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CRITICAL SUCCESS FACTORS AND MODERATING EFFECT OF INNOVATIVE CHARACTERISTICS OF SMES IN EMERGING ECONOMIES: THE CASE OF EGYPT

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Abstract:

The present study explores the challenges encountered by small and medium enterprises (SMEs) in Egypt, which serves as a model for developing economies. It examines the key factors that substantially impact SME business performance. Additionally, it evaluates the potential moderating role of SME innovative characteristics. The study distributed 400 survey questionnaires to Egyptian SME owners, managers, and executive committee members. The Non-probability Quota Sampling method was applied. Of 400 questionnaires, 360 were returned, giving a 90% response rate. Research variables were tested for reliability and validity using internal consistency, construct validity, and discriminant validity. IBM SPSS AMOS was used for Structure Equation Modelling (SEM) to analyze data and test hypotheses. The study confirmed a strong and positive relationship between government support, financial resources, entrepreneurial skills, and competitiveness with SME business performance. Moreover, it showed how the innovative characteristics significantly strengthen the impact of marketing capabilities on business success. The study illuminates the performance of SMEs in emerging markets. It introduces a new conceptual framework that integrates internal and external critical success factors and examines the potential moderating effect of organizations' innovative characteristics. The study outcomes urge policymakers and stakeholders in developing markets to strengthen and expand

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their support for SMEs. It emphasizes the crucial role of promoting entrepreneurship and points out the importance of financial institutions in facilitating the provision of grants to SMEs. Similarly, it motivates SME owners to make a concerted effort to improve their skills, foster an innovative culture, and improve eligibility for securing external funding.

Keywords:

Competitiveness; Emerging Economies; Government Support; Small And Medium Enterprises (SME); Success Factors;

Introduction

In recent years, SMEs have been acknowledged as crucial participants in the global economy and make significant contributions to wealth, income, and employment by politicians, government bodies, and academics (Jasra et al., 2011; Majama et al., 2017; Pletnev & Barkhatov, 2016; Trade & Campus, 2021). This shift in perception has been highlighted by various studies (Kraaijenbrink et al., 2010; Pletnev & Barkhatov, 2016; Sebestova et al., 2007), demonstrating how SMEs play an impactful role in stimulating economic growth, enhancing a country's competitiveness and prosperity, and accelerating industrialization. They are also recognised as a significant catalyst for innovation and research and development (R&D). Despite the fact that the SME sector has become a vital force for sustainable development in mature economies, it remains overlooked and undervalued in emerging economies.

Table 1: Contributions of SMEs To The Economy of Developed Countries

Country	Size of SMEs	Number of SMEs	Number of Jobs Created	Contribution to Total Employment
Australia (2009)	< 200 Employees	2 Million	4.8 Million	47.2 %
UK (2011)	< 250 Employees	4.5 Million	13.8 Million	58.8 %
USA (2009)	< 500 Employees	27.5 Million	59.9 Million	50 %
China (2001)	< 300 Employees	2.4 Million	82% of Total Employees	79 %

Source: (Chen, 2006; Gilmore Et Al., 2013)

Overall, SMEs often experience high rates of failure and low levels of performance, irrespective of the specific business environment in which they operate (Liang et al., 2015), despite their advantageous structure and flexibility compared to large corporations. On top of this, emerging country SMEs encounter extra difficulties in comparison to their counterparts in developed economies due to the high level of uncertainty and instability in the political and economic contexts. Inadequate infrastructure, technological deficiencies, the absence of a culture that supports innovation, and the lack of emphasis on entrepreneurship education are further disadvantages that contribute to the challenges faced by SMEs. Government support, financial resources, entrepreneurial skills, marketing capabilities, and competitiveness are widely recognised in the literature as essential characteristics that greatly contribute to the success and sustainability of SMEs.

The present study centres around SMEs in Egypt, representing a typical emerging economy model. The study explores the challenges businesses face in promising emerging markets in

the Middle East, particularly Egypt. Moreover, there have been scant deliberations regarding the development of innovation streams and the innovative characteristics of SMEs. Therefore, the present research positioned (i) to provide a better understanding of the current context of the Egyptian market, (ii) to examine the already identified CSFs within the current Egyptian market context, (iii) to introduce a novel model integrating both internal and external success factors; and (iv) to investigate their joint impacts on business success and the probable moderated effect resulted by the firm's innovative characteristics.

Literature Review

This section aims to consolidate the pertinent literature on the challenges encountered by SMEs in emerging markets and critical success factors for sustainable SME operations. It seeks to establish the correlation between crucial factors for success, such as government support (GS), financial resources (FR), entrepreneurial skills (ES), marketing capabilities (MC), competitiveness (CO), and SME performance (BP). Additionally, it explores the potential influence of innovative characteristics (IC) in moderating the connection between marketing capabilities, entrepreneurial skills, competitiveness, and SME business success.

Table 2: Critical Success Factors Reported Influencing The Performance of SMEs

Success Factors' Literature Review Matrix	GS	FR	ES	MC	CO	IC	BP
(Fatihah & Noraini, 2015)			√	√			√
(Chan & Al-Hawamdeh, 2002)	√				√		
(Young Park & Wook Kim, 2010)	√	√					√
(Chew & Chew, 2008)	√		√				√
(J. Chen, 2006)	√	√			√		
(Jasra et al., 2011)	√	√		√			√
(Mohamad Radzi et al., 2017)		√	√	√			√
(Sigalas et al., 2013)	√				√		
(Al-Ansari et al., 2013)	√					√	√
(Authors, 2014a)	√	√	√				
(Awuah & Amal, 2011)	√					√	
(Chosniel et al., 2014)	√				√		
(Edinburgh Group, 2012)	√	√		√		√	
(Frantz et al., 2017)	√	√			√		
(Gibb, 2000)		√					√
(Julius et al., 2016)	√	√	√		√	√	√
(Klewitz & Hansen, 2014)						√	
(Lisboa et al., 2011)			√			√	
(Todd et al., 2014)	√						
(Yeh-Yun Lin & Yi-Ching Chen, 2007)						√	
(Oke, Burke, & Myers, 2007)	√				√	√	√
(Thurik et al., 2015)	√						
(Sebestova et al., 2007)	√				√		
(Reed et al., 2000)					√		√
(Oladimeji et al., 2017)		√		√		√	√
(Odoom et al., 2017)				√		√	√

