology has altered the way businesses are done and businesses have attested to the reliability of technology and how critical and essential it has become in the performance of their operations and in goal achievement.

Historically, the growth in manufacturing output has been a key element in the successful transformation of most economies that have seen sustained rises in their per capita incomes. The most recent example being that of the Newly Industrializing Countries [NICs] and their success in exporting manufactures. According to Nigeria Vision (NV) 20:2020, 'the manufacturing sector provides the greatest opportunity for the transformation of the Nigerian economy. It is an antidote for unemployment, a creator of wealth and threshold for sustainable development'. However, Nigeria's manufacturing sector contributes on the average a mere 4.19% to the national GDP. It contributed only 4 per cent to GDP in 2011. For Nigeria to be one of the twenty biggest economies in the world in 2020, the sector must be contributing a minimum of 15% yearly to its GDP and grow it steadily to a minimum of 30% by 2020. (SMEDAN; 2013*).*

However, manufacturing firms are faced with a lot of challenges; some of them include ; Internal Security: For example, Vita-Foam had to close its manufacturing plant in Jos while Nigerrite Managing Director was at one time kidnapped along with his wife.

Inappropriate Fiscal Policy: Government's procurement policies, for example, do not encourage local content production. As such, the Nigerian market is inundated with a myriad of foreign goods, a high percentage of which can be produced locally, given the right policy atmosphere. High costs of funds: This is caused as a result of depreciation of the Naira against major currencies coupled

with high lending rates and extreme difficulties in accessing credit for working capital. Policy inconsistency and anomalies in customs duty.
Multiple taxes and levies by the three tiers of government. Scarcity of FX: this led to exchange loss of N500b in 2016. Crime and corruption: gratifications to public officials for sundry purposes such as accessing public utilities, clearing goods at the ports and obtaining licenses and permits. Cumbersome port administration that hinders the attainment of the 48– hour cargo clearing at the ports. Dearth of qualified skilled middle level manpower worsened by the decaying educational system. Slow rate of technology acquisition stemming from low investments in Research and Development. Infrastructural Deficit: The current power generation capacity is less than 4000 Megawatt, which is about 20 per cent of the estimated national demand. θ Figures released recently by the National Electricity Regulatory Commission (NERC) indicate that of the N796 billions spent to fuel generators in 2008, members of MAN spent over N350 billion. This excludes amount spent on maintenance, repairs and acquisition of new generators. For instance, some companies run their plant 16 hours a day on generator.

Maintaining the status quo will not drive growth. Nigerian manufacturers will need to do something differently in order to win market share in today's global economy .In this regard, this study sought to find out how to boost the business performance of some manufacturing firms by adopting some technopreneurship facilitators

Research Hypothesis

The hypothesis formulated will guide the study:
H_1: Government support does not significantly moderate the relationship between Technopreneurship facilitators and Business performance in some selected manufacturing firms in South South Nigeria?

Concept of Technopreneurship

Technopreneurship is a relatively new concept that is being recognized as a legitimate source of economic power in today's knowledge-based and emerging economies (Okorie, 2014). The increased attention to information and communication technology (ICT) has led to several advancements, together with extended studies increase and acceptance, similarly to advanced Internet literacy. The upsurge of technological advancement has given rise to new opportunities and challenges in the market sector (Dutse, et al. 2013). Technopreneurship is one of the most critical aspects of the ICT era in entrepreneurship, and it plays a fundamental role in giving competitive edge across most businesses. As a result of the rebuilding and economic growth, businesses will be able to expand to compete in this ever-dynamic world while at the same time being creative with value addition to their operations (Matejun, 2016). Technopreneurship is a combination of the phrases technology and entrepreneurship. It's essentially a type of entrepreneurship that is technology-based. Technopreneurship can be said to be a practice that combines technological innovations with entrepreneurial skills. Technology is indispensible to the technopreneur in transformation of products and services (Gietu, 2021; Adeoti, 2019). Technopreneurship has to do with the conversion of good ideas into viable commercial ventures via the platform of technology and innovation (Okorie, 2014). A technopreneur in this dispensation can literally start off their firm with an idea from a brainstorming notion. He explores existing methods and introduces some new suggestions in doing things differently (Oyedele, et al. 2020). Technopreneurship is the creation of a product, service /or solution that transforms the way people do things traditionally by utilizing technological innovations. Technopreneurship is widely embraced to represent an entrepreneur who combines resources such as land, labor, and capital to grow a product, makes non-recurring decisions, is aggressively competitive, technologically inventive, and takes risks (Dutse, et al., 2013). The word "technopreneur" was used first in 1987, in accordance to the Collins Dictionary (Gietu, 2021). "Technopreneurs are entrepreneurs who

