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The Effect of Corporate Entrepreneurship Determinants on the Financial Performance of Small and Medium Enterprises (SMEs): An Empirical Study

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Abstract: This paper examines the effect of corporate entrepreneurship determinants on small and medium-sized enterprises (SMEs) financial performance in Malaysia, including the mediator effect of competitive advantage. A cross-sectional design was adopted, where data were collected from a sample of 221 SMEs utilizing an online questionnaire. Hypotheses were tested using the partial least squares (PLS) approach. The findings revealed a significant relationship between the determinants of corporate entrepreneurship (individual, organizational, and external environment characteristics) and an organization's financial performance. A mediating effect was also found by including an organization's competitive advantage in its financial performance. A profound understanding of corporate entrepreneurship determinants by focusing on individual and organizational perspectives can assist SMEs in implementing appropriate strategies to achieve desired financial performance. The capability of SMEs to embed employee entrepreneurial behavior in the workplace is likely to achieve the desired financial performance outcomes effectively. This study advances knowledge on corporate entrepreneurship by proposing relevant determinants and the effect of each determinant on an organization's financial performance in the context of Malaysian SMEs.

Keywords: corporate entrepreneurship, individual characteristics, organizational characteristics, competitive advantage, organizational financial performance, small and medium enterprise (SMEs)
JEL Classification: L260, M130, O310

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Introduction

To drive corporate entrepreneurship and foster innovation, many businesses have adopted strategies such as downsizing, reengineering, and restructuring, aiming to streamline operations and create more agile environments conducive to entrepreneurial initiatives (Civelek, 2021; Mamun et al., 2018; Pangestuti et al., 2022). These actions are often implemented to eliminate inefficiencies, free up resources, and cultivate a culture that encourages risk-taking and the development of innovative solutions to remain competitive in dynamic markets. According to Chinie (2013), well-structured or bureaucratic businesses face difficulties in integrating the entrepreneurial spirit into their organizations. Therefore, it would be good if these organizations could think outside the box (Castrogiovanni et al., 2011). These organizations should adopt innovative approaches, such as fostering cross-disciplinary collaboration or exploring unconventional strategies, to drive corporate entrepreneurship and innovation effectively. For instance, they could implement programs like Google's '20% time,' which allows employees to dedicate a portion of their work hours to personal projects, or establish partnerships with startups to explore fresh perspectives and cutting-edge technologies.

Businesses will find it difficult to survive if they are unable to adopt proactive strategies that address the specific challenges of implementing corporate entrepreneurship, such as fostering innovation, overcoming resistance to change, and identifying viable new ventures (Nurhayati et al., 2021). Without such forward-thinking approaches, organizations risk falling behind competitors who are better equipped to navigate the complexities of dynamic markets and capitalize on emerging opportunities.

This is because today's external business environment has become aggressive, competitive, and dynamic (Sumarmi et al., 2024). According to Mokaya (2013), organizations must continuously reinvent themselves through differentiation and innovation to achieve and sustain a competitive advantage. While challenging, this approach not only enables the development of new products and services but also enhances organizational processes and business models, addressing a significant gap in research. Such efforts are crucial for maintaining relevance in dynamic markets and adapting to ever-evolving customer needs, ensuring long-term success.

Deslée and Dahan (2018) state that the outcome of the innovation process to assist business organizations is to develop new sources of competitive advantage and reintroduce their plans. Groenewald (2010) mentions that for organizations to remain competitive, they need to achieve a competitive advantage. Building on the foundational insights of Hatinah et al. (2015) and Kamalian et al. (2015), there is a pressing need to expand research into corporate entrepreneurship practices. Specifically, exploring the mediating role of competitive advantage is crucial, as it represents a significant gap in current knowledge. Addressing this gap is not only vital for enhancing the theoretical frameworks that underpin corporate entrepreneurship but also for providing practical guidance to organizations aiming to sustain innovation and performance in competitive markets. Such an investigation would offer a deeper understanding of the mechanisms through which corporate entrepreneurship drives sustainable competitive outcomes. Kahkha et al. (2014) observe that research exploring the impact of corporate entrepreneurship activities on organizational financial performance remains sparse. This observation has been corroborated by Çağa et al., (2024), who have found that less than 15% directly examined financial performance metrics. Similarly, D'Angelo et al. (2023) highlight the lack of studies that investigate the sustained financial effects of entrepreneurial initiatives, emphasizing that most existing research focuses on qualitative or theoretical models rather than quantitative financial outcomes. These findings underscore a significant gap in the literature, highlighting the need for more robust empirical research to understand the financial implications of corporate entrepreneurship activities—a critical dimension of entrepreneurial practice. There is a gap in the studies of corporate entrepreneurship whereby, until now, only little conceptual clarity has been produced on its most effective and reliable determinants (Wang & Zhang, 2009). Furthermore, researchers have proposed various definitions, resulting in some ambiguity on what determines corporate entrepreneurship (Kamalian et al., 2015). Thus, this study was carried out to identify the determinants of corporate entrepreneurship and its effect on organizational financial performance.

