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STRATEGIC PRODUCT RESPONSES, STRUCTURAL CAPITAL AND THE GROWTH OF EXPORT MANUFACTURING SMALL AND MEDIUM SIZED ENTERPRISES IN NAIROBI COUNTY

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ABSTRACT

Firm growth is related very closely to firm survival. Specifically, firm growth is positively correlated with the likelihood of survival. Hence firms that experience continuous growth will have a higher probability of surviving in the market. Stiff competition, resource constraints and organizational limitations hinder SMEs growth. The main objective of the study was to investigate the moderating effect of structural capital on the relationship between strategic product responses and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi county. The specific objectives of the study were to establish strategic product design, to determine strategic product development, to assess strategic product differentiation and to evaluate strategic product innovation on the growth of export manufacturing SMEs in Nairobi county and to examine moderating effect of structural capital on the relationship between strategic product responses and the growth of export manufacturing SMEs in Nairobi county. This study used the discrete choice theory, diffusion of innovation theory and chasm theory of growth (Anchor Theory). The study found out that product development response, product differentiation response, product innovation response and structural capital positively and significantly affect the growth of export manufacturing SMEs in Nairobi County. Further, the study found out that structural capital positively and significantly moderates the relationship between product innovation response and growth of export manufacturing SMEs in Nairobi County. However, structural capital positively but insignificantly moderates the relationship between product development response, product design response, product differentiation response and growth of export manufacturing SMEs in Nairobi county.

Key words: *Product Development Response, Product Differentiation Response, Product Innovation Response, SMEs Growth, Structural Capital*

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INTRODUCTION

Firm growth refers to the gradual increase in the scale or magnitude of a business or firm. Common indicators of corporate growth include the expansion of assets or capital invested, revenue generation, profitability, and workforce size. Certain companies opt to remain small, either due to deliberate decisions or external factors such as being a local "corner shop." Conversely, other companies want to grow and become enormous, either on a national or international scale. Growth can be characterized as the process of generating revenue, adding value, and expanding the volume of the firm (Andrews, Boyne, Law& Walker, 2009). The subject of firm expansion has been extensively examined in economic literature. The growth of a firm is directly linked to the survival of the firm. More precisely, there is a significant correlation between the expansion of a corporation and its chances of survival. Therefore, companies that consistently achieve growth are more likely to endure in the market. Researchers have extensively studied the expansion of enterprises. Firm growth can be observed across various stages of development, generally referred to as life cycles. While authors may employ various terminology, the sequence of actions that any enterprise goes through is generally consistent.

Growth-oriented businesses are a substantial contributor to the economic benefit of any nation; nevertheless, the concept of growth can mean very different things to various business owners. Companies are collections of internal and external resources, which work together to give an organization a competitive advantage in the marketplace. An organization's total size is not subject to any kind of upper bound over the course of time, but its rate of expansion certainly is. The rate at which an experienced managerial staff can design and carry out this plan is directly proportional to the rate at which a business will grow. The exterior environment of a business is an image in the imagination of the entrepreneur who founded the business. The actions of an enterprise are directed by productive opportunities, which are in reality a dynamic interaction between the organization's internal environment and the environment it interacts with externally. Growth is a process that takes place naturally and normally, and it will take place whenever the conditions are favorable. The scale of the organization is mostly irrelevant to the expansion process.

Greiner identified that firms pass through five distinct stages of development during their lifetimes. creativity, direction, delegation, coordination, and collaboration are some of the most important skills to have. In each phase, there is a pleasant period of progress that is followed by a crisis that requires managerial attention. He suggests that a company will experience evolutionary and revolutionary crises over its lifetime. These crises can be resolved by instituting new structures and programs that will assist personnel in reviving themselves, which will bring about the desired results. The phenomena of evolution and revolution described by Greiner became the foundation for a number of research on the life cycle of businesses.

According to Tebrani (2016), strategic response have been found to be effective in assisting an organization adapt to changes in the surrounding environment. These kinds of responses are alterations that come about as a natural consequence to the objectives and goals of an organization. Therefore, in order for an organization to grow, it must experience transition and adjust to that change.

According to Pearce & Robinson (2015), strategic responses are a series of acts and interventions that result in the development and execution of plans aimed to accomplish the objectives of an organization. These writers emphasize additionally that in order to effectively fulfill the objectives of the business, these plans and activities need to be strategically adapted to the complexities and dynamism of an environment that is constantly changing. Ketchen & Palmer (2017) made the observation that businesses are generally open

systems that have constant interactions and interfaces with their external environments.

Strategic responses simultaneously increase the value of organizations to the environment they operate in and guarantee their overall survival (Mugambi, 2003). The pursuit of a favorable competitive positioning for a product within an industry is a strategic response, which aims to maintain market relevance and outperform competitors. Its objective is to establish a sustainable and profitable position in resistance to the forces that dictate industry competition. Pearce & Robinson (2005) postulate that a firm can establish and maintain its position and relationship with the environment, thereby safeguarding against unforeseen challenges arising from environmental change, by employing strategic responses. Johnson & Scholes (2002) assert that the corporate level strategy addresses the company's fundamental goals and purpose, as well as guarantees the fulfilment of stakeholders' expectations. It facilitates the organization in determining which business lines to prioritize via portfolio management, divestiture, and diversification integration. The business level strategy establishes and outlines the manner in which the organization contends within its industry and plans to accomplish its objectives in the long run.

