

HOW ENTREPRENEURIAL LEADERSHIP ENHANCES THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES: THE IMPORTANCE OF INTELLECTUAL CAPITAL AND INNOVATION CAPABILITIES

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Abstract

Entrepreneurial leadership plays an important role in enhancing firms' financial performance. However, relatively few studies have examined the underlying explanation for this virtuous effect. This research aims to study the influence of business owners' entrepreneurial leadership on the financial performance of small and medium sized enterprises' (SMEs) and to examine the mediating roles of intellectual capital and innovation capabilities in the relationship between entrepreneurial leadership and financial performance. Survey data were collected by mail from 105 business owners or top executives and 1,001 employees in 105 SMEs in the manufacturing sector in the southern region of Thailand. In particular, entrepreneurial leadership was evaluated by the employees, while intellectual capital, innovation capabilities, and financial performance were evaluated by the business owners or top executives. Structural equation modeling (SEM) was used for analysis of the proposed moderated mediation model. The results confirmed that entrepreneurial leadership has an indirect influence on the financial performance of SMEs via the sequential mediating roles of intellectual capital and innovation capabilities. Moreover, the influence of innovation capabilities on financial performance was found to be stronger among SMEs that employed a higher level of differentiation strategies. The results from this research indicate that owners of

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SME businesses can play an important role in fostering their firms' intellectual capital, which, in turn, influences the firms' innovation capabilities and financial performance.

Keywords: Entrepreneurial Leadership; Intellectual Capital; Innovation Capabilities; Financial Performance.

1. INTRODUCTION

Small and medium sized enterprises (SMEs) play a significant role in promoting the growth and sustainable development of the Thai economy. In particular, Thai SMEs constitute a major source of employment, generating significant earnings, and contributing to the country's gross domestic product (GDP). A recent report by the Office of SMEs Promotion (2021) indicated that the GDP generated by SMEs has continued to grow during the past 5 years, increasing from 32.8% in 2016 to 34.2% in 2020. The report also indicated that 12,714,916 individuals are currently employed by SMEs, representing 71.70% of the total private-sector workforce in Thailand. In the manufacturing sector alone, the GDP generated by SMEs has amounted to 1,720,253 million Baht or 43.4% of the national GDP in the manufacturing sector (The Office of SMEs Promotion, 2021). These numbers lend credence to the importance of SMEs in the competitive and inclusive growth of the Thai economy. Accordingly, the 4th SME Promotion Master Plan (2017-2021) has put a significant emphasis on upgrading Thai SMEs and increasing their growth potential.

However, Thai SMEs still have their own inherent problems and limitations. Due to the lack of adequate internal management systems, it has been shown that only a small number of SMEs are able to compete in the international market, while the rate of imports and exports among the SME sector has shown a continuous trade deficit (The 4th SME promotion master plan, 2017-2021). The advent of the COVID-19 pandemic has further exacerbated the slowdown in the economic growth of SMEs. The GDP generated by Thai SMEs in the first quarter of 2020 shrank by 3.3% from the fourth quarter of 2019. Also, in the manufacturing sector, GDP shrank by 2.7% (The Office of SMEs Promotion, 2021).

In this respect, it is important to understand how SMEs can continue to grow and compete in their respective markets. Previous research in the business management literature indicates that several factors may account for the development of SMEs including leadership styles (Kroon, 2013) and human resource management (HRM) (Wu et al, 2014). Recent research also reveals that in their attempt to survive the "new normal" imposed by COVID-19 and the growing market competition,

several SMEs have adopted new technologies and technical innovations (Akpan et al., 2020), as well as marketing and process innovations (El Chaarani et al., 2021), while also digitizing their sales (Priyono et al., 2020).