Literature Review

This study is closely associated with the resource-based view (RBV) theory, commonly utilized in corporate entrepreneurship studies. In addition, the differences in corporate entrepreneurship determinants among the resources that Malaysian SMEs have at their disposal and the ability to operate these resources towards a positive financial performance are also projected (Zakaria & Kuah, 2024). According to Amran et al. (2015), the results of their study validated the model that supports the RBV theory, which relates to the environmental, organizational, and individual resources that affect the economic performance of SMEs in Malaysia. It was found that competitive advantage can be achieved when organizations have different levels of resources, capabilities, or essential competencies (Penrose, 2009). The RBV theory recommends that competitiveness can be realized by delivering superior value to customers. A review of literature on corporate entrepreneurship shows that most of the studies in that field did not use a specific conceptual framework (Ahuja & Lampert, 2001). The resources of a firm, which are the driver of its growth, profit level, and competitive advantage, are consistent with the RBV theory, which emphasizes the importance of the resources.

The Influence of the Relationship between Individual Characteristics, Organizational Characteristics, and External Environment Characteristics on Organizational Financial Performance

One of the main indications of a strong relationship between corporate entrepreneurship and organizational financial performance is provided by Amran et al. (2015) and Panjaitan et al. (2023), who have found a correlation between corporate entrepreneurial behavior and financial performance. In this study, individual characteristics consist of entrepreneurial behavior, entrepreneurial intention, and organizational citizenship behavior. The basis for evaluating the entrepreneurial behavior of individuals is based on two aspects, mainly, the amount of employees' experience measured by job knowledge and the strength of their social network and overall learned knowledge of the organization's staff, judged by their capabilities, initiatives, and how knowledge sharing takes place (Urbano et al., 2013). Entrepreneurial behavior will consider the individual human characteristics that affect people to act entrepreneurially (Affendy et al., 2011).

Identifying and exploiting business opportunities can be enhanced when employees possess relevant entrepreneurial experience (Shane & Khurana, 2003). Prior experience helps employees make wrong decisions or moves (Nahata, 2019; Prasetyo et al., 2022). In the case of entrepreneurial intention, it is described as the process of identifying opportunities, which is implemented purposefully and subsequently drawing more research attention (Alonso & Alexander, 2017; Krueger et al., 2000). The entrepreneur's goal setting, communication, commitment, and other actions are significantly guided by the level of entrepreneurial intentions (Ajzen, 2005). Entrepreneurial intention is a good predictor of subsequent entrepreneurial behavior (Ajzen, 1991, 2005). Therefore, when studying entrepreneurial behavior, it has become crucial to understand the factors that influence entrepreneurial intentions (Fitzsimmons & Douglas, 2011). Past literature on organizational citizenship behavior reveals that two approaches have been commonly utilized: mutual commitment and non-prefabricated incentives. In terms of forming a relationship and shared values, it has been found that individuals are different from one another. The reluctance of employees to display organizational citizenship behavior happens when employees take advantage of the situation for their self-interest. In addition, it is also driven by suspicion toward fellow workers (Krueger et al., 2000). One way to achieve organizational citizenship behavior and competitive performance, according to Fitzsimmons and Douglas (2011), is by applying fair treatment and procedures. To summarize the above discussion, it is posited that individual characteristics have a significant relationship with a competitive advantage.

H1: Individual characteristics have a significant relationship with organizational financial performance.

As part of organizational characteristics, entrepreneurial orientation significantly contributes to an organization's success. Positive relationships between entrepreneurial orientation and organizational financial performance are quite a common finding reported by researchers (Kraus & Rigtering, 2015). As stated by Chandler et al. (2000), corporate earnings are enhanced by having an innovative, supportive culture but do not significantly contribute to firm growth. Several researchers have also found a positive correlation between entrepreneurial orientation and the growth of small organizations (Gurbuz & Aykol, 2009) and the profit levels of non-state organizations (Chow, 2006).

Similarly, external environmental characteristics positively influence organizational performance (Antoncic & Zorn, 2004). The need for change in a volatile environment has become inevitable, and organizations have been forced to adapt to change to maintain their competitiveness. The ability of the organization to assimilate the necessary change depends on organizational-level characteristics, the capabilities of the employees, and the organization's strategic orientation, which is then said to affect the financial performance of organizations (Mokaya, 2013). The importance of environmental characteristics' explicit and implicit effect on organizational financial performance (Kamalian et al., 2015) has encouraged this study to investigate further the relationship between external environment characteristics and organizational financial performance. The following is posited:

H2: Organizational characteristics have a significant relationship with organizational financial performance.