Structural capital refers to the foundational elements that enable organizations to exchange their human resources for financial gain and to facilitate the development and application of their expertise (Bayraktaroglu et al. 2019). According to Tseng & Goo (2005), effective structural capital can be built by means of organizational processes, information systems, organizational culture, internal organizational structure, or administrative systems. In addition, it is simply structural, therefore it belongs to the organization and can be replicated or distributed to others. Not only does the creation of structural capital result in the development of systems for the acquisition of knowledge, but it also results in the provision of a mechanism for the collection and integration of that gained knowledge (Grant, 1996). According to Bontis (1998), efficient structural capital has the ability of enabling a favorable environment that encourages the dissemination of knowledge, the growth of collective knowledge, the reduction of lead times, and the development of productive persons. It is comprised of a company's complete non-human knowledge storehouse, which includes all of the company's policies, procedures, routines, and databases, as well as any relevant competitive formulas. According to Joshi et al. (2010), which was cited in Khalique et al. (2011), Structural Capital is a body of knowledge that was created by the firm and that is an integral component of the firm. On the other hand, Hussinki et al. (2019) stated that it allows the environment that encourages individuals' investment in their human capital for the development and utilizing of knowledge. According to Tjahjadi et al. (2019), Structural Capital is comprised of the organizational system in addition to the structure. Sharabati, (2020) highlighted that the organization will find it difficult to make full use of its intellectual capital, while Ramezan (2011) argued that strong Structural Capital has the ability to actualize the complete utilization of intellectual capital. However, if the organization has inefficient Structural Capital, it will be challenging to accomplish the complete utilization of its intellectual capital.

Growth of SMEs in Kenya

Small and Medium Enterprises (SMEs) can be characterized as firms that have an employee base of five to two hundred and fifty employees and are fundamentally geared to improve on their asset base. This is in contrast to the vast majority of microenterprises, which are small and lack the space and capacity for further growth. According to Ayyagari, Demirguc–Kunt, & Maksimovic (2011), small and medium-sized enterprises (SMEs) are intended to expand and search for between two million and two hundred million shillings in investment capital.Small and medium-sized businesses (SMEs) are extremely important to Kenya's overall economic development and job

market. SMEs were responsible for the creation of eighty percent of new jobs in 2014. In Kenya, the term "small and medium enterprises" (SMEs) can also refer to "micro and small enterprises" (MSEs) or "micro, small and medium enterprises" (MSMEs). Micro enterprises are defined by the Micro and Small Enterprise Act of 2012 as businesses that have less than ten employees and a maximum annual revenue of 500,000 Kenyan Shillings. Small businesses have an annual revenue of between 500,000 and 5 million Kenyan Shillings and employ 10 to 49 people. The act does not apply to medium firms, which are defined as businesses that have a turnover of between KES 5 million and KES 800 million and employ between 50 and 250 workers. Medium enterprises have been claimed to consist of businesses like these.

The majority of small and medium-sized enterprises (SMEs) belong to the informal sector known as jua kali, which literally translates to "hot sun" or "fierce sun." Originally, "jua kali" referred to persons who worked outside in the open air or beneath the blazing sun. By extension, the phrase now refers to those who are self-employed or who work in industries that are on a smaller scale. According to some sources, the term "jua kali" designates any and all businesses across all industries that have between 1 and 49 employees. It would therefore appear that jua kali might refer to MSMEs in either the formal or informal sector. Kenya does not maintain a complete database of small and medium-sized enterprises (SMEs). It has been stated that the number of official SMEs is more in the area of 250,000, despite the fact that estimates place the number of micro, small, and medium-sized firms in Kenya at roughly 7.5 million, with a contribution of approximately 44% to the country's GDP in 2008. According to a news report from CNBC in 2014, the contribution of small and medium-sized enterprises (SMEs) to Kenya's GDP is approximately 45% (Philip, Jaffee, & Okello, 2004).

Statement of the Problem

The contribution of Kenya's small and medium-sized businesses (SMEs) to the country's overall economic growth has been significant (Wu & Jia (2018). The expansion of small and medium-sized businesses is one of the methods that the government of Kenya intends to pursue in order to realize vision 2030. The export of Kenyan goods to many markets in Africa, the Middle East, Asia, the United States of America, and Europe results in the generation of major employment possibilities and the generation of millions of dollars in foreign currency. The severe competition, on the other hand, has caused small and medium-sized exporting businesses to fall behind, which hinders their capacity for achieving sustainable growth. According to Pearce & Robinson (2015), strategic responses are a series of actions and interventions that culminate in the formation and implementation of plans aimed to accomplish the objectives of an organization. The term "structural capital" refers to the entirety of a company's non-human knowledge storehouse, which includes routines, databases, policies, and processes in addition to any and all competitive equations. Kiiru & Wairimu, (2022), discovered that the majority of businesses utilized product development strategy to a considerable amount by identifying new markets for their new existing products. Odongo & Odhiambo (2016) noted that product development strategy is one of the most prominent methods of expansion utilized by small and medium businesses in Kenya. Kavale, Mugambi, & Namusonge (2017) found out that grand strategy and differentiation strategy, among others, had a beneficial impact on the corporate growth of microfinance institutions in Kenya. Previous studies have fallen short on strategic product responses, structural capital and the growth of export manufacturing small and medium sized firms in Kenya.