Challenges Facing SMEs

Tehseen (2015) argues that a lack of managerial skills and expertise, low productivity, and low-quality output resulting from an insufficient skilled labour force and a low capability to meet international standards are the most common bottlenecks for SMEs. In comparison, Abu & Mansor (2017) and Sanyal et al. (2020) report that financing access is the most critical challenge facing SMEs that accelerate business failure, despite other issues such as lack of expertise, insufficient marketing capabilities and managerial talent.

From another perspective, Auwal et al. (2018) reveal that the foremost challenge is to remain competitive. Over and above that, Chen et al. (2019), Ng (2019), and Thurik et al. (2015) disclose that lack of policies and regulations, absence of technical training and limited financial grants facilitated by governments are the decisive challenges facing SMEs. Other studies declare that improving entrepreneurial skills and orientation is one of SMEs' prime challenges. Likewise, the courage to innovate and take risks is useful for reviving established businesses and increasing competitiveness in the market (Sulistyo & Ayuni, 2020; Torchia & Calabrò, 2019). On top of this, the last decades of the nineteenth century to the early twentieth century were a period of global economic growth, leveraging the promotion of international trade and free capital mobility under the new global economy standards (Chosniel et al., 2014; Oladimeji et al., 2017; Zekos, 2003). Globalization is a way to bypass trade barriers as it allows penetration into new markets. However, it leads to sharpening competition that creates opportunities and challenges for SMEs to explore and exploit innovation and enhance their competitive position (Bary, 2019; Oladimeji et al., 2017). Previous studies reported that globalization is no longer recognized as a distraction but a reality that both large and small firms have to face (Chosniel et al., 2014). Some authors suggest that SMEs have to face worldwide competition, concluding that choosing not to participate in the global markets is no longer an option, and all firms must anticipate, respond and adapt to the competitive environment (Chosniel et al., 2014; Mutalemwa, 2015; Oladimeji et al., 2017).

Looking into the Egyptian context is an example of emerging economies, where SMEs represent 95 to 98 per cent of the total enterprises or 2.5 million firms and accommodate 75 per cent of the entire workforce (Bary, 2019). They provide around three-quarters of the national value-added (Dynamics et al., 2017), even though more than 90 per cent of SMEs in Egypt are micro or very small, employing less than five employees. According to the definition of the Central Bank of Egypt, firms are considered micro when they employ less than ten employees, which is a unique term in the Egyptian context. Small and medium are when firms employ between ten and two hundred employees, whilst large is when firms employ above that (Randall, 2017).

Table 3: Some Facts About SMEs in Egypt

Type of Enterprise	Number of Employees	Percentage from Total Number of Enterprises	Employment Rate
Micro Enterprises	1-4	91 %	60 %
Small & Medium Enterprises	5-200	8 %	
Large Corporations	More than 200	Less than 1%	40 %

Dynamics et al. (2017) reveal that the lack of adequate finance limits Egyptian SMEs' ability to expand and create jobs despite several government initiatives that do not match the needs of growth-oriented firms. From another perspective, Aboelmaged (2018) demonstrates that technology infrastructure, technology competencies and environmental regulations do not significantly influence SMEs' performance and sustainability, represented by their competitive advantage. In contrast, Loewe et al. (2013) proved that the business environment is essential for SMEs to sustain, whilst government efforts in reshaping policies and regulations to support SMEs will not be efficient with the inequality of opportunity, which is going to prevail as long as governments are unable or unwilling to compensate actively for the uneven distribution of financial, human and social capital through the provision of quality education, quality training, and access to finance and market information for all.

Like other developing nations, the Egyptian economy's political and financial volatility creates a challenging business climate for SMEs to thrive. In addition, Egyptian SMEs encounter substantial barriers in accessing foreign markets and competing with multinational rivals within the global setting. Furthermore, there has been a lack of comprehensive review of SMEs in Egypt, including exploring the difficulties they encounter and examining the crucial factors contributing to their achievements. Therefore, based on the abovementioned challenges and critical success factors, this research aims to enrich existing knowledge by providing an alternative framework for SMEs in developing economies, particularly Egypt.

Critical Success Factors of SMEs

Several studies have been carried out to investigate SMEs' internal and external success factors. Some studies reported entrepreneurial competency and marketing capabilities as critical internal factors and declared that both significantly impact business performance (Baporikar & Fotlela, 2020; Ng, 2019). Some other studies claimed that financial resources and knowledge sharing positively affect business success as well (Abu & Mansor, 2017; Kurnia et al., 2019; Radzi et al., 2017). In addition, other authors recognized the role of technology and the integration of its solutions in business as a strategic choice to increase SMEs' efficiency, performance, and competitiveness (Jasra et al., 2011; Radzi et al., 2017). It has also been published that government support contributes significantly to SMEs' success, preceding the earlier-mentioned factors. However, some studies asserted that financial resources remain the essential factor on which the whole business depends, and limited government financial support led entrepreneurs to face many problems (Jasra et al., 2011).