Our research draws attention to the role of *entrepreneurial leaders*—those who recognize and exploit business opportunities (Renko et al. 2015)—in the success of SMEs. Specifically, SME success is measured in terms of perceived financial performance, e.g., return on investment (ROI), profits, return on assets (ROA), and return on sales (Richard et al., 2009). Drawing from strategic choice theory (Child, 1972), the focus of the research is specifically on the entrepreneurial qualities of the business owners of the SMEs. This theoretical perspective indicates that top business leaders play a crucial role in determining the strategic path of their firms. To illustrate, entrepreneurial leaders can reposition their firms' strategies by investing more in human capital and the digitization of their internal processes and operations in order to cope with changes in the external environment.

While past research indicates that entrepreneurial leaders are instrumental in sustaining a firm's competitive advantage (Clark et al., 2019; Koryak et al., 2015; Renko et al., 2015) and financial performance (Huang et al., 2014; Sawaeen & Ali, 2020), it is important to acknowledge that relatively few studies to date have examined the underlying explanation

for these positive effects (Leitch & Volery, 2017; Renko et al., 2015). This study turns attention to the role of intellectual capital in explaining the influence of entrepreneurial leadership on the financial performance of SMEs. Intellectual capital is operationalized in terms of human capital (i.e., investing in people), structural capital (i.e., investing in the development of internal processes and management systems), and relational capital (i.e., investing in building favorable relationships with external stakeholders) (Kianto et al., 2017; Sardo et al., 2018).

Furthermore, it is proposed that the influence of entrepreneurial leadership on the SMEs' financial performance via intellectual capital will be sequentially mediated by the SMEs' innovation capabilities. Innovation capabilities refers to the firms' ability to generate customer value by developing new products and services and introducing them to the market, or by reducing the costs induced by the value creation process (Kianto et al., 2017). Past research indicates that intellectual capital leads to the development of business processes, creating customer value (Martín et al., 2011; Youndt & Snell, 2004) and the achievement of improved business performance and competitive advantages (Cabrita & Bontis, 2008; Edvinsson, 1997; McDowell et al., 2018; Sardo et al., 2018). Finally, this study aims to examine whether the impact of innovation capabilities on firm performance depends on the type of

business strategies employed. It is proposed that firms which employ a higher level of ‘differentiation’ strategies (Banker et al., 2014; Porter, 1980; Porter, 1997) will benefit the most from their innovation capabilities. In the sections below, the concept of entrepreneurial leadership is reviewed, along with the roles of intellectual capital, and innovation capabilities. The conceptual model is shown in Figure 1.

2. LITERATURE REVIEW

2.1 Theoretical Foundation

This study draws upon strategic choice theory (Child, 1972; Hrebiniak & Joyce, 1985; Oliver, 1991) to form the conceptual model. This theory states that top organizational leaders possess the discretion to make key

strategic decisions which influence their firms’ performance. Even in the face of persistent external constraints, threats and uncertainty, organizations can seek to differentiate themselves from others. They often do so by selecting the environment to operate in and also taking advantage of the prevailing conditions within the existing business environment. Top executives play a strategic role in determining the scope of human capital that corresponds with the technological requirements of the production processes and to determine organizational structures that fit their business demands. These decisions are different from those made by lower-level managers because the decisions made by top managers involve allocations of important organizational resources (Wang et.al, 2016).

