Innovativeness and Financial Competitiveness of Manufacturing Firms in South-East, Nigeria

Nwabuatu, Emmanuel Nnajiubah (Ph.D)

Department of Entrepreneurship, Ignatius Ajuru University of Education, Rivers State, Nigeria nwabuatu@gmail.com DOI: 10.56201/wjeds.v9.no4.2024.pg89.110

Abstract

The study examined the relationship between Innovativeness and Financial Competitiveness of Manufacturing Firms in South-East, Nigeria. The study adopted a cross-sectional research design. The population for this study consists of 608 participants from 64 manufacturing firms in the South-East Region of Nigeria. The respondents were top managers, operations managers, sales managers, supervisors, and senior staff. The primary data were collected through a questionnaire. The data were analyzed using Spearman's Rank-Order Correlation Coefficient Statistic through the Statistical Package for Social Science. The study found a significant relationship between Innovativeness and Financial Competitiveness of Manufacturing Firms in South-East, Nigeria. Hence, the study concluded that Innovativeness relates to Financial Competitiveness. Therefore, the study recommended that management should develop new products that meet the needs of the local market and are competitive in the global market the improve profit growth of manufacturing firms in the South-East region of Nigeria. Management should develop strong relationships with suppliers to ensure a steady supply of high-quality materials and services to improve financial performance of manufacturing firms in the South-East region of Nigeria. Management should implement new technologies that can improve manufacturing processes, such as automation, robotics, and data analytics to achieve financial performance financial performance

Keywords: Innovativeness, Product Innovation, Service Innovation, Process Innovation, Profit Growth, Financial Competitiveness

Introduction

Financial competitiveness is crucial for the success and sustainability of manufacturing firms in the South-East region of Nigeria. It refers to a firm's ability to achieve and maintain superior financial performance compared to competitors. Financially competitive firms are more likely to survive and grow in the long term (Hitt et al., 2001) and can withstand economic downturns and competitive pressures better than their counterparts. Financial competitiveness enables firms to invest in new technologies, expand operations, and enter new markets, capitalizing on growth opportunities (Porter, 2008). These firms can also invest in innovation and R&D, developing new products and processes to stay ahead (Barney, 2001). They are attractive to investors and lenders, making it easier to raise capital for further growth (Teece et al., 1997). Efficient cost management allows financially competitive firms to offer competitive prices while maintaining profitability (Porter, 2008). Financially competitive firms contribute to economic development by creating jobs, generating tax revenue, and stimulating other sectors of the economy through their supply

chains and operations (Porter, 2008). One of the factors can improve financial competitiveness is innovation which is crucial for manufacturing firms in the South-East region of Nigeria, for survival, grow, innovate, attract capital, manage costs, and contribute to economic development.

Innovation is a critical driver of competitiveness and economic growth, particularly in the manufacturing sector. Manufacturing firms that innovate are better able to develop new products, improve processes, and respond to changing market demands, ultimately enhancing their financial performance and competitiveness. However, the relationship between innovativeness and financial competitiveness is not well understood, especially in the context of the South-East region of Nigeria. The South-East region, comprising states such as Abia, Anambra, Ebonyi, Enugu, and Imo, is a hub of industrial activity in Nigeria, with a significant presence of manufacturing firms. These firms play a crucial role in the region's economy, contributing to employment, income generation, and economic development. Understanding how innovativeness influences the financial competitiveness of manufacturing firms in this region is essential for policymakers, managers, and researchers seeking to promote sustainable economic growth and development.

Despite the growing recognition of the importance of innovation for competitiveness, there is a noticeable gap in the literature regarding the specific relationship between innovativeness and financial competitiveness of manufacturing firms in the South-East region of Nigeria. While some studies have examined innovation in Nigerian manufacturing firms, few have focused specifically on the South-East region, which has its unique economic, social, and cultural dynamics. Furthermore, existing studies have often adopted a broad perspective on innovation, without adequately exploring the different dimensions of innovativeness, such as product innovation, process innovation, and organizational innovation, and their specific impact on financial competitiveness. Understanding these dimensions and their interrelationships is crucial for developing targeted strategies to enhance innovativeness and financial competitiveness in the region. Therefore, this study seeks to fill this gap by investigating the relationship between innovativeness and financial competitiveness of manufacturing firms in the South-East region of Nigeria, with a specific focus on the different dimensions of innovativeness and their implications for firm performance. By doing so, this research aims to contribute to the existing literature on innovation and competitiveness and provide valuable insights for policymakers, managers, and researchers interested in promoting economic growth and development in the region.

Statement of the Problem

he South-East region of Nigeria, like many developing regions, is striving to enhance its economic development through industrialization, with a particular focus on the manufacturing sector. However, the extent to which innovativeness contributes to the financial competitiveness of manufacturing firms in this region remains unclear. This is due to the fact that there is low financial competitiveness in terms profit growth which might be traced to lack of innovativeness. Despite the potential benefits of innovation in improving firm performance, including increased market profit growth and others, there is limited empirical evidence on the specific relationship between innovativeness and financial competitiveness in the context of the South-East region. Hence, this research seeks to address this gap by investigating the relationship between innovativeness and financial competitiveness of manufacturing firms in the South-East region of Nigeria. The study

aims to explore the extent to which different dimensions of innovativeness, such as product innovation, service innovation, and process innovation, contribute to the financial competitiveness of manufacturing firms in the region. By identifying the factors that drive innovativeness and examining their impact on financial competitiveness, this research aims to provide valuable insights for policymakers, managers, and researchers interested in enhancing the economic performance of the South-East region's manufacturing sector.

Aim and Objectives of the Study

The aim of the study was to examine the relationship between innovativeness and financial competitiveness of manufacturing firms in the South-East region of Nigeria.

The objectives of the study were to:

- 1. Determine the relationship between Product Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria.
- 2. Investigate the relationship between Service Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria.
- 3. Examine the relationship between Process Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria.

Research Questions

- 1. What is the relationship between Product Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria?
- 2. How does Service Innovation relate with Profit Growth of manufacturing firms in the South-East region of Nigeria?
- 3. What is the relationship between Process Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria?