External Success Factors (Government Support)

Researchers have different arguments about the definition and type of government support. Some argue it is financial, policies and regulation, infrastructure, training, or all of the listed (Bary, 2019; Matinaro et al., 2018; Sanyal et al., 2020; Vuong, 2020). Chan & Al-Hawamdeh (2002); Chew & Chew (2008); Lombardi et al. (2017) described the establishment of e-commerce systems and the rapid deployment of the Internet in Singapore as an effective and successful, characterized by a concerted planning effort through the government to establish a National Information Infrastructure (NII) and promote information technology in all sectors of society. Meanwhile, some other authors performed research to identify the effect of the Korean Government's R&D policy programmes on SMEs' financial performance and revealed its positive impact (Young Park & Wook Kim, 2010). Moreover, Jasra et al. (2011) studied the effect of government support in Pakistan, concluding that the government should play a vital role by giving SMEs a favourable environment and creating clear policies that lead to the success of entrepreneurship, including easiness of getting a business permit and funding

scheme from the government. Chen (2006) declared that the Chinese government attaches great importance to developing SMEs and has integrated small business development issues into its overall strategic planning for national economic and social development. Accordingly, they launched a series of policies and initiatives concerning taxation, financial and credit, and regulatory policies. Evidently, government support is a crucial aspect that greatly affects the performance of SMEs, even though the specific type and meaning of support may vary, as discussed in prior work. Consequently, this leads to the primary hypothesis of this study:

H1: Governmental support has a positive relationship with the business performance of SMEs.

Internal Success Factors (Financial Resources, Entrepreneurial Skills, Marketing Capabilities)

Small businesses frequently encounter limited access to funds, necessitating their reliance on private sources of finance. The lack of financial access might hinder the progress and advancement of organizations, thus impacting business sustainability (Jasra et al., 2011; Kim et al., 2008; Breunig and Zhang, 2020). Consequently, numerous studies have highlighted the significance of access to finance as a limitation on the growth of small businesses (Radzi et al., 2017; Schwab et al., 2019). Besides, banking institutions providing external capital are proven to help overcome the limitations of SMEs' capital-constrained requirements (No & Hakim, 2020). From another perspective, Do, Phong, and Thuong (2019) concluded that factors such as managerial experience, financial literacy of the owner, business plan, and financial management regulations directly influence SMEs' success in securing financing. Owners with higher education and SMEs with larger sizes have a better opportunity to access various financial resources. In addition, the specific role of the banking sector for SMEs should be investigated further via more research (Chosniel et al., 2014; Jasra et al., 2011; Oladimeji et al., 2017).

From another perspective, the significant impact of entrepreneurial skills on business performance, regardless of the various dimensions researchers use to assess those skills, is undeniable. Yet, the most compelling arguments presented by Mohammed (2020), Radzi et al. (2017) and Islam et al. (2011) conclude that innovativeness, proactiveness, leadership, and decision-making are essential soft skills. Entrepreneurial skills are business owners' knowledge, skills or abilities acquired through education, training, and experience. It can be further enhanced through effective interpersonal relationships, networking and communication skills (Coleman, 2007; Collins-Dodd et al., 2004). According to Sulistyo & Ayuni (2020); Amato et al. (2016); and Jasra et al. (2011), business owners with entrepreneurial characteristics have business intelligence and the capabilities to alert or recognize opportunities and transform business concepts into economic goods. Such innovative ability to produce products is possible if the actors of SMEs have a high entrepreneurial orientation that includes proactivity and risk-taking. Besides, having the enthusiasm for creativity and experimentation, a forward-looking perspective, and a willingness to outperform industry competitors are a bonus (Coy et al., 2007; Karami et al., 2006; Bowen et al., 2009; Bonet et al., 2011; Eggers et al., 2013).

Marketing capabilities once were the privilege of large firms, but today, they are a crucial business strategy for small firms as well. Globalization has pressured SMEs to strengthen their marketing capabilities to compete with large corporations worldwide (O'Cass & Sok, 2013). Marketing capabilities refer to a company's ability to utilize its tangible and intangible resources to understand complex consumers' needs and ultimately achieve superior brand

recognition (Nath et al., 2010). Entrepreneurs and business owners must understand the importance of developing creative marketing strategies, especially when competition for customers intensifies due to globalization (Ng, 2019). Besides creating value for the customer by managing the firm's brand, Baporikar and Fotolela (2020) argue that SMEs' success and survival depend on marketing creativity and robust marketing strategy for the products and services. Resource-Based View theory suggests that marketing capabilities are part of inimitable organizational resources that may offer a potential basis for sustainable competitive advantage (Kozlenkova, Samaha, & Palmatier, 2014). However, most SMEs operating in the global market tend to have fewer marketing resources, do less market research, lack presence in large markets, lack readily accessible markets and have less well-recognized brands (Merrilees et al., 2011; Hayami, 2009). The possible justification could be insufficient resources, including a lack of cash flow and marketing expertise within SMEs (Doole et al., 2006; O'Dwyer et al., 2009). Moreover, they often afford fewer incentive and reward programmes (Hayami, 2009).

Based on the highlighted studies on the substantial influence of financial resources, entrepreneurial skills, and marketing capabilities on the success of SMEs, three hypotheses are put up in this context, namely:

H2: Financial resources have a positive relationship with the business performance of SMEs.

H3: Entrepreneurial skills have a positive relationship with the business performance of SMEs.

H4: Marketing capabilities have a positive relationship with the business performance of SMEs.

Competitiveness

Deshmukh (2009) studied SMEs in emerging markets of India and China. He verified that cost, quality, product range and service delivery are the crucial focus of development and improvement to strengthen SME competitiveness. He further recommends that SMEs utilize information and communication technologies to reach the right markets cost-effectively to sustain fair competitiveness in domestic and global markets. Moreover, Volek, Novotná and Zeman (2019) reported increased labour productivity as a prime factor in increasing SMEs' performance and competitiveness. They measure competitiveness in terms of return on assets, return on sales and current liquidity. According to the literature, there is evidence to suggest that competitiveness has a positive and significant effect on the performance of SMEs. Thus, the fifth hypothesis in the present study suggests that:

H5: Competitiveness has a positive relationship with the business performance of SMEs.