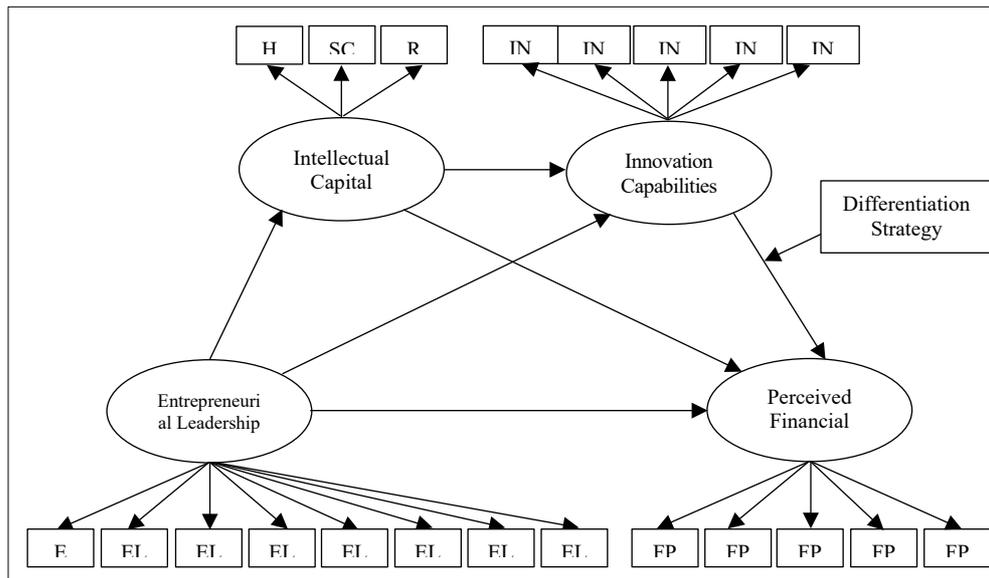


Figure 1: Conceptual Model

2.2 The Impact of Entrepreneurial Leadership and Financial Performance

Entrepreneurial leadership is a specific phenomenon situated at the nexus between the fields of leadership and entrepreneurship (Bagheri & Harrison, 2020; Clark et al., 2019; Cogliser & Brigham 2004; Fernald et al., 2005; Gupta et al., 2004; Huang et al., 2014; Koryak et al., 2015; Renko et al., 2015; Simba & Thai, 2019). Whereas leadership involves influencing others to understand and to agree about what needs to be done and how to do it, including assisting individuals and groups in achieve important goals (Yukl, 2020), entrepreneurship refers to the process by which opportunities to create goods are discovered, evaluated, and exploited (Shane & Venkataraman, 2000).

Accordingly, the concept of entrepreneurial leadership was developed to capture leadership behaviors that involve influencing and directing group members toward goals that include the recognition and exploitation of entrepreneurial opportunities (Renko et al., 2015). Opportunity here speaks to the possibility of introducing innovative goods to a marketplace (Gaglio, 2004). Hence, recognizing an entrepreneurial opportunity, entails perceiving this possibility, while opportunity exploitation means taking advantage of business activities and investments in order to reap the greatest returns from new business opportunities (Choi & Shepherd,

2004). As a result, entrepreneurial leadership can be viewed as a style of leadership in which leaders discover new business opportunities, utilizing them for the sustainable growth and success of the organization (Goossen & Stevens, 2013).

Past empirical studies indicate that entrepreneurial leadership can lead to positive organizational performance (Rahim et al., 2015; Sawaeen & Ali, 2020) and financial performance (Huang et al., 2014). In particular, Rahim et al. (2015) showed that entrepreneurial owners of SMEs can positively influence their business performance in Malaysian markets. Similarly, Sawaeen and Ali (2020) found that entrepreneurial leadership had a positive direct influence on the performance of SMEs in Kuwait. Moreover, Huang et al. (2014) showed that entrepreneurial leadership had a direct positive effect on the financial performance of small, medium, and large enterprises in China. Based on these empirical findings, the first hypothesis was formulated as follows:

Hypothesis 1: Entrepreneurial leadership has a positive influence on SMEs' financial performance.

2.3 The Mediating Role of Intellectual Capital

Intellectual capital has been defined as the possession of knowledge and skills, experience, technological advancements, and customer relationships, providing a competitive edge (Edvinsson, 1997). It has also been indicated that

intellectual capital involves the ability to transform raw materials into valuable products, relying on the talents of staff, the value of proprietary knowledge and processes, and the value of relationships with customers and suppliers (Stewart, 2010). In other words, intellectual capital relates to knowledge embedded in individuals, organizational structures, relationships, and networks (Kianto et al., 2017), which can lead to the development of business processes and create value (Youndt & Snell, 2004; Martín et al., 2011), enabling the achievement of improved business performance and competitive advantages (Cabrita & Bontis, 2008; Edvinsson, 1997; McDowell et al., 2018; Sardo et al., 2018).