Research Hypotheses

- Ho1: There is no significant relationship between product Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria.
- **H**₀₂: There is no significant relationship relationship between Service Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria.
- **Ho3:** There is no significant relationship between Process Innovation and Profit Growth of manufacturing firms in the South-East region of Nigeria.

LITERATURE REVIEW

Conceptual Framework



Conceptual Framework

Source: Researchers Desk (2024).

Conceptual Review

Concept of Innovativeness

An organization is said to be innovative if its people are encouraged to generate new concepts, novelties, and creative processes that lead to the development of new technologies, goods, services, or business models. According to Rauch et al. (2009), being innovative means having the inclination to be creative and experimental when introducing new goods and services and to take the lead in technology by doing research and development on novel methods. According to Madhoushi et al. (2011), it is the process of looking for novel, inventive, or creative approaches to issues and demands. Therefore, it has long been known that innovation is crucial to small businesses' long-term development and success. A company's ability to identify market demands is simply one factor that determines its success; it also has to figure out how to please consumers in a manner that makes its offerings competitively viable. Innovation may be seen as essential to a company's ability to merely remain competitive (Darroch & McNaughton, 2002). Covin and Miles (1999) assert that intrapreneurship cannot exist without innovation. One definition of innovation is a company's inclination to seek out novel ideas and try them out ahead of competitors. Consumers are expecting more and more customized goods and sales solutions. Adopting a

creative and inventive work strategy is really one of the traits that successful firms most often have in common. Moreover, a number of writers have connected company performance with innovation.

According to Bradmore (1996), innovation increases a company's competitiveness by enabling the effective application of novel concepts. Neely and Hii (1998) proposed two theories about the relationship between innovation and company performance. The first perspective focuses on enhancing the firm's competitive position vis-à-vis its rivals, while the second contends that innovation fundamentally changes a firm by augmenting its internal capabilities, rendering it more malleable and responsive to market forces than non-innovating firms. These viewpoints align with the conclusions drawn by Singh et al. (1993), who found that sales interactions and business settings provide unclear and unstructured difficulties for firms—exactly the kind of situation where innovation is most helpful. Moreover, studies on innovation have shown that it promotes information gathering and use, both of which are essential for developing tailored solutions (Robertson & Yu, 2001). This study has validated the strong hypothesis that innovativeness, and thus an intrapreneurial approach, will boost firm competitiveness because of the value of an innovative approach in uncertain environments and the degree to which such an approach encourages information gathering and utilization.

Product Innovation

Product innovation is the process of bringing new, never-before-seen items to market. Product innovation is defined by Schumpeter (1934) as the launch of a new product with enhanced quality that is not yet familiar to consumers. He argues that the competition from new products much exceeds small price changes in existing goods, highlighting the significance of product and service innovation in promoting organizational success. A new product or service innovation is introduced that is new or significantly improved in terms of its features or intended uses; examples include significant improvements in technical specifications, materials and components, integrated software, user-friendliness, or other functional characteristics (OECD Oslo Manual, 2005). Product innovations may stem from novel uses or combinations of current technology or information. They may also come from new applications of current technologies or knowledge. Shorter product life cycles, more global competition, and shifting customer needs all contribute to the complexity of product innovation. To be effective, there must be a great deal of interaction both inside the organization and between the firm and its suppliers and consumers (Akova et al., 1998). Wan et al. (2005) define product innovation as the launch of new products or services with the intention of expanding into untapped markets or client bases or gratifying existing ones. According to the OECD Innovation Handbook, "the introduction of a new or considerably enhanced product in respect to its features or intended functioning" is what is meant to be understood as "product innovation" (OECD, 2005). Product innovation also refers to new advancements in operations undertaken by businesses to deliver the main product while enhancing its consumer appeal. These operations may include technical details, materials and componentry, integrated software, user-friendliness, or other functional features. Product innovation also refers to fresh approaches used by businesses to market their main offering while enhancing its customer appeal (Mensah & Acquah, 2015).

Studies on innovation for a long time focused on the industrial sector and how these companies adopted new technologies (Drejer, 2004). However, with the growth and development of services, particularly in recent decades, this attitude has started to shift. Services now have a significant economic and social influence, making them a sector with a lot of promise for organizational research to explore (Kon, 2004). Research aimed at determining the correlation between investments in innovation and the success of these inventions has garnered more attention due to the issue of innovation in services and its projected large strategic relevance. This interest aligns with the reality that the economic system in which organizations function requires a major restructuring of competition, which in turn influences and leverages the ability to successfully discover and exploit new opportunities, develop creative value propositions, mobilize and manage global resources, and discover new opportunities reciprocally (Hagen et al., 2014). All of these factors impact performance organizations. have an on the of

Service Innovation

Product, service, and portfolio managers are responsible for service innovations. The heads of the departments oversee the subareas into which Services is subdivided. Head of Customer Retention, Head of Technical Support, and Head of Customer Support are a few examples. The Head of Customer Experience or Head of Customer Success positions now have more explicit accountability for fostering customer excitement. Organizational studies have focused a lot of emphasis on service innovation because of its social effect, particularly in relation to its direct impact on job creation and social and economic growth (Gallouj, 2007). According to Kon (2004) and Sundbo & Gallouj (1998), services are activities that have very specific characteristics that set them apart from goods produced in the manufacturing industry. These characteristics include the fact that the products generated are not perfectly formatted and encoded, that each transaction and result is unique, that supply and consumption occur simultaneously, that supply and demand are not clearly defined, and that their production involves a variety of qualitative aspects. Given the nature of services and the significance of the innovation processes that occur in this industry, it is easy to see why the output in this field has focused on introducing both theoretical and empirical viewpoints to the issue.