Objectives of Study

The general objective of the study was to investigate the moderating effect of structural capital on the relationship between strategic product responses and the growth of export manufacturing Small and Medium sized Enterprises

(SMEs) in Nairobi County. The specific objectives were;

- To establish the effect of product design response on growth of export manufacturing small and medium enterprises in Nairobi County.
- To determine the effect of product development response on growth of export manufacturing small and medium enterprises in Nairobi County.
- To assess the effect of product differentiation response on growth of export manufacturing small and medium enterprises in Nairobi County.
- To evaluate the effect of product innovation response on growth of export manufacturing small and medium enterprises in Nairobi County.
- To examine the moderating effect of structural capital on the relationship between product design response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.
- To examine the moderating effect of structural capital on the relationship between product development response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.
- To examine the moderating effect of structural capital on the relationship between product differentiation response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.
- To examine the moderating effect of structural capital on the relationship between product innovation response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.

The study was guided by the following research hypotheses

- **Ho_1:** Product design response has no significant effect on the growth of export manufacturing small and medium enterprises in Nairobi County.
- **Ho_2:** Product development response has no significant effect on the growth of export manufacturing small and medium enterprises in Nairobi County.
- **Ho_3:** Product differentiation response has no significant effect on the growth of export manufacturing small and medium enterprises in Nairobi County.
- **Ho_4:** Product innovation response has no significant effect on the growth of export manufacturing small and medium enterprises in Nairobi County.
- **Ho_5:** Structural capital has no significant moderating effect on the relationship between product design response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.
- **Ho_6:** Structural capital has no significant moderating effect on the relationship between product development response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.
- **Ho_7:** Structural capital has no significant moderating effect on the relationship between product differentiation response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.
- **Ho_8:** Structural capital has no significant moderating effect on the relationship between product innovation response and the growth of export manufacturing Small and Medium sized Enterprises (SMEs) in Nairobi County.

LITERATURE REVIEW

Theoretical Framework

This part covered the discrete choice theory of product differentiation, the diffusion of innovation theory and the chasm theory of growth.

Discrete Choice Theory of Product Differentiation

It is essential to have a solid understanding of product differentiation if one is interested in comprehending the workings of contemporary market economies and the fact that differentiated markets can be analyzed utilizing discrete choice models of consumer behavior. It provides a valuable synthesis of prior, sometimes extremely technical work in both differentiated markets and discrete choice models, and it extends this work to establish a cohesive theoretical framework for research in imperfect competition. These models have the benefit of building demand from a clearly defined utility for the qualities of items, which is one of the models' many advantages. The fact that they often force each customer to consider purchasing no more than one unit of a good is a regrettable constraint on consumers' ability to exercise discretion. This hypothesis is significant to this investigation because it elucidates the part that product differentiation plays in the expansion of a company (Allen, Chandrasekaran, & Basuroy, 2018).

Diffusion of Innovation Theory

The Diffusion of Innovation (DOI) Theory is one of the oldest theories in the field of social science. It was first proposed by E.M. Rogers. It describes how, over the course of time, a concept or product builds momentum and diffuses (or spreads) within a particular population or social system. The end outcome of this process of diffusion is that individuals will eventually adopt a new idea, behavior, or product as being a part of the social system. When a person makes a change in their behavior from what they had been doing in the past, such as when they buy or utilize a new product, this is considered adoption. The idea, behavior, or product in question must initially strike the individual as novel or pioneering in order for them to adopt it. Diffusion is able to take place due to the fact that this makes it possible. The process by which certain people are more likely to adopt a new idea, behavior, or product (innovation) than others is called adoption. Innovation can refer to a new concept, behavior, or product. In a social system, this phenomenon does not take place simultaneously. The traits of people who adopt a new technology early on are distinct from those of those who adopt a new technology later on (Hager, 2006). This theory is significant to this investigation because it offers an explanation of the part that product innovation plays in the expansion of a company.

Chasm Theory of Growth

According to the life cycle idea of a company, Chaston (2010) proposed that a new chasm needs to be crossed before moving on to the subsequent stage of growth. There are five distinct categories of chasms, which are as follows: launch capacity, expansion, organizational formalization, succession, and long-term growth. In order for leaders to successfully cross each chasm, they will need to acquire new talents and learn to prioritize managerial tasks inside the firm. In addition, it's possible that certain leaders will require more time to proceed from one chasm to the next, while others will easily get through the process. It's possible that not being able to transcend chasm 1 is due to a lack of financial backing or a non-viable way to access new technology. In order to get over Chasm 2, the leader needs to be able to boost sales and create more demand for their product or service. It will be necessary to increase capacity in order to go across chasm 3. It is necessary to satisfy the demand with the supply that is appropriate. Chasm 4 will be more difficult to pass if an official organization structure and professional manpower are not put into place. A thriving company will inevitably require the services of an experienced successor. It is possible for the entrepreneur to choose to either promote from inside the company or bring in a new top executive from outside the organization. The failure of the company to bridge chasm 5 may be caused by an inefficient replacement for the company's founder. On the other hand, if these concerns are adequately addressed, the company will experience expansion at the most senior levels (Levie & Lichtenstein,

2010). This theory's significance lies in the fact that it offers an interpretation of the expansion of SMEs.

Empirical Review

This part reviewed related literature on concepts of strategic product design, strategic product development, strategic product differentiation, strategic product innovation and SMEs growth.

