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Business Incubators and Entrepreneurial Success: A Study of Small Business Enterprises in Lagos State

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Abstract*:* The study investigated the influence of business incubators on the entrepreneurial success of small businesses in Lagos Island Local Government Area, Lagos State. Several pieces of literature on the subject's concept and techniques, hypotheses, and empirical review have been examined. Consequently, a survey study design was chosen. As a result, 368 questionnaires were distributed to small business owners in the Lagos Island Local Government Area of Lagos State. Simultaneously, two hundred sixty-two (262) questionnaires were completed and returned for analysis. In addition, a basic percentage was utilized to examine the questionnaire replies, and Pearson Product Moment Correlation Statistics was employed to test the hypotheses. Significant relationships were discovered between technological business incubators and entrepreneurial success (.568 significant value.001), physical business incubators and entrepreneurial success (.792 significant value.000), and virtual business incubators and entrepreneurial success. (.592 important value.000) The study indicated that the future success of modern small businesses required fresh efforts to enhance production methods, increase quality, and transition to products and services with added value through contemporary design and technical advancements. It also necessitates an emphasis on support systems that offer integrated services for manufacturing, management, marketing, and finances. Before and after their incubation, business incubators provide an excellent platform for the convergence mechanisms that enable knowledge-based firms. The findings indicate that business incubators empower their employees with contemporary technologies so that they can effectively interact with clients.

Keywords: Business Incubator; Entrepreneurial Success; Entrepreneurs; Physical Business Incubator Small Business Enterprises; Virtual Business Incubators

JEL Classification: L26

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1. Introduction

Business incubators (BIs) began in the 1960s and flourished in the late 1990s as a resource for new enterprises that require encouragement and money to get their ideas off the ground. Business incubators are programs designed to accelerate the development of start-up companies through a variety of business support assets and administrations, produced and supervised by incubator executives and offered in the incubator and through its network of connections (Kadocsa & Francsovics, 2016). The primary purpose of a business incubator is to stimulate the development of new businesses in the surrounding area. By assisting a local entrepreneur in establishing a business in the community, the surrounding area is likely to benefit from an increase in the number of available positions and the additional revenue generated by the new business activities. The two elements can contribute to revitalizing a local economy and, consequently, increase the personal satisfaction of everyone who lives and works nearby (Mahmood, Jianfeng, Jamil, Karmat, Khan & Cai, 2015). The purpose of business incubators is to aid budding entrepreneurs in launching their businesses. The business incubator serves to address a widespread deficiency (Marimuthu&Lakha, 2015). Not everyone can devote the time and resources required to attend college and earn a business administration degree (Muyengwa, Dube, Battle & Masinga, 2014). In addition, not everyone has the means to fund a new business venture until it becomes lucrative (Muyengwa et al, 2014). Incubator programmes aid in providing entrepreneurs with rudimentary training, a venue to establish their firm, and in some cases, connections with those who are in a position to invest in the company's development (Lose, Maziriri & Madinga, 2016).

The incubator cannot substitute entrepreneurial initiative, personal effort, or ingenuity. There is a phenomenon known as "incubator syndrome" in which the entrepreneur's initiative and judgment are supplanted by those of the center's advisers. Although the consultants may provide excellent recommendations, it is the business owner's job to ensure the company's success (Cullen, Calitz & Chandler, 2014). The manner in which incubators provide their services, their organizational structure, and the types of clients they serve differ. Classical incubators are business incubators that provide assistance in launching a business through the provision of counsel, office space, and administrative infrastructure and other services (Buys &Mbewana, 2015). They may also have strong links to finance sources, but they are infrequently business investors themselves. The majority of the enterprises that technology incubators support are startups and spin-offs. They maintain tight relationships with universities, research institutions, and technical parks (Lalkaka, 2015).

These businesses do not occupy the incubation facility. Affiliate clients may consist of home-based enterprises or early-stage companies with their own location that might benefit from incubator services. Virtual customers who are too far from an incubator to engage on-site receive therapy and other assistance via internet means. This virtual

approach is ideal for businesses who require the assistance of an incubator but wish to keep their own offices, warehouses, etc (Tengeh & Choto, 2015). Most prevalent incubator services include assistance with business fundamentals, networking opportunities, marketing assistance, assistance with accounting and financial management, access to bank loans, loan funds, and guarantee programmes, access to angel investors or venture capital, assistance with presentation skills, links to higher education resources, links to strategic partners, assistance with a comprehensive business training programme, advisory boards and mentors, and assistance with technology commercialization (Sithole &Rugimbana, 2014). Although most incubators give their clients with office space and shared administrative services, the core of a genuine business incubation program is the services it offers to start-up businesses (Tengeh & Choto, 2015). In contrast to many businesses help programs, business incubators do not service all businesses. Entrepreneurs who seek to enroll in a business incubation program are required to submit an application. Each municipality establishes eligibility requirements for participation in the business incubator. In general, only individuals with viable company concepts and a workable business plan are admitted to programs (Ntlamelle, 2015).

The length of time a firm spends in an incubation program can vary greatly based on a variety of factors, such as the type of business and the entrepreneur's level of business skill. Long R&D cycles necessitate a longer incubation period than manufacturing or service organizations that can produce and market a product instantly. The majority of enterprises who utilize an incubator will remain there for up to a year, at which point they should be ready to move into their own facilities. Rather than time in the program, many incubation programs base graduation requirements on development benchmarks, such as company income or staffing levels (Lose, 2016). Since nearly all incubators are sponsored in some way by government or regional funds, the fees are subsidized and lower than market rates. Due to the fact that many incubators are regionally sponsored, or because a new company would require a facility like this to be nearby, they are recognized mostly by region (Lose & Tengeh, 2016). Incubators are designed to boost a company's chances of success by providing a supportive atmosphere during its early phases (Mothibi, 2014).