Process Innovation

It is the responsibility of the process owner to innovate. The department head has responsibility for ensuring that the department runs smoothly and that objectives are met. These include the manager of HR, the manager of production, the manager of sales, and the head of innovation. Quality management typically offers support to process innovation. Process innovation is the introduction of a new, unproven technique for transforming inputs into outputs, according to Schumpeter (1934). Process innovation is defined as the process of rethinking and enhancing the internal workings and capabilities of corporate processes (Rosli & Sidek, 2013). These processes include manufacturing, technical design, administration, and commercial operations (Li & Atuagene-Gima, 2001). Process innovation includes things like new procedures, rules, organizational structures, and knowledge incorporated into products, applications, distribution routes, and customer expectations, preferences, and needs (Castillejo et al., 2013). A process

innovation is the use of a new or significantly improved manufacturing or delivery technology. Notable advancements in protocols, apparatus, and/or software are among the instances (OECD, 2005).

"Process innovation" describes novel or significantly improved methods of producing goods and providing services. Equipment, protocols, and software that are new or significantly improved are beneficial to auxiliary support activities such as purchasing, accounting, and computing. Process innovations seek to improve quality, produce new or significantly better commodities, reduce production or delivery unit costs, or all three (OECD, 2005). Specifically, organizational and technical changes are involved in process innovation efforts (Reichstein & Salter, 2006), which are hard to distinguish between (Edquist et al., 2001; Womack et al., 1990). The two separate but linked activities of technical process innovation and organizational process innovation are included in Edquist et al. (2001)'s list of process innovation activities. New products employed in the manufacturing process, such as IT equipment, industrial robots, processing machines, and intermediary items, are known as technological process innovations.

Concept of Financial Competitiveness

When discussing a company's financial competitiveness, the emphasis should be on the degree to which the company competes within its industry for consumers in order to get a high return on investments (Chenglin et al., 2006). In recent years, both academics and practitioners have been paying an increasing amount of attention to the financial competitiveness. Specifically, this emphasis has been focused on the global economy. Financial competitiveness is manifested differently across sectors through the companies that operate within those industries. It is not easy to create a method of assessment that can be applied to all businesses. According to Wei and Shao (2013), improving the financial competitiveness of a company and maximizing its value have both become essential components of an organization's overall strategy to remain competitive in its core market.

The specifics of the financial definition of competitiveness have not yet coalesced into a single, widely held conception in the academic community as a whole. The study of financial competitiveness primarily concentrates on three facets: the components, the assessment of performance, and the importance of value (Chenglin et al, 2006). Studies on the factors that go into determining financial competitiveness have shown the following logical connection between the factors that play a role in financial competitiveness (Chenglin, 2006; Wei & Shao, 2013). According to He et al. (2011), there are two phases in which the competitiveness of a financial mechanism may be identified: the stage of financial resource integration and company financial competitiveness, and the stage of developing financial capacity and access to financial resources. Financial strategy, financial resources, and financial management expertise compounded by execution equals financial competitiveness.) At this moment, financial competitiveness study is just in its early stages of exploration. The main basis for comprehending what is meant by "financial competitiveness" comes from the capability theory's viewpoint on how competitive firms are. Financial competitiveness, according to Wang and Xiaoming (2005), is the capacity that has been shown in the financial process to meet its corporate goals. Moreover, financial strategy, financial resources, financial capability, financial performance, and financial innovation all work together to provide financial competitiveness, which is a holistic strength. Furthermore, the capacity to meet its commercial goals is a sign of financial competitiveness.

Profit Growth

Profit growth consists of calculating an operational profit ratio, return on assets, and return on invested capital. Increasing profits is as simple as figuring out the operational profit ratio, ROA, and ROIC. To determine solvency, one must take into account the debt asset ratio, the current ratio, the ratio of operating cash flow to operational profit, and the debt coverage ratio. To be able to develop in a sustainable way, one must have a sustainable growth rate, as well as hedging and proliferating ratios, growth rates for total assets, revenue, net profit, and growth rates overall. Factors like the rate of cost, total assets, inventory turnover, and receivables turnover make up operational capacity. The growth of one's earnings is one component of one's capacity to compete financially. The rate of profit growth is a good indicator of a company's or industry's capacity to make money (Adu-Gyamfi, 2015). Net income is a measure of a company's success in making a profit, or the capacity of a business to bring in money after expenses. It measures the production in relation to the inputs (labor, equipment, and capital) used. It is often referred to as the ratio of output to input. Most people think of profitability as the ability to make money. The formula or equations for calculating profitability are as follows: Gross Profit / Net Sales multiplied by 100. Both of the components in the equation are generated from the income statement of the company. According to Gorg and Hanley (2004), the benefits of outsourcing on profitability include value improvement, gains in competitiveness (such as the adoption of new technology), and a rise in the profitability margin.

Innovativeness and Financial Competitiveness

Innovativeness plays a crucial role in improving the financial competitiveness of manufacturing firms in the South-East region of Nigeria. Several studies highlight how innovativeness contributes to financial competitiveness. Introducing new or improved products can lead to increased sales and market share, thereby enhancing financial performance (Gunday et al., 2011). Product innovation allows firms to meet evolving customer needs and preferences, leading to higher customer satisfaction and loyalty (Dodgson et al., 2013).

Improving operational processes can lead to cost savings, higher efficiency, and improved quality, all of which can positively impact financial performance (Sharma et al., 2016). Process innovation can also lead to faster delivery times, which can be a competitive advantage in the market (Dodgson et al., 2013). Introducing new services or improving existing ones can lead to higher customer satisfaction and loyalty, as well as increased revenue from service offerings (Gallouj, 2002). Service innovation can also differentiate a firm from its competitors and improve its competitive position in the market (Dodgson et al., 2013). Technological Innovation: Adopting new technologies can lead to improvements in efficiency, productivity, and quality, which can all contribute to improved financial performance (Gunday et al., 2011).

Technological innovation can also lead to the development of new products or services, further enhancing a firm's competitiveness (Sharma et al., 2016). Strategic Innovation: Developing new business models or entering new markets can lead to new revenue streams and improved financial

performance (Dodgson et al., 2013). Strategic innovation can also help a firm adapt to changing market conditions and stay ahead of competitors (Gunday et al., 2011). Thus, innovativeness plays a critical role in improving the financial competitiveness of manufacturing firms in the South-East region of Nigeria. By innovating in products, processes, services, technologies, and strategies, firms can enhance their competitive position, meet customer needs more effectively, and ultimately improve their financial performance.

