Efficacy of Porter's Generic Strategies in Achieving Competitive Advantage: The Mediating Roles of Market Ambidexterity and Firm Performance

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Article Information

Abstract

This study examines the influence of Porter's generic strategies on competitive advantage [CA] after controlling for the mediating roles of market ambidexterity [MA] and firm performance [FP] in an emergent developing country in West Africa. The study employed the explanatory research design and supported it with a quantitative research approach to measuring and analysing the primary data gathered through drop-and-pick questionnaire administration. Small and medium enterprises [SMEs] operating in the three major business hubs in Ghana were surveyed. SMEs were conveniently selected. 258 cases were used for data analysis. Reflective-formative structural equation modelling was used to test the hypotheses in SMART PLS 4.0. Differentiation strategy [DS] and focus strategy [FS] significantly predicted SMEs' performance, but cost leadership strategy [CLS] failed. Thus, SMEs were ineffective in using CLS to improve their performance in the COVID-19 era. FP mediated the DS and CA relation. A similar result was the case of the FS-CA predictive relation. However, FP failed to mediate the CLS-CA predictive relation. SMEs should focus on implementing FS and DS if they are to improve their performance. SMES should pursue cost-cutting strategies to reduce the cost of operations COVID-19.

Introduction

Businesses, particularly small and medium enterprises [SMEs] in emerging markets (Ali et al., 2021), are threatened with risks emanating from different sources notably environmental changes, market deregulation, technological change and so forth (Safari et al., 2020) hence, the need to focus on SMEs in the industrial revolution 4.0 era (Arsawan et al., 2020). There are an estimated 400 million SMEs worldwide

(Le et al., 2021). SMEs represent 92% of all businesses in developing countries, generate 60% employment, and support 40% of GDPs of most countries in Asia and sub-Saharan Africa (Adeola et al., 2021). 92% of businesses registered in Ghana are SMEs, account for 71% of employment, and contribute 49% to the country's GDP (Nketsiah & van der Westhuizen, 2025; Oduro, 2020).

With minimal hierarchical chains with easily deployable resources, SMEs easily tap opportunities that come with market disruptions (Lafuente et al., 2020). The COVID-19 pandemic has challenged global supply chains extremely, exposing enormous vulnerabilities (Ngo et al., 2022). The economic impact of COVID-19 on SMEs has heightened competition (El Chaarani et al., 2021) and has partly caused high inflation in Ghana (Subramaniam & Masron, 2022), hence the need for SMEs to trigger the use of their competitive strategies. Business strategy represents a comprehensive plan illustrating how firms reach their mission and objectives (Rostami & Rezaei, 2021). By tying business strategies to interest in business, firms direct their operations and activities in specific business units for a particular commercial venture or a particular market (Rostami & Rezaei, 2021), capitalizing on opportunities in the business environment and equally defending themselves from threats in the environment (Eymas & Bensebaa, 2021).

Porter's generic strategies have dominated corporate competitive strategy for the last 30 years, often in the context of industrialized and Western countries (Pretorius, 2008). However, their applicability in a developing country context for SMEs is justified (Wanyonyi, et al., 2021). SMEs in emerging economies could improve their performance through the use of Porter's generic strategies because such strategies have universal application and implications on organizational outcomes (Ayob & Dana, 2017). Emerging markets include countries that are classified as "low-income" and lower-middle-income" based on the GNI per capita income (Kumar et al., 2022). Emerging markets present crucial cultural, regulatory and socioeconomic departures from the institutional assumptions of Western countries, thereby calling into question our understanding of constructs and relations (Gruber-Muecke & Hofer, 2015). Porter's generic strategies guide how firms choose how to compete, anchored on the match between the type of competitive advantage [CA] and the market target they pursue (Akan et al., 2006). The relevance of the generic strategy in business success is recognised (Wanyonyi, et al., 2021), especially in COVID-19 pandemic era (Hu & Kee, 2021), therefore, firms placing low emphasis on cost leadership strategy [CLS], differentiation strategy [DS] and focus strategy [FS] could perform poorly (Hlavacka et al., 2001).

Agrawal and Kant (2020) opined that CA represents a firm's ability to use its strategy for competing in the markets for favourable results by outperforming key rivals. Remaining competitive means strategies should position firms to lower their cost and increase their market share by marketing distinctive products or services in the market (Wheelen & Hunger, 2011). Through improved firm performance [FP] as ascribed by the efficacy of well-executed strategies, firms are positioned to achieve and sustain their CA (Lafuente et al., 2020). Porter's model is premised on the assumption that firms operate normally by profiting from the demand for their products in a competitive environment (Pretorius, 2008). However, the extent of the competitiveness of firms is influenced by some firm-specific factors (Acquaah & Agyemang, 2015) and external factors, given the interplay among them (Rostami & Rezaei, 2021). This is the position of the contingency theory (Acquaah & Agyemang, 2015). Relying on internal and external resources, firms blend their competitive strategies with their market ambidexterity [MA] strategies to survive (Nofiani, et al., 2021; Peng et al., 2022). Ambidextrous market-oriented firms are dynamic and able to adjust their competitive strategies to changing business environments (Jurksiene & Pundziene, 2016).

SMEs in emerging markets need to be more ambidextrous in their competitive orientation and market programmes since they are limited in terms of access to resources to compete with large firms (Rojas-Cordova, et al., 2022). MA epitomizes a firm's cross-functional processes and routines that position

it to be adaptive to a highly dynamic business environment through vigilant market learning, adaptive market experimentation and open market (Ali et al., 2021). It also refers to the ability to conduct both exploitation and exploration innovation in serving the needs of customers (Nofiani et al., 2020; Herhausen, 2016). MA is vital for positioning SMEs favorably in the context of dynamic and erratic business environmental situations (Ali et al., 2021), which is typical of emerging markets (Wang & Rafiq, 2014). MA has implications for both FP (Adiwajaya et al., 2020) and CA (Lin et al., 2020). The integration of competitive strategies and MA strategies could produce a synergized impact on FP. This goes from the underlying potentiating effect of MA on the predictive relationship between the dimensions of the generic strategies and FP (Adiwajaya et al., 2020). When SMEs execute their generic competitive strategies, their MA strategies could enhance the effect of such generic strategies on their performance, a logic supported by the mediation scenario in the context of this empirical study.

Firm characteristics, including age and size, have implications for the success of Porter's generic strategies in achieving organisational outcomes (Ruckman & Blettner, 2022; Leitner & Güldenberg, 2010). Hence the consideration of the moderating roles of these variables in the study. Operationally, businesses, irrespective of their industry, with 10-29 full-time workers are classified as small enterprises whilst businesses with 30-50 full-time workers are classified as medium enterprises (Uzir, et al. 2022). Firm age refers to the number of years a business exists after incorporation, which gives legal backing as an artificial entity (Farooq, Vij & Kaur, 2021).

Inherently, SMEs encounter some problems in their bid to successfully execute their chosen strategies (Yeon et al., 2022). Firms implementing more than one generic strategy may find themselves stuck in the middle (Porter, 1980). Studies on generic strategies and FP are far advanced; however, the results have not conclusively established that performance is enhanced by following one of the generic strategy types (Powers & Hahn, 2004). Besides, MNCs in emerging markets were ineffective in the execution of CLS because conditions in emerging markets are different and unique, requiring extreme adaptation to survive by MNCs (Baack & Boggs, 2008). SMEs seem to be finding it difficult to cope with the remnants of the outbreak of the COVID-19 pandemic (Eymas & Bensebaa, 2021) because these SMEs in developing economies are unable to efficiently manage the bundle of resources at their disposal to tap the opportunities in the external marketing environment (Arsawan et al., 2020). Arguably, there is no universal market strategy that firms can adopt to gain CA (Brege & Kindström, 2020). An empirical study by Acuaah and Agyapong (2015) discovered that only DS is positively related to the performance of micro and small businesses operating in Ghana. CLS failed to predict a significant change in MSE's performance. Empirical studies to unravel the universal applicability of Porter's generic strategies in Africa are few (Agyapong et al., 2016) since such studies usually focus on developed economies (Parnell, 2012), hence, conducting this study could aid in understanding how the model works in a different socioeconomic environment among SMEs.