Entrepreneurship is viewed as a new product that enables businesspeople to create new forms of business organization and new business activities in response to the evolving requirements of society. This new product entrepreneurship is principally responsible for the relaxation of cultural rigidities. Entrepreneurship is the capacity of entrepreneurs to analyze risks and build enterprises that are hazardous but precisely suited to the ever-changing economic environment (Ntlamelle, 2015).

1.1. Statement of the Problem

Incubators for businesses are essentially organizations that boost the survival rates of innovative start-up enterprises and assist entrepreneurial endeavors. However, incubators confront a variety of obstacles, including a lack of sponsorship, production space, advanced technological facilities, and development into new regions. Thus, numerous researchers (such as Buys & Mbewana 2015; Calitz & Chandler 2014;) have investigated the factors that contributed to the success of business incubation, such as access to a prototype based on advanced technology, lack of funding and sponsorship, geographic location, and lack of entrepreneurial skills. Indeed, the discovered criteria are the most significant determinants of incubation success in Nigeria. Small commercial enterprises. As a result, business incubators have the difficulty of funding and sponsorship shortages when providing services to incubates, since the majority of business incubators are not self-sufficient. The Incubation Support Programme (ISP) Adelowo (2020) within the Department of Trade and Industry (DTI) and SEDA Technology Programme are the primary funders of business incubators in Nigeria (STP). Consequently, it is still necessary to encourage the private sector to fund business incubators (Lose, 2016).

Few studies (Cullen, Calitz & Chandler, 2014; Ntlamelle, 2015) have been undertaken in Nigeria on the performance of a business incubator in terms of internationally accepted standards (Cullen, Calitz & Chandler, 2014; Ntlamelle, 2015). However, the incubation process for small businesses in Nigeria is a young phenomenon that is continually evolving. Thus, company incubation is a relatively new notion in developing nations such as Nigeria. There is a significant information vacuum in the literature regarding business incubation in the United States, and little is known about the geography, organization, and activities of business incubators across the country. In light of this, the purpose of this study is to examine business incubators and entrepreneurial success in small businesses in Lagos state.

1.2. Research Objectives

The main objective of this study is to examine the impact of business incubator on entrepreneurial success among small business enterprises in Lagos State. The specific objectives are to:

i. Examine the relationship between of technology business incubator on entrepreneurial success in small business enterprises
ii. Investigate the influence of physical business incubator on entrepreneurial success in small business enterprises
iii. Determine the relationship of virtual business incubator on entrepreneurial success in small business enterprises.

1.3 Research Question

The following research questions were designed in line with the research objectives:

i. Is there significant impact of technology business incubator on entrepreneurial success among small and medium business enterprises

ii. What is the significant influence of physical business incubator on entrepreneurial success among small and medium business enterprises

iii. ls there significant relationship between virtual business incubator on entrepreneurial success among small and medium business enterprises

1.4. Research Hypotheses

Hypotheses I

There is no significant relationship between technology business incubators and entrepreneurial success among small business enterprises

Hypothesis II

There is no significant influence of physical business incubators on entrepreneurial success among small business enterprises

Hypothesis III

There is no significant relationship between virtual business incubators and entrepreneurial success among small business enterprises.

2. Literature Review

2.1. Conceptual Review

Various definitions of business incubators can be found in the literature in an attempt to characterize BIs. Anderson & Al-Mubarak (2012) define BIs as a business development tool that is used to expand entrepreneurial ventures by offering a foundational platform for businesses. In a similar vein, Bakkali, Messeghem, and Sammut (2014) define business incubators (BIs) as organizations that provide and enable a protected environment for start-up and leaving enterprises by offering a broad array of shared services with the goal of minimizing start-up failure.

The initial description of a business incubator was provided at the workshop “Best Practices in Incubator Infrastructure and Innovation Support” (Barbero, Casillas, Wright & Garcia, 2014): “a place where freshly created enterprises are focused in a small area”. Its purpose is to boost the possibilities of development and survival of these enterprises by offering a modular building that is fitted with the necessary

utilities (telephone, fax and computer) and where it is provided managerial and services support. The major purpose is to enhance the local neighborhood and create new jobs. Al-Mubaraki & Busler (2010) in another definition of business incubators shows that "business incubators are a dynamic process of business development. This term covers a wide range of processes that help companies lower failure rate in the initial phase and accelerates the development of those who have the potential to become generators of jobs and wealth. Incubators provide three main ingredients for developing a successful business: an entrepreneurial environment and training, access to mentors and investors, visibility in the market.

2.1.1. Small Business Enterprises

The notion of small and medium enterprises (SME) was introduced into the development landscape as early as the late 1940s, and the primary aim was to improve trade and industrialization in the present developed nations (Dubihlela & Van Schaikwyk, 2014). The definitions of SME are usually derived in each country, based on the role of SME in the economy, policies and programs designed by particular agencies or institutions empowered to develop SME. For instance, a small business in the developed economies of countries like Japan, Germany and United States of America (USA), may be a medium or large-scaled business in a developing economy like Nigeria. Moreover, the definition of SME also varies overtime from agencies or developing institutions to another, depending on their policy focus (Marimuthu & Lakha, 2015).