Theoretical Review: Innovation-Driven Growth Theory:

The study adopted Innovation-Driven Growth Theory by Schumpeter, 1934 because it support the concept of innovativness and financial competitiveness. The Innovation-Driven Growth Theory suggests that innovation is a key driver of economic growth and development (Schumpeter, 1934). In the context of manufacturing firms in the South-East region of Nigeria, innovativeness can lead to increased productivity, job creation, and revenue growth, all of which contribute to financial competitiveness. By investing in innovation, firms can differentiate themselves from competitors, attract new customers, and expand their market share, leading to improved financial performance.

Empirical Review

Numerous studies have been carried out to ascertain the connections between these two aspects of a business's financial standing. Researchers under the direction of Pervan et al. (2017) looked studied the profitability of 195 Croatian businesses during a ten-year period. They discovered that the profitability of the enterprises was significantly influenced by their size, age, liquidity, and solvency. The study by Adekola et al. (2017) used Ordinary Least Square (OLS) regression to analyze working capital metrics of Nigerian non-financial service firms in relation to gross and net profit margins. These metrics included accounts receivable period, accounts payable period, inventory turnover in days, receivable turnover in days, cash conversion cycle, and current ratio. Their findings demonstrate that the correlations between the variables are not concave nor linear, but rather, the kind of interaction is contingent upon the industry in which the company operates.

Akindele and Odusina (2015) found that a firm's profitability, liquidity, and risk were all negatively correlated with each other, which is consistent with the findings of Eljelly (2004) and Raheman and Nasr (2007). This research was carried out in Nigeria. OLS regression was used in both of the Nigerian investigations, which made them chronological. Furthermore, none of these publications addressed the requirement for a model to explain temporal and random effects; neither were random firm-specific effects examined.

Almazari (2014) conducted an analysis of Saudi enterprises and concluded that the current ratio is the most significant indicator of liquidity. Nonetheless, working capital management and profitability seem to be significantly correlated negatively, suggesting that excessive liquidity reduces profitability. Garanina & Belova (2015) used a random effect regression model to analyze the link between working capital and profitability of 720 Russian enterprises. They discovered that the return on net operating asset (RNOA) (RNOA) and cash conversion cycles had a negative association. After evaluating 15 Ghanaian companies over a ten-year period, Li et al. (2020) discovered that liquidity significantly harmed profitability. They used a random effect generalized least square (GLS) regression model to reach this result. Liquidity management has a detrimental

effect on operational performance, according to Sultana et al.'s (2019) ten-year examination of a subgroup of non-financial enterprises in Pakistan. Because of this, companies must proceed with extreme care when determining how to trade-off these factors and creating appropriate plans. They thought that short-term loan turnover days and the cash conversion cycle negatively affected net margin. Stated differently, increased profitability might result from efficient working capital management. Similar conclusions were reached by Singh et al. (2017), who proposed that proactive working capital management would increase profitability and that there was a negative correlation between company profitability conversion and the cash cycle.

Ren et al. (2019) found that non-state-owned enterprises' cash conversion cycle had a major influence on their profitability after looking at a subgroup of Chinese companies over a seven-year period. This relationship, however, is not important for companies that are governed by the state. It might be argued that the ownership of the company also influences the kind of connection that exists between working capital management and business success. Dhole et al. (2019) found a correlation between Australian firms' financial limitations and efficient working capital management via the use of a novel text-based measure of financial constraints. Furthermore, a company with efficient working capital management may benefit from higher market valuations even while facing financial limits, as shown by the fact that it may lessen the negative correlation exists that between share price and financial restraints.

Asghar et al. (2019) used the difference between operating profit and cash flow to assess operational cash flow, and the difference between operating profit and sales to evaluate business performance. The firms were then subjected to regression analysis using data from the Tehran Securities Exchange spanning the years 2007 to 2011, and they found no significant link between the variables considered. Assey et al. (2020) evaluated the impacts of working capital management on firms listed on the Dar es Salaam stock market and found that the performance of the companies was affected differently by the various components of working capital management. They concluded that companies have to extend the days of inventory and payment as well as shorten accounts receivable in order to boost their financial performance. In their 2018 study, Dioha et al. examined the connections between the corporate characteristics and profitability of Nigerian businesses. They came to the conclusion that an organization's age or liquidity has little bearing on how profitable it is. Still, evidence suggests that growth, company size, and leverage all have a big effect on profitability. Kokodey et al. (2020), looking at Malayan companies, discovered that investing in working capital reduces the firm's worth. US companies are putting better working capital management practices into practice, according study by Boisjoly et al. (2020). These results include (i) the observation that working capital management strategies raise a company's external value by outsiders and enhance its Key Performance Indicators (KPIs); and (ii) the observation that working capital management practices differ greatly amongst sectors.

Baos-Caballero et al. (2014) looked at the relationship between a subgroup of non-financial UK firms' corporate performance and working capital management. They discovered an inverse U-shaped relationship between working capital investments and company success, indicating the existence of an optimal working capital level where firm value is maximized and costs and benefits

are balanced. (Baos-Caballero et al., 2014) underlined once again how critical it is that management comprehends the ramifications of lost sales and discounts due to subpar working capital management procedures.

Research on working capital management and liquidity was also conducted by Hamid and Akhi (2016), who discovered no relationship between profitability and liquidity in Bangladesh's chemical and pharmaceutical sector. In order to arrive at a result that necessitates a comprehensive analysis to corroborate the findings, they selected 10 pharmaceutical enterprises and used the OLS approach without considering alternative models, such as fixed or random effect panels. Nevertheless, Hoque et al. (2015) used OLS regression to find a mixed relationship between different working capital components and firm profitability in the cement manufacturing industry without considering the viability of using additional panel data models. Hossain and Kabir (2015) performed a comparative liquidity study using basic financial statement analysis approaches to find significant differences in liquidity across some of the leading pharmaceutical companies. However, they did not use any sophisticated empirical techniques to support their findings.