SMEs and large firms compete differently (Parnell et al., 2012), hence examining the usage of Porter's generic strategies among SMEs could provide deeper insights into how these strategies relate to FP and eventually to CA (Teeratansirikool, et al., 2013). Additionally, there seem to be few empirical studies on ambidexterity in emerging economies (Peng et al., 2021) and some sort of research gap between MA and FP (Tan & Liu, 2014). Also, mature institutional support for the exploration aspect of MA is somewhat lacking in emerging markets because it takes longer to realize outcomes (Wasti, et al., 2022). Applying market ambidexterity entails many contextual and procedural complexities and rigidities, especially when both exploitative and explorative structures and processes are implemented simultaneously instead of a separation approach (Ali et al., 2021). Exploitation and exploration have a distinct impact on FP and are

somewhat contradictory activities requiring separate resource allocation (Wasti, et al., 2022). This study seeks to contribute to the debate in this regard.

CA may not necessarily reflect superior FP (Agrawal & Kant, 2020), triggering the empirical test of FP-CA relationship in this study. Although some studies have established a significant positive link between ambidexterity and FP in terms of both objective and subjective measures (Voss & Voss, 2013), it appears little is known empirically about such a relationship intertwined with Porter's generic strategies.

From the foregoing, this study examined the influence of Porter's generic strategies on SMEs' performance and examined the purported mediating role of MA, after considering the moderating effects of firm age and firm size. Similarly, the study assessed the mediating role of FP in transmitting the impacts of the generic strategies amid market ambidextrous strategies into achieving CA among SMEs. The study is of value to managers and owners of SMEs in the sense that it empirically examines how Porter's generic strategies relate to FP in a self-typing approach to strategy assessment, thereby generating insight to guide the strategic posture of SMEs in emergent economies in the COVID-19 pandemic era. The efficacy of market ambidextrous programs adapted by the SMEs would be brought to bear, hence, directing resource allocation given the nature of viable economic outcomes of such programs in respect of their alignment with generic strategies. The study unravels support for SDG8, which focuses on decent work and economic growth and SDG 12 which seeks to promote responsible consumption and production.

The rest of the paper covers the literature review, research methods, results, discussions, conclusions and implications, limitations and suggestions for further studies.

Literature Review and Hypotheses Development

Grand theory

The study is strongly anchored on the tenets of the resource-based theory [RBT] of the firm (Barney, 1991). The RBT asserts firms can attain a competitive advantage if they have access to strategy-supporting resources and capabilities and efficiently deploy such resources and capabilities. Such resources should characteristically be rare, valuable, non-substitutable and inimitable (Seclen-Luna, et al., 2020). SMEs having core and distinctive competences in access and use of such resources can achieve superior performance than SMEs lacking such resources and capabilities (Barney, 2001). SMEs employing any of the generic strategies are better positioned to perform better than firms that are stuck in the middle (Nandakumar et al., 2010). To attain the goal of low cost per unit, SMEs should possess the needed resources that can help them eradicate waste and maximize productivity. To differentiate their brands, SMEs should have access to resources that can support the execution of such a differentiation strategy. To focus their competitive strategy on niche markets, SMEs should have access to and use resources that can help them satisfy the needs of the niche market they are targeting. It is when customers are served profitably that the SMEs can realize the gains in such a strategy.

The RBT also recognises the structure-conduct-performance assumption [SCP]. The SCP underscores what firms should do to establish a strong position in the wake of various competitive forces, which is finding appealing sectors or industry segments (Zhang & Jedin, 2023). To excel in terms of achieving improved FP, SMEs are required to identify the structural qualities of the markets in which they operate and develop the capacity to efficiently and effectively execute plans to gain and maintain a competitive edge in their respective markets. Whilst market structure determines firm behaviour, firm behaviour equally influences firm performance (Zhang & Jedin, 2023). Operating in a free market in a stable

democratic country in a developing country, the SMEs are afforded a competitive landscape in which the forces of demand and supply determine the competitive posture and strategies to adopt. In this instance, SMES embed, in their corporate strategic posture, the generic competitive strategies and modify their behaviour to capture the value the market structure brings to the table. Firms with the right resources and capabilities and are adept at adjusting to take advantage of the opportunities thrown by the external market are more likely to perform better and achieve a competitive advantage. This grand theory, resource-based view theory, is also recognized in studies on Porter's competitive strategy context (Furrer et al., 2008; Rhew & Arendt, 2023) about firm performance (Nwaniki & Anene, 2023).

Generic strategies and firm performance

Strategy refers to a comprehensive plan that shows how a firm has reached its mission and objectives (Rostami & Rezaei, 2021). Strategies capture a firm's realized position in its competitive market (Ruckman & Blettner, 2022) and are mapped out to satisfy the interest and direct operation of a specific business unit that aims to position such a unit to survive competitive pressure in the dynamic business environment (Olson et al., 2005). Several typologies of strategies exist, including Porter's generic strategies, which are embedded with the cost leadership strategy [CLS], differentiation strategy [DS] and focus strategy [FS] (Porter, 1980; Rostami & Rezaei, 2021). Pursuing more than one generic strategy by a single firm concurrently is well recognised (Powers & Hahn, 2004) even though others prefer a single-strategy performance benefit (Dess & Davis, 1984; Calingo, 1989). Porter (1980) argues that if businesses give equal consideration to the three strategies, they would likely be stuck in the middle. This supports the idea for businesses to focus on one of these strategies at a time (Ertac & Cankan, 2021). Each generic strategy positions the firm differently in its market, establishes a central theme for how the firm intends to outcompete rivals, creates boundaries or guidelines for strategic change as market circumstances unfold and points to different ways of experimenting and tinkering with the back strategy (Thompson et al., 2012). The choice of any strategy is precipitated by careful analysis of relevant proficiencies (Kharub, et al., 2019).

Firms employing the CLS strive to minimize the overall cumulative costs of their overall value chain activities compared with their key competitors (Thompson et al., 2012). Revamping the efficiency of operations affecting cost drivers is a genuine option that can help firms achieve the overall aim of providing service or producing products at the least cost comparable to that of competitors' brands. This gives room for pricing below average market prices to expand market share whilst making some profits or charging the market-going prices for super-normal profit gains. Firms employing a DS carefully study buyer needs and behaviour, values, and willingness to pay for a unique product or service (Thompson et al., 2012). DS emphasizes incorporating features that both appeal to buyers and create sustainably distinctive product offerings, thereby justifying the usage of higher pricing mechanisms to recoup differentiation costs. DS exploits the premium of added features to brands. With FS, firms target niche markets that is often overlooked by other competing firms in the broad market and either focus on exploiting the benefits of a low-cost strategy or DS (Thompson et al., 2012). The usage of FS is appropriate in situations where the target market niche is big enough to be profitable and offers good growth potential. It is also preferable in a circumstance where industry leaders do not see that having a presence in the niche is crucial to their own success, where the industry has many different niches and segments and where it is costly or difficult for multi-segment competitors to meet the needs of target market niche buyers and when the focuser has a reservoir of buyer goodwill and long-term loyalty.

From the perspective of the resource-based view theory (Barney, 1991), intersectoral variations in FP are rooted in their origin in asymmetric resource distribution among firms. Hence, firms winning the competitive race in the business arena are those that possess superior resources-resources that are rare, valuable, inimitable and non-substitutable (Seclen-Luna, et al., 2020). Efficiency of use of such superior resources creates distinctive competencies that set firms apart in value creation and delivery, hence achieving CA through the occasion of isolation mechanisms that prevent imitation of the resources that sustain CA. From this perspective, the most important element for competing is how to compete and not where to compete (Barney, 1991). Certain categories of studies have linked competitive strategies to FP (Kharub et al., 2019). Nandakumar et al., (2010) also hinted that firms employing any of the generic strategies are better positioned to perform better than firms that are stuck in the middle. Some empirical studies collectively acknowledge the significant positive impact of CLS on FP (Kharub et al. 2019; Nandakumar et al. 2010). DS also proved to be more impactful on FP in high-hostility business environments such as the COVID-19 pandemic era (Islami et al., 2020; Wheelen & Hunger, 2011). Finally, some studies also confirm the FS-FP link (Islami et al. 2020; Herzallah, et al. 2017). We hypothesise that:

> H_{1a}:   *Cost leadership strategy significantly causes a positive change in SMEs'*
> *performance*
> H_{1b}:   *Differentiation strategy significantly causes a positive change in SMEs'*
> *performance*
> H_{1c}:   *The Focus strategy significantly causes a positive change in SMEs' performance*

Mediating role of market ambidexterity

Firm orientation in a dynamic business environment potentially affects the success of chosen strategies. Firms amalgamate various elements of different orientations, including competition, innovation and customer orientation to gain a CA (Brege & Kindström, 2020). MA fits in all the dimensions depending on how firms approach competitive drivers in a dynamic, highly intensive business environment. MA strategies are resource-based, intensive approach that utilizes the dual implementation of proactive and reactive customer value creation (Brege & Kindström, 2020) by adapting internal and external resources in a constantly changing business environment (Nofiani, et al., 2020). MA refers to the ability to conduct both exploitation and exploration innovation in serving the needs of customers (Nofiani et al., 2020; Herhausen, 2016).