The above variation notwithstanding, SME can be defined based on certain criteria including, turnover, number of employees, profit, capital employed, available finance, market share and relative size within the industry. The definition can be based on either some quantitative or qualitative variables. Quantitative definitions mainly express the size of enterprises, mainly in monetary terms such as turnover, asset value, profit, as well as quantitative index like number of employees. As examples, the 1975 companies Act in the United Kingdom stated that an enterprise with a turnover of less than £ 1.4 million was small, those with turnover between £1.4 and £5.7million were medium, while those enterprises having turnover above £5.7 million were large. It also went further to classify the enterprises based on number of employees – those with fewer than 50 workers being small, between 50 and 250 workers being medium and those employing above 250 workers were described as being large. Similarly, the European Union (EU) in 1995, defined SME as any enterprise employing less than 250 employees, and went further to break down the SME into micro (less than 10 employees, small (from 10 to 49 employees) and medium (between 50 to 249 employees).

Furthermore literature review the role of business incubators in supporting entrepreneurship and innovation.

Although they come in different shapes and size varying in terms of structure , support services and operational processes incubators according to Theodoraki etal (2018) share a common purpose to promote entrepreneurship innovation the creation of new firms and economic development for new Klofoten etal (2016) they are key element of sustainable EE Spigel (2017) Kautonen etal (2017) explain that incubators are widely employed instrument of regional innovation policy this they are organizational. Incubators are often grouped together with other similar initiatives to support innovation and new business such as science parks and accelerators e.g (Cumming et. al 2019) focusingresearch incubator.

This system controls and links resource with the objective of facilitating the successful new venture development of the incubates while simultaneously containing the cost of their potential failure (Hackett and Dilts (2004) Although much of the literature centers on incubator facilities it is important to also recognizes the key role that the entire incubators plays in incubating new venture.Includes the incubator manager and staff incubator advisory board fellow incubate companies and employee local universities and universities community members industry contacts and professional service s providers such as lawyers accountants consultants marketing specialist venture capitalists venture capitalists angel investors and volunteers

2.1.2. Technology Business

We explore the role of technology business incubators in facilitating incubate growth and competitiveness while doing so we have also identified the gaps in the literature anddiscuss some opportunities to make a contribution to the TBI domain

We identify on important gap practice the based approach has not been employed to the study TBI Adopting a practice approach would allow us to gain a better understanding of how and why the various functions are performed in an incubator enabling us to also explain the variation in the performance of the different incubators

2.1.3. Physical Business Incubator

Business incubators (BIS) are important supporters for young business, since they pride small business with physical facilities and intangible support e.g office space, service rendered, training, knowledge transfer, idea generation, advertising and business to business. Physical business incubators centers play an important role in nurturing and growth of new small business by supporting them in early stages of development. Architecturally, incubation center is a physical unit for young entrepreneurs to come together, facilitate spontaneous interaction and evolve themselves by understanding different aspect relation to business, entrepreneurship in their respective fields. Such center contributive significantly in the economic and social development of the country by fostering entrepreneurship and generating large employment opportunities by training the entrepreneurship for certain period of time

then providing various opportunities to grow and excel at comparatively lower capital cost.

2.1.4. Virtual Business Incubators

Our knowledge based economy has decreased the importance of physical work space through the emergence of virtual networks and virtual valve creation Cakula etal (2013) this general development has been reinforced considerably by the covid -19 pandemic and resulting physical Proximity restrictions (Engels 2020) VBIS are described in the context of physical incubators as follows:

These trends have galvanized the development of entrepreneurial support systems as seen in the rising Number of VBIS (Hausberg & Korreck 2020).VBIS are described in the context of physical incubators as follows a business incubator is a service provider that offers a comprehensive package of services(more than one) designed to support facilitate and accelerate the growth of starting business e.g virtual models 3D, search engine and marketing of social media B.Nyagadza (2022) VBI does this with services and tools that are at least to a significant extent independent of the location of the services Rural region and presents a study of how virtual business incubators (VBIS) can fill this gap and support rural entrepreneurial activities the leading roles played by incubators including providing managerial advice accessible finance and facilities. Although incubators have become a popular tool developed by government universities and private sector for encouraging entrepreneurship and innovation theyhave not been met with success everywhere.

2.2. Theoretical Reviews

2.2.1. Discovery Theory of Entrepreneurship Innovation

Discovery theory was propounded by Kirzner, (1973) he assumed that competitive imperfections are assumed to arise exogenously, from changes in technology, consumer preferences, or some other attributes of the context within which an industry or market exists. In his review of this literature, Shane (2003, 23) cites technological changes, political and regulatory changes, and social and demographic changes as examples of the kinds of events that can disrupt the competitive equilibrium that exists in a market or industry, thereby forming opportunities. This emphasis on exogenous shocks forming opportunities has several important implications for discovery theory. For example, this emphasis suggests that discovery theory is based on realist assumptions in the philosophy of science—that opportunities, like mountains, exist as real and objective phenomena, independent of the actions or perceptions of entrepreneurs, just waiting to be discovered and exploited (McKelvey, 1999). Just as Mount Everest existed before George Mallory climbed it, that discovery opportunities are yet to be observed does not deny the reality of their existence.

However, it is entrepreneurs who bring "agency to opportunity" by exploiting them. Also, this emphasis on exogenous shocks forming opportunities suggests that discovery theory is predominantly about search—systematically scanning the environment to discover opportunities to produce new products or services. In this search process, entrepreneurs must consider both its direction and duration, and must also guard against confusing local search—where modest opportunities to produce new products or services exist—with more global search— where muchmore substantial opportunities exist. The assumption made by discovery theory concerning the nature of entrepreneurs follows directly from its assumption about the nature of opportunities. Since opportunities are created by exogenous shocks to an industry or market and since these opportunities are objective and thus, in principle, observable, then everyone associated with that industry or market should be aware of the opportunities a shock has created. Of course, if everyone associated with an industry or market knew about the opportunities created by a shock, and were all sufficiently skilled to exploit these opportunities, then they could all try to exploit them.