In a different study, Islam et al. (2018) found a mixed relationship between profitability and the working capital and liquidity components. According to Islam et al. (2018), profitability is significantly impacted both positively and negatively by the number of days account receivable (AR) and the current ratio (CR). To examine the effects of the repressors on the regressed variable, they used alternative panel data models and pooled OLS regression without looking at the temporal dependency of the variables. In his investigation on the relationship between working capital indicators and the firm performance of 10 pharmaceutical companies in Bangladesh, Sharif (2018) found inconsistent patterns among the variables he examined.

In their study of Bangladesh's textile sector, Khan et al. (2020) discovered a significant relationship between performances and fixed asset turnover, cash conversion cycle, days sales outstanding, inventory turnover time, sponsor ownership, and total assets. Tasfiq and Chowdhury (2015) used correlation analysis as the only method to ascertain the relationship and interdependence between the variables in their study on pharmaceutical enterprises in Bangladesh. Khan et al., 2020 used a fixed effect regression model rather than an OLS regression and found that there was a negative association between payment deferral duration and age as well as performance. It is clear that excessive liquidity may result in agency problems since managers may spend extra capital in unwise projects, prioritizing their own interests above the company's (Almeida et al., 2014; Jensen, 1986). Recall that a large body of research on liquidity has focused on the banking sector (Bose et al., 2017; Masud et al., 2016; Rahman & Banna, 2016; Siddik et al., 2016; Yesmine & Bhuiyah, 2015).

Summary and Gap in Literature

The study engaged in a comprehensive overview of various studies on the relationship between innovativeness and firm financial competitiveness of Manufacturing Firms in South-East, Nigeria. The gap in the literature is the lack of studies that specifically focus on the optimal level of innovativeness that maximizes firm financial competitiveness of Manufacturing Firms in South-

East, Nigeria. Additionally, there were need for more research that examines innovativeness and firm financial competitiveness in emerging markets or specific industries like manufacturing sector in South-East, Nigeria that have not been extensively studied in this context. Therefore, to fill this gap the present examined the relationship between Innovativeness and Financial Competitiveness of Manufacturing Firms in South-East, Nigeria

Methodology

Research Design: The study employed a cross sectional research design

Population for the Study

This study's target population included all manufacturing companies in Nigeria's southeast. In the South-East of Nigeria, there are 184 operational manufacturing companies that make up the study's population (Manufacturers Association of Nigeria, Enugu Regional Office, Enugu, Nigeria, 2022). Using the census sample approach, the study's population was established.

Sample Size and Sampling Techniques

Since this study used a census method in determining the population of the study. The sample size is the entire 184 firms which represents the functional manufacturing companies employed as the population for the study. This decision was made because the size of 184 companies is not too large to engage and that's why the researcher decided to employ the census sampling technique which allows the use of the entire population as the sample size.

With respect to the respondents of the study, the unit of analysis of the study is the macro level of analysis where the firms themselves are analyzed. Since this was the case, the respondents were the people at the managerial levels who understand the visions, missions, objectives, strategies and operational modes of the firms. Specifically five managers were designated in each firm on the basis of the positions they occupy. These were the top managers, production managers, marketing managers, product development managers and financial managers. This produced a total of 920 respondents.

Sources of Data

The study made use of primary data. The primary data was obtained directly from the respondents

Instrumentation/Measurement

This research used the questionnaire as instrument in obtaining data from the respondents. This was due to the fact that the questionnaire was a low-cost instrument, useful in a variety of situations. It provided useful information, and respondents remained anonymous (Young, 2015). Most importantly, they are used to quickly collect big datasets, either by direct contact, mail, or online through the web or email. Lastly, it enables respondents to have enough time to mediate on the items before responding to them, which provides meaningful data for the research study.

Measurement of Variables

All variables were measured on Likert's 4-point scale ranged from 1-4 points. In this case a score of 1 was assigned to strongly disagree; 2 to disagree; 3 to agree; and 4 to strongly agree.

Validity of Instrument

The study adopted content validity and it was found that the item statements properly represented the variables measured.

Reliability of Instrument

In order to determine the instruments' reliability in a scientific manner and get reliability scores of 0.7 or higher—the standard for dependability acceptance—the research used the Cronbach Alpha reliability test (Cronbach, 1951). The calculation of the reliability test was carried out using SPSS version 23.0. The reliability test produced the following results.

Variables	Number of Items	Correlated Alpha values
Product innovation	7	0.887
Service innovation	6	0.834
Process innovation	6	0.954
Profit growth	6	0.923
Total number of items	25	

Table 1 Reliability Test Results

Source: SPSS Output 2024.

Administration of Instrument

The researcher sent emails to responders directly with nine hundred and twenty (920) copies of the questionnaire. The questionnaire was quickly recovered after being filled out according to the specified instructions. The use of questionnaires to gather data was beneficial as it gave respondents enough time to consider the questions before answering them.Data Analysis

The questionnaire was distributed to the respondents at different businesses in a total of 608 (100%) copies. Only 10 (1.6%) of the total were left unfinished, meaning that 902 (98.4%) of the copies were recovered. The fact that over 90% of the questionnaire was completed by respondents indicates that the delivery and retrieval of the survey were effective.

Result and Discussion

In this section the study tested the null hypotheses in order to generate findings.

Test of Hypothesis One

Ho₁: There is no significant relationship between product innovation and the profit growth of manufacturing firms in south-east region of Nigeria.

Table 4.14 Correlation on product innovation and profit growth

Correlations

			Product	Profit
			innovation	Growth
Spearman's	Product innovation	Correlation	1.000	$.826^{**}$
rho		Coefficient		
		Sig. (2-tailed)		.000
		N	598	598
	Profit Growth	Correlation	.826**	1.000
		Coefficient		
		Sig. (2-tailed)	.000	
		N	598	598

**. Correlation is significant at the 0.01 level (2-tailed). Source: Research Survey (2024).

4.4.2Test of Hypothesis Two

Ho2: There is no significant relationship between service innovation and the profit growth of manufacturing firms in south-east region of Nigeria.

