Technopreneurship and Business Performance of Ride-Hailing Firms in Lagos State

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ABSTRACT

The objective of this study is to examine the effects of Technopreneurship on Business Performance of Ride-hailing firms in Lagos State. A descriptive survey research design was used for this study. The study population covers 5,662 vendors and staff of Uber Technologies Inc., and Bolt Technology Company in Lagos State, while the sample size stood at 374, which were determined through Taro Yamane's formula. A designed questionnaire was developed to gather data for the research. Content validity was used to validate the questionnaires developed for the study. The Cronbach's alpha coefficient was used to examine the reliability of the scales of measurement. Three research hypotheses were formulated and tested using Pearson moment product of correlation and multiple regression analysis. Hypothesis 1 showed that the coefficient of determination (R^2) is 0.625. Hypothesis 2 revealed that there is a significant strong positive relationship between technology and operational efficiency of Ride-hailing firms in Lagos State. Similarly, hypothesis 3 depicted that there is a significant strong positive relationship between innovation and market share of Ride-hailing firms in Lagos State. The study concluded that the concept of technopreneurship is an intriguing proposition for businesses looking to boost their level of performance by leveraging interactions between internal innovation capabilities, competencies, and resources, as well as favorable external factors such as technology. The study recommended among others that SMEs should be encouraged to innovate through supportive measures that allow them to develop products and manufacturing processes so that Nigerian products and services meet global quality standards.

Keywords: Business Performance, Innovation, Market Share, Operational Efficiency, Technology, and Technopreneurship.

INTRODUCTION

In contemporary business environment, emerging economies have recognised the potential of technopreneurship (a combination of innovation, technology, and entrepreneurship) in boosting economic prosperity (Oyedele, Ojeaga, Ganiyu, Derera, & Oyero, 2020). Since the advent of the internet, the digital revolution has created an ideal environment for entrepreneurs. The rapid advancement of technology in the last fifty years has had a significant impact on our daily lives (Oyedele, Kowo, & Oyero, 2019). Modern technology builds and supports enterprise processes on a competitive global platform. The transition from the physical to the virtual world is a prominent trend, with an increasing number of routine operations and procedures moving to the electronic domain in most parts of the world (Abass, 2018). Nations all over the world have embraced information and communication technology (ICT) as a means of improving public and private sector procedures and making these services more accessible to citizens (Adeoti, 2019). Modern technology has created new opportunities and challenges for the economic development of a country. It should be noted that information technology has grown in importance in the business world because it helps to improve business operations (Bubou & Okrigwe, 2011). With the emphasis on the dynamic, substantial,

and ubiquitous consequences of new technologies in the third and fourth industrial revolutions, technical innovation and entrepreneurship have become interdependent and combined into technopreneurship (Bubou & Okrigwe, 2011).

Without a doubt, the small Covid-19 virus has already caused havoc in every country in terms of health, safety, economics, and social issues. During the pandemic, technopreneurs were more opportunistic, pivoting their businesses through "repurposing" and redirecting existing knowledge, skills, people, and networks to meet new demands (Otache, 2020). However, some experts believe that the Covid-19 pandemic will continue to benefit technopreneurs. According to some experts, the Covid-19 pandemic will benefit technopreneurs in three ways: increasing public awareness of the value of science and technology-based products and services, implementing the Internet of Things (IoT), and implementing economic-based innovation (Marina, Azizi, Afiffudin & Nor Musfirah, 2020). To begin with, the global community is becoming increasingly concerned about science and technology-based products and services. The entire world is now focused on technological advancements that could aid in pandemic prevention. This educates people on the importance of science and technology, which is desperately needed at this time. This opportunity is clearly aimed at businesses that have technology in a variety of sectors that can benefit society as a whole (Gietu, 2021).

Second, implementing IoT technology will improve business performance. Technopreneurs are a group of tech-savvy entrepreneurs who are not afraid of incorporating technological advancements into every aspect of their businesses. The ability to perform numerous tasks or make decisions online, anywhere and at any time, via the Internet of Things (IoT), would improve a business's performance (Gietu, 2021). In this context, technopreneurs are an IoT-friendly group with the advantage of quickly strengthening existing business strategies. Thirdly, utilizing the economic innovation strategy, companies are driven to be more innovative (frugal innovation). A reverse engineering-based innovation method enables technopreneur businesses to provide low-cost simple technologies to help solve problems in areas with limited resources and infrastructure (Marina, Azizi, Afiffudin & Nor Musfirah, 2020).