2.2.2 Competency Theory

Similarly, Noel Burch in 1970 developed competency theory. The theory deals with stages of learning a new skill. It stipulates that individuals are unaware of how little they know, or unconscious of their incompetence. As they recognize their incompetence, they consciously acquire a skill, and then consciously use that skill. Eventually, the skill can be done without consciously being thought through, and the individual is said to have unconscious competence (Peters, Rice & Sundararajan, 2004). The theory is characterized by helping someone know what they don't know and it explains how skills can be acquired. The theory described the four stages of learning a new skill thus, unconscious stage: the individual does not understand or know how to do something and does not necessarily recognize the deficit. He may deny the usefulness of the skill. The individual must recognize his own incompetence and the value of the new skill before moving to the next stage. Conscious incompetence: though the individual does not understand or know how to do something, he recognizes the deficit, as well as the value of a new skill in addressing the deficit. The making of mistakes can be integral to the learning process at this stage. Conscious competence: the individual understands or know how to do something.

2.2.3. Skill Acquisition Theory

Another theory which is important to this study is skill acquisition theory. The theory was developed by Robert Dekeyser in 2007. The theory postulates that development in knowledge has three stages: declarative, procedural and automatic. Declarative knowledge refers to explicit knowledge about a topic; procedural knowledge is implicit knowledge that refers to behaviour. And automaticity occurs towards the end point of extensive practice; towards the point at which one has become completely expert in performing a task. From the perspective of skill acquisition theory, the

sequence of these stages is crucial as is appropriate combination of abstract rules and concrete examples at the declarative stage. The theory relates to this study in the sense that skill acquisition is task oriented and there is need to diagnose a task and break it down into its components in order to provide effective feedback. When it is not possible to conceptualize a task, then feedback becomes considerably less effective. The theory if adopted when teaching skill subjects will be helpful to learners as it follows the stages of learning a skill. The cognitive phase requires the identification and development of component parts of the skill which involves formation of a mental picture of the skill. Then through practicing the various components of the skill will be linked together. And constant practice will make the skill become automatic.

2.2.4. Theoretical Framework

The study considers some theories that related to some of the critical issues under study. One of these theories underpinning this study is skill acquisition theory as propounded by Robert (2007). The theory postulates that development in knowledge there are three stages, declaration, procedural and automatic. It is task oriented and there is need to diagnose a task and break it down into its components in order to provide effective feedback. This theory is relevant to this work because its show how small business enterprise mostly business incubators on developed skill acquisition knowledge in the profitability, marketing and financial.

2.3. Empirical Review

Evaluation of incubator´s performance Abraham and Knight (2020) comment that the business incubator movement in Brazil was originated in the 80's, expanding in the following decades.

There, it received the condition of public policy to support innovation and local development, to the point of moving considerable values from public resources. With the public policy status, it became necessary to use instruments and measures to control and evaluate the effectiveness of the incubators' results in the execution of their functions and their social and economic responsibilities. Despite the high number of incubators and investment in them, initiatives to evaluate incubator results are limited; little is known about their success in supporting the creation and development of new businesses. Even if there are success stories and public policies supporting business incubators, there are also incubators that may not be successful in supporting entrepreneurs. As a consequence, there is a growing debate about the effectiveness of incubators and the real need to invest public resources in these organizations, the control and evaluation of an incubator are essential, because besides offering information to improve management, it also serves to identify the degree to which its objectives are being achieved. states, is necessary for the following purposes: a) seek the achievement of organizational goals; b) adapt to environmental changes; c) avoid

repetition of errors and correct faults; d) deal with the complexity of the business; e) minimize costs; f) improve processes; g) increase/maintain market share; h) greater autonomy in decision making and i) ensure the safety of the business.

Barringer and Ireland (2018) argue that attempting to measure the impacts of incubators is as important as it is challenging. Measuring is important because most incubators operate with public funds and must be held accountable for the results associated with the usage of these funds. Measurement is a challenge because the entire range of data needed to implement technology based projects that directly address the question "if incubation had not been done would there be any difference in the survival rate of new ventures?" is not readily available. The importance of evaluating incubators lies in the fact that it indicates the main points where incubation programs should be remodeled or improved. It can be concluded that evaluation of the incubators must take place periodically for a better improvement of their organizational processes, and therefore their results; but it is not an easy systematics, due to the difficulty in establishing the criteria to be evaluated, besides the difficulty of obtaining the data from the established questions.

Clow, (2018). posit that evaluating business incubators suffer from two major flaws. First, it is not possible to define precisely what constitutes success, and second, even when studies succeed, they are unable to measure success by using factors that determine the outcome of incubation For Basma and Harding (2017), incubator evaluations have been a topic of discussion since the beginning of their existence due to the fact that there was no consensus on how to determine the good performance of the incubators. Rogova (2018) explains that the problem of assessing the effectiveness of business incubators has not been solved in a systematic way. One of the reasons to be considered may be the diversity of institutional models and contexts in which incubators operate.

For Gurteen, (2018), methodologies for self- assessment of business incubators have been established, but according to the evaluation purpose, indicators can be included or extracted so that the performance measure may be investigated based on the objectives of each organization. According to Tang et al (2016), although the critical success factors approach provides a way to evaluate the effectiveness of TBI, some elements of success may be critical in some cases, but may not be decisive in other cases. For example, entrepreneur training and a network of relationships play critical roles in the operation of European technology incubators, while company funding and management functions are considered important for the performance of TBI in the United States. What can be observed is that incubator evaluation models used in one country are not always applicable in another country. In this way, a classification that has been established by surveys conducted in other countries cannot be followed blindly, because policies introduced in different countries can lead to different results.