H3: External environment characteristics have a significant relationship with organizational financial performance.

The Influence of the Relationship between Individual Characteristics, Organizational Characteristics, and External Environment Characteristics on Organizational Competitive Advantage

Organizational support, such as the level of encouragement and support from the management, worker's discretion, designation of idea champions, the establishment of ways to harness ideas from employees, training, rewards, time availability, and financial resources, are deemed crucial for pursuing new ideas or projects (Zahra, 2007). As stated by Chen et al. (2005), organizational management style cannot positively impact corporate entrepreneurship, even when support is obtained from the board of directors and senior management. Furthermore, corporate strategic entrepreneurial management affects the success level in cultivating corporate entrepreneurship (Covin & Miles, 1999).

Organizational culture is an internal organizational factor that motivates corporate entrepreneurship (Kuratko, 2007). Top management and the transfer of experience and knowledge is an essential part of the corporate entrepreneurial culture for handling people and groups of individuals (Trestl, 2016). The lack of proper transference of knowledge among individuals is an area of concern, as there is no proper documentation to retain the knowledge of employees. Evidence from previous experience in various industries has shown how this task of knowledge transfer can be learned and mastered (Thornberry, 2003). The formation of specific functional teams and how the cultures of organizations are utilized will pave the way to attain corporate entrepreneurial goals. Individual involvement is needed to ensure this can be carried out successfully (Trestl, 2016). Organizational entrepreneurial orientation is also one of the critical links to organizational performance.

Felício et al. (2012) state that, for organizations to stay and remain competitive in the twenty-first century, they need to have rapid and cost-effective organizational techniques. As per Morris et al. (2008), the occurrence of more innovative, risk-taking, and proactive entrepreneurial activities reflects the level of entrepreneurship in an organization relating to entrepreneurial orientation. Organizations with entrepreneurial orientation behave differently than other types of organizations, making entrepreneurial orientation a significant theoretical construct. In this study, the organization's external environment is a resource that expedites the organization in identifying, acquiring, and exploiting resources (Hitt et al., 2011). According to Ireland et al. (2003), examples of external environmental resources are raw materials, monetary resources, and labor. The organization's external environment focuses on collaborations between organizational and business environment characteristics (Kraus & Rigtering, 2015). The external business environment needs to be studied carefully before any deductions can be made to see the relationship between corporate entrepreneurship and the financial performance of organizations (Covin & Miller, 2014). Previous studies have shown that corporate entrepreneurship was mainly related to better financial performance (Bierwerth et al., 2015). Paradkar et al. (2015) show that organizations need to be innovative and agile in this current age of rapid technological advancement. It has become a minimum requirement for organizations to be more creative, innovative, and entrepreneurial to remain competitive, contributing to corporate entrepreneurship that will ensure survival, growth, profitability, and positive renewal for the organization (Zahra, 2007).

Dentchev et al. (2016) state that environmental characteristics such as dynamism, industry growth, and resource deployment favor corporate entrepreneurship. These are present in the external business environment, influencing entrepreneurial activities.

Therefore, based on the discussion above, the following hypotheses are posited:

H4: Individual characteristics have a significant relationship with organizational competitive advantage.
H5: Organizational characteristics have a significant relationship with organizational competitive advantage.
H6: External environment characteristics significantly impact organizational competitive advantage.

The Relationship between Organizational Competitive Advantage and Organizational Financial Performance

David (2015) defines competitive advantage as a means to earn a higher rate of profit, which can be achieved by outperforming rivals in the industry. Anwar (2018), however, refers to competitive advantage as anything that a firm does well compared to its rivals in the industry. Sources or situations that lead to a competitive advantage for organizations are their availability when they are valuable, rare, and hard to imitate. An organization's resources and capabilities enable innovation and efficiency, which can be exploited to generate a competitive advantage (Ismail et al., 2012). It is suggested that if an organization could inculcate corporate entrepreneurship practices, it can enhance its performance (Zimmerman & Brouthers, 2012). Majeed (2011) states that companies with more competitive advantages could gain higher levels of financial performance. Ireland et al. (2003) argue that corporate entrepreneurship promotes wealth creation and organizational financial performance through competitive advantage. Strategic entrepreneurship and intellectual capital will facilitate the competitive advantage of an organization's resources.

Achieving a competitive level will provide opportunities for companies to obtain the possible highest financial performance. Based on these justifications, the following hypothesis is postulated:

H7: Competitive advantage has a significant relationship with organizational financial performance.