Technopreneurship as a corporate leadership style entails recognizing highly technological economic opportunities with high development potential, collecting resources such as expert labor and capital, rapid expansion, and exceptional risk management through decision-making skills (Dorf, & Byers 2015). The rapid advancement of technology has encouraged small and medium-sized businesses to take advantage of the opportunity to establish, expand, and prosper their businesses capable of creating jobs, mobilizing local resources, creating a balanced and affluent society, and playing a significant complementary role to large firms, ultimately strengthening the nation's economic development (Fowosire, Idris & Opoola, 2017). Companies who can adapt to the changes that are occurring in the globe will become more viable. Companies that use modern technology are better equipped to engage with environmentally conscious clients, provide excellent service to workers and clients, and have more advanced and successful leadership management (Otache, 2020). Starting from this issue, this study attempts to examine the effects of technopreneurship on business performance of Ride-hailing firms in Lagos state.

Statement of the Problem

Several businesses have embraced the usage of technology in their daily operations. Technology has changed how businesses are run, to the point that businesses are lending credence to how essential and critical technology has become in the performance of their operations and job performance. However, technopreneurship is challenging because it requires a high level of intelligence, competence, and complex programmes to generate "strategic thinkers" capable of coming up with ideas and innovations that will survive in a competitive dynamic environment. Moreover, the majority of MSMEs in Nigeria are yet to incorporate technology in their operations. As a result of digitalization and technological advancements, the future of business will rely on up skilling as industrial disruptions are unavoidable (Price Waterhouse

Coopers, 2020). Furthermore, the exponential growth in technology advancements over the last decade because of the unprecedented expansion, businesses have been driven to adapt and expand more than ever before. The slogan "adapt or perish," is a universal fact for businesses to succeed in today's modern environment. Innovation is challenging but for SMEs and startups in Nigeria to thrive in the competitive world of business, they need to progressively innovate to ensure that goods and services reach untapped customer needs, and for this, business models must allow innovation to flourish. (Dutse, Ningi & Abubakar, 2013).

Various scholars have empirically investigated the effect of technopreneurship on business performance. Some of these studies such as as Abass (2018), Fowosire, Idris and Opoola (2017), Gietu (2021), Okorie (2014), Oyedele, Ojeaga, Ganiyu, Derera and Oyero (2020), Oyedele, Kowo and Oyero (2019) among others reported a strong significant positive relationship between technopreneurship and business performance. Others such as Okafor (2017) reported a weak effect among others the varied areas of interest. Hence, the findings and outcomes of previous investigations have shown mixed results. Furthermore, because technopreneurship is still in its early stage in Nigeria, there is likely a scarcity of literature on the subject. As a result, the purpose of this research was to add to existing knowledge in this subject while also underlining the significance of technopreneurship in Nigerian MSMEs.

Research Objectives

The main objective of this study is to examine the effects of technopreneurship on business performance of Ride-hailing Firms in Lagos State. The specific objectives are to

1. examine the effects of technopreneurship on business performance of Ride-hailing Firms in Lagos State
2. find out the relationship between technology and operational efficiency of Ride-hailing firms in Lagos State.
3. investigate the relationship between innovation and market share of Ride-hailing firms in Lagos State.

Research Questions

The study aimed to address the following questions in line with its objectives:

1. Does technopreneurship affect business performance of Ride-hailing firms in Lagos State?
2. Does technology correlate with operational efficiency of Ride-hailing firms in Lagos State?
3. Is there a significant relationship between innovation and market share of Ride-hailing firms in Lagos State?

Research Hypotheses

The following hypotheses was formulated to guide the study:

H_{01}: Technopreneurship has no significant effects on business performance of Ride-hailing firms in Lagos State.

H_{02}: Technology does not significantly correlate with operational efficiency of Ride-hailing firms in Lagos State.

H_{03}: There is no significant relationship between innovation and market share of Ride-hailing firms in Lagos State.