Kavhumbura, (2018) has noted that the Incubation system combines a variety of small enterprise support elementsin a single affordable package. It has targeteda special niche that is early stage nurturing for SMEs through focus with the support and compact environment. Lose andTengeh (2015) argued thatthe need to define incubation and illustrate the features which distinguish an incubator from other support programmes. As a result, research in the early 1980s focused on the basic task of identifying the common features of incubators. Theyidentified these features as the collective activities that assist entrepreneurs in the development of new technology-based firms, both start-ups and fledglings. Incubators further seekto effectively link talent, technology, capital and know-how to leverage entrepreneurial talent in order to accelerate the development of new companies, thus speeding upthe commercialization of technology. In a similar manner, Lose, Maziriri&Madinga, (2016), the incubator is a collective and temporary place for accommodating companies which offers space, assistance and services suited to the needs of companies being launched or recently founded". He identified several key characteristics, including the availability of modular and expandable space for rent for a limited time; access to shared cost services relating primarily to administrative functions and management or technological support, as well as privileged access to business and scientific communities; and a place for interaction between companies and for coordinated moral support.

2.4. Conceptual Model of the Business Incubator and Entrepreneurial Success

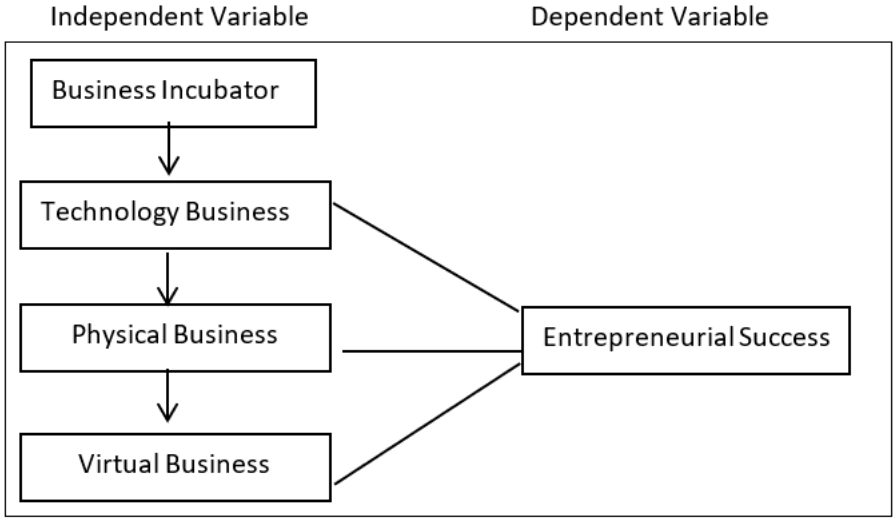

Figure 1. Showing the Conceptual Model of the Business Incubator and Entrepreneurial Success
Source: Researcher (2022)

3. Methodology

The study employed a survey research design. This study focuses on business incubators and entrepreneurial success in Lagos State's small businesses. The sampling frame for the study consisted of small business owners in Lagos Island Local Government Area, Lagos State, due to the concentration of economic activities in the study area (Akinlabi 2019). According to SMEDAN (2021), the overall number of small businesses in the Lagos Island Local Government Area of Lagos State exceeds nine thousand (9000). As suggested by krejcie& Morgan's (1970), the sample size for this study is 368, of which 262 were fully completed and returned, representing a response rate of 71.19 percent. Purposive and accidental sampling techniques of non-probability sampling were used to select respondents at the study site. The questionnaire and Key Informaton Interview Guide (KII) were used to obtain data from respondents. Cronbach's Alpha Coefficient Statistics were utilized to determine the reliability of the study instrument, and the coefficient value of.824 was considered to be reliable. For data analysis, descriptive statistics based on basic percentages were used, while Pearson Product Moment Correlation was used to test the hypotheses made.

4. Data Analysis and Interpretation

Question 1. Is there significant impact of technology business incubator on entrepreneurial success among small and medium business enterprises?

S/NO	Variable	Category	Frequency	%
1.	Business incubators is to promote the creation and growth of entrepreneurial venture	strongly agree	110	42.1
		Agree	117	44.6
		Undecided	35	13.3
		Total	**262**	**100.0**
2.	Providing a protected environment to start firms and small business	strongly agree	100	38.5
		Agree	151	57.4
		Undecided	11	4.1
		Total	**262**	**100.0**
3.	It reduces wastages of materials which results in better performance	strongly agree	113	43.1
		Agree	149	56.9
		Total	**262**	**100.0**
4.	Increase in job satisfaction and morale among employee	strongly agree	138	52.8
		Agree	124	47.2
		Total	**262**	**100.0**

Source: Field Survey, (2022)

The above data for question 1 reveals that 42.1% of respondents strongly agreed that the purpose of business incubators is to foster the establishment and growth of

entrepreneurial ventures, while 44.6% agreed and 13.3% were unsure. In addition, the above table for question 2 reveals that 38.5% of respondents strongly agreed that creating a protected environment for start-ups and small businesses, 57.4% agreed, and 4.1% were unsure. The above data for question 3 reveals that 43.1% of respondents strongly agreed that it lowers material waste, resulting in improved performance, while 56.9% agreed with the statement. The above data reveals that 52.8% of respondents strongly agreed with the statement that employee job satisfaction and morale had increased, while 47.2% agreed with the statement.

Question 2. What is the significant influence of physical business incubator on entrepreneurial success among small and medium business enterprises?