Product Design Response and SMEs Growth

A competitive advantage can be gained by an organization in a number of different ways. One of these ways is through the development of new designs for products that, in comparison to those already on the market, are either quicker to bring to market, better able to fulfil the requirements of customers, or simpler to manufacture, use, and repair. The goal of strategic product design is to establish a connection between design thought and the value created for businesses. It all comes down to making educated selections that will lead to a finished product that is a success — one that is both profitable and appealing to the target audience. A successful product design strategy places the user's needs front and centre at all times, and it also needs to do the following: Offer insights that are supported by research in order to aid in the success of the product, direct the design team in the direction of the appropriate solutions, and incorporate the input from users, other disciplines, and departments into the design process. A company can more easily realize its long-term product goal if it has solid product design strategies in place. They are the means by which one determines what to build and the manner in which one should construct it. It is essential for commercial banks to have a distinct product strategy from the very beginning since it will serve as the foundation for all of the decisions that are made regarding the product. It is quite easy to get caught up in thinking about the short term and end up designing features that don't help the commercial banks accomplish their long-term goals if there isn't a strategy in place to prevent this. Increasing client happiness and sales are two of the primary outcomes that may be anticipated from the implementation of a product design strategy, in addition to providing the company with a competitive advantage in the marketplace (Johnson & Scholes, 2002).

Product Development Response and SMEs Growth

Product development is the process of introducing a new good or service that is significantly improved in terms of its characteristics or intended uses. This can include significant improvements in terms of technical specifications, components and materials, incorporated software, user friendliness, or other functional characteristics. It is possible to classify a product development as either radical or gradual based on the amount of change that is linked with it. The actions of an organization, business, or society can undergo radical transformations as a direct result of radical advancements, which also constitute distinct breaks from the norms that have previously been followed. On the other hand, incremental developments primarily focus on enhancing the capabilities that an organization already possesses, therefore they only require very minor adjustments to be made to its already established procedures. Both the times and the markets have evolved. Karaba (2020) found that firms in Kenya rated product development as a factor 81.2% of the time, which indicates that product development contributes to the attainment of a competitive advantage in the business industry in Kenya. According to Kotler (2000), product development is the process by which a company maintains its presence in its existing markets while simultaneously developing new products for those markets. The idea that new goods are beneficial to the financial health of sponsoring firms is one that has received a lot of support from academics over the years.

Product Differentiation Response and SMEs Growth

Product differentiation entails developing a product that is regarded as distinct from others, thereby increasing its appeal to a specific target market. Product differentiation strategy is crucial to the achievement of any company in developing or

modifying a product to make it appear appealing and distinct from its rivals (Yulianti & Nasution, 2020). Product differentiation elucidates the distinctions between the offerings of an organization's products or services and those of its competitors with the intention of demonstrating the distinctive qualities of the firm's product and generating a perception of value that enhances the firm's performance (Allen, Chandrasekaran, & Basuroy, 2018). In recent years, the financial industry has experienced an unparalleled degree of competition, both from within and outside the organisation (Chen, Nazir, Hashmi, & Shaikh, 2019). Product differentiation is a critical factor in fostering firm expansion and attaining a competitive edge. Ekeagbara, Ogunnaike, Olaleke, Ibidunni, & Kehinde (2019) assert that competitive strategies are crucial for organisations as they bring upon them an advantage against rival firms. When a company effectively executes the product differentiation strategy, it delivers distinct or exceptional value to its customers via product quality, features, or post-purchase support and service. In the past thirty years, research has demonstrated that differentiation occurs when a company provides a service or product that consumers perceive as distinct (Barney, 2006).

Product Innovation Response and SMEs Growth

Innovative organisations never experience complacency in the face of success, as stated by Futterer, Schmidt, & Heidenreich (2018). Product innovation plays a pivotal role in growth strategies as it enables organisations to penetrate new markets, expand their current market presence, and gain a competitive advantage. Strategic innovation is recognised as a critical element in the operations of prosperous organisations (Kasemsap, 2017). According to Olsen & Hkansson (2017), a creative team oversees innovative businesses. Innovative managers understand the value of an inventive workforce and will invest in their development without hesitation. Employees are encouraged to generate innovative ideas that can optimise work processes and increase productivity through the use of effective innovation training programmes. In the contemporary landscape characterised by intense competition, every organisation strives to surpass its rivals and acquire new customers. Knowledgeable individuals serve as a catalyst for the development of creative ideas and advancements. The process of innovation creation is complicated and necessitates simultaneous manifestation and operation of multidimensional internal transformations, including but not limited to resource capability, organisation innovation, and new product development (Hana, 2020).

Structural Capital as a Moderator

Structural Capital establishes the framework for the organisation by supplying the necessary instruments and structure to safeguard, package, and disseminate knowledge among every stakeholder in the value chain (Manzaneque, Ramírez, & Diéguez-Soto, 2017; Bontis, 2001). The objective is to explain the crucial function that Structural Capital serves as an antecedent or moderator in the relationship among strategic product responses and the growth of SMEs. Structural capital comprises an amalgamation of elements such as organisational policies, information systems, competitive intelligence, patents, formulations, and products and systems that have been developed over the course of an organization's existence (Archer-Brown & Kietzmann, 2018). A non-commutable resource that is challenging, if not impossible, to replicate, it significantly contributes to the establishment and maintenance of the firm's competitive advantage (AlQershi, Abas & Mokhtar, 2019).