Table 4.15 Correlation on service innovation and profit growth

Correlations

			Service innovation	Profit Growth
Spearman's rho	Service innovation	Correlation Coefficient	1.000	.863**
		Sig. (2-tailed)		.000
		N	598	598
	Profit Growth	Correlation Coefficient	.863**	1.000
		Sig. (2-tailed)	.000	
		N	598	598
** Correlatio	n is significant at the 0.0	1 level (2-tailed)		

**. Correlation is significant at the 0.01 level (2-tailed). Source: Research Survey (2024).

Test of Hypothesis Three

Ho3: There is no significant relationship between innovativeness and the profit growth of manufacturing firms in south-east region of Nigeria.

Table 4.16 Correlation on Innovativeness and profit growth

Correlations

			Process innovation	Profit Growth
Spearman's	Process innovation	Correlation	1.000	$.887^{**}$
rho		Coefficient		
		Sig. (2-tailed)		.000
		N	598	598
	Profit Growth	Correlation	$.887^{**}$	1.000
		Coefficient		
		Sig. (2-tailed)	.000	•
		N	598	598
**. Correlation	n is significant at the 0.0	1 level (2-tailed).		

Source: Research Survey (2022).

Discussion of findings

Significant relationship between product innovation and the profit growth of manufacturing firms in south-east region of Nigeria.

A study by Okeke and Ezejiofor (2018) investigated the impact of product innovation on the performance of manufacturing firms in Nigeria. The study found a positive and significant relationship between product innovation and firm performance, which can be associated with profit growth. Product innovation, such as introducing new or improved products, can lead to increased sales, market share, and ultimately, profitability for manufacturing firms. By meeting customer needs more effectively or offering new solutions, firms can gain a competitive edge and drive profit growth.

Significant relationship between service innovation and the profit growth of manufacturing firms in south-east region of Nigeria.

Research by Nduka and Nnadi (2019) explored the impact of service innovation on the performance of manufacturing firms in Nigeria. Although the study did not focus specifically on the South-East region, it found a positive relationship between service innovation and firm performance, which can be indicative of profit growth. Service innovation, which involves improving service delivery processes or introducing new services, can enhance customer satisfaction and loyalty. This can lead to increased repeat business, higher sales, and ultimately, improved profitability for manufacturing firms.

Significant relationship between process innovation and the profit growth of manufacturing firms in south-east region of Nigeria.

Ojo's (2022) research examined the effects of process, product, and technology innovation on small

and medium-sized business (SMEs) performance. The study utilized a descriptive research approach using Schumpeter's Creative Destruction Theory as a theoretical framework. 186 SME owners in the city of Ibadan provided information to a well-structured questionnaire that was created to meet the goals of the research. Regression analysis and descriptive statistics were used to examine the data. The findings demonstrated that innovation in technology, products, and processes all had a substantial and favorable relationship with the success of SMEs.

Conclusion

Based on empirical studies, there is a significant positive relationship between product innovation and the profit growth of manufacturing firms in the South-East region of Nigeria. This suggests that companies that introducing the hy othese teted new or improved products are likely to experience higher profitability compared to those that do not innovate their products. Product innovation can lead to increased customer satisfaction, market share, and competitive advantage, ultimately contributing to higher profits.

Similarly, there is a significant positive relationship between service innovation and the profit growth of manufacturing firms in the South-East region of Nigeria. This implies that firms that innovate their services, such as customer service processes, delivery methods, or after-sales support, are likely to achieve higher profitability. Service innovation can enhance customer loyalty, brand reputation, and overall customer experience, leading to increased revenues and profits.

Furthermore, there is a significant positive relationship between process innovation and the profit growth of manufacturing firms in the South-East region of Nigeria. This indicates that companies that innovate their production processes, supply chain management, or operational workflows are likely to see improvements in efficiency, cost savings, and productivity, resulting in higher profitability. Process innovation can also lead to better quality control, reduced waste, and faster time-to-market, all of which contribute to increased profits. In conclusion, all three dimenion of innovation—product, servicSe, and process—are significantly related to the profit growth of manufacturing firms in the South-East region of Nigeria. Embracing innovation in these areas can be a key driver of success and competitiveness for firms in the region, leading to sustainable profit growth and business growth.

Recommendations

Based on the findings the following recommendations were put forward.

- 1. Management should allocate resources to develop new products that meet the needs of the local market and are competitive in the global market the improve profit growth of manufacturing firms in the South-East region of Nigeria.
- 2. Management should develop strong relationships with suppliers to ensure a steady supply of high-quality materials and services to improve financial performance of manufacturing firms in the South-East region of Nigeria.

3. Management should implement new technologies that can improve manufacturing processes, such as automation, robotics, and data analytics to achieve financial performance financial performance

Contribution to Knowledge

The relationship between innovativeness and financial competitiveness of manufacturing firms in the South-East region of Nigeria contributes significantly to the existing knowledge in several ways: The study provides insights into the specific dynamics of the South-East region, which may have unique economic, social, and political factors influencing the relationship between innovativeness and financial competitiveness. Manufacturing is a key sector in Nigeria, and understanding how innovativeness impacts financial competitiveness can provide valuable insights for firms in the region seeking to improve their performance. Findings from the study can inform policy decisions aimed at promoting innovation and improving the financial competitiveness of manufacturing firms in the South-East region, potentially leading to economic growth and job creation. The study can offer practical implications for managers of manufacturing firms, highlighting the importance of fostering a culture of innovation and investing in innovative practices to enhance financial performance. The research contributes to the academic literature on innovation and financial competitiveness, adding to the theoretical understanding of these concepts and their interrelationship in the context of emerging economies like Nigeria.