LITERATURE REVIEW

Conceptual Clarifications

Concept of Technopreneurship

Technopreneurship is a relatively new concept that is being recognised as a legitimate source of economic power in today's knowledge-based and emerging economies (Okorie, 2014). The increased focus on information and communication technology (ICT) has resulted in a number of advancements, including increased research growth and acceptance, as well as improved Internet literacy. The rise 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 fundamental aspects of the ICT era in entrepreneurship, and it plays a critical role in the creation of competitive advantage in a variety of businesses. As a result of the rebuilding and economic growth, businesses will be able to expand in order to compete in this ever-expanding world while also creating and adding value to their operations (Matejun, 2016). Technopreneurship is a term that combines the phrases technology and entrepreneurship. It is, in essence, a form of technology-based entrepreneurship. Technopreneurship is a practice that combines technological innovations with entrepreneurial skills. Technology is an important aspect of the technopreneurs transformation of products and services (Gietu, 2021; Adeoti, 2019). Technopreneurship is the process of turning good ideas into viable commercial ventures through the use of technology and innovation (Okorie, 2014). A technopreneur in today's world starts their firm with little more than a brainstorming notion. He examines current methods and considers some new suggestions for doing things differently (Oyedele, et al. 2020). Technopreneurship is the creation of a product and services or solution that employs technological innovations to transform the way people do things in a traditional method. The term is widely accepted to represent an entrepreneur who combines resources such as land, labor, and capital to develop a product, makes non-routine decisions, is aggressively competitive, technologically inventive, and takes risks (Dutse, et al., 2013).

The term "technopreneur" was first used in 1987, according to the Collins Dictionary (Gietu, 2021). "Technopreneurs are entrepreneurs who start and manage their own technology businesses. Technopreneurs are people who take modern technology and turn them into successful businesses or services (Akande & Oladejo, 2013). However, it rose to prominence in the 2000s, when a large number of people began to use the Internet (Gietu, 2021). A technopreneur begins with a novel concept. This concept has the ability to alter the way society has historically operated. They use 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, Idris & Opoola, 2017). Technopreneurship as a new concept is one of the basis of a number of important topics and issues. It's a relatively a new word that is gaining popularity among academics and business players alike (Matejun, 2016).

Technopreneurship in Nigeria

Nigeria is the largest economy in Sub-Saharan Africa, with a population of over 211 million people (Macro Trends, 2021) and a GDP of USD 514.05 billion (O'Neill, 2021). It is primarily reliant on oil and gas earnings, and a collapse in global oil prices in 2016 sparked a recession, with the GDP shrinking by 1.5 percent. When Nigeria plunged into recession, the country's tech environment grew, resulting in an increase in entrepreneurship and economic diversification (Outram Cullinan & Company, 2018). The Economic Recovery and Growth Plan, which was released in February 2017, aimed to make Nigeria more competitive in the global market by investing in its people. The relevance of the ICT sector as a major enabler is recognized in the strategy. As a result, maintaining a conducive business environment for the ICT sector and increasing youth employment in the sector are major concerns (Outram Cullinan & Company, 2018). Technopreneurship in Nigeria is still in its infancy, but it has a bright future ahead of it (Price Waterhouse

Coopers, 2020). Inconsistent policies, a challenging business environment, insufficient ICT and physical infrastructure, and human capacity deficiencies are among the structural issues confronting Nigerian businesses, as they are in other African countries (Price Waterhouse Coopers, 2020). Despite these challenges, the Nigerian Bureau of Statistics reports that MSMEs provide roughly 47% of Nigeria's GDP and employ 84 percent of the country's workforce (Fate Foundation, 2016). In Nigeria, marketplace internet applications are the most popular type of technopreneurship, with MSMEs increasingly embracing these platforms to offer their products and services. Another important area for companies is e-commerce (Dutse, Ningi & Abubakar, 2013). The majority of business models in Nigeria are localized versions of successful business models of foreign nations. Apart from for-profit ventures, social technopreneurship is on the rise, with entrepreneurs increasingly relying on technology to address some of society's most pressing issues (Oyedele, et al.,2020). Technopreneurship growth over the last decade in Nigeria resulted in the formation of "Yabacon Valley" in the Yaba district of Lagos State. Yabacon Valley grew swiftly to attract a slew of accelerators, startups, and incubators, including Co-Creation Hub, iDEA Hub, Passion Incubator, and a slew of others (Adeoti, 2019).

According to Outram Cullinan and Company (2018), the Nigerian government has launched a variety of initiatives and institutions to help the technopreneurship ecosystem in order to reach its growth goals. The Office for ICT Innovation and Entrepreneurship (OIIE) is a designated subsidiary tasked with removing impediments to business growth and enhancing the environment to encourage innovation and entrepreneurship all over the country. National Information Technology Development Agency (NITDA) was established to carry out the Nigerian Information Technology Policy by coordinating general IT development in the country and assuring the availability of IT resources. SMEDAN (Small and Medium Enterprises Development Agency of Nigeria) was established to assist Nigerian SMEs. SMEDAN's key aims include rural industrialisation, poverty alleviation, and the creation of new jobs. The agency connects SMEs to internal and external financial resources as well as appropriate technologies.