start and manage their technology businesses. Technopreneurs are people who take modern technology and turn them into successful businesses or services (Akande & Oladejo, 2013). However, it came to the fore in the 2000s, when a great number of people began to utilize the Internet (Gietu, 2021). A technopreneur can begin with a novel idea. This concept can alter the way society has historically operated. They capitalize on technology to develop a new product or find a solution to a problem. As a result, science and technology are the defining characteristics of technopreneurship (Fowosire, et al 2017). Technopreneurship is a relatively new word that is gaining popularity amongst academics and business players and has become a pivot for some important topics and issues (Matejun, 2016).

A review of extant literature shows that several factors influence technopreneurship either by stimulating or inhibiting a firm's attitude towards innovation, evident in its innovative activities or behaviors. They include government-supported developments, financial resources, academia-industry collaborations, and market dynamics, all of which are externally driven factors. Several internally driven elements for the firm include management orientation, organizational culture, technology orientation, alliance and cooperation, and market orientation. The external environment may potentially determine the development of technological innovations. Both endogenous factors and the external environment undoubtedly play an important role in the process of technopreneurship linked with the basic pillars of the knowledge economy (Al Ansari, 2014; Matejun, 2016).

Consumers' perceptions of and eventual purchases of brands, goods, and offerings have developed at a breakneck speed. This is as a result of technological advancements made available to today's enterprises. What most customers do not apprehend is that companies use a massive range of recent and evolving technology in the development, manufacture, and distribution of their products, goods, and services (Dutse, Ningi & Abubakar, 2013). According to Ulas (2019), technology has great influence on business growth and development. Some of the benefits could be more convenience and ease in business performance, cloud trust, less cost and more functionality, improved learning, effective marketing, instant communication, improved customer service, high efficiency, productivity, and smartness.

Concept of Business Performance

Business performance is described as "the operational ability of the company to satisfy the desires of its key shareholders," and it must be measured to gauge an organization's success (Selvarani & Kanagaraj, 2015).performance is known as achieving a particular work against known standards of accuracy, completeness, cost, and speed. Profit, return on investment (ROI), turnover or number of customers, liquidity, design quality, and product improvement are all common measures used to assess business performance (Akande & Oladejo, 2013). The term business performance refers to attitudes that have been evaluated or measured in terms of their contribution to the organization's goals. The management's approach and skills, particularly line management's, are reflected in their behavior or attitude, which enables them to use resources effectively and professionally (Kenny, 2019). Farlex (2012) defines it as an organization's actual output/results when compared to its expected outcomes (goals and objectives). The three primary outcomes of business organizations being studied are financial performance (profits, return on assets, return on investment, and so on); product market performance (sales, market share, and so on); and operational efficiency(Resource utilization, timeliness, productivity, product quality ,Cost efficiency) . (Kenny, 2019). For this study, business performance shall be conceptualized into financial performance, operational efficiency and market performance as dimensions of business performance.