Conceptual Framework

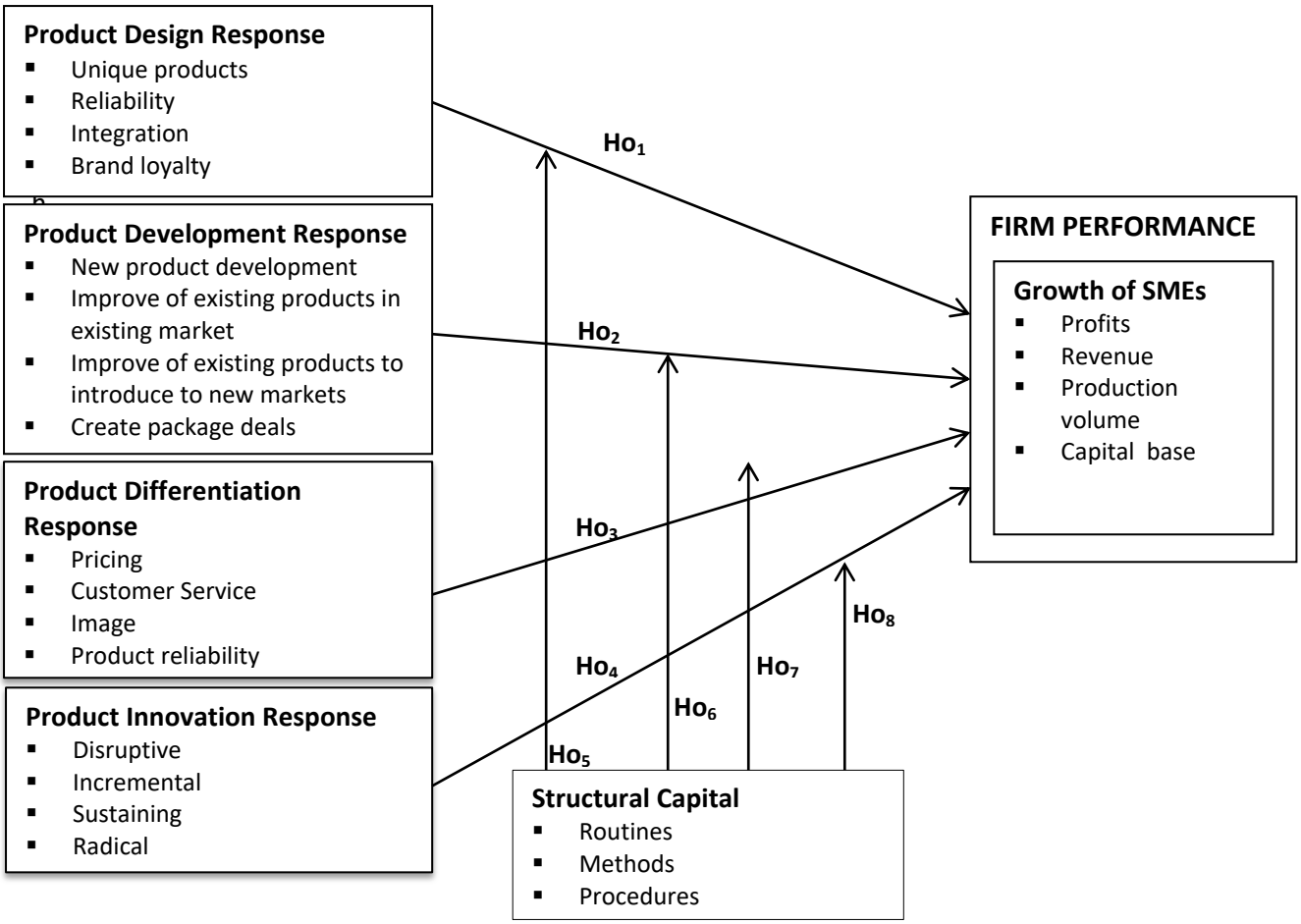

Figure 1: Conceptual Framework

Source: Researcher (2023)

METHODOLOGY

This study employed explanatory research design. The research was conducted in Nairobi County, and it covered all of the micro, small, and medium businesses located in Nairobi County. As of December 2021, the county of Nairobi. This study targeted 369 top level managers of export manufacturing small and medium sized enterprises spread across Nairobi County. The SMEs of the various sectors targeted comprises of; Clothing/Accessories, Food Manufacturers, Furniture Masons, JuaKali Artifacts and Steel Products in Nairobi County. The top level executives of export manufacturing businesses in Nairobi County served as the study's sampling frame and the Slovin's formula was used to determine the sample size of 191 SMEs.

Table 1: Target Population and Sample Size

Category	Target Population	Sample Size
Clothing/Accessories	172	89
Food Manufacturers	31	16
Furniture Masons	48	25
Jua Kali Artifacts	73	38
Steel Products	45	23
Total	**369**	**191**

Source: (Author, 2023)

Mixed sampling methods was employed; stratified random sampling method was used to stratify the sample size into five strata and random sampling method was useful because it gave each item an equal chance of being picked. The unit of analysis was small and medium-sized export manufacturing companies while the unit of observation was the top level managers of export manufacturing SMEs. Primary data was collected using a structured questionnaire which were dropped by research assistants and picked later for analysis. Data analysis was conducted using descriptive and inferential statistics. Correlation and moderated multiple linear regression model was employed as shown below;

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5M + B_6M * X_1 + B_7\,M * X_2 + B_8\,M * X_3 + B_9\,M * X_4 + e \ldots\ldots\ldots\ldots\ldots\ldots$$

Where:

Y = Growth of SMEs

B_0 = Constant Term

B_1, B_2, B_3, B_4, B_5, B_6, B_7, B_8 and B_9= Regression Coefficient of the Predictor Variables

X_1 = Product Design Response

X_2 = Product Development Response

X_3 = Product Differentiation Response

X_4 = Product Innovation Response

M = Structural Capital (Moderating Variable)

e = Error Term.

Data Analysis and Presentation

Validity Test

Exploratory Factor Analysis (EFA) is one technique to determine the structure of data set. The data from the export manufacturing SMEs was subjected to an EFA phase to assess the structure of the data. The KMO and the bartlet test showed the data was suitable for FA. The KMO was greater than 0.8 and the Bartlett's Test of Sphericity was significant ($p<0.05$) an indication that the data set is suitable to be subjected to FA. This further suggests that data is adequate to separate out into distinct structures. Because of this necessary conclusion, factor analysis was carried out. The results were reported in table 2 below.