The current research operationalizes intellectual capital in terms of human capital, structural capital, and relational capital (Cabrita & Bontis, 2008; Kianto et al., 2017; Sardo et al., 2018;). Human capital can be defined as the knowledge, skills, and abilities residing with and utilized by individuals (Schultz, 1961). Stewart (2010) stated that human capital consists of skills, competencies, and abilities of individuals and groups. Structural capital, on the other hand, refers to the knowledge assets that exist in the organizational structure including patents, copyrights and trademarks, processes, methodologies, documents, computer networks, software, and administrative systems (Stewart, 2010). Thus, structural capital is sometimes referred to as the

organizational capital that is accumulated and distributed through databases, structures, systems, and processes (Subramaniam & Youndt, 2005; Youndt & Snell, 2004). Finally, relational capital can be perceived as the value generated by the positive relationships that a firm has with its suppliers, allies, and customers (Stewart, 2010).

It is proposed that entrepreneurial leaders can help to enhance human capital by investing in HRM practices that promote the development of skills, knowledge, and abilities, as well as the work motivation of employees (Kianto et al., 2017). These practices may include selecting high-performing job candidates, establishing pay and benefit policies that emphasize the promotion of employee well-being, providing career growth opportunities, and investing in training programs that continuously develop employee skills. At the same time, leaders with entrepreneurial qualities can enhance their firms' structural capital by investing in important infrastructure and databases that help to facilitate internal work processes (Edvinsson, 1997; Kianto et al., 2017). For example, the CEO of Bitkub—a Thai startup that has grown into a global unicorn—made a significant investment in streamlining internal processes by adopting multiple internal process apps (Jirayut, 2020). Finally, as entrepreneurial leaders have a clear vision about their business future while also seeking new business opportunities (Renko et al., 2015), they often focus on

building strong relationships with external entities such as investors (e.g., venture capitalists and banks) and government agencies.

In this respect, the resourced-based view (RBV) (Barney, 1991) indicates that in order for firms to sustain a competitive advantage, they must focus on building and acquiring resources that are valuable (V), rare (R), inimitable (I), and non-substitutable (N). Intellectual capital can be regarded as a valuable asset, which has a potent impact on organizational performance (Huang & Huang, 2020; Kianto et al., 2017; Subramaniam & Youndt, 2005). Indeed, previous studies found that intellectual capital was positively related to organizational performance. For example, Coder et al. (2017) found that intellectual capital had a positive influence on sales growth, profit growth, and the perceived business success of small businesses in the southeastern states of the US. This is consistent with the work by Xu and Li (2019), which showed that intellectual capital was positively associated with the earnings, profitability, and operating efficiency, of manufacturing SMEs in China. Similarly, Sardo et al. (2018) found that intellectual capital (i.e., human capital, structural capital, and relational capital) had a positive impact on the financial performance of small- and medium-sized hotels in Portugal. Although no research to date has examined the mediating role of intellectual capital in the relationship between entrepreneurial leadership and financial performance, the above

theoretical insights and empirical evidence are drawn upon to form the following hypothesis:

Hypothesis 2: Intellectual capital has a positive influence on SMEs' financial performance.

Hypothesis 3: Intellectual capital positively mediates the relationship between entrepreneurial leadership and SMEs' financial performance.

2.4 The Mediating Role of Innovation Capabilities

Innovation capabilities can be defined as the output of a firm's innovation efforts and innovative inputs (Ahuja & Katila, 2001). While innovation has been conceptualized in various ways (e.g., Chandy & Tellis, 2000), this study adopts the view of Kianto et al. (2017), who defined innovation capabilities in terms of innovating products and services, work processes, management practices, marketing schemes, and business models. Previous studies indicate that intellectual capital is directly related to a firm's innovation capabilities (Huang & Huang, 2020; Kianto et al., 2017; Subramaniam & Youndt, 2005). Firstly, human capital involves the knowledge and skills of employees that provide a fundamental basis for generating innovation (Subramaniam & Youndt, 2005). Secondly, structural capital is a stock of knowledge, which increases innovation because the production of new products, processes, or methods usually requires combining and applying different pieces of existing knowledge (Fleming & Sorenson,