Performance often entails organizational accomplishment or the achievement of organizational goals (Herath & Mahmood, 2014). Performance measurement and management practices have become common place in all businesses. The knowledge of the association between innovation

and firm performance offers practical insights for proper management of firms. With this knowledge, managers of enterprises would be capable of optimizing their decision making processes as it relates to various performance output. This knowledge will also assist them in the maximal allocation of the resources. As noted by Murphy et al. (1996), performance of a firm is a multi-faceted concept, inclusive of indicators such as; finance production, or marketing (Sohn et al., 2007), or consequential such as relating to growth and profit (Wolff & Pett, 2006). Studies have described firm performance in terms of, how organizational objectives are well achieved (Jarvis et al., 2000). Firm performance can be assessed by examining how successful an organization is in achieving its goals (Gerba & Viswanadham, 2016). Scholars have argued that performance of firms can be described as the firms" ability to produce suitable outcome and actions (Chittithaworn et al., 2011). Gerba & Viswanadham (2016) opined that performance can be in terms of financial and nonfinancial performance. This includes; return on investment (ROI), sales volume, sales value, profitability, total assets, employment size, capital employed, market share, customer satisfaction, productivity, turnover, delivery time, employees turnover, etc. In this study, performance is measured as total sales value (Carter & Jones-Evan, 2000; Gebreeyesus, 2007).

Government support policy.

Government support refers to the *role of the government in promoting and encouraging the implementation and usage of technology* (Lucas, 2014).Government Support could be in form of financial support provided by federal, provincial or municipal governments,. It can also include unrestricted access to capital and operating grants, subsidies, repayable or forgivable loans, reimbursable tax credits, and loan guarantees. Public policy is a set of decisions made by governments and other political actors to impact, alter, or frame a challenge or issue that has been identified as being in the political realm by policy makers and/or the wider public. The most common types of government support include: Loans and grants. The government may provide loans, grants or grant subsidies directly to the project company. The terms offered for these capital contributions can be flexible and are often subordinated to senior commercial debt, so as not to compete with it for repayment.

Government support refers to the various ways in which governments provide assistance to new and emerging businesses. This support can come in various packaging, such as financial assistance, tax incentives, and access to resources such as mentorship, training, and networking opportunities. The aim the government support is to enable startups overcome some of the many challenges they face in their early stages of development, and to foster a supportive environment for innovation and growth OECD (2019a). Government support can take many forms, and each type of support is designed to help businesses overcome different challenges. Some types of government support:

1. Financial support: support of this kind can come in the form of loans, grants, or tax incentives. Financial support can assist startups secure the funding they need to get off the ground and expand their business. According to a study by FasterCapital, startups that receive government funding are more likely to survive and grow compared to those that do not.
2. Regulatory support: Governments can give regulatory support by streamlining the process of starting and operating a business making it easier. These include but not limited to the following: reducing red tape, making it easier to get the required licenses and permits, and providing direction and guidance on compliance with various regulations. Start-up patenting activity in collaboration with government agency or laboratory can increase by an average of 74% .
3. Tax incentives: the provision of tax breaks or credits can lessen the financial burden and demand on startups, releasing more of their capital for growth-related activities. This can

boost the attraction to startups, making it appealing to private investors, who may see the tax benefits as a form of risk mitigation.

4. Research and development initiatives: Government-sponsored R&D programs can foster innovation, which is a key driver of startup growth. The government can fund the research directly, or they might create partnerships/collaboration between startups and universities or research institutes.
5. Market access and export assistance: Governments can help startups penetrate into new markets, both domestically and internationally. They can mediate trade agreements that make it easier for startups to export their products, the can as well run programs that connect startups with foreign investors and customers.
6. Mentorship and training: Governments can make available access to mentorship and training programs for startups. These programs can help entrepreneurs acquire relevant skills they need to succeed, connect with experienced business leaders, and build a supportive network.
7. Access to resource: Resources such as office space, technology, and networking opportunities can be provided by the government of the day. These resources will enable startups save money and focus on growing their business.