Mediation Assessment of Competitive Advantage

Previous literature has shown that competitive advantage has a mediating role in organizational financial performance. Ma and Wang (2006) address the relationship between competitive advantage and organizational financial performance and find that competitive advantage is not equal to superior performance. However, it provides predictive validity for future performance. Rezaian and Naeiji (2012) provide more real evidence about the mediating role of competitive advantage in organizational financial performance. They show that competitive advantage significantly mediates strategic entrepreneurship determinants and financial performance. In addition, in their study, Rosli and Norshafizah (2013) show that competitive advantages mediate the relationships between corporate entrepreneurship and financial performance determinants. Since competitive advantage is predicted to influence organizational financial performance, individual and organizational characteristics and external environmental characteristics may also significantly indirectly influence organizational financial performance (Kamalian et al., 2015).

Empirical studies examining the mediating effect of competitive advantage on organizational characteristics and business financial performance relationships are still scarce (Rosli & Norshafizah, 2013). Therefore, based on this scarcity, the following hypotheses are proposed:

H8: Competitive advantage mediates the relationships between individual characteristics and organizational financial performance.
H9: Competitive advantage mediates the relationships between organizational characteristics and organizational financial performance.
H10: Competitive advantage mediates the relationships between external environment characteristics and organizational financial performance.

Organizational Financial Performance

In management research, some scholars have criticized financial performance as the dominant construct for organizational performance (Góis et al., 2020; Mahrous & Genedy, 2019). The criticisms against this approach relate to the scope of accounting manipulation, the possibility of asset undervaluation, different depreciation methods, different methods of consolidating accounts, and lack of standardization (Chakravarthy, 1986). Corporate entrepreneurship is an essential aspect of the financial performance of small and medium enterprises (SMEs). However, there are limited studies on understanding them as a consequence of corporate entrepreneurship activities (Trestl, 2016). The above reasoning justified the researchers' selection of the respondents in this study, who were among the recipients of the Malaysian "Enterprise 50" award. Before they received this award, the selected SMEs had an excellent record of financial performance. Excellent financial performance is one of the criteria to participate and qualify for the Malaysian "Enterprise 50" award. Being successful in their respective businesses, these organizations can also be the benchmark for new setups and other small and medium enterprises in the future.

Proposed Research Framework

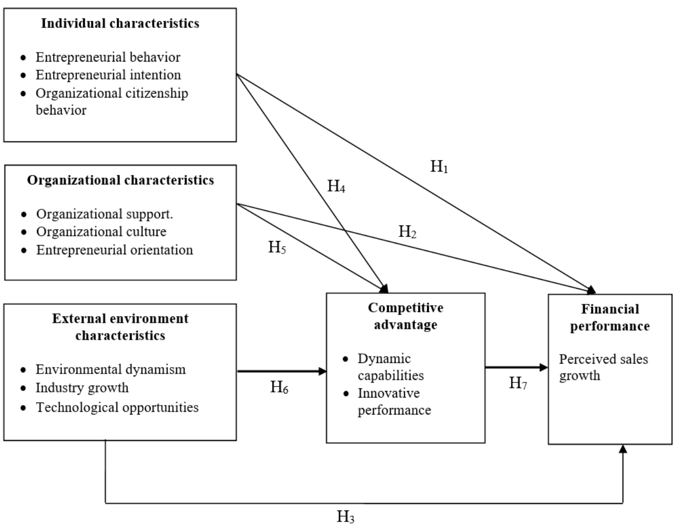

Figure 1. Proposed Research Framework

Methods

The research approach in this study is based on the quantitative method and employs an online survey for the data collection. The study population focused on small and medium enterprises (SMEs) in Malaysia, and the sample was collected from the Malaysia "Enterprise 50" award recipients from 1998 to 2021. As of December 2021, there were 618 recipients of the Malaysian "Enterprise 50" awards. The process of distributing the online survey started with contacting the key persons of the organizations on the list for the "Enterprise 50" award. During the data collection phase, the questionnaire was distributed to middle-level managers up to the top management level. The questionnaire modified the items accordingly, and the measurement scale deployed was a seven-point Likert scale. Groenewald (2010) and Mokaya (2013) measured the items for individual characteristics. For organizational characteristics, which consisted of organizational support, organizational culture, and organizational entrepreneurial orientation, the items were adapted from Groenewald (2010), Normalini (2013), and Rosli and Norshafizah (2013). Business environment characteristics encompassed environmental dynamism, industry growth, and technological opportunities, which were measured by Amran et al. (2015) and Najib (2014). The items for financial performance were measured by Amran et al. (2015) and Rosli and Norshafizah (2013). For competitive advantage, the items were adapted from Antoncic and Zorn (2004), Bashir et al. (2011), Giannikis and Nikandrou (2013), Ramaswami et al. (2004), and Rosli and Norshafizah (2013). The items for demographic profiles were adapted from Bashir et al. (2011) and Kaswengi (2014). There were 84 items in the questionnaire to make up all the variables involved.