2004). Without a strong structural capital (e.g., supportive infrastructure that facilitates the retention and transfer of existing knowledge), it would be virtually impossible for innovation to take place (Kianto et al., 2017). Thirdly, relational capital contributes to innovation as not all knowledge required to innovate is located within the organization (Kianto et al., 2017). Relational capital provides firms with the necessary influence and power that can enhance knowledge sharing and co-creation of innovation (Adler & Kwon, 2002). Based on these reasons, it is hypothesized that:

Hypothesis 4: Intellectual capital has a positive influence on SMEs' innovation capabilities.

Furthermore, it is proposed that innovation capabilities will mediate the relationship between entrepreneurial leadership, intellectual capital, and SMEs' financial performance. In particular, innovation can be viewed as the successful exploitation of ideas that are new to a firm in order to build profitable products and processes (Damanpour, 1991). It is proposed that entrepreneurial leaders can enhance firms' innovative capabilities as, by definition, they often come up with new ideas for innovating their products or services, pushing their employees to act similarly. Empirically, Fontana and Musa (2017) showed that entrepreneurial leaders in different industries in Indonesia exerted a direct positive effect on employee innovation. Huang

et al. (2014) also found that entrepreneurial leadership had a positive effect on the financial performance of SMEs and large enterprises in China via the mediating roles of exploratory and exploitative innovations. Based on these reasons, the following hypotheses were formulated:

Hypothesis 5: Innovation capabilities have a positive influence on SMEs' financial performance.

Hypothesis 6: Innovation capabilities positively mediate the relationship between entrepreneurial leadership, intellectual capital, and financial performance.

2.5 The Moderating Role of Differentiation Strategies

Porter (1997) stated that strategy is about making choices, the tradeoff, and choosing to be different. There are multiple strategies that a firm can employ to sustain a competitive advantage. For example, a 'cost leadership' strategy can be employed by firms with a large economy of scale, which seek to win a competition by producing products and services that are relatively cheaper than those of other firms. This study focuses on differentiation strategy, which can be viewed as a strategic choice that is developed around firm- in combination with product-specific innovations and marketing efforts, which are difficult to imitate (Banker et al., 2014). It has been indicated that a differentiation strategy can allow firms to command a price premium (Porter, 1980) through, for example,

product research and development, brand building, and strong supplier and customer networks (Banker et al., 2014).

Previous studies however have revealed mixed findings with regards to the relationship between the employment of differentiation strategies and firms' financial performance. For example, past research has shown that differentiation strategies had positive impacts on the financial performance of firms in the US (Banker et al., 2014) as well as manufacturing firms in Australia (Spencer et al., 2009). Meanwhile, Gok and Peker (2017) reported that innovation can actually lead to lower levels of firm's financial performance especially when there is a lack of market performance. These inconsistent findings suggest that the influence of firms' innovation capabilities on their financial performance is context-specific.

In this respect, it is proposed that the benefits that SMEs reaped from possessing high levels of innovative capabilities will be most evident among those that employ a higher level of differentiation. In particular, innovation involves a large investment of both financial and non-financial (e.g., time) resources, which could prove to be less profitable among firms that employ a low level of differentiation. In particular, differentiation may be too costly for firms that favor a cost leadership strategy. While it is acknowledged that this hypothesis is somewhat exploratory in nature, drawing from the above rationale leads to

formulation of the following tentative hypotheses:

Hypothesis 7: Differentiation strategy moderates the relationship between innovation capabilities and financial performance, such that this relationship is stronger when there is a higher level of differentiation strategy.

Hypothesis 8: Differentiation strategy moderates the indirect relationship between entrepreneurial leadership and financial performance via the mediating roles of intellectual capital and innovation capabilities, such that this indirect relationship is stronger when there is a higher level of differentiation.