S/NO	Variable	Category	Frequency	%
1.	It helps eliminate fears in attempting a new task	strongly agree	145	55.4
		Agree	101	38.5
		Undecided	16	6.2
		Total	**262**	**100.0**
2.	It improves organizational performance	strongly agree	163	62.1
		Agree	83	31.8
		Undecided	16	6.2
		Total	**262**	**100.0**
3.	It improve organizational capabilities	strongly agree	150	57.4
		Agree	94	35.9
		Undecided	18	6.7
		Total	**262**	**100.0**
4.	It improve the effectiveness and productivity of organisations	strongly agree	75	28.7
		Agree	169	64.6
		Undecided	18	6.7
		Total	**262**	**100.0**
5	It enhance company's image	strongly agree	146	55.9
		Agree	116	44.1
		Total	**262**	**100.0**

Source: Field Survey, (2022)

The above data for question 1 reveals that 55.4% of respondents strongly agreed that it helps alleviate anxieties while undertaking a new endeavor, while 38.5% agreed and 6.2% were unsure. The above table for question 2 reveals that 62.1% of respondents strongly agreed that it increases organizational performance, while 31.8% agreed and 6.2% were undecided. The above data for question 3 reveals that 57.4% of respondents strongly agreed that it improves organizational capacities, while 35.9% agreed and 6.7% were undecided. The above table for question 4 reveals that 28.7% of respondents strongly agreed that it increases the effectiveness and productivity of organizations, 64.6% agreed, and 6.7% were unsure about the statement. The above

data reveals that 55.9% of respondents strongly agreed that it enhances the company's image, while 44.1% agreed with the statement.

Question 3. Is there significant relationship between virtual business incubator and entrepreneurial success among small and medium business enterprises?

S/NO	Variable	Category	Frequency	%
1.	It helps organizations to achieve their goals through improve workers performance	strongly agree	105	40.0
		Agree	133	50.8
		Undecided	8	3.1
		Disagree	16	6.2
		Total	**262**	**100.0**
2.	Gives understanding on how employees can be more effective in their roles or how organization can help them address their work-life balance challenges	strongly agree	37	14.4
		Agree	149	56.9
		Undecided	59	22.6
		Disagree	17	6.2
		Total	**262**	**100.0**
3.	Inject capabilities that are very difficult for competitors to benchmark and replicate	strongly agree	59	23.6
		Agree	148	56.4
		Undecided	39	13.8
		Disagree	16	6.2
		Total	**262**	**100.0**
4.	Enhances in building winning teams with competent and experienced which solve problems or weaknesses	strongly agree	74	28.2
		Agree	142	54.4
		Undecided	30	11.3
		Disagree	12	6.2
		Total	**262**	**100.0**
5	Provide an opportunity to help employees achieve their personal best	Strongly agree	169	64.6
		Agree	69	26.2
		Undecided	16	6.2
		Disagree	8	3.1
		Total	**262**	**100.0**

Source: Field Survey, (2022)

40% of respondents strongly agreed that it helps firms achieve their goals through improving employee performance, while 50.8% agreed, 3.1% were undecided, and 6.2% disagreed with this statement. 14.4% of respondents strongly agreed that it provides insight into how individuals can be more effective in their roles or how organizations may assist them with work-life balance issues, 56.9% agreed, 22.6% were undecided, and 6.2% disagreed with the premise. 23.6% of respondents strongly agreed that it injects capabilities that are tough for competitors to benchmark and replicate, 56.4% agreed, 13.8% were undecided, and 6.2% disagreed with the proposition, as seen in the table above. 28.2% of respondents strongly agreed, 54.4% agreed, 11.3% were undecided, and 6.2% disagreed with the premise that it facilitates the development of winning teams comprised of competent and experienced

individuals who are able to handle problems or address weaknesses. The above data reveals that 64.6% of respondents strongly agreed that it provides an opportunity for employees to attain their personal best, 26.2% agreed, 6.2% were unsure, and 3.1% disagreed with the assertion.

Question 4. Entrepreneurial success among small and medium business enterprises?

S/NO	Variable	Category	Frequency	%
1.	In my organization market share value is impressive	strongly agree	98	37.4
		Agree	112	42.6
		Undecided	36	13.8
		Disagree	8	3.1
		Strongly disagree	8	3.1
		Total	**262**	**100.0**
2.	My organization return on investment is excellent	strongly agree	140	53.3
		Agree	78	29.7
		Undecided	44	16.9
		Total	**262**	**100.0**
3.	My organization sales volume has been fantastic over the years	strongly agree	108	41.0
		Agree	126	48.2
		Undecided	28	10.8
		Total	**262**	**100.0**
4.	My organization has been doing fine, in terms of its return on investment	strongly agree	148	56.4
		Agree	105	40.0
		Undecided	9	3.6
		Total	**262**	**100.0**
5	In my organizationearnings per share has being on the increase for the last five years	Strongly agree	132	50.3
		Agree	114	43.6
		Undecided	8	3.1
		Disagree	8	3.1
		Total	**262**	**100.0**

Source: Field Survey, (2022)

The accompanying data indicates that 37.4% of respondents strongly agreed with the first question. 42.6% agreed that their organization's market share worth is impressive, 13.8% were unsure, 3.1% disagreed, and 3.1% strongly disagreed with the statement. The above table for question 2 reveals that 53.3% of respondents strongly agreed that their organization's return on investment is great, while 29.7% agreed and 16.9% were unsure. 41% of respondents strongly agreed that their company's sales volume has been exceptional over the years, 48.2% agreed, and 10.8% were unsure about the statement, as shown in the table for question 3. The above table for question 4 reveals that 56.4% of respondents strongly agreed that their organization's return on investment has been satisfactory, while 40% agreed and 3.8% were unsure about the

statement. 50.3% of respondents strongly agreed that their company's earnings per share had increased over the past five years, 43.6% agreed, 3.1% were undecided, and 3.1% disagreed with the statement, as shown in the table for question 5.

4.1. Test of Hypotheses

Hypotheses I

There is no significant relationship between technology business incubators and entrepreneurial success among small and medium business enterprises.