Table 2: KMO and Bartlett's Test Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.858
Bartlett's Test of Sphericity	Approx. Chi-Square	2075.555
	Df	276
	Sig.	.000

Source: Research Data (2023)

Reliability Test

The results of doing the Cronbach test on each individual construct are shown were all above 0.7, which indicates that they are reliable.

Table 3: Cronbach Alpha Test of internal consistency

Scale	Number of items	Alpha	Consistency	
Product Design	4		.773	Reliable
product Development	4		.701	Reliable
Product Innovation	4		.814	Reliable
product Differentiation	4		.769	Reliable
Structural Capital	4		.837	Reliable
SME Growth	4		.756	Reliable

Source: Research Data (2023)

Descriptive Results

This section reported on the descriptive results of product design response, product development response, product differentiation response, product innovation response, structural capital and SME growth measured on a five scale.

Table 4 Descriptive Statistics Results

	Mean	Std. Deviation
Product Design Response	4.2525	.739
Product Development Response	3.9175	.799
Product Differentiation Response	3.815	.733
Product Innovation Response	4.36	.8.45
Structural Capital	4.11	.870
Growth of Export Manufacturing SMEs	3.95	.8.625

Source: Research Data (2023)

The descriptive results above showed that the respondents agreed that product design response, product development response, product differentiation strategy, product innovation response and structural capital to a great extend affected growth of export manufacturing SMES in Nairobi county.

Correlation Analysis

Table 5: Correlation Results

		Product Design	Product Development	Product Differentiation	Product Innovation	Structural Capital	SME Growth
Product Design	Coefficient	1					
	Sig.						
Product Development	Coefficient	.543**	1				
	Sig.	.000					
Product Differentiation	Coefficient	.477**	.426**	1			
	Sig.	.000	.000				
Product Innovation	Coefficient	.307**	.357**	.508**	1		
	Sig.	.000	.000	.000			
Structural Capital	Coefficient	.470**	.383**	.510**	.587**	1	
	Sig.	.000	.000	.000	.000	.276**	
SME Growth	Coefficient	.476**	.383**	.275**	.277**	.000	1
	Sig.	.000	.000	.000	.000		

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

b. Listwise N=163

Source: Research Data (2023)

It is seen that product design (*r*=.476, p .000), product development (*r*=.383, p= .000), product differentiation (*r*=.275, p=.000) product innovation (*r*=.277, p=.000) and structural capital (*r*=.276, p=.000) are positively and significantly correlated with growth of export manufacturing SMEs in Nairobi County. Increase in effectiveness in product design, product development, product differentiation, product innovation and structural capital will result in increase in growth.

Moderated Multiple Regression Analysis Results

Table 6: ANOVA

1	Regression	20.060	5	4.012	13.527	.000[b]
	Residual	46.565	157	.297		
	Total	66.626	162			
2	Regression	24.205	9	2.689	9.700	.000[c]
	Residual	42.421	153	.277		
	Total	66.626	162			

Source: Research Data (2023)

Based on the findings, product design, product development, product differentiation, and product innovation are all strong growth predictors. The F statistic turned in at 13.527, which lends validity to this assertion. Additionally, the reported p-value was 0.000, which is lower than the traditionally accepted significance level of 0.05. In model 2 (moderated), a significant F ration was obtained (F=9.700, p=.000). The change statistics shows that they are significant indicating that significant moderation was evident. ΔR^2=.062, ΔF=3.737, p=.006

Table 7: Regression Coefficient Results

		Unstandardized Coefficients		Standardized Coefficients			Hypotheses
Model		B	Std. Error	Beta	t	Sig.	Test
1	(Constant)	.509	.135		3.763	.000	
	product design	.496	.060	.560	8.202	.000	Reject Ho1
	product development	.559	.068	.565	8.248	.000	Reject Ho2
	product differentiation	.388	.068	.442	5.683	.000	Reject Ho3
	Product Innovation	.480	.086	.426	5.579	.000	Reject Ho4
	Structural capital	.248	.060	.560	4.101	.000	Reject Ho5
2	(Constant)	.399	.178		2.233	.027	
	product design	.272	.084	.248	3.249	.001	
	product development	.201	.062	.288	3.214	.002	
	product differentiation	-.088	.070	-.112	-1.255	.212	
	Product Innovation	.083	.065	.108	1.271	.206	
	Pdt design S.Capital	.123	.064	.149	1.928	.056	Fail to reject Ho6
	Product_dev. X Structural Capital	.052	.091	-.042	-.576	.566	Fail to reject Ho7
	P. differentiation X S Capital	.126	.081	.131	1.559	.121	Fail to reject Ho8
	Innovation X S Capital	.272	.084	.248	3.249	.001	Reject Ho9

Based on the study results, the derived models were;

Model 1; GROWTH = .509+ .560Product design response+ .565Product development response+ .442product differentiation response+ .426product innovation response +.560 structural capital

Model 2; GROWTH = 0.509+ .149Product design response -.042Product development response+ .131product differentiation response+ .248product innovation response

The results show product design response (β=.560, p=.000), product development response (β=.565, p=.000), product differentiation response (β=.442 p=.000), product innovation response (β=.426. p=.000) and structural capital (β=.560. p=.000) positively and significantly affect the growth of export manufacturing SMEs in Nairobi county. This implies that all the strategic responses positively and significantly affects growth of export manufacturing SMEs. Thus all the null hypotheses

(Ho1, Ho2, Ho3 and Ho4) were rejected. On the moderation results, product design response X structural capital (β=.149, p=.056), product development response X structural -capital (β=.042, p=.556), product differentiation response X structural -capital (β=.131, p=.121) showed that structural capital positively but insignificantly moderated the relationship between strategic product responses and growth of export manufacturing SMEs in Nairobi county, hence failed to reject Ho5, Ho6, and Ho7. On product innovation response X structural-capital (β=.248. p=.001), results indicated that structural capital positively and significantly moderated the relationship between innovation product responses and growth of export manufacturing SMEs in Nairobi county, hence reject Ho8.