These are just a few examples of the types of government support available to businesses. The particular kind of support a business may receive will depend largely on the government's objectives, business needs and the industry in which it operates. Regardless of the type of support, the goal is always to help businesses succeed and thrive .OECD (2018).The progressive developments of government support for startups are an exciting and constantly evolving topic. New technologies and innovative business models are driving economic growth and creating new opportunities for startups and entrepreneurs like never before. As such, governments around the world are taking a closer look at their support programs and exploring new and innovative ways to help business succeed.

Technology Acceptance Model (TAM).

One of the most important models of technology acceptance is the Technology Acceptance Model (TAM; Davis, 1989), which states that two key elements influence an individual's intention to utilize new technology: perceived ease of use and perceived usefulness (Rokhim, Wulandari & Mayasari, 2018). Variables related to the utilization of new technology, as well as human and social elements, are included in TAM. TAM's main goal is to provide the foundations for examining the effects of external forces on user beliefs, attitudes, and intentions. It usually relates to a customer's perceptions depending on their experience's outcome (Marcia, 2020). Consumers see a new service as superior to its competitors in this scenario. This is because they can quickly test the latest innovation and assess its benefits (Rokhim, Wulandari & Mayasari, 2018). The perception of simplicity of use is popular in the e-commerce business. Many consumers feel that their performance will improve as a result of their internet shopping. As a result, perceived ease of use is a practical factor that influences e-marketing (Marcia, 2020). Businesses should evaluate this model since they are being driven to use new technology to compete in the marketplace. The adoption of technology by entrepreneurs impacts the company's ability to innovate. In practice, firms require a tool that is simple to use and understand to deal with the complexity of web-based marketing applications.

Research Design

The research design method employed for this study is the cross-sectional survey research design, it is the choice of the researcher because it aided the researcher in the assessment of public opinion using questionnaire and sampling methods at a particular point in time.

Population of the study.

The population of a study simply refers to the elements and units of interest in a research. It describes those entities which are directly concerned with the topic of interest. The population of this study consisted of the 50 selected manufacturing Companies duly registered with the Manufacturers Association of Nigeria (MAN) as at December 2022.

SAMPLE SIZE AND SAMPLING TECHNIQUES.

This is a census study on some selected manufacturing companies in South-South, Nigeria.
From the preliminary investigation there at least (5) designated managerial departments in each of the manufacturing companies. These important positions are involved with the decision making and operations of the companies and so will be able to provide authentic information required for this research; these designated positions are production/operations, sales/ marketing, customer relationship department, quality assurance/ logistics department and Finance department. Five (5) managers were selected from each of 50 selected manufacturing companies in South-South, Nigeria giving a total of 250 respondents.

Instrument for Data Collection.

The research instrument for this study was a structured questionnaire

Method of Data Analysis

Mean and standard deviation were used for the univariate analysis while the bivariate analysis was done using Spearman rank order correlation in SPSS Version. The data obtained was analyzed using Pearson's product moment correlation coefficient at a 95% confidence interval. The Statistical Package for Social Science (SPSS) version 25 was used to analyze the data.

Multivariate Analysis of the Contextual Variable- government support policy .

The multivariate analysis in this section examines the assumed role of government support policy as a moderator in the relationship between technopreneurship and business performance in manufacturing firms in South-South region of Nigeria. The Decision rule is that if the difference between the zero-order correlation and the controlled correlation < 0.01, then there is no significant difference, and the null hypothesis is accepted otherwise the alternate is accepted.

Moderating Effect of Government Support Policy

Control Variables			Technopreneurship	Business performance	Government Support Policy
-none-[a]	Technopreneurship	Correlation	1.000	.872	.604
		Significance (2-tailed)	.	.000	.000
		Df	0	216	216
	Business performance	Correlation	.872	1.000	.611
		Significance (2-tailed)	.000	.	.000
		Df	216	0	216
	Government Support Policy	Correlation	.604	-.011	1.000
		Significance (2-tailed)	.000	.000	.
		Df	216	216	0
Government_Support_Policy	Technopreneurship	Correlation	1.000	.674	
		Significance (2-tailed)	.	.000	

	Df	0	215	
Business performance	Correlation	.674	1.000	
	Significance (2-tailed)	.000	.	
	Df	215	0	

a. Cells contain zero-order (Pearson) correlations.