3. METHODOLOGY

3.1 Sample and Procedures

The above hypotheses were examined using survey data collected from a sample of SMEs in the South of Thailand. The data were collected from 105 business owners or top executives, and 1,001 employees from 105 SMEs in the manufacturing sector. Based on a stratified random sampling procedure, survey questionnaires were distributed to the SMEs by registered mail, with each mailing containing return postage envelopes. The survey packet contained two specific types of questionnaires. The first questionnaire asked business owners or top executives (whoever were available to fill out the survey) to assess their firms' intellectual capital, innovation capabilities, and financial

performance, as well as to provide specific information of their firm, including firm age. The second questionnaire type asked employees to assess the entrepreneurial leadership qualities of their employers. This procedure helps to alleviate the effects of common method bias (CMB) from surveying a single group of respondents at a single

point in time (Podsakoff et al, 2003).

The survey questionnaires were sent to a total of 352 SMEs (i.e., 352 business owners or top executives and 3,520 employees [10 employees per firm]). Over a period of five months, 105 survey packets were successfully returned from 105 SMEs (comprising 54 small enterprises and 51 medium enterprises). Specifically, 105

Table 1 Sample Statistics

Variables	CEOs or top executives (n=105) (Percent)	Employees (n=1,001) (Percent)
Gender		
Male	66.67	34.18
Female	33.33	65.82
Age (years)		
18-30	8.65	38.82
31-40	24.04	34.63
41-50	34.62	19.82
51-60	25.96	6.23
61 or more	6.73	0.51
Education		
Below bachelor's	10.53	48.37
Bachelor's	62.11	51.00
Master's	27.37	0.63
Tenure (years)		
1-10	61.17	83.69
11-20	27.18	12.88
21-30	11.65	2.79
31 or more	0.00	0.65
Firm Age (years)		
1-10	34.62	-
11-20	21.15	-
21-30	25.00	-
31-40	13.46	-
41-50	3.85	-
51 or more	1.92	-

business owners or top executives, and 1,001 employees successfully completed the surveys, resulting in a response rate of 29.83% and 28.44%, respectively. While we acknowledge that these response rates are quite low, it is important to note these response rates are consistent with previous organizational-level research (e.g., Coder et al., 2017). In fact, such responses rates should be considered quite impressive when considering that the data were collected during the peak of COVID-19, where firms were mostly preoccupied with their business operations. The descriptive statistics of the respondents are shown in Table 1.

3.2 Survey Measures

The measures used in this study were all based on Likert-type scales. The measurement items along with their reliability and validity indices are reported in Table 4. Entrepreneurial Leadership ($\alpha = 0.958$) was measured using 8 items developed by Renko et al. (2015). Intellectual capital ($\alpha = 0.850$) was measured using 19 items developed by Subramaniam and Youndt (2005) and Kianto et al. (2017), comprising three specific dimensions: human capital, structural capital, and relational capital. These measurements were based on a scale format where 1 = *strongly disagree* and 5 = *strongly agree*. Innovation capabilities ($\alpha = 0.937$) were also measured using 5 items developed by Kianto et al. (2017). This measure evaluates the innovative performance of a firm over

the last year compared to other competitors. Lastly, perceived financial performance (FP) ($\alpha = 0.908$) was measured using 5 items developed by Vorhies and Morgan (2005). This measure was evaluated against the financial performance of other competitors over the last year. These measurements were based on a scale format where 1 = *much worse than competitors* and 5 = *much better than competitors*.