CONCLUSIONS

- Product design response has a positive and significant effect on growth of export manufacturing SMEs in Nairobi County.
- Product development response has a positive and significant effect on growth of export manufacturing SMEs in Nairobi County.
- Product differentiation response has a positive and significant effect on growth of export manufacturing SMEs in Nairobi County.
- Product innovation response has a positive and significant effect on growth of export manufacturing SMEs in Nairobi County.
- Structural capital positively and significantly moderates the relationship between product innovation response and growth of export manufacturing SMEs in Nairobi County. However, structural capital positively but insignificantly moderates the relationship between product development response, product design response, product differentiation response and growth of export manufacturing SMEs in Nairobi county.

RECOMMENDATIONS

The following managerial recommendations were made;

- Managers of the export manufacturing SMEs in Nairobi County should work towards strengthening product design response by creation of unique and reliable products as it will increase growth**.**
- Managers of the export manufacturing SMEs in Nairobi County should work towards strengthening product development response by development of new products, improving of existing products and creation of package deals as it will increase growth.
- Managers of the export manufacturing SMEs in Nairobi County should work towards strengthening product differentiation response by offering quality customer service, build image and ensure product reliability as it will increase growth.
- Managers of the export manufacturing SMEs in Nairobi County should work towards strengthening product innovation response by transformation of expensive and sophisticated products into simpler and affordable one that can be accessible to a broader population as it will increase growth.
- Managers of the export manufacturing SMEs in Nairobi county should strengthen their structural capital as it moderates the strategic product responses relationship with the growth of the SMEs thus expect a growth on them.

The following policy recommendations were made;

- The government, in collaboration with export manufacturing SMEs stakeholders should enact polices that support the sector especially on taxes and licenses that increases unnecessarily the cost of doing business.
- The SMEs should be supported to be centers of innovation by removing laws that are bottlenecks to research and innovation. There is need for favorable intellectual property laws.

- SMEs align with Sustainable Development Goals (SDGs) of ending poverty in all its forms everywhere and promoting inclusive and sustained economic growth.

REFERENCES

Adeyeye, A. (2016). Challenges to SME growth in Kenya. Nairobi, Kenya.

AlQershi, N., Abas, Z. B., & Mokhtar, S. S. M. (2018). Strategic innovation as driver for SME performance in Yemen. *Journal of Technology and Operations Management*, *13*(1), 26-36.

Amar, M. Y. (2016). The influence of product differentiation strategy on operational performance at Small and Medium Enterprises (SMEs) in South Sulawesi, Indonesia. *Journal of Economics Business and Accountancy Ventura, 18(3), 343 – 350.*

Andrews, R., Boyne, G. A., Law, J., & Walker, R. M. (2009). Strategy formulation, strategy content and performance: An empirical analysis*. Public Management Review, 11,* 1-22.

Ansoff, H. I. (2007). Strategic Management, UK. Palgrave Macmillan.

Archer-Brown, C., & Kietzmann, J. (2018). Strategic knowledge management and enterprise social media. *Journal of Knowledge Management*.

Bayraktaroglu AE, Calisir F, Baskak M (2019) Intellectual capital and firm performance: *an extended VAIC model. J Intellect Cap 20*:406–425

Batara, Firman, Hernita, Seri, Abubakar and Idris, (2021), Economic Growth, Increasing Productivity of SMEs, and Open Innovation. *J. Open Innov. Technol. Mark. Complex.* 2021 *7*(1), 20;

Braguinsky, Serguey, Atsushi Ohyama, Tetsuji Okazaki, and Chad Syverson. 2021. "Product Innovation, Product Diversification, and Firm Growth: Evidence from Japan's Early Industrialization." *American Economic Review, 111* (12): 3795-3826.

Becchetti, L., & Trovato, G. (2002). The determinants of growth for small and medium sized firms. The role of the availability of external finance. *Small business economics, 19,* 291-306.

Bejinaru R (2016) Knowledge dynamics impact on intellectual capital in organizations. *Manag Dyn Knowl Econ 4*(4):515–534

Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods.* Oxford university press.

Cabrilo S, Dahms S (2018) How strategic knowledge management drives intellectual capital to superior innovation and market performance. *J Knowl Manag 22*:621–648

Coad, A., Daunfeldt, S.-O., Hölzl, W., Johansson, D., & Nightingale, P. (2014). High-growth firms: introduction to the special section. *Industrial and Corporate Change, 23,* 91-112.

Cooper, D. R., & Schindler, P. S. (2014). *Business research methods.* McGraw-Hil.