Young technopreneurs are succeeding with new business models and applications of new technology. Well-known instances are the Digital Ride-Hailing and Electronic Marketing platforms (Dunn, Johnson & Smith, 2019).

Determinants of Technopreneurship

Technology

Technology is the collection of organized knowledge, tools, and machines that man uses to influence his environment and meet his basic needs. It can also be defined as the coordinated use of organized scientific and socio-cultural know-how to influence the environment in order to solve problems and meet human needs (Fowosire, Idris, & Opoola, 2017). Technology are becoming more common. Across industries, it is being utilized to disrupt existing business models and incumbents, as well as to generate completely new solutions, particularly in the areas of impact and sustainability (Abass, 2018). As a result, technology can be defined as any mechanical or digital device, tool, or system. These are used to either replace or supplement the completion tasks (Melo, 2018). Technology has changed the way businesses operate by allowing small enterprises to compete on an equal footing with larger corporations. Small firms use a variety of technology to generate competitive advantages in the marketplace, ranging from servers to mobile devices (Vitez, 2019). Consumers' perceptions of and eventual purchases of brands, goods, and services have evolved at a breakneck speed. This is due to technological advancements available to today's enterprises. What most customers do not realize is that businesses use a wide range of new 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 significant effects on business growth and development. Some of the effects include: 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 and productivity, and smarter than ever.

Innovation

According to Metis Partners (2020), innovation refers to the process of developing and commercializing new ideas, establishing new processes, or altering the way a company generates revenue. It can also be defined as the operations required to keep a business competitive and long-term sustainable. This encompasses research, new product/service development, new process development, continuous improvement, and new business growth, among other things (Metis Partners, 2020). Innovation refers to creative activities that are carried out in the development of new services or products, or in the improvement of existing services or products. Since it is assumed that the product of research and development activity/process is innovation, innovation continues to be an important element of primary/normal business activities in order to maintain growth and satisfy customers (Oyedele, 2020). Innovation refers to a new or better product or process (or a mix of products and processes) that differs significantly from the unit's previous products or processes and has been made available to potential users (product) or implemented by the unit (process) (Youmatter, 2020). Firms must have a thorough awareness of the market and user needs before innovation. This establishes the foundation for the new product's development. One of the key goals of innovation is to keep a company competitive by developing goods that improve and elevate its present product line (Selvarani & Kanagaraj, 2015). Innovative practices can lead to increased productivity, which can assist raise profits, foster growth and giving you a competitive advantage. Innovation, in a larger sense, can help a business stay ahead of the curve by anticipating customer demands or trends (Al-Ansari, 2014). The goal of corporate and institutional partnerships should be to connect scientific capabilities of universities and research and development centers' with capital market institutions and business activity (Matejun, 2016). The promising future of technopreneurship in emerging economies is based on research institutions, incubators, and innovation centers playing central roles by forming collaborations with universities and outstanding technology companies and introducing them into the country with sustained monetary assistance from stake – holders. These types of partnerships encourage competition, which is the major driver of ongoing learning and development (Abass, 2018).

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 in order to gauge an organisation's success (Selvarani & Kanagaraj, 2015). Achieving a particular work against known standards of accuracy, completeness, cost, and speed is referred to as performance. Profit, return on investment (ROI), turnover or number of customers, 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 organisation'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 organisation's actual output/results when compared to its expected outcomes (goals and objectives). The three primary outcomes of business organisations 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 shareholder return performance (total shareholder return, economic value added, and so on) (Kenny, 2019).

For the purpose of this study, business performance shall be conceptualized into operational efficiency and market share.

Operational Efficiency

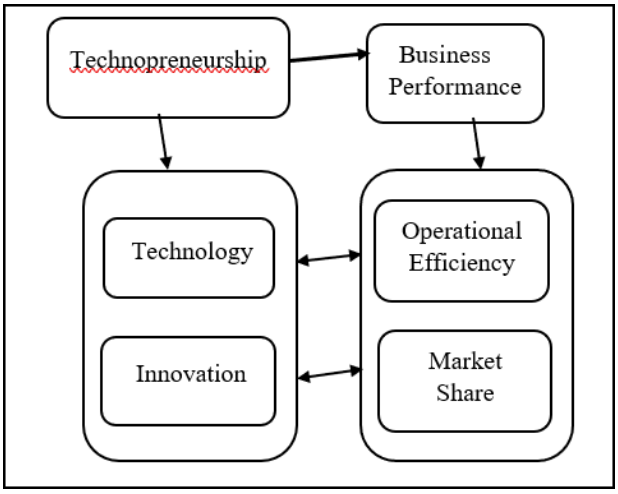
Operational efficiency refers to a set of strategies and tactics used to accomplish the basic goal of delivering