Stratified random sampling was used, and the sampling approach involved the stratification of small and medium enterprises (SMEs) in Malaysia. Then, each sample was chosen from each stratum. The sampling frame for this study was based on the population list of 618 companies. In addition, the reliability of the questionnaire was also tested. A pre-test study was done before the execution of the pilot study. For content validity, the survey instrument was provided to two industry practitioners and four academic experts to improve the structure and wording of the items in the questionnaire. A random sample of 50 managers from the targeted respondents was selected. In this study, the responses established during the pilot study were verified for internal consistency reliability, whereby Cronbach's alpha with more than 0.7 is acceptable (Hair et al., 2016). Only two out of 84 items were deleted, and the final questionnaire had 82 items measuring five constructs and other questions related to the firm.

Results

Based on stratified random sampling with a total population of 618 SMEs, 442 SMEs were selected, and the survey questionnaires were distributed to 442 SMEs. Two hundred eighty-seven questionnaires were returned (46.4 percent). Upon screening the returned questionnaires, only 223 questionnaires were used for further analysis. Outlier analysis was done, and two questionnaires were removed, leaving the final usable 221 questionnaires.

Descriptive Analysis

From the survey, there were 221 valid, usable respondents, and each company was represented by one respondent only. Table 1 shows the respondents' profiles based on age, gender, and position in their respective organizations.

Table 1. Respondents Profile

Group	Frequency	%
Gender		
Male	125	56.6
Female	96	43.4
	221	**100.0**
Age		
20 - 29 years	1	0.5
30 - 39 years	84	38.0
40 - 49 years	113	51.1
50 years and above	23	10.4
	221	**100.0**
Position		
Departmental manager to regional / senior manager	122	55.2
Divisional manager to general manager	90	40.7
Vice president to chief executive officer	9	4.1
	221	**100.0**
Company's business sector		
Manufacturing sector	120	54.3
Service sector	86	38.9
Other sectors	15	6.8
	221	**100.0**
Company experience in current industry		
12 - 14 years	40	18.1
15 - 17 years	91	41.2
18 years and above	90	40.7
	221	**100.0**

Measurement Model and Assessment in Goodness-of-Fit Measures

The PLS-SEM approach was used to evaluate the measurement and structural model. In this approach, the non-parametric bootstrap can estimate the precision of the PLS. The non-parametric bootstrap approach was applied with 5,000 replications to obtain the standard errors of the estimates (Hair et al., 2014).

Convergent Validity

In this study, the convergent validity was measured by making an allowance for the size of the factor loading, average variance extracted (AVE), and construct reliability (CR) among the sets of items in the construct. Table 2 shows the overall result of the convergent validity.

Table 2. Convergent Validity

Construct(s)	Item	Factor loadingy (validity)	AVE	CR	Cronbach Alpha
Entrepreneurial behavior (EB)	EiB 1	0.774	0.5672	0.8388	0.7425
	EiB 2	0.809			
	EiB 3	0.776			
	EiB 4	0.643			
	EiB 5	0.333 [a]			
Entrepreneurial intention (EI)	EI 1	0.696	0.5483	0.8789	0.8342
	EI 2	0.664			
	EI 3	0.773			
	EI 4	0.791			
	EI 5	0.737			
	EI 6	0.774			
Organizational citizenship behavior (OCB)	OCB 1	0.744	0.601	0.9003	0.8671
	OCB 2	0.760			
	OCB 3	0.750			
	OCB 4	0.799			
	OCB 5	0.796			
	OCB 6	0.801			
Organizational support (OS)	OSu 1	0.555 [a]	0.5246	0.8981	0.8703
	OSu 2	0.559 [a]			
	OSu 3	0.445 [a]			
	OSu 4	0.695			
	OSu 5	0.491 [a]			
	OSu 6	0.572 [a]			
	OSu 7	0.436 [a]			
	OSu 8	0.707			
	OSu 9	0.756			
	OSu 10	0.493 [a]			
	OSu 11	0.719			
	OSu 12	0.694			
	OSu 13	0.700			
	OSu 14	0.749			
	OSu 15	0.769			
Organizational culture (OC)	OC 1y	0.753	0.5298	0.8704	0.8206
	OC 2y	0.773			
	OC 3y	0.766			
	OC 4y	0.512 [a]			
	OC 5y	0.601			
	OC 6y	0.481 [a]			
	OC 7y	0.523 [a]			
	OC 8y	0.725			