3.3 Data Aggregation

Since the unit of analysis in the current research was at the organizational level, it was important to aggregate any individual-level data to the organizational level. Specifically, entrepreneurial leadership was assessed by employees ($n = 1,001$) so it was necessary to aggregate this variable to the organizational level ($n = 105$). Three indicators were used to justify data aggregation, namely, ICC (1), ICC (2) (intraclass correlation coefficient), and $r_{wg}(j)$ (within-group agreement) (Bliese, 2000; James et al., 1984; LeBreton & Senter, 2008). The results showed significant F -statistics (one-way ANOVA) ($F = 6.29, p < 0.001$), indicating that there was significant variation in the levels of entrepreneurial leadership among the SMEs. Furthermore, the ICC (1) was found to be 0.36, indicating that 36 percent of the variance in entrepreneurial leadership could be attributed to the differences among the SMEs. The ICC (2) of 0.84 indicates a sufficient reliability in the

above variance across these SMEs. Finally, the $r_{wg}(j)$ value of 0.92 indicates a strong agreement among employees in the same SMEs.

3.4 Analytic Procedure

The study hypotheses were tested using Structural Equation Modeling (SEM) in Mplus (Muthén & Muthén, 2017). This comprises two specific procedures: (1) Testing a measurement model and (2) testing a structural model. Confirmatory factor analysis (CFA) was used in testing the measurement model. The fit of the measurement model was determined using several indices, including chi-square (χ^2), relative chi-square ratio (χ^2/df), the Tucker-Lewis index (TLI), the comparative fit index (CFI), the standard root mean squared residual (SRMR), and the root mean square

error of approximation (RMSEA). After the fit of the measurement model was assessed, the hypothesized model was estimated using a moderated mediation framework (i.e., conditional indirect effects).

4. RESULTS

4.1 The Measurement Model

As shown in Table 3, the results indicated that the proposed five variables had a good fit to the data ($\chi^2 = 288.094$, $df = 181$, $\chi^2/df = 1.591$, $p < 0.001$; CFI = 0.948; TLI = 0.940, RMSEA = 0.050, SRMR = 0.050). The proposed adjusted measurement model was thus accepted as the best fitting model (Hair et al., 2019).

As shown in Table 4, the loadings were all above 0.5, and ranged from 0.694 to 0.943. In terms of convergent

Table 2 Means, Standard deviations, Bivariate Correlations, and Square Roots of Average Variance Extracted (AVE)

Variables	Mean	SD	1	2	3	4	5	6
1. Entrepreneurial Leadership	4.086	0.401	(0.861)	0.386***	0.297**	0.293**	0.0	0.0
2. Intellectual Capital	3.812	0.547	0.358**	(0.809)	0.695***	0.354***	0.0	0.0
3. Innovation Capabilities	3.669	0.731	0.305**	0.611**	(0.864)	0.658***	0.0	0.0
4. Perceived Financial Performance	3.534	0.604	0.247*	0.362**	0.620**	(0.806)	-0.016	0.254*
5. Differentiation Strategy	3.733	0.800	0.101	0.265**	0.347**	0.237*	(-)	0.0
6. Innovation capabilities x Differentiation Strategy	-	-	-	-	-	-	-	(-)

Notes. $n = 105$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; Numbers on the diagonal (in parentheses) are square roots of the AVE; Numbers below the diagonal are bivariate correlations; Numbers above the diagonal give the correlation matrix for the latent variables for Model 2 (with interaction)

validity, the average variance extracted (AVE) and composite reliabilities (CR) were examined. The size of the AVE for each variable was above the recommended value of 0.5, while the size of CR also exceeded the recommended value of 0.70 (Hair et al., 2019). As shown in Table 2, the discriminant validity of the constructs

was assessed using the square roots of the AVEs (Fornell & Larcker, 1981). The size of the AVE values was greater than the correlations shared between the latent variable and other latent variables, indicating discriminant validity among the constructs.