Source: SPSS Output version 25.0

RQ1: What is the moderating effect of government support policy on the relationship between technopreneurship facilitators and business performance in manufacturing firms in South-South region of Nigeria?

With respect to research question 10, table 4.22 depicts the zero-order correlation between technopreneurship and business performance and shows the correlation coefficient when government support n is not moderating the variables; and this is positive and very strong at 0.872. The partial correlation controlling for government support policy, however, is also strong with rho value of 0.674. The observed positive "relationship" between technopreneurship and business performance is due to the underlying relationships between each of those variables and government support policy. Therefore, government support policy has a positive and strong effect on the relationship between technopreneurship and business performance in manufacturing firms in South-South region of Nigeria.

Ho_1: Government support policy does not significantly moderate the relationship between technopreneurship facilitators and business performance in manufacturing firms in South-South region of Nigeria.

From a critical look at the zero partial correlation, we found that the relationship both between technopreneurship and business performance are positively correlated with Government support policy, as the control variable. Removing the effect of this control variable reduced the correlation between the other two variables to be 0.674 and significant at $\alpha = 0.05$. Since the difference between the zero-order correlation and the controlled correlation (0.872 - 0.674) = 0.198 > 0.01; hence from the decision rule, there is a significant difference and thus the null hypothesis is accepted and upheld. Therefore, it is concluded that Government support policy significantly moderate the relationship between technopreneurship and business performance in manufacturing firms in South-South region of Nigeria.

Moderating Effect of Government Support Policy

The findings showed that there is a significant relationship between collaboration and business performance of manufacturing firms in south south region of Nigeria. The finding of the study corroborates the conceptual argument that the government is required to deploy its designated regulatory bodies and other important stakeholders, to formulate a sequence of effective and efficient strategies to promote competitiveness among business firms. Such policies should include monetary, fiscal, financial, budgetary, capacity building, labor, and trade. In this regard, the government also could reduce corrupt practices and punitive tax evasion through its policies. More importantly the government is required to ensure relative political stability to gain maximum advantages from the SMEs sector. Nevertheless, the aspect of government support policy towards business performance is somewhat neglected in the field of social science especially in the management studies (Ibrahim et al., 2017), more especially in an emerging economy like Bangladesh. Literature revealed that there are very few studies that relate government support policy and SME performance and among the few studies, very limited studies were conducted regarding this issue agree to the fact that government support policy can play a dynamic role in improving business performance(Obaji & Olugu, 2014; & Sotubo,2016).

CONCLUSIONS

Based on the findings of the study concludes that technopreneurship positively correlates with business performance of some selected manufacturing firms in South-South, region of Nigeria. This implies that a meaningful relationship exist between technology-driven entrepreneurial practices and achieving favorable outcomes for businesses in the manufacturing sector. Similarly, based on the specific objective, the following conclusions have been made:

The study concludes that technological innovation positively correlates with business performance of manufacturing firms in South-South of Nigeria. The study implies that manufacturing firms in the South-South region can gain a competitive edge by embracing technological innovations. This could involve adopting advanced machinery, automation, digital solutions, and other cutting-edge technologies to improve efficiency, reduce costs, and enhance overall business operations.

RECOMMENDATIONS

Based on the findings, the following recommendations have been made:

i. Manufacturing firms should encourage and organize industry-specific networking events, conferences, and workshops to facilitate collaboration among manufacturing firms. Again, they should provide platforms for businesses to share insights, challenges, and potential areas for collaboration.

ii. Government should develop and implement policies that explicitly support and encourage technopreneurship in the manufacturing sector of the South-South region. It is also important for government to offer incentives, tax breaks, or grants for manufacturing firms actively engaging in technopreneurial practices.

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