	OC 9y	0.735			
Entrepreneurial orientation (EO)	EO 1	0.397 [a]	0.5013	0.8891	0.8574
	EO 2	0.64			
	EO 3	0.713			
	EO 4	0.687			
	EO 5	0.740			
	EO 6	0.680			
	EO 7	0.774			
	EO 8	0.742			
	EO 9	0.680			
Environmental dynamism (ED)	ED 1	0.782	0.5654	0.8382	0.7427
	ED 2	0.759			
	ED 3	0.793			
	ED 4	0.668			
	ED 5	0.189 [a]			
Technological opportunities (TO)	TO 1	0.903	0.6946	0.8708	0.7739
	TO 2	0.886			
	TO 3	0.695			
	TO 4	0.571 [a]			
Industry growth (IG)	IG 1	0.746	0.5465	0.8782	0.8333
	IG 2	0.745			
	IG 3	0.668			
	IG 4	0.796			
	IG 5	0.764			
	IG 6	0.710			
Perceived sales growth (PSG)	PSG 1	0.808	0.6699	0.8903	0.8356
	PSG 2	0.831			
	PSG 3	0.805			
	PSG 4	0.829			
Dynamic Capabilities (CC)	DC 1	0.520 [a]	0.6387	0.8981	0.8576
	DC 2	0.829			
	DC 3	0.816			
	DC 4	0.817			
	DC 5	0.814			
	DC 6	0.715			
Innovative performance (IP)	IP 1	0.58 [a]	0.5699	0.8683	0.8095
	IP 2	0.679			
	IP 3	0.746			
	IP 4	0.836			
	IP 5	0.772			
	IP 6	0.734			

a: rejected item due to inadequate factor loading (below 0.6)

As shown in Table 2, the results of assessing the standardized factor loadings of the model's items indicated that the initial standardized factor loadings of 16 items (i.e., EiB_5, OS_1, OS_2, OS_3, OS_5, OS_6, OS_7, OS_10, OC_4, OC_6, OC_7, EO_1, ED_5, TO_4, DC_1 and IP_1) were below the cut-off 0.6. Therefore, these items were removed as recommended by Hair et al. (2014). The standardized factor loadings of the remaining 65 items were all above 0.6, ranging from 0.601 to 0.903. The reliability of the questionnaire was assessed by AVE, CR, and Cronbach's alpha. Table 4.2 also shows that the AVE, ranging from 0.5013 to 0.7986, was above the cut-off of 0.5, as Nunnally and Bernstein (1994) recommended. The CR values surpassed 0.6 for all constructs, as Bagozzi and Yi (1988) recommended, ranging from 0.8382 to 0.9003. The Cronbach's alpha ranged from 0.7425 to 0.8703, which was above the threshold of 0.7, as Nunnally and Bernstein (1994) recommended.

Discriminant Validity

Table 3 represents the discriminant validity of the measurement model. The inter-correlations between the constructs ranged from 0.252 to 0.681, which was below the threshold of 0.85.

Table 3. Results of discriminant validity

Variable	IVC	OGC	BEC	FP	CA
Individual characteristics (IVC)	**0.860**				
Organizational characteristics (OGC)	0.681	**0.822**			
External environment characteristics (BEC)	0.507	0.553	**0.832**		
Financial performance (FP)	0.252	0.327	0.302	**1.000**	
Competitive Advantage (CA)	0.476	0.576	0.471	0.468	**0.894**

Structural Model Assessment

In the structural model, the effects of individual, organizational, and external environments on financial performance were evaluated, including the mediation effects of competitive advantage. A total of seven research hypotheses (direct effects) and three research hypotheses (mediation effect) were examined. The data were analyzed, and the results were discussed based on the hypotheses in Table 4.

Table 4. Hypotheses testing (direct effects)

Hypothesis	Path shape	Path coefficient	Standard error	T-value	P-value	Hypothesis result
H1	IVC→FP	-0.0298	0.0461	0.647	0.518	**Rejected**
H2	OGC→FP	0.0646	0.0558	1.157	0.249	**Rejected**
H3	BEC→FP	0.0925*	0.0428	2.1603	0.032	**Supported**
H4	**IVC→CA**	**0.1069****	**0.0406**	**2.6323**	**0.009**	**Supported**
H5	**OGC→CA**	**0.3935*****	**0.0491**	**8.0226**	**0.000**	**Supported**
H6	**BEC→CA**	**0.1988*****	**0.0401**	**4.9593**	**0.000**	**Supported**
H7	CA→FP	0.4016***	0.0464	8.6474	0.000	**Supported**

**p< 0.05, **p< 0.01, ***p< 0.001*

In Table 4, three paths from individual, organizational, and external environment characteristics to competitive advantage and two paths from external environment characteristics and competitive advantage to financial performance were significant. Thus, H3, H4, H5, H6, and H7 were supported. However, the effects of individual and organizational characteristics on financial performance were insignificant. Thus, H1 and H2 were rejected.

Table 5 shows the summary of the mediation effect of organizational competitive advantage. This study employed the bootstrapping approach to measuring the mediating effects of an organization's competitive advantage (Bagozzi & Yi, 1988). The significance of the regression coefficients between individual characteristics, organizational characteristics, external environment characteristics, organizational competitive advantage, and organizational financial performance was inspected to decide the existence of the mediation effect. Thus, three hypotheses (i.e., H8, H9, and H10) were assessed, as shown in Table 5.