high-quality products and services to clients in the most cost-effective and timely manner possible. Resource utilization, production, distribution and inventory management are all common aspects of operational efficiency (Chron Contributor, 2021). The strategic dimensions in which organisations choose to compete have been identified as operational efficiency. Better operational efficiency can boost customer satisfaction by delivering high-quality products and services in a timely manner. Simply put, operational efficiency refers to a company's capacity to save cost and time (Su Wu, Zhong & Ying Liu, 2020). MSMEs cannot rely on manual processes, out-of-date marketing strategies, or haphazard technology any longer. Continued growth necessitates the kind of operational efficiency, customer service, agility, and productivity that can only be provided by modern technologies. It is the only way to get businesses to embrace the digital transformation they need to succeed (Sturman, 2018). Technology can help a company's operations run more smoothly. Technology has the potential to help create more efficient operations. It can assist firms in reducing or eliminating duplications, errors, and delays in your workflow, as well as speeding up by automating specific operations (Melo, 2018). With the right technology in place, entrepreneurs can save time and cost while increasing the productivity and competitiveness of their firms (Melo, 2018). From mobility and cloud computing to social media marketing tools, savvy MSMEs have already implemented a slew of technology to boost operational efficiency. In order to stay relevant, profitable, and efficient, MSMEs must keep pushing forward. Here are a few innovations that will help MSMEs run more efficiently: Artificial Intelligence, Internet of Things, Complete Wireless Access, Data Analytics, and Intelligent Networks (Sturman, 2018).

Market Share

The amount or portion of a market that a firm or organisation owns is referred to as market share. In other terms, a company's market share is the ratio of its total sales to the total industry sales in which it operates (Iwu, 2010). The entire sales of a firm for a given time period, as well as the total sales of the industry in which the company works, are taken into account when calculating market share (Nguyen, Phung & Khuong, 2019). Increased market share allows a business to function on a larger scale, profitably, increased sales, increased customer base, enhanced reputation, dominating the industry, and increased bargaining power. Increased market share can be achieved through innovation (Onikoyi, 2017). Product innovation, production process innovation, or simply delivering new technologies to the market that competitors have yet to provide are all examples of innovation. A corporation can get an advantage over its competitors and dominate the industry through innovating (Nguyen, Phung & Khuong, 2019).

Figure1: Conceptual Model



Source: Researcher (2022)

Theoritecal Framework

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 belief, attitude, and intention. It usually relates to a customer's perceptions depending on their experience's outcome (Marcia, 2020). Consumers see a new service as superior than its competitors in this scenario. This is due to the fact that 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). MSMEs should evaluate this model since they are being driven to use new technology in order to compete in the marketplace. The adoption of technology by entrepreneurs impacts the company's ability to innovate. In practice, MSMEs require a tool that is simple to use and understand in order to deal with the complexity of web-based marketing applications.

Innovation Diffusion Theory (IDT)

Everett Rogers presented his Innovation Diffusion Theory (IDT) in 1962. It lays the foundation for comprehending innovation adoption and the elements that influence an individual's choices of innovations (Marcia, 2020). It aims to explain how, why, and at what pace a product, service, or process expands throughout a population or social system. In other words, the rate at which new ideas and technologies spread is explained by the diffusion of innovation (Burgess, Sellitto, Cox, Buultjens &Bingley, 2017). The diffusion of innovation theory explains how quickly a new product or service is adopted by consumers. As a result, this theory is relevant to this study because it aids marketers in understanding how trends develop and helps firms in determining the possibility of a new product's success or failure. Firms can forecast which categories of consumers would buy their product/service using the diffusion of innovation theory, and develop effective marketing techniques to push adoption through each category.

Empirical Review

Technopreneurship and Business Performance

Dutse, Ningi, and Abubakar (2013) investigated technopreneurship and enterprise growth in Nigeria micro finance banks. Using Pearson Correlation to establish a relationship between the variables and Multivariate Analysis of Variance to show causal effects, the article investigated the role microfinance banks can play in promoting technopreneurship derive and growth among micro, small, and medium scale enterprises in Nigeria. The findings of the coefficients demonstrate a strong positive relationship between the variables as well as a significant causal influence between the predictor variable and the two criterion variables.