References

- Adekola, A., Shittu, A., & Adekola, D. (2017). Analysis of working capital metrics of Nigerian non-financial service firms in relation to gross and net profit margins. *International Journal of Management Science and Business Administration*, *3*(4), 42-53.
- Adu-Gyamfi, E. (2015). The Impact of Financial Innovations on the Profit Growth of Firms in Ghana. *European Journal of Business and Management*, 7(5), 164-172.
- Akindele, J. A. & Odusina, A. O. (2015). Working capital management and firm profitability evidence from Nigerian quoted Companies. *Research Journal of Finance and Accounting*, 6(7).
- Akova, B., Ulusoy, G., Payzin, E., & Kaylan, A.R., (1998). New product development capabilities of the Turkish electronics industry. In: *Proceedings of the Fifth International Product Development Management Conference*, 863–876
- Almazari, A.A. (2014). Impact of Internal Factors on Bank Profitability: Comparative Study between Saudi Arabia and Jordan. *Journal of Applied Finance and Banking*, *4*, 1-7.
- Almeida, H., Campello, M., & Weisbach, M. S. (2014). Corporate financial and investment policies when future financing is not frictionless. *Journal of Corporate Finance*, 25, 232-250.

- Asghar, MZ, Gul, F, Hakkarainen, PS & Tasdemir, M.Z. 2(019). Giriimcilik Eğitiminin Etkisini Değerlendirmek için Giriimcilik Niyetleri Anketinin Doğrulanması. Eitim ve Bilim, 44(197).
- Assey, L. H., Su, X., & Parveen, S. (2020). Effect of working capital management on financial performance: evidence from listed firms at dare s salaam stock of exchange. *IOSR Journal of Business and Management (IOSR-JBM)*, 22(4), 01-08.\
- Baos-Caballero, S., Domínguez-Márquez, F. V., & García-Teruel, P. J. (2014). How does financial reporting quality affect corporate investment efficiency? *Applied Economics*, 46(13), 1565-1580.
- Barney, J. B. (2001). *Gaining and Sustaining Competitive Advantage*. Second edition, Prentice-Hall
- Boisjoly, R. P., Conine, T. E., & McDonald, M. B. (2020). Working capital management: *Financial and valuation impact*, 2-8.
- Bose, D., Barman, S. & Ashis K Chatterjee, A.K. (2017). *Capacity planning under postponement* strategies decision sciences institute: Effects of price and production postponement on capacity planning, 4-9.
- Bradmore, D. (1996). Competitive advantage: concepts and cases. Prentice Hall Australia.
- Castillejo, A., Barrachina, M., Llopis, A. & Samchis, J. (2013). *The role of process innovation on sme growth, spanish ministry of science and technology*, 4-8.
- Chenglin, L., Mili, W., Pengcheng, J., Shude, L., & Yongzhi, C. (2006). Features and formation mechanism of faults and potash-forming effect in the Lop Nur Salt Lake, Xinjiang, China. Acta Geologica Sinica-English Edition, 80(6), 936-943.
- Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship theory and practice*, 23(3), 47-63.
- Darroch, J., & McNaughton, R. (2002). Examining the link between knowledge management practices and types of innovation. *Journal of intellectual capital*.
- Dhole, S., Rahman, M., & Hossain, M. (2019). Financial limitations and efficient working capital management: A novel text-based measure of financial constraints. *Australian Journal of Management*, 44(3), 445-463.
- Dioha, C., Mohammed, N. A., & Okpanachi, J. (2018). Effect of firm characteristics on profitability of listed consumer goods companies in Nigeria.
- Dodgson, M., Gann, D., & Salter, A. (2013). *The management of technological innovation: Strategy and practice.* Oxford University Press.

- Drejer, I. (2004). Identifying innovation in surveys of services: a Schumpeterian perspective. *Research policy*, *33*(3), 551-562.
- Edquist, C., Hommen, L., & McKelvey, M. D. (2001). *Innovation and employment: Process* versus product innovation. Edward Elgar Publishing.
- Eljelly, A. M. (2004). Liquidity-profitability tradeoff: An empirical investigation in an emerging market. *International journal of commerce and management*.
- Gallouj, F. (2002). Innovation in the service economy: The new wealth of nations. Edward Elgar
- Gallouj, F. (2007). Innovation in services: A review of the debate and a research agenda. Journal of Evolutionary Economics, 17(5), 499-512.
- Garanina, T. A., & Belova, O. A. (2015). Liquidity, cash conversion cycle and financial performance: case of Russian companies, 2-10.
- Görg, H., & Hanley, A. (2004). Does outsourcing increase profitability?. Available at SSRN 612228
- Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*, 133(2), 662-676.
- Hagen, B., Zucchella, A., & Cerchiello, P. (2014). The effects of product and process innovations on the export performance of firms. *International Business Review*, 23(6), 1132-1143.
- Hamid, M. K., & Akhi, R. A. (2016). Liquidity and profitability trade-off in pharmaceuticals and chemicals sector of Bangladesh. *International Journal of Science and Research*, 5(9), 420-423.
- He, Y., Dong, J., & Bai, R. (2011, August). The evaluation model of financial competitiveness in telecom enterprises. In International Conference on Advances in Education and Management, 24-32). Springer, Berlin, Heidelberg.
- Hitt, M.A., Ireland, R.D., Camp, S.M. & Sexton, D.L., (2001). Guest editors' introduction to the special issue strategic entrepreneurship: 1ntrapreneurial strategies for wealth creation. *Strategic Management Journal* 22, 479–491.
- Hoque, M. A., Siekkinen, M., Khan, K. N., Xiao, Y., & Tarkoma, S. (2015). Modeling, profiling, and debugging the energy consumption of mobile devices. ACM Computing Surveys (CSUR), 48(3), 1-40.
- Hossain, M., & Kabir, M. (2015). Comparative liquidity study of leading pharmaceutical companies using basic financial statement analysis approaches. *Journal of Pharmaceutical Finance, Economics and Policy*, 24(2), 67-82.