Market ambidextrous SMEs have a higher level of focus on responding to market signals as well as focus on creating future advantages (Brege & Kindström, 2020). The essence of MA is to position SMEs to innovate (explore) and be productive (exploit) in the face of competition, which is critical for their long-term success (Rojas-Cordiva, et al., 2022). SMEs with astute MA are more competitive and have the capacity to refine their existing products and services and improve the efficiency of existing capabilities through exploitative innovation (Lee, et al., 2020). Therefore, MA could augment the efforts of SMEs in formulating and executing generic strategies to take advantage of the opportunities that come with the dynamism in this COVID-19 era. The formulation of generic strategies is interlinked with MA strategies to induce desired organisational outcomes. Conceptually, MA is approached with a combination orientation.
The choice of the combined approach to MA for SMEs is justified because SMEs that fail to efficiently exploit their resources are more likely to face difficulties in innovation (Goni & Maloney, 2017).

Organisational learning theory underpins the intervention role of MA (Adiwajaya et al., 2020; Jiang, et al., 2022). With market ambidextrous strategies, firms can interact with their structures and thus

facilitate the reach of the resulting knowledge acquisition process, which in turn helps to update the structures within which such firms develop their daily work (Curado, 2006). Ambidextrous firms activate their information systems to gain insights from their market, which eventually influences the formulation of competitive strategies. SMEs learn through involvement in the interaction and sharing of experiences and knowledge gained through marketing information systems. Therefore, competitive strategies are amended in tandem with the manipulation of ambidextrous market strategies. Subsequently, competitive strategies are adapted to suit the changing circumstances to take advantage of improved FP and its consequential favourable impact on CA. Market ambidextrous strategies have a curvilinear influence on advantage creation through enhanced efficiency and effectiveness (Lin et al., 2020). Ali, et al. (2021) found that MA mediated adaptive marketing innovation-product innovation relation. Firms that focus on internal ambidexterity are positioned to create competitive capability based on their access to superior resources which eventually boost FP (Nofiani et al., 2020). Therefore, it is hypothesised that:

> H_{2a}: *Market ambidexterity mediates the predictive relationship between cost leadership strategy and firm performance*
>
> H_{2b}: *Market ambidexterity mediates the predictive relationship between differentiation strategy and firm performance*
>
> H_{2c}: *Market ambidexterity mediates the predictive relationship between focus strategy and firm performance*

Mediating role of firm performance

CA exists for firms when customers perceive their marketing offering(s) as better than those of competitors (Chen, 2019). CA manifests when a firm demonstrates the ability to show a higher degree of competitiveness compared to its rivals in a given industry, including the ability to reduce cost, create distinctive market offerings or better satisfy customers (Porter, 2011). Firms enjoying CA are able to withstand competitive pressure through their adaptive capability in their defensive strategies and leapfrog competitors with attacking strategies in the market environment, which eventually positions them favorably in the eyes of the target market (Chen, 2019). Thus, achieving CA hinges on firms' capabilities inherent in its bundle of both tangible and intangible resources (Chen, 2019; Hinterhuber, 2013). Strong and sustainable FP is therefore a requirement for the attainment of CA. FP deals with the capability of a firm to implement tasks that help it to achieve its strategic goals and competitive edge (Cagliyan, Attar & Abdul-Kareem, 2022). FP covers the assessment of how efficiently and effectively firm managers use resources to provide satisfaction to customers and eventually attain business goals. Demonstration of improving FP over time would culminate in the attainment of CA.

From the contingency theoretical perspective, CA is contingent on FP (Pertusa-Ortega et al., 2010). In this case, attainment of FP could affect the attainment of CA. This theory is appropriate for corporate strategy (Pertusa-Ortega et al., 2010). The study contends that changes in organisational performance depend on changes in generic strategies being implemented by the SMEs amid the effectiveness of market ambidextrous programs. Equally, achieving CA is determined by the degree of superior FP. Thus, the attainment of CA is determined by the fit among generic strategies, MA and FP. Empirically, Porter's generic strategies have proven to significantly improve FP (Islami et al., 2020). Other studies established a predictive relationship between FP and CA (Amoako-Gyampah & Acquaah; 2008; Kharub et al. 2019), which presupposes FP is positioned to help better explain the impact of Porter's generic strategies on CA, hence the logical conclusion of a mediating effect. By mediation, the study contends FP is a candidate

responsible for transmitting the effect of generic strategies amid the intervening effect of MA on the CA of SMEs in a better manner. We, therefore, hypothesise that:

H3a: Firm performance positively mediates the predictive relationship between cost leadership strategy and competitive advantage

H3b: Firm performance positively mediates the predictive relationship between differentiation strategy and competitive advantage

H3c: Firm performance positively mediates the predictive relationship between focus strategy and competitive advantage

Moderating roles of firm age and size

Firm characteristics, including age and size, have implications for access to resources, experience, network, power and dominance in business dealings. The success of an optimal course of action hinges upon both internal and external situations, hence the need for adapting succinct strategies to suit changing situations (Dikova & Veselova, 2021). Some contextual factors influence the use of generic strategies among firms (Nakabugo et al., 2022), including firm size and firm age (Ruckman & Blettner, 2022). SMEs are better positioned to implement innovative strategies given their state of creativity and access to revenue (Cheah, et al., 2022). Concerning firm size, big and matured firms have outstanding capabilities and are endowed with adequate resources that help them to seize opportunities and survive more than small firms (Cheah, et al., 2022) because large firms are more technically and managerially capable with access to supporting resources in inter-organisational alliances, competencies that are limited for small firms (Yang, et al., 2019). Firm size also affects the effectiveness of DS (Hlavacka et al., 2001), with larger firms doing well in DF (Ghiasi, et al., 2022).

Concerning firm age, Ruckman and Blettner (2022) found that old firms are unable to respond strategically compared to young firms because young firms have established internal processes and procedures. Young firms were also seen as more competitive than old firms because such firms are more agile strategically compared to old firms (Reed, 2021). On the contrary, old firms have more resources, align with industry and have better management than young firms because of the experience gained through long-term operational existence (Farooq, et al., 2021). Nketsiah (2018) found that older firms are able to better sustain their growth effectively compared with younger firms owing to the experience gained through series of business operations and activities. The issues raised above show that approaches to competitive orientation could be influenced by the size and the age of firms. For instance, older and larger firms are more likely to marshal the needed resources to execute their chosen strategies efficiently because they have access to strategy-supported resources, including their knowledge about the happenings, given their long-standing experience in the business environment, than micro and small enterprises (Cheah et al., 2022; Quansha et al., 2022). Some studies recognise the moderating role of firm size and age in different study contexts (Kim, 2022; Baullay & Hamdan, 2019; Corvino, et al., 2019) hence we hypothesize that:

H4a   Firm age moderates significantly, the focus strategy-firm performance relation

H4b   Firm age moderates significantly, the cost leadership strategy-firm performance relation

H4c   Firm age moderates significantly, the differentiation strategy-firm performance relation

H4d   Firm size moderates significantly, the focus strategy-firm performance relation

H4e   Firm size moderates significantly, the cost leadership strategy-firm performance relation

H4f   Firm size moderates significantly the differentiation strategy-firm performance relation

Conceptual framework

The conceptual framework in Figure 1 illustrates how various factors interact to influence financial performance (FP) and competitive advantage (CA) in firms. The framework highlights that Market Attraction (MA) acts as a mediator, linking strategies and capabilities to financial outcomes. Additionally, moderating effects, such as firm size and age, influence the strength of these relationships. Key relationships are:

1. Competitive Leadership Strategies (CLS) and Dynamic Capabilities (DS) influence Market Attraction (MA), which mediates the effect on Financial Performance (FP). Firms with strong leadership and adaptive capabilities attract more customers, driving better financial results.
2. Firm Size (FS) and Firm Age affect Market Attraction and Financial Performance, with larger and older firms having more resources to invest in market attraction. However, younger firms may be more agile, affecting how firm size and age impact the relationships.
3. Firm Age also directly influences Competitive Advantage (CA), with older firms benefiting from established reputations, though younger firms can leverage innovation for competitive gain.
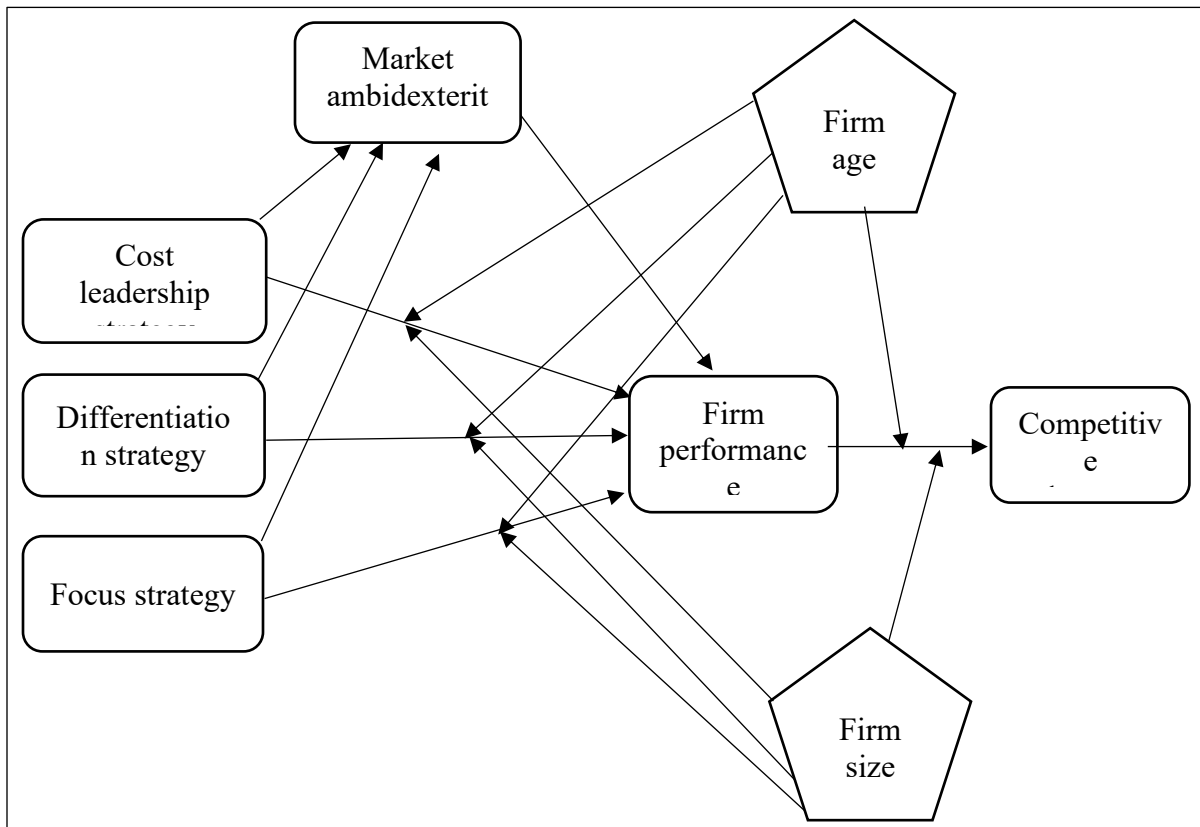

Figure 1: Conceptual framework

Research Methods

Research design, sampling, and data collection

A causal research design was applied to approach the conduct of this study quantitatively. The general orientation of the study was to assess how changes in some constructs (Generic strategies, MA) induce changes in other constructs (FP and CA, MA) in a natural, real-world situation without the manipulation of the researcher (Aggrey et al., 2021). The targeted population included SMEs operating in the three major business hubs in Ghana: Accra, Kumasi and Tamale. Conducting a study with a cross-industry sample on strategy-SMEs' performance is well-recognized (Parnell, et al., 2012). Using the G*power software, an estimated minimum sample size 129 was determined based on these parameters [effect size=0.15; error prob=0.05; power=0.95; number of predictors=4]. Actual power of 0.951 was achieved subsequently, which is above the 0.8 recommended threshold (Husin, et al., 2022). However, since a larger sample size is better than a smaller sample size, 270 structured questionnaires were distributed conveniently to the SMEs through the drop-and-pick method. Using a 5-point Likert scale for the measurement of the opinions of the participants exposed to the respondents to social desirability risk, hence self-administered, aided the researcher in reducing such risks. 258 usable structured questionnaires were retrieved (95.6% response rate). The data collection exercise took two months (July-August 2021) in three major cities in Ghana (Kassoh et al., 2021). Managers/owners of SMEs served as proxies for SMEs. Table 1 summarises the demographic characteristics of the target sample.

Table 1: Demographics

Variable	Options	Frequency	Percentage (%)
Firm size	10-29 workers (SE)	161	62.4%
	30-50 workers (ME)	97	37.6%
Firm age	Less than 5 years (Young)	138	53.5%
	5 years and above (Old)	120	46.5%
Industry type	Agriculture	21	08.1%
	Commerce	57	22.1%
	Manufacturing	35	13.6%
	Service	145	56.2%
Location	Kumasi	87	33.7%
	Accra	85	32.9%
	Tamale	86	33.3%
Job-status	Manager	62	24.0%
	Owner	106	41.1%
	Manager/Owner	90	34.9%

Measurements

Empirically validated scales were adapted to measure the constructs given their suitability in the study context. A self-typing approach where owners and managers of the SMEs were asked to rate the extent to

which their firms' strategies conform to particular strategic types through the use of a multi-item Likert scale was used (Nandakumar et al., 2011). Measures of Porter's generic strategies were adapted from these sources (Allen & Helms, 2006; Islami et al., 2020). A 5-point Likert scale was employed to test the opinions of the respondents on the degree of effectiveness of the strategies. It was reflectively specified based on theoretical conceptualisation. FP measures were adapted from these empirically validated sources (Islami et al., 2020; Nofiani et al., 2020). These performance indicators are recognised for SMEs in emerging markets (Ngo et al., 2022; Gruber-Muecke et al., 2015). A 5-point Likert scale measured the extent of improvement in FP after implementing the generic strategies. FP was reflectively specified based on theoretical conceptualisation and empirical evidence.

Rated on the degree of effectiveness based on a 5-point Likert scale, MA was adapted from these sources (Ali, et al., 2022; Adiwijaya, et al., 2020; Nofiani, et al., 2020). It was reflectively-formatively specified because of its second-order conceptualisation and its purported mediation role. CA indicators were adapted from these sources (Agrawal & Kant, 2020; Safari et al., 2020; Zahid et al., 2020). CA was rated on a 5-point Likert scale on the state of agreement and was reflectively measured. Firm age and firm size were ordinally measured, given their recognised classifications in the context of the study. Firms with less than 5 years of operating experience were classified as young firms and those with more than 5 years of operating experience were considered old firms (Mina & Santoleri, 2021). Firms with 10-29 workers were considered small enterprises, whilst firms with 30-50 workers were considered medium enterprises (Uzir, et al., 2022).

Common method bias

Common method bias [CMB] refers to errors associated with a structured questionnaire that includes the wording of instructions and items, or response format (Podsakoff et al., 2012). Some ex-ante principles were followed to limit the incidence of CMB. The participants were pre-qualified to ensure they possess the required knowledge of the themes of the study. The anonymity of response was ensured, and participants were assured of this before the items were issued to them. Items were worded in a simple clear-cut manner, which eliminated the possibility of respondents relying on systematic response tendencies such as extreme or midpoint responses in responding to items in the structured scales (Podsakoff, et al., 2012). Different rating scales were used for the adapted scales. Psychological separation and negative wording techniques were also employed. However, reverse coding was done to correct the inconsistencies in the data file regarding the negatively worded items. Statistically, CMB was measured with Harman's single-factor method. The presence of CMB can cause path coefficient inflation and deflation, which would blur the actual impact of the predictors on the outcome variables (Kock, 2015). Our results prove there are no threats of CMB for the constructs because the percentages of variance for all the constructs are less than 50% (Bakri, et al., 2022).

Table 2: Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
DS	3.733	37.334	37.334	3.049	30.491	30.491
FS	2.568	32.095	32.095	1.875	23.436	23.436
CLS	1.778	59.252	59.252	1.171	39.048	39.048
FP	4.116	51.444	51.444	3.594	44.921	44.921
CA	3.602	27.706	27.706	2.852	21.936	21.936
MA	3.029	43.267	43.267	2.404	34.341	34.341

The Analytical Tool

Coding and data entry were done in SPSS (version 25.0) to get the data file. The data file was then converted into *CSV* format and imported into the SMART PLS (Version 4.0) for analysis. The reflective-formative partial least squares structural equation model (PLS-SEM) with the two-stage embedded approach was used to test the specified hypotheses (Ali et al., 2022). The use of PLS-SEM helped in testing and validating the measurement theory before validating the structural theory through a two-step approach (Hair et al., 2021). Also, the PLS-SEM helped formulate a complex model (Hair et al., 2021). The drive for making practical recommendations based on the causal-prediction orientation of this study makes the use of PLS-SEM more appealing (Hair et al., 2021; Hair & Sarstedt, 2021). Also, with such a complex model with a number of items and unstable measurement, the PLS-SEM is preferred to the CB-SEM approach (Yusoff et al., 2020). In the two-step approach for the model evaluation, iterations were made. Indicators with loadings less than 0.7 and not statistically significant [$p<0.05$] were deleted because their deletion improved the measurement model (Hair et al., 2019). Table 3 summarises the indices used for the model evaluation.