Correlations

		Technology business incubator	**entrepreneurial success among small and medium business enterprises**
Technology business incubator	Pearson Correlation	1	.586**
	Sig. (2-tailed)		.001
	N	262	262
entrepreneurial success among small and medium business enterprises	Pearson Correlation	.586**	1
	Sig. (2-tailed)	.001	
	N	262	262

**. Correlation is significant at the 0.05 level (2-tailed).

It was observed from the hypothesis one tested that there is significant relationship between technology business incubators and entrepreneurial success among small and medium business enterprises at Pearson correlation value (.568) and the significant value of (.001). Hence the null hypothesis was rejected while the alternate hypothesis was accepted. This implies that there is significant relationship between technology business incubator and entrepreneurial success among small and medium business enterprises.

Hypothesis II

There is no significant influence of physical business incubator on entrepreneurial success among small and medium business enterprises.
Correlations

		Physical business incubators	entrepreneurial success among small and medium business enterprises
Physical business incubator	Pearson Correlation	1	.792**
	Sig. (2-tailed)		.000
	N	262	262
Entrepreneurial success among small and medium business enterprises	Pearson Correlation	.792**	1
	Sig. (2-tailed)	.000	
	N	262	262

**. Correlation is significant at the 0.05 level (2-tailed).

The above hypothesis tested revealed that there is significant influence of physical business incubator on entrepreneurial success among small and medium business enterprises. This was observed at (.792) Pearson correlation value and significant value (.000) Hence, the null hypothesis was rejected while the alternate was accepted. This implies that there is significant influence of physical business incubator on entrepreneurial success among small and medium business enterprises.

Hypothesis III

There is no significant relationship between virtual business incubator and entrepreneurial success among small and medium business enterprises.

Correlations

		Virtual business incubators	**entrepreneurial success among small and medium business enterprises**
Virtual business incubators	Pearson Correlation	1	.592**
	Sig. (2-tailed)		.000
	N	262	262
Entrepreneurial success among small and medium business enterprises	Pearson Correlation	.592**	1
	Sig. (2-tailed)	.000	
	N	262	262

**. Correlation is significant at the 0.01 level (2-tailed).

It was observed from the hypothesis one tested that there is significant relationship between virtual business incubators and entrepreneurial success among small and medium business enterprises at Pearson correlation value (.592) and the significant value of (.000). Hence the null hypothesis was rejected while the alternate hypothesis

was accepted. This implies that there is significant relationship between virtual business incubator and entrepreneurial success among small and medium business enterprises.

4.2. Discussion of Finding

According to the findings of the first hypothesis, there is no correlation between technology business incubators and entrepreneurial success. The hypothesis (HO) is rejected, which is consistent with the data. According to Clow (2018), who found that evaluating business incubators suffers from two key weaknesses, success cannot be accurately defined. Incapable of measuring performance using elements that impact incubator outcomes.

According to the findings of the second hypothesis, there is no correlation between physical incubators and entrepreneurial success. The null hypothesis (Ho) is consistent with the findings of the study conducted by Bosma and Harding (2017), who indicate that there was no consensus on how to determine the performance of incubators at the time of their establishment.

According to the findings of the third hypothesis, there is no correlation between virtual business incubators and entrepreneurial success. The null hypothesis (Ho) is consistent with the findings of the investigation. Rogova (2018) states that the difficulty of systematically evaluating the efficiency of business incubators has not been resolved. Note that the variables covered in these studies, namely technological business, physical business, and virtual business, can be applied to various sectors of the economy.

5. Conclusions

Future expansion of a modern small-business sector necessitates renewed efforts to enhance manufacturing methods, increase product quality, and transition to products and services with added value through modern design and technical advancements. Additionally, special attention must be paid to support systems that provide integrated services for production, management, marketing, and finance (International Labour Organization, 2008). Before and after their incubation, business incubators provide a good platform for the convergence mechanisms that enable knowledge-based firms (Olawale & Garwe, 2010).

Incubator assessments conducted by the United Nations Development Programme in Brazil, the Czech Republic, the People’s Republic of China, Mexico, Nigeria, Poland, and Turkey point to the potential of incubators for creating innovative enterprises, greatly increasing their chances of survival and success, generating jobs directly while firms are still within the incubator and even larger employment when they graduate

and grow, and simultaneously promoting the competitiveness of the local economy (UNIDO, 1997).

Lastly, connections between business incubators and universities are crucial. Incubators are a proven tool for economic development in their respective areas. Incubated enterprises are projected to have created over 0.2 million employment over the past four decades (Wiggins & Gibson, 2003), which may have expanded the tax base. The operations of the incubators have resulted in the occupation of extra commercial real estate space, the improvement of the local business infrastructure, and the creation of additional jobs in various business sectors (Buys & Mbewana, 2007). Similarly, the United Nations Industrial Development Organization (1997) asserts that the involvement of private-sector organizations has increased over time and has considerably boosted the incubation of small businesses and the development of SMEs. Overall, it is important to note that business incubators do not replace entrepreneurial endeavors, but rather improve entrepreneurial circumstances.

5.1. Recommendations

In tandem with the relationship found between business incubator and small and medium scale enterprise development, the following initiatives were recommended:

i. To ensure a seamless and timely exit, BIs should recruit only goal-driven entrepreneurs into their programs. Beyond this, BIs should provide their team with modern technology and the appropriate abilities to address client needs; this may include continual evaluation, retraining, and cutting edge of the incubator workforce.

ii. Also recommended are business training at local colleges and universities for incubation managers who lack the required entrepreneurial abilities. Establishing partnerships with tenant companies can significantly increase the revenue base of business centers, and they should engage in investment arrangements through well designed negotiations. One of these options is a buy-back of investment, in which the tenant company can repurchase shares from the center in the future.

iii. Furthermore, it is suggested that all incubators establish a training, workshop, and development center to assure the availability of qualified personnel. All parts of the strategy, objectives, governing system, organizational structure, and resources of the incubation centers must be aimed toward sustainability. The primary objective of the incubation centers should be enterprise growth, with all other objectives remaining secondary.