- Islam, S. R., Zeng, M., Dobre, O. A., & Kwak, K. S. (2018). Resource allocation for downlink NOMA systems: Key techniques and open issues. *IEEE Wireless Communications*, 25(2), 40-47
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329.
- Khan, S. A. R., Yu, Z., Belhadi, A., & Mardani, A. (2020). Investigating the effects of renewable energy on international trade and environmental quality. *Journal of Environmental management*, 272, 111089.
- Kokodey, T. A., Lomachenko, T. I., Maidanevych, Y. P., Nekhaychuk, D. V., & Romanova, Y. A. (2020). Effect of world economy globalization and supply chain upon socio-economic processes at the national level. *Int. J. Supply Chain Manag*, 9, 822-828.
- Kon, A. (2004). The paradox of technology: What's driving innovation in service industries? *Technology in Society*, 26(4), 493-507.
- Li, H., & Atuagene-Gima, K. (2020). Product innovation strategy and the performance of new technology ventures in China. *Academy of Management Journal*, 44(6), 1123-1134.
- Li, H., & Atuagene-Gima, K., (2001). Product innovation strategy and the performance of new technology ventures in China. *Academy of Management Journal*, 44(6), 1123-1134
- Masud, H., Ahmad, M.S., Farzand, J., & Jamil, A. (2016). Relationship between parenting styles and academic performance of adolescents: mediating role of self-efficacy. *Asia Pacific Education Review*, 7(1), 10.1007/s12564-015-9413-6.
- Mensah, T. B. & Acquah, I. S. K. (2015). The effect of innovation types on the performance of small and medium-sized Enterprises in the Sekondi-Takoradi Metropolis
- Nduka, C., & Nnadi, C. (2019). Impact of service innovation on the performance of manufacturing firms in Nigeria. *International Journal of Innovation Management*, 7(1), 32-45.
- Neely, A., & Hii, J. (1998). Innovation and business performance: a literature review. *The Judge Institute of Management Studies, University of Cambridge*, 0-65.\
- OECD Oslo Manual (2005). The Measurement of scientific and technological activities oslo manual guidelines for collecting and interpreting innovation data, OECD and EUROSTAT, Paris, France, 3rd edition,.
- Okeke, R. I., & Ezejiofor, R. (2018). The impact of product innovation on the performance of manufacturing firms in Nigeria. *Journal of Innovation Management*, 6(2), 45-58.
- Ojo, A. (2022). The Effects of Process, Product, and Technology Innovation on Small and Medium-Sized Business Performance: A Case Study of Ibadan, Nigeria. *Journal of Business Innovation*, 8(1), 45-62.

IIARD – International Institute of Academic Research and Development

- Pervan, M., Pervan, I., & Curak, M. (2017). The influence of age on firm performance: evidence from the Croatian food industry. *Journal of Eastern Europe Research in Business and Economics*, (1), 1-10
- Porter, M. E. (2008). *Competitive advantage: Creating and sustaining superior performance*. Simon and Schuster.
- Raheman, A., & Nasr, M. (2007). Working capital management and profitability--case of Pakistani firms. *International Review of Business Research Papers*, 3(1), 279-300.
- Rahman, M. M., & Banna, H. (2016). Corporate social responsibility reporting and financial performance: Evidence from Bangladesh. *Journal of Business Ethics*, 134(4), 479-492.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761-787.
- Ren, S., Wu, Y., Liu, S., Zhou, M., & Ma, S. (2019). Explicit cross-lingual pre-training for unsupervised machine translation. *arXiv preprint arXiv:1909.00180*.
- Robertson, P. L., & Yu, T. F. (2001). Firm strategy, innovation and consumer demand: a market process approach. *Managerial and Decision Economics*, 22(4-5), 183-199.
- Rosli, M. M., & Sidek, S. (2013). The impact of innovation on the performance of small and medium manufacturing enterprises:: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprises*, 1, 3-8.
- Schumpeter, J.A. (1934). The theory of economic development: an inquiry into profits, capital, credit, interest and the business cycle, *Harvard Economic Studies*, 46, 6-9.
- Sharif, A. (2018). A bibliometric analysis of business and management research output in Africa. *South African Journal of Business Management, 49*(1), 1-13.
- Sharif, A. (2018). Inconsistent patterns among examined variables. *Journal of Business Research*, 40(2), 210-225.
- Sharma, P., Kumar, A., & Mehrotra, D. (2016). Financial competitiveness and firm performance: Evidence from the manufacturing sector. *Journal of Business Economics and Finance*, 5(2), 78-92.
- Siddik, M. N. A., Sun, G., Kabiraj, S., Shanmugan, J., & Yanjuan, C. (2016). Impacts of e-banking on performance of banks in a developing economy: empirical evidence from Bangladesh. *Journal of Business Economics and Management*, 17(6), 1066-1080.
- Singh, I. L., Molloy, R., & Parasuraman, R. (1993). Individual differences in monitoring failures of automation. *The Journal of general psychology*, 120(3), 357-373.

- Singh, T., Sharma, S., & Nagesh, S. (2017). Socio-economic status scales updated for 2017. Int J Res Med Sci, 5(7), 3264-7.
- Sultana, N., Hussain, M., & Yousaf, S. (2019). Ten-year examination of a subgroup of nonfinancial enterprises in Pakistan. *Journal of Business Studies Quarterly*, 11(3), 1-18.
- Sundbo, J., & Gallouj, F. (1998). Innovation in services. Research Policy, 26(4-5), 537-556.
- Tasfiq, M. S., & Chowdhury, S. R. (2015). Consequences of Working Capital Management on the Firm's Profit Performance: A Study on Pharmaceutical Companies in Bangladesh. *Journal of Business*, 36(1).
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Wan, D., Ong, C. H. & Lee, F. (2005). *Determinants of firm innovation in singapore*, technovation, 25(3), 261-8.
- Wang, C., & Xiaoming, Y. (2005). Financial competitiveness: A conceptual framework and empirical assessment. *Journal of Financial Management*, 32(4), 23-45.
- Wei, L. & Shao, L. (2013). evAluation on the financial competitiveness of chinese listed real estate companies based on entropy method, 12-18.
- Womack, J. E., Cruz, J. R., Rigdon, H. K., & Hoover, G. M. (1990). Encoding techniques for multiple source point seismic data acquisition. *Geophysics*, 55(10), 1389-1396.
- Yesmine, S., & Bhuiyah, M. S. U. (2015). Determinants of banks' financial performance: A comparative study between nationalized and local private commercial banks of Bangladesh. *International Journal of Business and Management Invention*, 4(9), 33-39.
- Young, P. (2015). The use of the questionnaire as an instrument for data collection. *Journal of Research Methods*, 25(3), 123-135.