SMEs' Innovative Characteristics

In today's dynamic market and highly competitive environment, all firms, including large-scale organizations and SMEs, have recognized the vital need for continuous innovation and offering new and creative products and services to sustain and achieve competitive advantages (Julius et al., 2016; Matinaro et al., 2018; Oladimeji et al., 2017). SMEs must develop a competitive advantage to compete with industry players and rivals worldwide. Some studies have acknowledged the influence of knowledge utilization and sharing within SMEs and developing individuals' analytical and critical thinking skills to develop and sustain competitive advantage (Egbu et al., 2005; Ngah & Jusoff, 2009). Innovation can be articulated as an individual's new

idea, practice, and object. Popa et al. (1996) argue that innovative ability is described as converting knowledge and ideas into new products, processes, and systems, generating benefits and returns for the organization and the shareholders, while Sulistyo and Ayuni (2020) explain innovation capability as the implementation and creation of technology applied to new systems, policies, programmes, products, processes and services to the organization. SMEs are crucial engines for innovation and technology advancement since they are more flexible in adapting their processes, prices, and products in response to the recent changes in the market compared to large firms (Al-Ansari et al., 2013; Moeuf et al., 2019). Furthermore, innovative and technology-based SMEs can furnish a platform for local, regional, and international growth (Bary, 2019).

Amini Sedeh et al. (2022) argue that in less developed nations, innovative entrepreneurship plays a crucial role in driving economic development, while Gunartin et al. (2023) reveal that competencies, specifically analytical, innovative, operational, human, strategic, commitment, learning, and personal strength, have a direct and indirect influence on the performance of SMEs. Moreover, Bradley et al. (2021) confirm that innovation and entrepreneurship facilitate the introduction of novel products and services into the market, foster the expansion of enterprises and industries, and engender advancements in social and economic spheres. On the other hand, da Costa et al. (2018) reveal that innovative marketing capabilities are positively related to performance. In their study, Falahat et al. (2020) demonstrated that market intelligence capability, product innovation capability, and pricing capability are three crucial talents that contribute to the competitive advantage of SMEs. In addition, it was explained that marketing innovation is crucial for enhancing organizations' performance and positively impacts business sustainability (Hanaysha et al., 2022; PAULA & SILVA, 2019).

From another perspective, studies explained how firms' innovation performances are believed to be a crucial aspect in the growing competitiveness of countries (Hermundsdottir & Aspelund, 2021). This is demonstrated through the projection of innovative business processes into the overall innovation performance of the economy (PAULA & SILVA, 2019). According to Otero-Neira et al. (2009), the different performance levels of firms are linked to the types of innovation they develop (Forsman & Temel, 2011). Moreover, Blumentritt and Danis (2006) and Calantone et al. (2002) provided empirical evidence on a significant positive link between innovation and business performance. Thereby, the subsequent three hypotheses are suggested:

H6: Innovative Characteristics moderates the relationship between entrepreneurial skills and business performance of SMEs.

H7: Innovative Characteristics moderates the relationship between marketing capabilities and business performance of SMEs.

H8: Innovative Characteristics moderates the relationship between competitiveness and business performance of SMEs.

The research framework of the present study has been provided in Figure 1.