Table 5. Mediation effects of competitive advantage

Dependent Variable = Financial performance (FP)	**Independent Variable (IV)**		
Mediating Variable = Competitive Advantage (CA)	**Individual characteristics (IVC)**	**Organizational characteristics (OGC)**	**External environment characteristics (BEC)**
Total Effect of IV on DV without M (path a)	.0131$^{(sig:0.781)}$	.2226$^{***(sig:0.000)}$	.1723$^{***(sig:0.000)}$
Direct Effect of IV on DV with M (path a')	-.0298$^{(sig:0.518)}$	.0646$^{(sig:0.249)}$	.0925$^{*(sig:0.032)}$
Indirect Effect of IV on DV through M (path bc)	0.0429**	0.158***	0.0798***
Effect of IV on M (path b)	.1069$^{**(sig:0.009)}$	.3935$^{***(sig:0.000)}$	.1988$^{***(sig:0.000)}$
Effect of M on DV (path c)	.4016$^{***(sig:0.000)}$	.4016$^{***(sig:0.000)}$	.4016$^{***(sig:0.000)}$
Mediation Path	IVC→CA→FP	OGC→CA→FP	BEC→CA→FP
Mediation Effect	No	Yes	Yes
Degree of Mediation	---	Full	Partial
	H8 (Rejected)	**H9 (Supported)**	**H10 (Supported)**

**p< 0.05, **p< 0.01, ***p< 0.001*

Discussion

This study investigates the relationship between corporate entrepreneurship determinants and Malaysian SMEs' organizational financial performance. The central research gap was based on the point that there is a critical issue of poor financial performance among Malaysian small and medium enterprises (Rahman et al., 2025; Shehnaz & Ramayah, 2015). The dimension of this study was extended by including the mediating role of an organization's competitive advantage. In the previous section, the three corporate entrepreneurship determinants support organizational competitive advantage. On the contrary, only the business environment supports organizational financial performance. In addition, the organizational competitive advantage also strongly supports organizational financial performance. The analysis has provided empirical evidence that an organization's competitive advantage delivers the most significant direct impact on organizational financial performance. This is followed by the external environment characteristics, which provide the second most significant direct impact on organizational financial performance. However, it was found that organizational characteristics and individual characteristics do not provide any significant direct impact on organizational financial performance.

Among the four determinants, it was shown that organizational competitive advantage has the most positive significant direct effect on the organizational financial performance of small and medium enterprises. This is followed by external environment characteristics, which also have a significant relationship with SMEs' organizational financial performance. It is noted in this study that organizational characteristics and individual characteristics have a non-significant direct effect on small and medium enterprises' financial performance. On the other hand, the results also provided some interesting empirical evidence on the direct effects of the corporate entrepreneurship determinants on organizational competitive advantage. Interestingly, it was found that organizational characteristics delivered the most significant direct impact on organizational competitive advantage. External environment characteristics provided the second most significant direct impact on organizational competitive advantage, and individual characteristics had the least significant direct impact on organizational competitive advantage.

The findings indicated that all three corporate entrepreneurship determinants significantly correlate with SMEs' organizational competitive advantages. In the structural model analysis, organizational characteristics have a positive, significant, direct effect on the SMEs' competitive advantage. This is followed by the external environment and individual characteristics, which directly correlate with the SME's organizationsl competitive advantage. The findings of this study are in line with past research (Amran et al., 2015; Armesh et al., 2014; Kamalian et al., 2015). The findings also suggest that a resource-based view is validated as inputs of individual, organizational, and environmental resources are relevant in ensuring higher economic outcomes for small and medium enterprises (Barney et al., 2001). However, in this study, individual and organizational characteristics only supported organizational competitive advantage and not organizational financial performance. Instead, it was the external environment characteristics that supported both organizational financial performance and organizational competitive advantage.

In this study, the hypotheses on the mediating role of organizational competitive advantage in the relationship between corporate entrepreneurship determinants and organizational financial performance to some extent were supported. Based on the findings, it was found that there is a partial mediation effect of competitive advantage on the relationship between corporate entrepreneurship and the financial performance of SMEs. The findings of this study are in line with Rosli and Norshafizah (2013) and demonstrate the importance of organizational competitive advantage in enhancing the relationship between corporate entrepreneurship determinants and organizational financial performance. The findings provide evidence that the resource-based views of an organization are associated with the organization's competitive advantage. The findings also concurred with Trestl's (2016) findings, in which corporate entrepreneurship does not protect an organization from external environmental influences harming profitability. However, it provides a viable instrument to steer competitiveness from within the organizations. From the theoretical perspective, this study was designed to identify and bridge the research gaps previously highlighted in the past corporate entrepreneurship literature. This study has significantly contributed to the body of knowledge on corporate entrepreneurship and extended the existing literature. It has delivered new empirical evidence on the relationship between corporate entrepreneurship and the financial performance of small and medium enterprises in the Malaysian context.