5.2. Suggestion for Further Studies:

Further research is suggested to be carried out under the following areas:

- Advance technological based projects and professional success;
- Relationship between business incubators and entrepreneurial success;
- To examine current success in small business enterprises;
- Factor influencing business incubators attitudes toward entrepreneurial success.

References

Abraham, J. & Knight, D. (2020). Strategic innovation: Leveraging creative action for more profitable growth. *Strategy and Leadership, 29*, (1); pp 21 – 26.

Amabile, T. M.; Conti, R.; Coon, H.; Lazenby, J. & Herron, M. (2020). Assessing the work environment for creativity. *The Academy of Management Journal*, 39, *(5)*; pp. 1154 – 1184.

Barringer, B. R. & Ireland, R. D. (2018). *Entrepreneurship: Successfully launching new ventures*. New Jersey: Pearson Prentice Hall.

Bosma, N. & Harding, R. (2017). *Global entrepreneurship monitor: GEM 2006 results*. MA, USA: Babson College and UK: London Business School.

Buys, A. J. &Mbewana, P. N. (2015). Key success factors for business incubation in South Africa: the Godisa case study. *South African Journal of Science*, 103(9-10), pp. 356-358.

Clow, J.E. (2018). Entrepreneurship teaching strategies Roston: *National Business EducationAssociation.* 1(2), pp. 102-112.

Cullen, M.; Calitz, A. & Chandler, L. (2014). Business Incubation in the Eastern Cape: A Case Study. *International Journal for Innovation Education and Research*, *2*(5), pp. 76-89.

Gurteen, D. (2018). Knowledge, creativity and innovation. *Journal of Knowledge Management*, 2, (1); 5 – 13.

Heye, D. (2016). Creativity and innovation: Two key characteristics of the 21st century information professional. *Business Information Review*, 23, (4); pp. 252 – 257.

Kadocsa, Gy. & Francsovics, A. (2016) Macro and Micro Economic Factors of Small Enterprise Competitiveness. Acta PolytechnicaHungarica, *8*, (1), pp. 23-40

Kuczmarski, T. (2020). What is innovation? The art of welcoming risk. *Journal of Consumer Marketing*, 13(5), pp. 7 – 11.

Lalkaka, R. (2015). Technology business incubators to help build an innovation-based economy. *Journal of Change Management*, *3*(2), pp. 167-176.

Lesákova, L. (2012). The Role of Business Incubators in Supporting the SME Startup. *Acta PolytechnicaHungarica*, *9*(3), pp. 85-95.

Lose, T. & Tengeh, R. K. (2015). The Sustainability and Challenges of Business Incubators in the Western Cape Province, South Africa. *Sustainability*, 7(10), pp. 14344-14357.

Lose, T. &Tengeh, R. K. (2016). An evaluation of the effectiveness of business incubation programme: a user satisfaction approach. *Investment Management and Financial Innovations*, 13(2), pp. 370-378

Lose, T. (2016). The role of business incubators in facilitating the entrepreneurial skills requirements of small and medium size enterprises in the Cape metropolitan area, South Africa. *MTech Thesis*, Cape Town. Cape Peninisula University of Technology).

Lose, T.; Maziriri, E.T. & Madinga, W. (2016). Assessing the Impact of Incubation Programme to Small and Medium Enterprises Development in the Western Cape Province of South Africa. *International Journal of Small Business and Entrepreneurship Research*, 4(4), pp. 16-29.

Mahmood, N.; Jianfeng, C.; Jamil, F.; Karmat, J.; Khan, M. & Cai, Y. (2015). Business Incubators: Boon or Boondoggle for SMEs and Economic Development of Pakistan. *International Journal of u-and e-Service, Science and Technology*, *8*(4), pp. 147-158.

Marimuthu, M. & Lakha, P. A. (2015). The importance and effectiveness of assistance programme in a business incubator. *Problems and Perspectives in Management, 13*(3), pp. 79-86.

Masutha, M. & Rogerson, C. M. (2014) Small enterprise development in South Africa: The role of business incubators. *Bulletin of Geography. Socio-economic Series*, *26*(26), pp. 141-155.

Mothibi, G. (2014). The Influence of Business Incubation Services on the Performance of Small Medium Enterprises in the South African Tourism Industry. *In European Conference onManagement, Leadership & Governance (p. 569). Academic Conferences International Limited.*

Muyengwa, G., Dube, P., Battle, K. &Masinga, E. (2014). An Enterprise Development Initiative: Incubation in the South African Motor Body Repair Sector. In *Balkan Region Conference onEngineering and Business Education 1*(1), pp. 41-46.

Ndabeni, L. L. (2015). The contribution of business incubators and technology stations to small enterprise development in South Africa. *Development Southern Africa*, *25*(3), pp. 259-268.

Ntlamelle, T. (2015). The efficacy of SMME incubation as a strategy for enterprise development in South Africa. *Master's Thesis*. Johannesburg. University of the Witwatersrand.

Sithole, N. & Rugimbana, R. O. (2014). Commercialisation of research and technology: A multiple case study of university technology business incubators. *African Journal of Business Management*, *8*(16), p. 641.

Tengeh, R. K. &Choto, P. (2015). The relevance and challenges of business incubators that support survivalist entrepreneurs. *Investment Management and Financial Innovations, 12(2),* pp. 150-161.