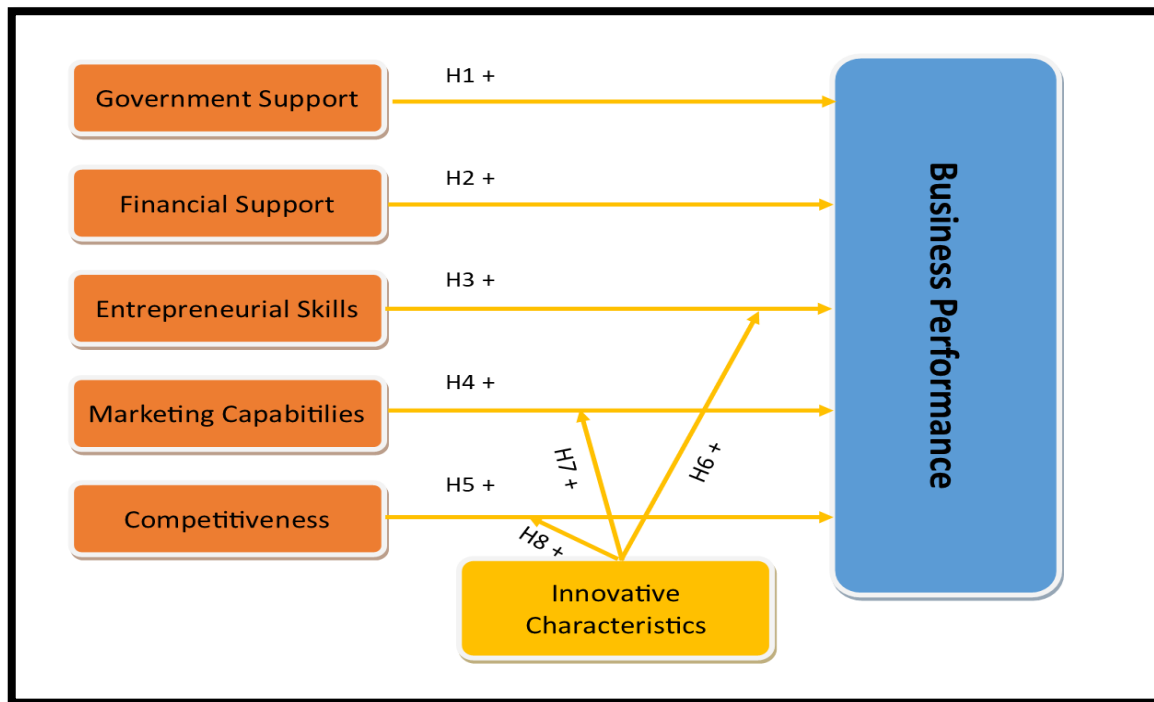


Figure 1: Conceptual Framework

Methodology

The current study utilized nonprobability quota sampling to assess the influence of government support, financial resources, entrepreneurial skills, marketing capabilities, and competitiveness on the business performance of Egyptian SMEs. Additionally, it examines the moderating effect of SMEs' innovative characteristics on the relationship between entrepreneurial skills, marketing capabilities, competitiveness, and business performance. In this study, we used a self-administered survey questionnaire with forty-nine items to determine the effectiveness of the constructs. Out of the forty-nine items, five items measured government support, seven items measured financial resources, seven items measured entrepreneurial skills, five items measured marketing capabilities, five items measured competitiveness, eleven items measured innovative characteristics, and nine items measured business performance, respectively. The research variables items were adopted and adapted from Yeh-Yun Lin & Yi-Ching Chen. (2007), Young Park & Wook Kim. (2010), Mohamad Radzi et al. (2017), Sulistyo & Ayuni (2020), Lisboa et al. (2011), Kraus et al. (2012), Avlonitis & Salavou (2007), Sigalas et al. (2013), Al-Ansari et al. (2013), Oke et al. (2007), and Aboelmaged (2018). Five points Likert scale (strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5)) were used to measure the items. Items of the variables are presented in Table 5.

Prior to data collection, an ethical approval form was submitted to the senior management of the participating SMEs. Throughout the data-gathering procedure, the respondents were guaranteed the protection of their identities and confidentiality. Respondents were not obligated to participate in the questionnaire and had the freedom to decline their participation at any point during the survey. The study circulated 400 questionnaires to owners, managers, and executive committee members of SMEs and obtained 360 usable responses, resulting in a response rate of 90%. The gathered data were analyzed using various tests, including the Normality, Non-Response Bias, Multicollinearity, and Common Method Bias tests. Once the initial validity of the data was confirmed, the study variables were analyzed for internal

consistency and the validity of the constructs. The data was tested for normality, bias, and internal consistency using the SPSS-24 software. Construct validity was assessed using the outer loadings, composite reliability, and average variance extracted (AVE). In addition, the discriminant validity was examined to determine the distinctiveness of the variable items from one another. This study uses the Structure Equation Modelling (SEM) technique to examine the hypothesized research model via The Analysis of Moment Structures (AMOS) software.

Findings

Demographic Profile of the Respondents

In this study, out of the 360 participants in the survey, 50% were managers, 22% were members of executive committees, and 28% were owners of small and medium-sized enterprises. Among them, just 20% were beyond the age of 50, while the remaining 80% were below 50 years old. It is worth mentioning that 46.7% of the participants were female, whereas 53.3% were male. The participants in the survey are responsible for supervising SMEs active in different areas of the Egyptian market. More precisely, 29.2% of the SMEs are located in the northern region of Egypt, while 20.3% are situated in the southern region. A comparable number of SMEs are found in the eastern region. The remaining SMEs, constituting 6.9% of the total participating SMEs, are located in the western region of Egypt. (See Table 2).

Table 4: Respondents' Demographic Profile

Description	Frequency	Percent
Position		
Executive Committee Member	78	21.7
Manager	180	50.0
Owner	102	28.3
Age		
30 and under	42	11.7
31 to 40	113	31.4
41 to 50	135	37.5
51 to 60	55	15.3
above 60	15	4.2
Gender		
Male	192	53.3
Female	168	46.7
Location		
Central of Egypt	84	23.3
East of Egypt	73	20.3
North of Egypt	105	29.2
South of Egypt	73	20.3
West of Egypt	25	6.9
Number of employees		
Less than 3	15	4.2
3 to 5	42	11.7
6 to 10	105	29.2
11 to 20	111	30.8
More than 20	87	24.2
Type of industry		
Agriculture	21	5.8

Description	Frequency	Percent
Consumer Goods	54	15.0
Import/Export	60	16.7
Information Technology	68	18.9
Manufacturing	40	11.1
Services	90	25.0
Others	27	7.5
Time in operation		
Less than one year	29	8.1
1 to 3 years	92	25.6
4 to 6 years	114	31.7
7 to 10 years	52	14.4
More than 10 years	73	20.3

Analysis of the Measurement Model

The Measurement model analysis assessed all the research variables using Reliability and Validity tests (Hair et al., 2017; Henseler, 2018). In the Formative model, construct and convergent validities were assessed by examining the outer loadings of the variables' items, as well as the values of both Cronbach's Alpha and Composite Reliability (CR). The Average Variance Extracted (AVE) value serves as an indicator of both the construct and convergent validities of the research variables. Henseler et al. (2009) state that a study variable is considered satisfactory if its outer loading is 0.7 or higher, whilst construct loadings between 0.4 and 0.7 should be carefully evaluated before deciding whether to exclude them from the model. According to Hair et al. (2020), an outer loading of 0.5 or higher is still regarded as acceptable, but any outer loading below 0.5 should be excluded from the model. However, Hulland (1999) argues that a loading value of 0.4 or above is considered acceptable. This study uses a threshold of 0.7 for Cronbach's Alpha and Composite Reliability values and 0.5 for the AVE to assess the validity of the Measurement model.

The Measurement model was analyzed using the AMOS 24 programme. The results for Cronbach Alpha, CR, outer loading, and AVE are displayed in Table 3. The results of the Measurement model indicate that the outer loading values of all constructs fall within the range of 0.70 to 0.90, with the exception of items ES5, ES6, ES8, MC6, CO1, CO4, and CO7, which were excluded due to low factor loadings. Based on the results, the CR value of all constructs is higher than 0.7, and AVE is larger than 0.50, which satisfies the minimum criteria for construct and convergent validity (Hair et al., 2017). Furthermore, Discriminant Validity was assessed for the Measurement model by examining the cross-loading values of all constructs' indicators. Hair et al. (2020) propose that indicators of a construct should exhibit the highest value within their own underlying construct when compared to other constructs. According to the tests, the indicators of all the underlying constructs have a larger loading in the Structural model compared to the indicators of other constructs. Therefore, these findings fulfil the requirements of cross-loading evaluation with sufficient evidence. Hence, the results of the Discriminant Validity indicate that the Measurement model is appropriate.