Gunasilan, Nordin, Ahmad and Suanda (2020) carried out a research on an Initial experiment on the effects of digital transformation and technological entrepreneurship in organisational performance in Malaysia, Singapore and Thailand. Statistical Package for Social Science was used to evaluate the data collected from the surveys (SPSS). The relationship between the factors of digital transformation and technology entrepreneurship in organisational performance is studied using Pearson correlation analysis. Digital transformation, technical entrepreneurship, and internal cohesiveness all have a very high favorable impact on organisational performance, according to the findings.

Mashingaidze (2016) investigated Technopreneurship (entreprenology) as the Holy Grail of SMEs Growth in South Africa: a historical analysis. This article summarizes entrepreneur studies and explores the tendencies in the evolution of entrepreneurship to today's technopreneurship. It was concluded that education is the foundation and lifeblood of technopreneurship, and that it should be incorporated into government policy reforms and the work of all policymakers.

Oyedele, Kowo, and Oyero (2019) investigated the impact of technopreneurship on business performance among agro-businesses in Abeokuta, Ogun State. Linear regression was used to analyze the data in SPSS version 20 (Statistical Package for Social Sciences). The survey finds that technological innovation has a significant impact on business competitiveness, as well as that technological opportunities have a significant impact on firm operational efficiency.

Oyedele, Ojeaga, Ganiyu, Derera and Oyero (2020) examined Technopreneurship as a pathway to sustainable business performance in SMES in Nigeria. Linear regression was used to analyze the responses. The findings of the study, which were based on the testing of two (2) hypotheses, show that intellectual property rights have a significant impact on business profitability, and that research and development and innovation (R&D&I) has a direct positive effect on business earned revenue.

Pujanis, Khairunnisaa and Meuthia (2016) examined Technopreneurship in Small Travel Entreprises (STEs): A Conceptual Framework of Performance Measurement. The study was descriptive in nature, with purposive sampling being employed for the non-adoption of e-travel in five STEs. It was established that technopreneurship had a favorable impact on final performance as measured by market share, sales, net profit, growth, Return on Investment (ROI), and global market expansion. The results of the measurement would provide a first representation of STEs' use of e-travel in Indonesia.

Wibawa, Widjanarko, Utomo and Wahyurini (2020) investigated the role of technology and SME resources in the creation and innovation of new food products The research was carried out on a small company in Sleman, Yogyakarta, that makes processed salak cuisine. The method of analysis was qualitative analysis. Observation, interviews, and focus group discussions were used to gather data from SMEs, local governments, and industry associations. The findings of the study demonstrate that SMEs can use technical assistance from higher education to develop a variety of unique salak processed meals.

Technology and Operational Efficiency

Hasan, Shiming, Islam, and Hossain (2020) evaluated the effect of block chain technology on firms' operational efficiency in Block chain based companies in China. The operational efficiency of firms that deploy block chain technology is evaluated using ordinary least squares and system generalized method of moment's estimation. The findings showed that because of block chain technology implementation in firms' operations, the current year performance of companies appears to be better than the prior year's performance.

Novotna, M., Volek, T. & Rost, M. (2020) investigated the impact of technology investments on production efficiency in manufacturing companies and how different these relationships are for low-technology and high-technology companies in Czech Republic. ANOVA analysis was to analyse the data. The findings revealed that technological investments has a positive and significant impact on production efficiency in manufacturing companies.

Muath, Hani & Rand (2018) examined the effects of the adoption of 3D printing technology (3DPT) applications on the operational performance of entrepreneurs' companies in terms of time, cost, quality, competitiveness, and management processes. The data was analysed using multiple regression techniques.

The findings indicate that all integrated operational performance indicators (time, cost, quality, competitiveness, and management processes) were significantly influenced by the adoption of 3DPT.

Nnamani and Eze (2013) examined the effect of Technology on entrepreneurial performance of Small Scale Firms in Enugu. Data was presented in tables and analyzed using percentages. Formulated hypotheses was tested using t-test statistics. It concluded that technology has positive significant effect on the performance of SMEs in Enugu

Innovation and Market share

Nguyen, Phung and Khuong (2019) investigated the impact of innovation on the firm performance and corporate social responsibility of Vietnamese manufacturing firms. Pearson Correlation was used to analyze the data in SPSS version 20. According to the findings, process and product innovations benefit business performance in terms of market share, but not in terms of return on total assets. This means that investing in creative activities will take time to show a return on investment, but it may help with consumer loyalty.