Ekeagbara, J. A., Ogunnaike, O., Olaleke, O., Ibidunni, A., & Kehinde, B. E. (2019). Competitive strategies in higher education: Scale development. *Review of Economics and Business Studies, 121(1), 79 – 93.*

Faris .N, Noriah .C., & Zaimah .A. ,(2021). Intellectual Capital as a Moderating Effect between Corporate Governance, and Firm Performance: A Conceptual Review. *Universal Journal of Accounting and Finance* 9(6):1470-1477

Filipe & Zelia (2018). Intellectual capital, growth opportunities, and financial performance in European firms: Dynamic panel data analysis. *Journal of Intellectual Capital*, ISSN: 1469-1930

Gerry, J., & Scholes, K. (2003). Exploring corporate strategy. India: Prentice Hall, 6th ed

Gherardini, F., Renzi, C., & Leali, F. (2017). A systematic user-centred framework for engineering product design in small-and medium-sized enterprises (SMEs). *The International Journal of Advanced Manufacturing Technology*, *91*, 1723-1746.

Greiner, L. E. (1998). Evolution and revolution as organizations grow. *Harvard business review, 76,* 55-64.

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach'salpha reliability coefficient for Likert-type scales. Midwest Researchto-Practice Conference in Adult, Continuing, and Community Education.

Golafshani, N. (2003). Acceptance of reliability and validity in qualitative research. *The qualitative report*, *8*(4), 597-606.

Gupta, P. D., Guha, S., & Krishnaswami, S. S. (2013). Firm growth and its determinants. *Journal of innovation and entrepreneurship, 2*, 15.

Haris M, Yao H, Tariq G, Malik A, Javaid HM (2019) Intellectual capital performance and profitability of banks: evidence from Pakistan. J Risk Financ Manag 12(2):56

Hill, C. W., Jones, G. R., & Schilling, M. A. (2014). *Strategic management: theory: an integrated approach.* Cengage Learning.

John Stark (2022). Product Lifecycle Management (Volume 1) 21st Century. Paradigm for Product Realisation. *Decision Engineering, Electronic ISSN* 2197-6589

Kanak, S., Iiguni, Y., & others. (2010). Microfinance programs and social capital formation: the present scenario in a rural village of Bangladesh. *International Journal of Applied Economics and Finance, 4,* 173-180.

Kavale, S., Mugambi, F., & Namusonge, G. (2016). The Effects of product differentiation strategy on corporate growth in selected microfinance institutions in Kenya. *International Journal for Research in Business, Management and Accounting, 2*, 13-28.

Kiptugen, E. J. (2003). *Strategic responses to a changing competitive environment: The case study of Kenya Commercial Bank* (Doctoral dissertation).

Knight, Moen & Madsen (2020) Antecedents to differentiation strategy in the exporting SME. Volume 29, Issue 6,

Kotler, P. & Keller, K., (2016). Marketing management. 15th ed. Harlow: Pearson.

Leitch, C., Hill, F., & Neergaard, H. (2010). Entrepreneurial and business growth and the quest for a "comprehensive theory": tilting at windmills? *Entrepreneurship Theory and Practice, 34*, 249-260.

Liu, W., & Atuahene-Gima, K. (2018). Enhancing product innovation performance in a dysfunctional competitive environment: The roles of competitive strategies and market-based assets. *Industrial Marketing Management*, *73*, 7-20.

Lu WM, Wang WK, Kweh QL (2014) Intellectual capital and performance in the Chinese life insurance industry. Omega 42(1):65–74

Maduekwe, C. C., & Kamala, P. (2016). Performance measurement by small and medium enterprises in Cape Metropolis, South Africa. *Problems and Perspectives in Management,* 46-55.

Manzaneque, M., Ramírez, Y., & Diéguez-Soto, J. (2017). Intellectual capital efficiency, technological innovation and family management. *Innovation*, *19*(2), 167-188.

Memon, M. A., Cheah, J. H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation analysis: issues and guidelines. *Journal of Applied Structural Equation Modeling*, *3*(1), 1-11.

Nyageko, M. I. (2017). *Strategy implementation, planning typologies and performance of universities in kenya.* Ph.D. dissertation, MOI UNIVERSITY.

Olsen, P. I., & Håkansson, H. (2017). The roles of deals and business networks in innovation processes. *IMP Journal*, *11*(1), 25-50.

Rahman, N., Othman, M., Yajid, M., Rahman, S., Yaakob, A., Masri, R., Ibrahim, Z. J. (2018). Impact of strategic leadership on organizational performance, strategic orientation and operational strategy. *Management Science Letters, 8,* 1387-1398.

Rahmanc, A., Yaakobd, A., Masrie, R., Ramlia, S. I., Amaradiwakara, U., & Gunatilake, M. (2017, February). Factors Affecting Growth of Small and Medium Enterprises In Sri Lanka. *International Journal of Advanced Research, 5(2),* 1805-1814. doi:10.21474/ijar01/3345

Ravichandran, T. (2018). Exploring the relationships between IT competence, innovation capacity and organizational agility. *The Journal of Strategic Information Systems*, *27*(1), 22-42.

Salvador, Domingo & Luis (2020). The structural capital, the innovation and the performance of the industrial SMES. *Journal of Intellectual Capital*, ISSN: 1469-1930

Sardo F, Serrasqueiro Z, Alves H (2018) On the relationship between intellectual capital and financial performance: a panel data analysis on SME hotels. Int J Hosp Manag 75:67–74

Tjahjadi B, Soewarno N, Astri E, Hariyati H (2019) Does intellectual capital matter in performance management system-organizational performance relationship? Experience of higher education institutions in Indonesia. J Intellect Cap 20(4):533–554

Yulianti & Nasution, E.S. (2020). Pengaruh diferensiasi produk dan saluran distribusi terhadap loyalitas pelanggan pada CV. Makmur Auto Sejahtera Medan. *Jurnal Manajemen Bisnis Eka Prasetya* (JMBEP), 6 (1), 41-51