Table 5: Validity of The Research Constructs

Code	Variable Items	Loading	Alpha	CR	AVE	Discriminant Validity
<i>Government Support</i>			0.957	0.930	0.726	Yes
GS1	Our company has direct access to financial support from the government (i.e., soft loans, grants, credit guarantee, etc.).	0.871				
GS2	Our company is receiving technology support from the government (i.e., robust infrastructure, incubator facilities, portals).	0.841				
GS3	Our company is receiving human resources support from the government.	0.851				
GS4	The government develops rules and regulations to facilitate the operation of SMEs like us.	0.862				
GS5	The government gives educational support to grow entrepreneurial skills in SMEs (i.e., Training, workshops, seminars, etc.).	0.836				
<i>Entrepreneurial Skills</i>			0.949	0.947	0.717	Yes
ES1	I have an ambitious goal with a clear vision and mission to run the business.	0.842				
ES2	I have characteristics of autonomy.	0.845				
ES3	I have characteristics of competitive aggressiveness.	0.846				
ES4	I have characteristics of risk-taking.	0.837				
ES7	I am proactive.	0.851				
ES9	I have reliable managerial skills.	0.853				
ES10	I have decision-making skills.	0.852				
<i>Marketing Capabilities</i>			0.957	0.931	0.728	Yes
MC1	Our company has a good service and delivery system.	0.863				
MC2	Our company has a good knowledge of customers and their needs.	0.843				

MC3	Our company has a good image and reputation.	0.847				
MC4	We have good quality product/service.	0.861				
MC5	We have effective sales skills, marketing, and promotion activities.	0.853				
	Financial Resources		0.969	0.946	0.714	Yes
FR1	Our company has a good financial base and adequate cash resources.	0.840				
FR2	Our company has a good accounting practice and systems to manage our operations.	0.853				
FR3	Our company use public financial support and grants.	0.840				
FR4	Our company keeps track of financial reports on the sales.	0.842				
FR5	Our company keeps track of financial reports on the purchase.	0.840				
FR6	Our company keeps track of financial reports on the income statement.	0.846				
FR7	Our company keeps track of financial reports on the balance sheet.	0.853				
	Competitiveness		0.949	0.918	0.692	Yes
CO2	Our company is making use of more market opportunities than competitors.	0.834				
CO3	Our company neutralizes all competitive threats.	0.819				
CO5	Our company is able to reduce total expenses at a higher rate than competitors.	0.824				
CO6	Our company is able to reduce operating expenses at a higher rate than competitors.	0.835				
CO8	Our company is able to reduce the operating expenses ratio (operating expenses divided by revenue) to a higher extent than competitors.	0.847				
	Innovative Characteristics		0.976	0.954	0.652	Yes
IC1	Our company frequently tries new ideas.	0.805				

IC2	Our company introduces a number of new products/services.	0.808				
IC3	Our company introduces a number of new processes or organization management systems.	0.812				
IC4	Our company is first to market with new products or services.	0.794				
IC5	Our management seeks out new ways to do things.	0.809				
IC6	Our company is creative in its methods of operation.	0.821				
IC7	Our company uses up to date technology.	0.815				
IC8	Our company develops new market segments.	0.803				
IC9	Our company uses new marketing methods.	0.811				
IC10	Our company develops new ways of establishing relationships with customers.	0.795				
IC11	Our company spends resources on research and development for new products, services or processes.	0.809				
	Business Performance		0.964	0.933	0.607	Yes
BP1	I consider the business is operating efficiently.	0.759				
BP2	I am satisfied with the growth of the net income of the business.	0.790				
BP3	I consider the business as successful.	0.771				
BP4	I consider the business is growing.	0.771				
BP5	Our business will continue to expand in the future.	0.791				
BP6	Our company's market share is growing from year to year.	0.783				
BP7	Our company's customer satisfaction is increasing continuously.	0.779				
BP8	Our company's sales growth is increasing yearly.	0.770				
BP9	Our company's return on investment is always enhancing.	0.796				

Note: Yes (Square root of AVE > correlations of the construct)

Analysis of the Structural Equation Modeling

The present study employed IBM SPSS AMOS software for the purpose of data analysis and hypothesis testing. It demonstrates the efficacy and use of AMOS as a method for analyzing research data as it is a visual programme and easier to use than other programmes (Civelek, 2018). Moreover, it allows for evaluating complex models with multiple components, interactions, and moderations. The Structural Equation Modeling (SEM) analysis was conducted to examine the relationships between the independent variables (Government Support, Financial Resources, Entrepreneurial Skills, Marketing Capabilities, and Competitiveness) and the dependent variable (Business Performance), with the moderation role of Innovative Characteristics between Entrepreneurial Skills, Marketing Capabilities, and Competitiveness and Business Performance.