Iwu (2010) examined the relationships between increase in market share through product development and innovation. Pearson Correlation was used to analyze the data in SPSS version 20. Linear regression was used to analyze the data through SPSS. According to findings, innovation attempts aren't enough to ensure a lucrative market share. Rather, a far more understandable alignment of elements drives the product development goal to meaningful resource use.

Onikoyi (2017) investigated the impact of product innovation on performance. The results of the study was analyzed using regression and correlation. The findings show that the impact of product innovation on market share was higher in the company. Therefore, it was recommended that creative/quality innovations should be maintained continuously to develop appropriate product continually and increase market share.

METHODOLOGY

A descriptive survey research design was used in this study. Descriptive research entails going beyond the surface level of a study problem to get a more in-depth look at it, resulting in a detailed description of the research subject (Saunders, Lewis & Thornhill, 2016). The study's population covers members of staff and vendors of Uber Technologies Inc., and Bolt Company Lagos State, which is 2,616 and 3,046 respectively. The total population of the study is 5,662 members of staff and vendors (HRM Office Uber Technologies Inc., and HRM Office Bolt Company Lagos State).

The sample size was determined with the use of Taro Yamane formula (1964), thus:

$$n = \frac{N}{1 + N(e)^2}$$

Where: n = sample size sought

e = error margin, N = population size

Applying the above formula, with our known population of 5,662 respondents, level of significance of 95% (i.e. error margin = 0.05), the sample size, (n) = 374)

$$n = \frac{5,662}{1+5,662\ (0.05)^2}$$

$$n = 374$$

Table 1: Optimum Sample Size Distribution

S/N	Firm	Accessible Population	Sample size
1	Uber Technologies, Inc.	2,616	$\frac{374 \times 2,616}{5,662} = 173$
2	Bolt Company	3,046	$\frac{374 \times 3,046}{5,662} = 201$
	Total	5,662	374

Source: Survey Data 2022

The research adopted multistage sampling technique, which provided flexibility as the researcher was able to break down the population as often as necessary, also allowed each stage to use its own sampling method. The researcher made use of stratified sampling technique where the population was categorised into strata based on the two companies involved. Additionally, the researcher used cluster sampling and purposive sampling techniques to select vendors in the Surulere and Eti-Osa Local Government Areas, where these vendors are more numerous. Structured questionnaire was used as the instrument for primary data collection. The questionnaire was divided into five sections. The first section collected information on the bio data of the respondents while the second – fifth sections contained five (5) questions each that measured the variables technopreneurship and business performance, using A 6-point Likert – type scales: strongly agree, agree, partially agree, partially disagree, disagree and strongly disagree. Out of the 374 questionnaires shared to these groups, 181 were properly filled and returned, these were considered suitable for this study. The Cronbach's alpha coefficient was used to examine the reliability of the scales of measurement, and a higher number implies that the scale of measurement is more reliable. Statistical Package for Social Science (SPSS) was used to evaluate the data collected from the surveys. The multiple regression and Pearson product moment correlation statistical techniques were utilized to establish the interconnectedness of the measurement scales.

Table2: Results of Reliability Test

Variables	Number of items	Cronbach's Alpha	Status
Technology	5	0.897	Good
Innovation	5	0.886	Good
Operation Efficiency	5	0.859	Good
Market Share	5	0.781	Acceptable

Source: Researchers Computation (2021).

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Data Analysis and Interpretations

Hypotheses Testing

H_{01}: Technopreneurship has no significant effects on business performance of Ride-hailing firms in Lagos State.

Table3: Regression Result of Technopreneurship and Business Performance

Variables	B	Std. Error	T-statistic	P-value
Technology	0.704	0.295	7.931	0.000
Innovation	0.540	0. 213	5.031	0.000
R-Square		.625		
F-Statistic		11.041		

Dependent Variable: Business Performance.

Source: Researcher's Computation (2021).

Interpretation; Table 3 revealed the regression results of the study's hypothesis one that Technopreneurship has no significant effects on Business Performance of Ride-hailing firms in Lagos State. The R-Square which is the coefficient of determination shows that 62.5% of the variations in Business Performance is caused by the components of Technopreneurship (Technology and Innovation) while the remaining 37.5% is caused by factors not captured in the study. It is also demonstrated that Technology has positive and significant effect on Business Performance (?=0.704; p=.000; t test=7.931); Innovation has positive and significant effect on Business Performance (?=0.540; p=.000; t test= 5.031). The F-statistics revealed that the two components of Technopreneurship adopted for this study have positive significant combined effect on Business Performance (F-statistics= 11.041). Therefore, the null hypothesis is rejected.