Table 3: Model Evaluation Criteria

Measurement Model	Indices
Reliability	rho_A ≥ 0.7 (Henseler, 2017)
Convergent validity	Average variance extracted ≥ 0.5 (Hair, et al., 2021)
Discriminant validity	Heterotrait-Monotrait Ratio ≤ 1 (Hair, et al., 2021)
Composite reliability	Composite reliability ≥ 0.7 (Benitez, et al., 2020)
Common method bias	Harman's single factor
Structural Model	**Indices**
Indicator reliability	Indicator loading >0.7; p≤ 0.05 (Benitez, et al., 2020)
Coefficients and effect size	Standardized beta
Coefficient of determination	R^2: Results above 0.67 (Substantial), 0.33 (Moderate) and 0.19 (Weak) (Benitez et al., 2020)

Results

Measurement model

The measurement model is used to assess the reliability and validity of the latent constructs being measured. Reliability refers to the consistency of the measurement, while validity pertains to whether the instrument truly measures what it is intended to measure. To evaluate the measurement model, various indicators, such as Cronbach's alpha, rho_A, composite reliability (CR) and average variance extracted (AVE), were examined. Table 4 presents the values for these indicators across the constructs in the study. It shows that the primary data gathered were reliable and satisfactory for most constructs when scores for FS, CA and CLS were approximated (rho_As>0.7). Composite reliabilities for the constructs were satisfactory (CRs>0.7). Convergent validities for the constructs were satisfactory (AVEs>0.5).

Table 4: Construct Reliability and Validity

	Cronbach's alpha	rho_A	Composite reliability	Average variance extracted (AVE)
CA	0.676	0.678	0.804	0.506
CLS	0.656	0.677	0.810	0.588
DS	0.734	0.745	0.833	0.556
Firm age	1.000	1.000	1.000	1.000
FP	0.860	0.866	0.896	0.590
Firm size	1.000	1.000	1.000	1.000
FS	0.615	0.616	0.796	0.565

Discriminant Validity

Discriminant validity ensures that the constructs in a study are distinct and not overly correlated. This means that each construct should represent a unique dimension of the data, and not overlap too much with other constructs. A widely used criterion to assess discriminant validity is the Heterotrait-Monotrait (HTMT) ratio, which compares the correlation between constructs to the correlations within the same construct. HTMT ratios less than 0.85 are generally considered indicative of good discriminant validity, suggesting that the constructs are sufficiently different from one another. If the HTMT ratio exceeds this threshold, it may indicate that the constructs are not adequately distinct, which could undermine the validity of the measurement model.

Table 5 below presents the HTMT ratios between the pairs of constructs in the study.

Table 5: Heterotrait-Monotrait Ratio

	CA	CLS	DS	Firm age	FP	Firm size
CLS	0.402	0.000	0.000	0.000	0.000	0.000
DS	0.814	0.580	0.000	0.000	0.000	0.000
FP	0.754	0.605	0.838	0.142	0.000	0.000
FS	0.691	0.630	0.698	0.120	0.807	0.129

Discriminant validities between the pairs of constructs were satisfactory (HTMT ratios<0.85).

Collinearity Statistics

Collinearity refers to the degree of correlation among predictor variables in a regression model. High collinearity can lead to issues such as inflated standard errors, making it difficult to determine the individual effect of each predictor variable. To assess collinearity in structural equation modelling (SEM), the Variance Inflation Factor (VIF) is used. A VIF value above 5 or 10 typically signals problematic collinearity, while values below this threshold indicate that the variables are not excessively correlated.

In this study, the outer VIF values presented in Table 6 provide an indication of the degree of collinearity between the constructs in the measurement model. Generally, a VIF below 5 is acceptable, indicating that multicollinearity is not a concern. The following table presents the outer VIF values for the various constructs used in the study.

Table 6: Outer VIF

	Compared with our competitors, we;	Outer VIF
CA1	make higher cost savings through technological efficiency	1.224
CA12	fascinate the best talent from the marketplace	1.529
CA13	gain higher attraction of new employees at competitive wage	1.412
CA6	give faster response to the new customers' needs	1.158
Cstra1	Vigorous pursuit of cost reductions	1.277
Cstra2	Tight control of overhead costs	1.315
Cstra3	Minimizing distribution cost	1.251
Dstra2	Forecasting market growth	1.348
Dstra4	Fostering innovation and creativity	1.340
Dstra5	Refining existing products/services	1.465
Dstra7	Building a positive reputation within the industry for technological leadership	1.459
FP1	Product/service quality	1.844
FP2	Profits	1.872
FP3	Sales growth	1.699
FP4	Returns on sales	2.121
FP6	Customer satisfaction	1.615
FP7	Return on investment	1.687
Fstra1	Offering products for that segment of the market that pays high prices	1.180
Fstra7	Intensive training of front-line staff	1.237
Fstra8	Intensive supervision of front-line staff	1.257
Mexploi		1.391
Mexplor		1.391
NumE		1.000

Threat multicollinearity was not a problem for the estimated model (Outer VIFs<5).

Structural model evaluation

Path co-efficient

Path coefficients in structural equation modelling (SEM) represent the strength and direction of the relationships between variables in the model. These coefficients are typically denoted as beta values (β) and are assessed for statistical significance using p-values. A p-value below 0.05 typically indicates that the relationship is statistically significant, while a p-value above this threshold suggests that the relationship is not significant. The path coefficients in Table 7 represent the relationships between the constructs being studied, such as the impact of firm size, firm age or decision-making strategy on financial performance (FP), competitive advantage (CA), and market attraction (MA).

The table below provides the beta values and corresponding p-values for the paths in the model.

Table 7: Path co-efficient

	Beta	P values
CLS -> FP	0.055	0.320
CLS -> MA	0.101	0.045
DS -> FP	0.869	0.000
DS -> MA	0.303	0.000
Firm age -> CA	-0.063	0.273
Firm age -> FP	0.035	0.340
FP -> CA	0.935	0.000
Firm size -> CA	-0.080	0.116
Firm size -> FP	-0.016	0.377
FS -> FP	0.528	0.001
FS -> MA	0.313	0.000
MA -> FP	0.105	0.280
Firm age x MA -> FP	0.026	0.411
Firm age x DS -> FP	-0.312	0.001
Firm age x CLS -> FP	0.061	0.231
Firm age x FS -> FP	-0.214	0.039
Firm size x CLS -> FP	-0.058	0.209
Firm size x DS -> FP	0.138	0.058
Firm size x FP -> CA	-0.055	0.240
Firm age x FP -> CA	-0.269	0.018
Firm size x FS -> FP	-0.045	0.303
Firm size x MA -> FP	0.012	0.443

Direct Effects

CLS failed to significantly predict FP (β=0.055; p=0.320: p>0.05). **H$_{1a}$** is rejected. DS predicted significantly positive change in FP (β=0.869; p=0.000: p<0.05). **H$_{1b}$** failed to reject. FS was a significant positive predictor of FP (β=0.528; p=0.001: p<0.05). **H$_{1c}$** failed to reject