The results indicate a significant positive effect of Governmental Support on Business Performance (Estimate = 0.291, $p < 0.001$), suggesting that businesses receiving governmental supports exhibit higher performance. Financial Resources also demonstrate a positive impact on Business Performance (Estimate = 0.143, $p = 0.003$). Furthermore, Entrepreneurial Skills show a significant positive association with Business Performance (Estimate = 0.227, $p = 0.008$). Marketing Capabilities, however, show a non-significant direct effect on Business Performance (Estimate = 0.017, $p = 0.870$). Competitiveness significantly contributes to Business Performance (Estimate = 0.194, $p = 0.037$), indicating that businesses with strong Competitiveness tend to perform better. The moderation effects of Innovative Characteristics are evident in the positive interaction terms. Specifically, the interaction between Marketing Capabilities and Innovative Characteristics (MC*IC) has a significant positive impact on Business Performance (Estimate = 0.068, $p = 0.003$). Conversely, the interaction between Entrepreneurial Skills and Innovative Characteristics (ES*IC) shows a negative effect but is not statistically significant (Estimate = -0.014, $p = 0.552$). Similarly, the interaction between Competitiveness and Innovative Characteristics (CO*IC) has a negative effect but is not statistically significant (Estimate = -0.040, $p = 0.145$).

Based on the analysis of the findings, it can be verified that hypotheses H1, H2, H3, H5, and H7 are supported at a statistically significant level ($p < 0.05$). However, hypotheses H4, H6, and H8 are not supported.

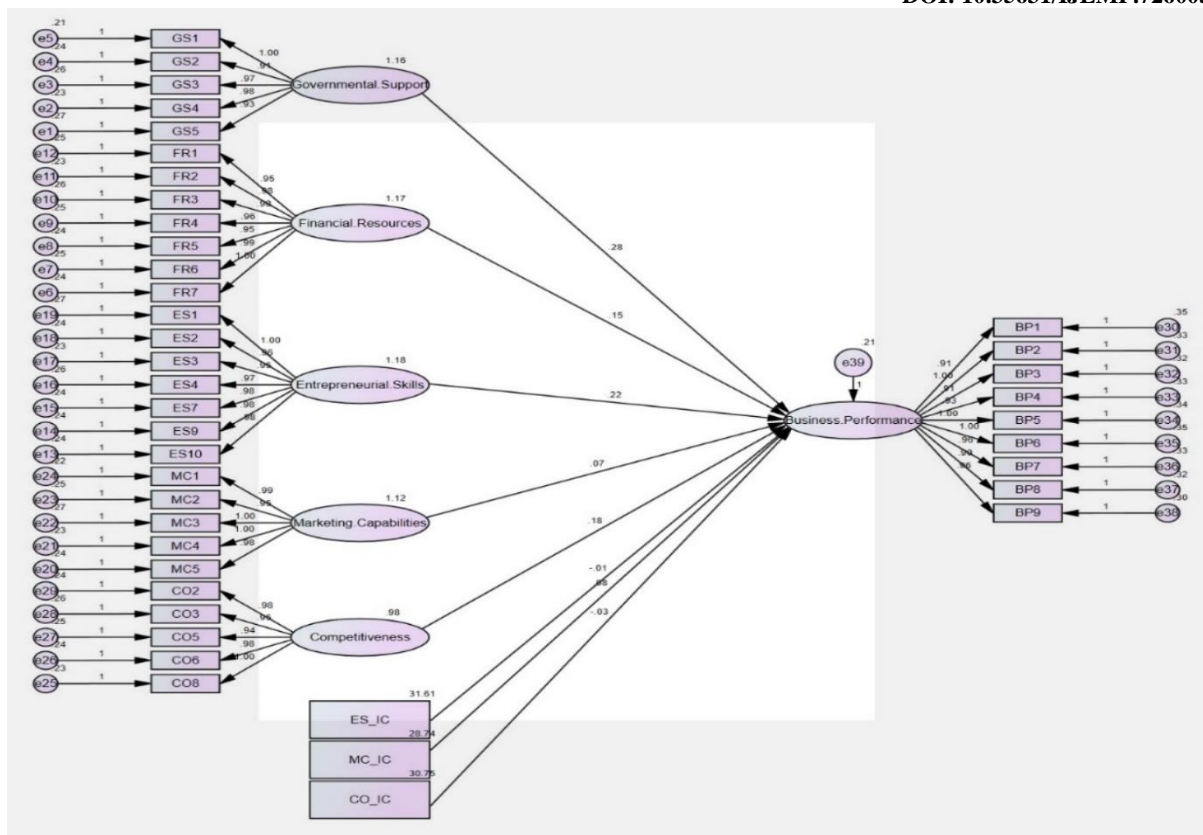


Figure 2: AMOS Structure Equation Modelling

Table 6: Results of The Path Analysis

Hypothesized Path	Estimate	p-value	Remarks
H1 Government Support → Business Performance	0.291	0.000	Supported
H2 Financial Resources → Business Performance	0.143	0.003	Supported
H3 Entrepreneurial Skills → Business Performance	0.227	0.008	Supported
H4 Marketing Capabilities → Business Performance	0.017	0.870	Not Supported
H5 Competitiveness → Business Performance	0.194	0.037	Supported
H6 ES*IC → Business Performance	-0.014	0.552	Not Supported
H7 MC*IC → Business Performance	0.086	0.003	Supported
H8 CO*IC → Business Performance	-0.040	0.145	Not Supported

Discussion

This study aims to explore the challenges encountered by SMEs in developing countries using the Egyptian market as a representative example and examines the associated vital success factors and how they affect business performance using knowledge obtained from prior studies.

Likewise, the study investigated how the innovative characteristics of SMEs may moderate the relationship between entrepreneurial skills, marketing capabilities, competitiveness, and business performance. The study employed Structural Equation Modelling (SEM) to analyze the data gathered through a questionnaire administered to owners, managers, and executive committee members of SMEs in Egypt. The results of the study validate the notion that government support has a positive and substantial effect on the performance of SMEs. This finding aligns with the research conducted by Tran and Tron (2023), who highlight the importance of government policy actions in enabling SMEs to effectively utilize their financial resources, leading to improved performance, economic growth, and job creation. Additionally, Galasso et al. (2020) have demonstrated the essential role of local government support and guidance in enhancing the performance and competitiveness of small businesses. Meanwhile, the study reveals that financial resources have a positive and significant influence on the success of SMEs in emerging markets. This is corroborated by Cheng et al. (2022), who revealed that financial constraints have consistently been a crucial obstacle that impedes the functioning and advancement of businesses, particularly for SMEs with limited fixed assets and heightened operational risk. Moreover, Schwab et al. (2019) demonstrate that legal limitations can hinder small businesses' ability to obtain financing, consequently restricting the growth of medium-sized establishments. Likewise, Rupeika-Apoga and Danovi (2015) said that alternative financing is important for policymakers who aim to promote the establishment and expansion of businesses, as SMEs play a vital role in the development of countries.