H_{02}: Technology does not significantly correlate with operational efficiency of Ride-hailing firms in Lagos State.

Table 4 Correlation Analysis

Variables	Operational Efficiency		N
Technology	Pearson Correlation	0.614**	181
	Sig.(2-tailed)	0.000	
	Status	Strong Positive	

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

Source: Researchers computation (2021).

Interpretation

Table 4 revealed the correlation results between technology and operational efficiency. It was indicated that the Pearson correlation value between technology and operational efficiency is .614. The table further showed that the significant value between the two variables is .000, which is less than the .05% significant level. This implies that there is a positive and significant relationship between technology and operational efficiency of Ride-hailing firms in Lagos State.

H_{03}: There is no significant relationship between innovation and market share of Ride-hailing firms in Lagos State.

Table 5 Correlation Analysis

Variables	**Market Share**		**N**
Innovation	Pearson Correlation	0.703**	181
	Sig.(2-tailed)	0.000	
	Status	Strong Positive	

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

Source: Researchers computation (2021).

Interpretation

Table 5 revealed the correlation results between innovation and market share. It was indicated that the Pearson correlation value between is innovation and market share is .703. The table further revealed that the significant value between the two variables is .000, which is less than the .05% significant level. This implies that there is a positive and significant relationship between innovation and market share of Ride-hailing firms in Lagos State. Thus, the study rejects the null hypothesis.

DISCUSSION OF FINDINGS

The aim of the study, which is to investigate the effects of Technopreneurship on Business Performance of Ride-hailing industries in Lagos State, has been achieved. Tables 3 has revealed that the components of Technopreneurship (Technology, and Innovation) have significant effects on the components of Business Performance (Operational Efficiency and Market Share) of Ride-hailing firms in Lagos State. It has been demonstrated that MSMEs' use of technology has resulted in operational efficiency and increased market share. As technology allows businesses to expand their visibility and reach target markets beyond their neighborhoods and surrounding communities, connect with customers via e-mail, blogs, social networks, and forums, and collaborate closely with their customers to supply them with products and services that enhance their quality of life. As a result, maximizing their potential will be critical for operational efficiency and increased market share. The positive and significant effects of Innovation on Business Performance of Ride-hailing firms in Lagos State is a clear indication that businesses that allocates adequate resources to innovative practices most likely stay ahead of market trends and keep the company relevant. Entrepreneurs need an edge to survive and stand out. Innovation can provide that edge—boosting firm's productivity, growth and profitability.

Result from the field survey revealed that hypothesis two was not supported which depicts that technology does not significantly correlate with operational efficiency of Ride-hailing firms in Lagos State. The findings revealed that there is a positive and significant relationship between technology and operational efficiency. The findings of the study is in conformity with the results of the study undertaken by Guyo (2014) that established a positive and significant relationship between technology and operational efficiency in commercial banks in Kenya. Similarly, this study finding did not support hypothesis three, which states that there is no significant relationship between innovation and market share of Ride-hailing firms in Lagos State. In the study, it was revealed that there is a positive and significant relationship between innovation and market share. The findings is in line with the results of the study undertaken by Onikoyi (2017) that established a positive and significant relationship between innovative practices and market share.

CONCLUSION

Technopreneurship enviable position in sustainable business performance has been established. The concept of technopreneurship is an intriguing proposition for businesses looking to boost their level of innovation by leveraging interactions between internal innovation capabilities, competencies, and resources, as well as favorable external factors such as research and development and technology. This research has substantial implications for policymakers and business owners since it offers a framework for guiding the application of technopreneurship practices in businesses and knowledge on how a number of interconnected activities contribute to sustainable business performance. Operational efficiency and market share are both affected by technology and Innovation, according to the findings. Finally, this study is credited with expanding existing knowledge and providing empirical support for various underlying conceptions or suggestions presented in academic literature. Likewise, it adds to the existing literature on entrepreneurship, innovation, and technology management by providing some unique and valuable ideas.

RECOMMENDATIONS

The following recommendations are made based on the study's findings:

1. Micro, small, and medium-sized enterprises (MSMEs) should be encouraged to innovate through supportive measures by the government and its agencies that allow them to develop products and manufacturing processes so that Nigerian products and services meet global quality standards. The firm is at the center of innovation and innovation is critical to business success and growth.
2. There will be need for more collaborations between innovation hubs and universities in Nigeria. This will encourage research and development and scale the environment for innovative ideas in the academic space.
3. Creating an atmosphere for business zones and innovation hubs with a friendly tax regime.

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