Moderation Effects

Firm age moderated in a negative but significant manner, the relationship between FS and FP (β=-0.214; p=0.039: p<0.05), DS and FP (β=-0.214; p=0.001: p<0.05), FP and CA (β=-0.269; p=0.018: p<0.05) but failed in case of CLS and FP. **H4a** and **H4b** are supported. H4c was not supported. Firm size had no significant moderating effects. Hence **H4d, H4e** and **H4f** were not supported. The interaction effects are presented in Figure 2.
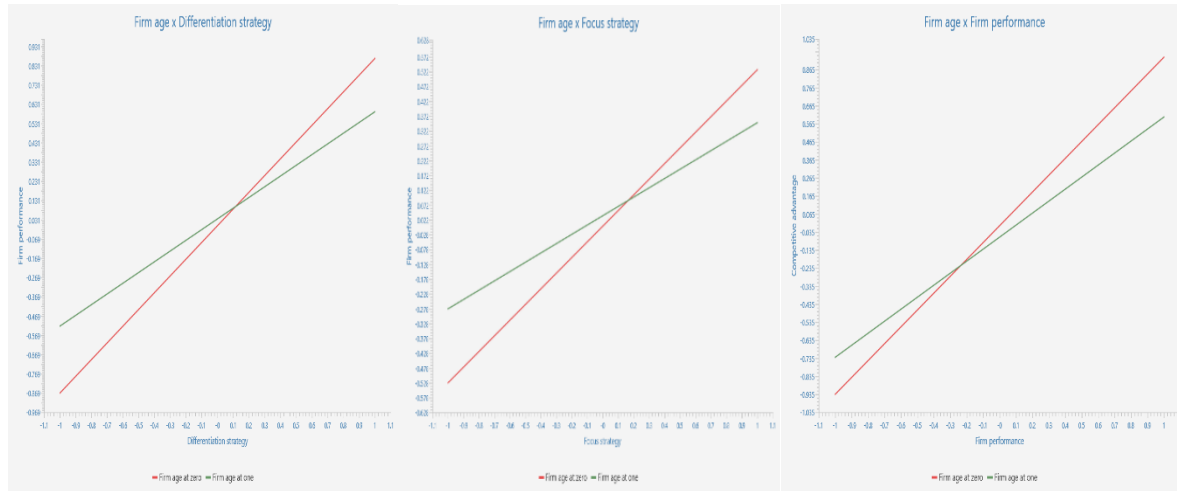
Figure 2: Graphs for Moderation Effects

Mediation Analysis

Mediation analysis is used to test whether the effect of a predictor variable on an outcome variable is transmitted through one or more intervening variables. The analysis typically involves calculating the indirect effect, which is the product of the paths from the independent variable to the mediator and from the mediator to the dependent variable. The significance of these indirect effects can be assessed using p-values. A p-value less than 0.05 indicates that the mediation effect is statistically significant, suggesting that the mediator plays a meaningful role in the relationship between the independent and dependent variables. Conversely, a p-value greater than 0.05 suggests that the mediation effect is not significant.

Table 8 presents the specific indirect effects for various paths in the model.

Table 8: Specific Indirect Effect

	B	P values
MA -> FP -> CA	0.099	0.285
CLS -> MA -> FP	0.011	0.313
FS -> MA -> FP	0.033	0.281
CLS -> FP -> CA	0.052	0.326
FS -> FP -> CA	0.494	0.002
DS -> MA -> FP	0.032	0.292
DS -> FP -> CA	0.812	0.000

Table 8 shows that MA fails to mediate the predictive relationship between CLS and FP (β=0.011; p=0.313: p>0.05) positively. **H2a** is rejected. Same is the case of FS and FP (β=0.033; p=0.281: p>0.05) and of DS and FP

(β=0.032; p=0.292: p>0.05), hence **H2b** and **H2c** are rejected. FP significantly mediates the predictive relationship between FS and CA (β=0.494; p=0.002: p<0.05) positively. **H3c** is supported. FP significantly mediates the predictive relationship between DS and CA (β=0.812; p=0.000: p<0.05) positively hence supporting **H3b**. However, it fails to mediate significantly the CLS-CA predictive relation (β=0.052; p=0.326: p>0.05) therefore **H3a** is rejected.

Coefficient of determination

The coefficient of determination, denoted as R-squared (R^2), is a statistical measure that indicates the proportion of the variance in the dependent variable that is predictable from the independent variables in a model. It is a key indicator of the model's explanatory power. The closer the R^2 value is to 1, the better the model explains the variance in the dependent variable. Conversely, an R^2 value close to 0 indicates that the model does not explain much of the variability. In addition to R-squared, the adjusted R-squared is also provided. This value adjusts the R^2 to account for the number of predictors in the model, ensuring that the inclusion of additional variables does not artificially inflate the R^2. A higher adjusted R^2 indicates a more robust model, especially when comparing models with different numbers of predictors. Table 9 presents the R-squared and adjusted R-squared values for the dependent variables in the model.

Table 9: Coefficient of Determination

	R-square	R-square adjusted
CA	0.372	0.360
FP	0.622	0.600
MA	0.340	0.332

Table 9 shows that changes in CLS, FS and DS jointly accounts for 34.0% positive change in MA. Changes in CLS, FS, DS and MA and the firm characteristics (Firm age and firm size) and their interaction effects jointly account for a 62.2% positive change in SMEs' performance. FP and the interactive effects of firm characteristics, given the transmissive effects of the generic strategies and MA in turn, account for 37.2% positive variance in CA. A pictorial representation of the structural model is presented in Figure 3.
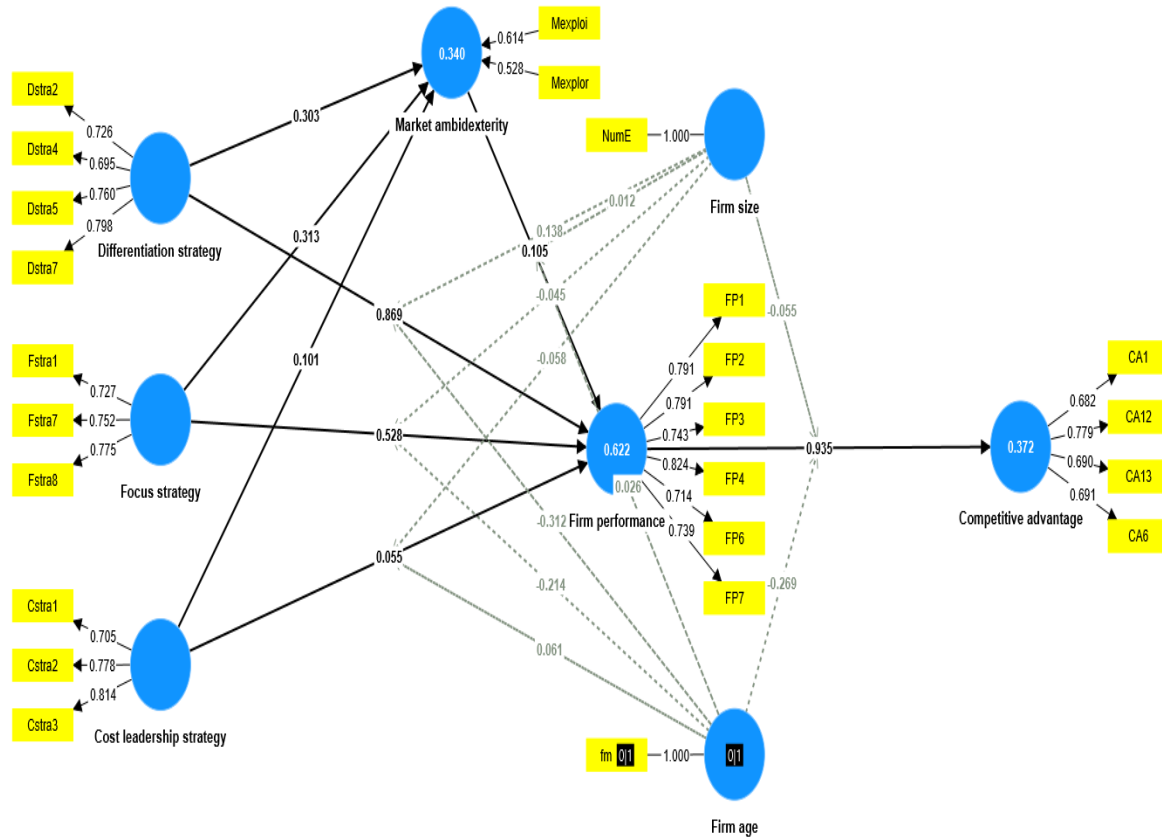
Figure 3: Structural Model

Test of Difference

The test of difference in SEM allows for a deeper understanding of the variability in relationships between constructs across groups, helping to refine the model and improve its applicability to specific subgroups. It is performed through Multi-Group Analysis (MGA).

MGA-Firm Age

The impact of firm age on the relationships between various constructs through a Multi-Group Analysis (MGA) is explored. The analysis compares the path coefficients between old enterprises and young enterprises to determine if the strength of these relationships differs based on the age of the firm. The differences are assessed by calculating the coefficients' differences for old versus young firms and examining the statistical significance of these differences using p-values. A p-value less than 0.05 indicates a statistically significant difference between the groups. Table 10 presents the direct effects and corresponding p-values. Likewise, Table 11 presents the indirect effects and corresponding p-values.