On top of that, the present study validates a strong and statistically significant correlation between entrepreneurial skills and the business performance of SMEs in emerging markets, which echoes the findings of Gunartin et al. (2023), who observed that successful business management necessitates entrepreneurs to devise strategies to capitalize on opportunities, create business plans, execute programme development strategies, assess performance, and foster innovation and business growth. Additionally, the present finding fits in with the results of Anwar et al. (2022), who referred to high failure rate of newly established businesses in emerging economies compared to advanced economies as a result of a deficiency in capabilities, inadequate resources, limited entrepreneurial skills, and a scarcity of opportunities. Along with that, the study affirms that competitiveness has a beneficial and significant influence on the performance of SMEs. This finding is consistent with Baporikar's (2019) conclusion that in order for a company to thrive in a dynamic business landscape, it must assess its internal factors such as resource capabilities, relative cost position, and competitive advantage over its competitors. In addition, Kraja and Osmani (2013) emphasized the necessity for enterprises to have strategic management and a competitive edge in order to sustain their operations. They also highlighted the importance of developing a comprehensive business plan, analyzing the situation, and effectively implementing strategies to turn ideas into reality.

Unlike the findings of Davcik et al. (2021) and Amin (2021), who emphasized the importance of developing a strong brand, adaptability of marketing capabilities and marketing strategy for business survival and success, the present study found that marketing capabilities do not have a significant impact on the performance of SMEs in emerging economies. However, the innovative characteristics of SMEs have been proven to enhance the relationship and significantly moderate the influence of marketing capabilities on business performance. This finding is supported by Hanaysha et al. (2022) who confirm the significant effect of marketing innovation on the sustainability of businesses. Apart from that, the current study found no significant moderating effect of innovative characteristics on the relationship between

entrepreneurial skills as well as competitiveness, and business performance of SMEs in developing countries. This finding contradicts previous studies that have shown a significant influence of innovative entrepreneurship on economic development, especially in less developed economies. Furthermore, other studies have demonstrated a significant impact of sustainability innovation on firm competitiveness (Amini Sedeh et al., 2022; Hanaysha et al., 2022; Hermundsdottir & Aspelund, 2021).

Conclusions, Significance, Recommendations, Limitations and Future Research

The results of this study validate the substantial impact of government support, financial resources, entrepreneurial skills, and competitiveness on improving the business performance of SMEs in emerging countries such as Egypt. Summarising the study findings, all of the study questions were answered, and all research objectives were successfully accomplished. The current study has implications for the government, SME owners, and academics since it analyses the primary determinants of business success and offers valuable instruments, information, and recommendations to improve SME performance in emerging countries. The study findings suggest the crucial role of the government and stakeholders of SMEs to offer financial, technical, and regulatory support to help SMEs overcome the specific obstacles and barriers faced in developing economies. Furthermore, this research demonstrates human resources support in a different dimension. Thus, it is imperative for governments in developing markets to prioritize the nurturing of talented individuals, train them for new markets, and provide them with the necessary knowledge and skills to succeed in their chosen career paths, which in turn will have a direct influence on the performance of the enterprises that employ them. Additionally, the current study indicates that it is fundamental for the government to prioritize the education of entrepreneurs in order to enhance their abilities, hence positively impacting the performance of the SMEs under their supervision.

Although the current study does not demonstrate empirical evidence for a notable influence of marketing capabilities on the performance of SMEs in developing markets, it does indicate that the innovative characteristics of SMEs positively and considerably enhance this relationship. Thus, it is crucial for SME owners to have knowledge about the advantages, opportunities, and possibilities of innovation and the unique qualities of their companies on which to capitalize. Ultimately, this study recommends that governments give priority to its laws and regulations in order to modernize the functioning of SMEs in emerging economies. This would help to attract entrepreneurs and provide a favourable climate for the sustainable growth of SMEs. However, authorities should give greater importance to enacting policies that improve the ability of SMEs to obtain financial resources. To achieve this, funding procedures should be made more efficient, financial literacy programmes can be offered to enhance financial management abilities, and financial institutions can be encouraged to provide help to SMEs (Tran & Tron, 2023). On the other hand, ensuring openness in financial reporting and promoting responsible financial management practices are essential considerations. Finally, establishing a business climate that fosters entrepreneurship and innovation has the potential to facilitate the growth of SMEs.

However, an important limitation of the present investigation is the restricted accessibility of data, combined with the absence of data precision. In addition, the widespread and significant presence of informal businesses in Egypt presents difficulties in obtaining a sufficient sample size, as there is a discrepancy between the number of officially registered or legal corporations and the actual number of businesses operating in Egypt. In addition, the study exclusively utilized quantitative measures to analyze the data. Therefore, future researchers may find it

beneficial to incorporate both qualitative and quantitative methodologies in order to provide more indepth and resilient study outcomes. From another viewpoint, this study lays the groundwork for future researchers and academics who are interested in developing markets, emphasizing the importance of small and medium-sized businesses for economic progress and national growth. Additionally, the suggested conceptual model can be easily adjusted to investigate other important factors that contribute to success, as well as other possible moderating and mediating roles. Lastly, the study provides valuable insights for other researchers and raises additional concerns about the competitiveness of small and medium firms and their impact on the long-term viability of SMEs in developing countries.

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