This study contributes to the body of knowledge by introducing the three main determinants of corporate entrepreneurship: individual characteristics, organizational characteristics, business environment characteristics, and the mediating role of competitive advantage. This finding is achieved based on studies by Hatinah et al. (2015) and Kamalian et al. (2015) on the possibilities of using multi-level analysis by including a mediation role, which can impact the relationship between corporate entrepreneurship and organizational financial performance. This study offers an excellent opportunity for Malaysian SMEs to prepare themselves to face global business challenges with the endorsement of the Malaysian government on the Trans-Pacific Partnership Agreement (TPPA) with other world economic giants. Additionally, this study narrowed down the research gap between the determinants of corporate entrepreneurship and SMEs' financial performance, which previous researchers have identified, but until today, produced little conceptual clarity on the most effective and reliable determinants for corporate entrepreneurship (Daryani & Karimi, 2013; Rutherford & Holt, 2007; Wang & Zhang, 2009).

This study offers practical implications from its findings, especially for Malaysian SMEs. This research was designed to identify new evidence highlighted in corporate entrepreneurship practices among Malaysian SMEs. The choice of respondents among successful SMEs in Malaysia has provided some valuable propositions to other Malaysian SMEs on managing their organization's financial performance. The success of the selected SMEs was proven when they fulfilled all the stringent requirements to be the recipients of the Malaysian "Enterprise 50" award. For Malaysian SMEs, the findings of this study will enable them to understand the factors that might have a relationship with and influence their business operations in the future. This information will help SMEs in Malaysia understand the importance of making the right decisions regarding corporate entrepreneurial activities. Improving SMEs' financial performance will significantly impact Malaysia's gross domestic product (GDP). This study's findings are expected to benefit the Malaysian SME community, economy, and the country as a whole. It will create a greater awareness of the factors affecting the relationship between corporate entrepreneurship practices and organizational financial performance.

Conslusions

Corporate entrepreneurship practices are essential components of any organization, regardless of its shape and size. This study delivered empirical evidence on the significant relationship between the determinants of corporate entrepreneurship and financial performance among successful Malaysian SMEs. This study offered new empirical evidence, emphasizing the role of organizational characteristics in controlling the external environment toward achieving a positive organizational financial performance. Such awareness shall create better understanding and decision-making by the top management level of companies from the Malaysian private sector and government-linked companies (GLC). This study also makes a significant contribution by improving organizational performance and sustaining organizational competitive advantage in the competitive 21st-century business environment. To further reinforce the findings of this study, additional research can be conducted by replicating this study and extending it to other countries, particularly in Southeast Asia. In addition, it is also recommended to expand this study with a different research method design, such as a qualitative or mixed method with another research context, to grasp a better understanding and bridge the theoretical and knowledge gaps identified earlier.

To conclude, this study has made an essential contribution to corporate entrepreneurship and has positively responded to the needs of the industry by focusing the research area on corporate entrepreneurship practices among successful Malaysian SMEs. Therefore, given the importance of corporate entrepreneurship in today's business environment, research needs to be conducted based on the research model proposed in this study.

Limitations

While the research was designed to meet the study's main objectives, the findings were still subject to several limitations. The first limitation is the scope of the study, which was confined only to SMEs in Malaysia that were listed as the award recipients of the Malaysian "Enterprise 50" awards. This raises concerns that the findings might be country-specific. Therefore, it is suggested that a homogeneous culture reduces the likelihood of culturally induced variation in the perception of the relevant constructs (Spender & Grant, 1996). The second limitation is that the current study experienced difficulties collecting data from SMEs. A few of the respondents were reluctant to participate in the research. They were concerned that disclosing company information might adversely affect them.

On top of that, this study might face the problem of self-reported bias since the information on financial performance was measured through self-reporting by the respondents. There might be a particular bias between the actual situation and the indicated reality. Nevertheless, since most of the respondents were from the managerial level, this is not perceived as critical. Thirdly, the research time horizon for the cross-sectional design provided a short time frame for this study, especially during the data collection. A short time frame is likely to make the study static, and a longitudinal study would offer a more dynamic approach. This approach may give the relevant variables over a longer time, providing a better result that discloses hidden relationships between short- and long-term practices (Soininen et al., 2012).

Last but not least, the fourth limitation is that this study covered both the manufacturing and services industries. Therefore, it is suggested that future research investigate the manufacturing and services industries separately. This is to determine whether the nature of corporate entrepreneurship practices is similar or different to the manufacturing industry and services industry.

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