Table 10: Direct Effect

	Difference (Old enterprise - Young enterprise)	p-Value original 1-tailed (Old enterprise vs Young enterprise)
CLS -> FP	0.108	0.111
CLS -> MA	0.298	0.005
DS -> FP	-0.220	0.970
DS -> MA	0.081	0.249
FP -> CA	-0.335	1.000
FS -> FP	-0.191	0.942
FS -> MA	-0.083	0.726
MA -> FP	0.061	0.322

Table 10 reveals that old firms outperformed young firms in a significant manner in terms of CLS-MA relation. However, the generic strategies-FP relations were not statistically different for old enterprises and new enterprises.

Table 11: MGA-Specific Indirect Effect

	Difference (Old enterprise - Young enterprise)	p-Value original 1-tailed (Old enterprise vs Young enterprise)
FS -> MA -> FP -> CA	-0.010	0.682
CLS -> MA -> FP -> CA	0.019	0.092
FS -> MA -> FP	0.008	0.447
CLS -> FP -> CA	0.000	0.509
MA -> FP -> CA	-0.013	0.583
FS -> FP -> CA	-0.181	0.998
DS -> MA -> FP	0.030	0.273
DS -> FP -> CA	-0.250	0.999
CLS -> MA -> FP	0.046	0.058
DS -> MA -> FP -> CA	0.002	0.478

Young firms outperformed old firms in the FS -FP-CA relation and DS-FP-CA relation.

Firm Size

The effect of firm size on the relationships between various constructs is explored through a Multi-Group Analysis (MGA). The aim is to investigate whether the strength of relationships varies between medium enterprises and small enterprises. The MGA compares path coefficients between these two groups to assess if there are significant differences in how the constructs are related across firm sizes. For each path, the difference in the coefficients between medium enterprises and small enterprises is calculated, along with the corresponding p-values. A p-value less than 0.05 typically indicates that the difference between the groups is statistically significant. Table 12 presents the path coefficient differences and p-values.

Table 12: MGA-Path-MGA

	Difference (Medium enterprise - Small enterprise)	p-Value original 1-tailed (Medium enterprise vs Small enterprise)
CLS -> FP	-0.084	0.831
CLS -> MA	0.258	0.013
DS -> FP	0.158	0.072
DS -> MA	-0.091	0.757
FP -> CA	0.019	0.409
FS -> FP	-0.047	0.656
FS -> MA	0.046	0.373
MA -> FP	-0.030	0.599

Medium enterprises outperformed small enterprises in CLS-MA relation (Beta diff: = 0.258; p<0.05). However, there is no statistically significant difference in Generic strategies-FP relations.

Table 13: Specific indirect effect

	Difference (Medium enterprise - Small enterprise)	p-Value original 1-tailed (Medium enterprise vs Small enterprise)
FS -> MA -> FP -> CA	-0.003	0.569
CLS -> MA -> FP -> CA	0.011	0.236
FS -> MA -> FP	-0.006	0.574
CLS -> FP -> CA	-0.048	0.811
MA -> FP -> CA	-0.016	0.590
FS -> FP -> CA	-0.023	0.622
DS -> MA -> FP	-0.016	0.645
DS -> FP -> CA	0.104	0.108
CLS -> MA -> FP	0.018	0.218
DS -> MA -> FP -> CA	-0.009	0.635

There is no statistically significant difference in scores for the respective constructs in the indirect model for small enterprises and medium enterprises (p-values>0.05).

Test of Robustness

The test of robustness is designed to evaluate the stability and predictive accuracy of the model. It examines whether the model's predictions hold under different conditions or variations in the data. This test is crucial for ensuring that the model's results are not overly sensitive to small changes or assumptions. Robustness is often assessed by comparing the performance of the Partial Least Squares (PLS) model with other predictive models, such as Linear Models (LM). Key indicators used in robustness testing include Q^2_predict, Root Mean Square Error (RMSE), and Mean Absolute Error (MAE). Table 13 below presents the robustness test results, comparing the predictive performance of the PLS-SEM model and the linear model (LM) using Q^2_predict, RMSE, and MAE.

Pable 13: PLS predict

	Q^2predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
CA1	0.183	**0.974**	0.793	**0.973**	0.763
CA12	0.138	**1.003**	0.835	**1.020**	0.843
CA13	0.087	0.899	0.749	0.921	0.761
CA6	0.239	0.795	0.649	0.795	0.640
FP1	0.378	0.786	0.617	0.817	0.641
FP2	0.344	0.755	0.595	0.757	0.602
FP3	0.264	0.841	0.678	0.835	0.681
FP4	0.375	0.848	0.696	0.863	0.714
FP6	0.246	0.746	0.566	0.756	0.586
FP7	0.356	0.822	0.664	0.834	0.664
Mexploi	0.230	0.881	0.703	0.904	0.714
Mexplor	0.253	0.868	0.704	0.876	0.714

Table 13 shows that the predictive relevance of the estimated model is considered relevant (Q^2preducts > 0). The model has a low predictive power because the majority of the dependent construct indicators (CA) produced higher prediction errors compared to the naïve LM benchmark (Hair, et al., 2019).

Importance-Performance Map Analysis

FP ad DF had higher performance-higher importance scores. The remaining constructs had higher performance and moderate importance. The overall implication is that the constructs are performing well and are relevant to predicting the modelled relationships.
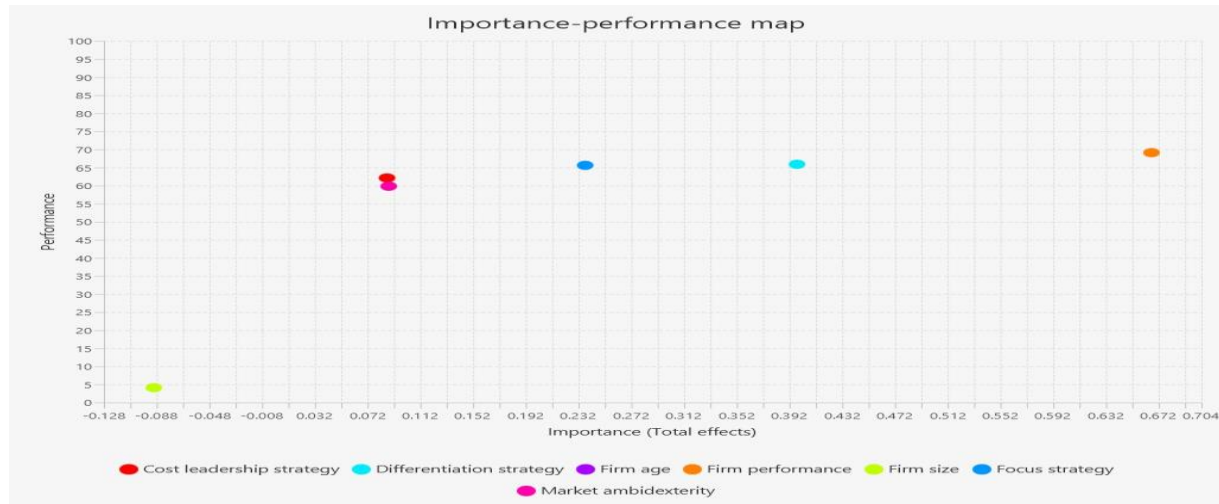

Figure 4: IMPA-Model

IPMA-Indicator

The position of the indicators in the higher performance-higher quadrant proves most of the indicators are valid predictors of the concepts they measured under the context of the study.
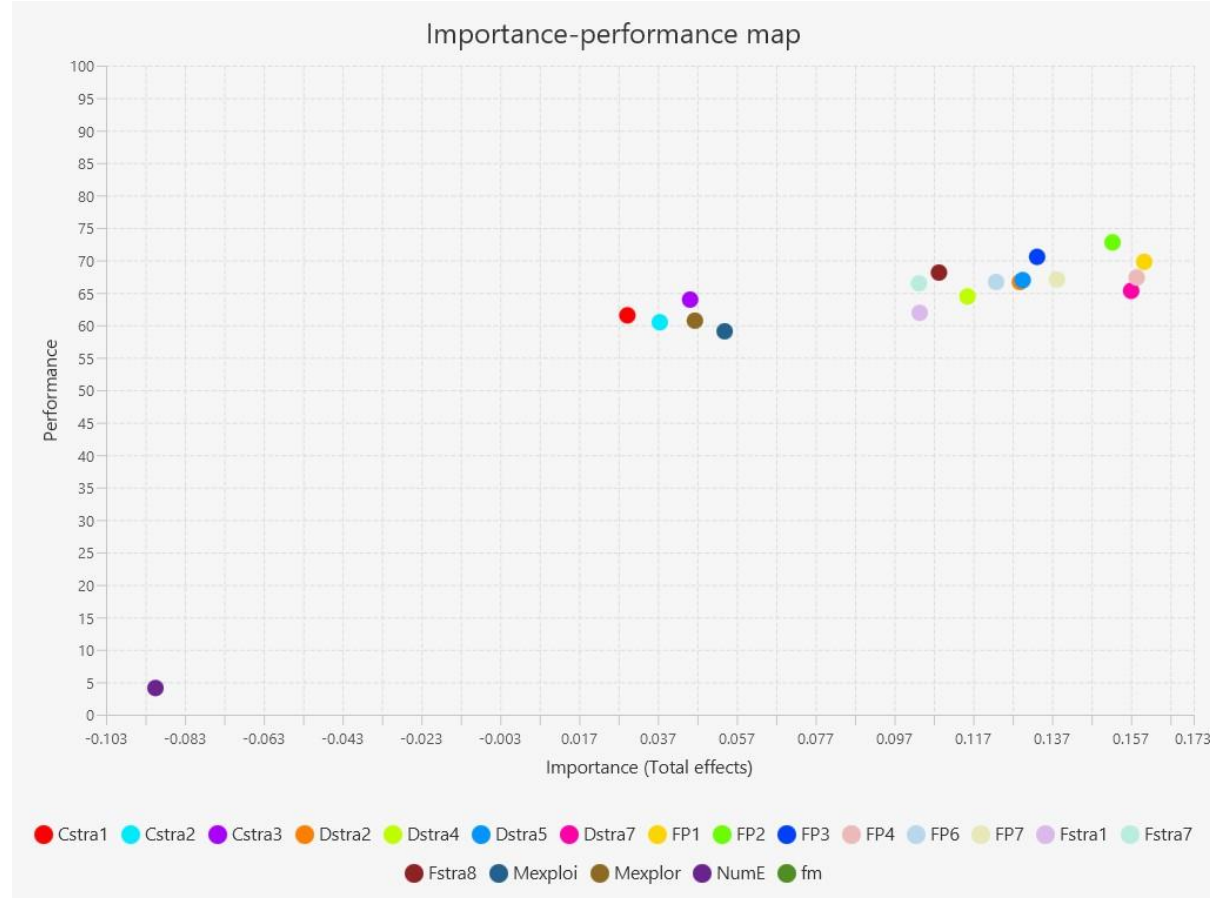

Figure 5: IMPA-Indicators

Discussion

CLS fails to significantly predict FP. H1a is rejected. CLS fails to predict a significant change in FP, signifying its incapability to improve FP. This situation could partly be linked to the higher cost of production, amid disruptions in supply chains during the COVID-19 crisis that engulfed businesses in developing countries in Africa due to their over-dependence on imports. The higher levels of inflation also give credence to the inability of the SMEs to achieve lower costs, hence limiting the capacity of CLS to improve FP and CA. Therefore, Ghana's inflationary pressure is having an unfavourable impact on competition among SMEs (Subramaniam & Masron, 2022). CLS is thus dysfunctional and not a viable strategic choice for SMEs. Like the studies of Kimiti, (2022), the claim that CLS predicts FP is refuted. However, the view of Kharub, Mor and Sharma (2018) is supported.

DS is a significant positive predictor of FP. The execution of DS by SMEs improves FP significantly, thereby confirming the position of some previous studies (Islami et al., 2020; Wheelen and Hunger, 2011).

This behaviour could be attributed to the position of the RBV theory that firms that differentiate their marketing offerings are more resourceful, and adjust their product and process designs to meet the exact value customers are ready to pay a premium for, hence translating into improved FP (Wheelen & Hunger, 2011). FS is a significant positive predictor of FP and MA. FS is a significant positive predictor of FP, a finding that contradicts the position of Powers and Hahn (2004). Empirically, FS and DS are better competitive strategic options for SMEs in emergent markets during the COVID-19 pandemic era than CLS. Like the position of Aquaah and Agyapong (2015), the efficacy of DS is affirmed alongside the power of DS to improve SMEs' performance in Ghana.

The success of Porter's generic strategies (DS and FS) on FP does not depend on MA as claimed by these studies **(**Ali, et al., 2021; Nofiani et al., 2020). SMEs' adaption to changing business environment conditions via MA activities in the COVID-19 era fails to energize Porter's generic strategies in achieving improved FP, contradicting some studies (Ali et al., 2021; Jurksiene & Pundziene, 2016). FP significantly mediates positively the predictive relationship between FS and CA. FP significantly mediates positively DS-CA the predictive relationship. However, it fails to mediate significantly the CLS-CA predictive relation. FP translates the gains in broad-marketed based generic strategies into improved CA among SMEs. Generic strategies are powerful weapons for competing which eventually helps firms to achieve CA (Rostami & Rezaei, 2021). By tying business strategies to interest in business, SMEs are able to direct their operations and activities in specific business units for a particular commercial venture or a particular market (Rostami & Rezaei, 2021). The most important element for competing is how to compete and not where to compete (Barney, 1991). SMEs use DS and FS to improve their performance which in turn causes them to improve their CA (Lafuente et al., 2020). However, FP fails to transmit the effect of CLS on CA. CLS fails to interact with FP to improve CA. Firm age proves to be a significant determinant of the success of Porter's generic strategy among SMEs.

Conclusions

Conclusively, DS improves SMEs' performance better than FS although they all improve FP. CLS fails to improve FM. MA activities do not transmit the effect of Porter's generic strategies on FP. FP translates the gains in DS and FS into CA for SMEs. FP does not mediate the CLS-CA relationship. Firm age influences the relations among DS, FS, FP and CA for SMEs. Firm size however fails to moderate the generic strategies-FP-CA relations for SMEs.

Implications

Practically, the study offers some recommendations which could be relied on to improve the performance of SMEs. Owners and managers of SMEs should adopt DS and FS if they are to improve the performance of their businesses. Improving the conditions that affect the effective implementation of the items that measure the constructs as operationalized in this study could position the SMEs to improve their performance. SMEs should not rely on CLS unless the objective is to achieve other organizational outcomes except to improve FP and CA. Formulating strategies for cost-cutting in the operations of SMEs may make CLS efficient in producing improved FP and CA. Thus, in this COVID-19 pandemic era, SMEs can excel by efficiently concentrating on FS and DS in their target markets.

SMEs must have strategic policy statements that recognise the usage of Porter's generic strategic typologies, particularly DS and FS in their operations, especially during the COVID-19 era. Such a strategic policy statement would guide the activities, operations and programs implementation of SMEs hence creating avenues for the use of tactics for competing in a sustainable manner. Tying generic strategies to specific performance targets among SMEs could provide an avenue for SMEs to achieve a CA. The study thus proves CA hinges on improving FP, which is equally influenced by DS and FS, alongside the intervening influence of firm age. Performance metrics and performance management systems should be integrated with generic strategic programs for DS and FS to empower their potency to significantly improve SMEs' performance, eventually improving CA. unless otherwise proven, that MA has significant implications for other organisational outcomes other than FP, investment in MA activities should be avoided in the quest for improving FP and CA among SMEs.

Theoretically, the position of contingency theory is strongly supported by the moderating role of firm age in Porter's generic strategies-FP-CA relations, but the inability of MA to mediate such relations disproves the power of the contingency theory in this regard. SMEs seem to have developed competencies in FS and DS, which implicitly influence their performance and CA, hence supporting the position of the RBV theory as alluded to in the study. Firm age has proven to be a key contextual factor that affects the efficacy of Porter's generic strategies in producing viable economic outcomes in terms of improved firm performance, thereby supporting the idea espoused by the contingency theory that the success of corporate strategies depends on both internal and external contextual factors.

The survival of SMEs in the COVID-19 era is crucial because of their socio-economic implications on Ghana's development. Efficient execution of the DS and FS simultaneously is needed to improve the FP and CA, feats that have enormous benefits in terms of employment creation, income generation, revenue mobilisation to governments, and eventual improvement in the people's livelihood. Therefore, SMEs should efficiently execute their DS and FS to sustain their CA in the face of improved FP for their survival and growth. This can support the attainment of SDG 8 and SDG 12.

Limitations and suggestions for further studies

The generalisation of the findings is somewhat constrained because micro and large enterprises were excluded from the study. Hence, the findings reflect the situation of SMEs in the Ghanaian business context. The study relied on subjective assessment of owners and managers of SMEs to measure the variables/constructs; hence, more objective measurement criteria are required in future studies.

Disclosure statement

No potential conflict of interest was reported by the author(s)

Ethical considerations

We obtained informed consent from all participants and ensured voluntary participation. The survey responses were anonymous, and we did not collect any identifiable information about the participants. All sources cited in the study were duly referenced appropriately.

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Availability of data and materials

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