Table 3 Measurement Model

χ^2	df	P-Value	χ^2/df	RMSEA	CFI	TLI	SRMR
288.094	181	0.000	1.591	0.075	0.948	0.940	0.050

Table 4 Factor Loadings, AVE and CR

Variables	Factor Loadings
Entrepreneurial Leadership: AVE = 0.741; CR = 0.958	
EL 1	0.839***
EL 2	0.834***
EL 3	0.840***
EL 4	0.940***
EL 5	0.902***
EL 6	0.943***
EL 7	0.869***
EL 8	0.694***
Intellectual Capital: AVE = 0.655; CR = 0.850	
HC (5 items)	0.760***
SC (8 items)	0.830***
RC (6 items)	0.835***
Innovation Capabilities: AVE = 0.747; CR = 0.936	
INC 1	0.873***
INC 2	0.776***
INC 3	0.880***
INC 4	0.867***
INC 5	0.919***
Perceived Financial Performance: AVE = 0.649; CR = 0.902	
FP 1	0.755***
FP 2	0.795***
FP 3	0.766***
FP 4	0.825***
FP 5	0.880***

Notes. *** $p < 0.001$; items are available upon request.

4.2 The Structural Models

The results showed that the full model had a good fit to the data ($\chi^2 = 326.937$, $df = 201$, $\chi^2/df = 1.626$, $p < 0.001$; CFI = 0.939; TLI = 0.930, RMSEA = 0.077, SRMR = 0.075). As shown in Table 5, the results indicated that entrepreneurial leadership was positively related to intellectual capital ($\beta = 0.386$, $p < 0.001$). Intellectual capital was also found to be positively related to innovation capabilities ($\beta = 0.684$, $p < 0.001$). Innovation capabilities were also found to be positively related to financial performance ($\beta = 0.782$,

$p < 0.001$). The model explained 14%, 48%, and 49% of the variances in intellectual capital, innovation capabilities, and financial performance, respectively. As shown in Table 6, results of the bootstrapping procedure also indicated that the indirect effect of entrepreneurial leadership via intellectual capital and innovation capabilities was significant ($\beta = 0.207$, $SE = 0.068$, $p < 0.01$, 95% CI [0.116, 0.346]). These results provide support to hypotheses 1-2 and 4-6.

To test hypotheses 7-8 on the moderating role of differentiation, estimation was conducted to form a

Table 5 Latent Moderated Mediation SEM Results

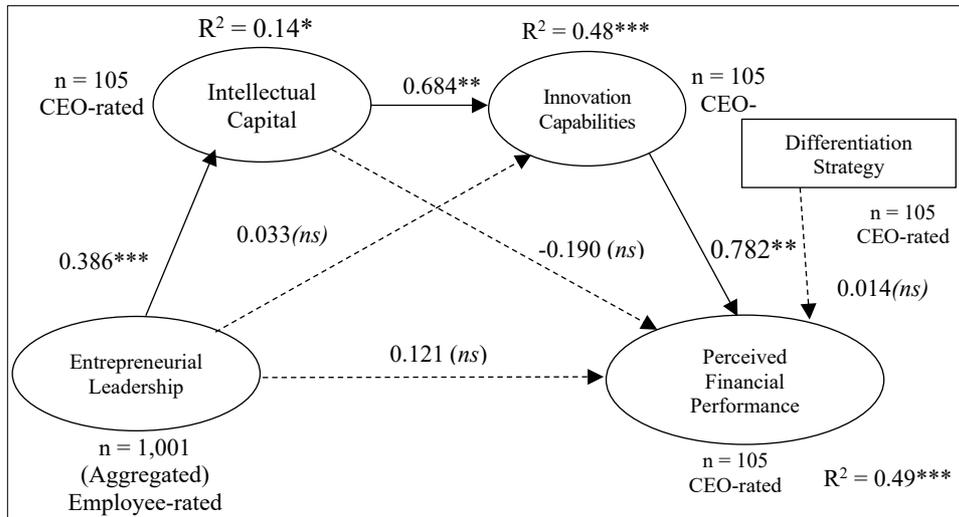
Estimated Paths	Model 1 (without interaction)	Model 2 (with interaction)
Main Paths		
1. Entrepreneurial Leadership --> Intellectual Capital	0.386***	0.386***
2. Entrepreneurial Leadership --> Innovation Capabilities	0.033	0.033
3. Entrepreneurial Leadership --> Perceived Financial Performance	0.121	0.158
4. Intellectual Capital --> Innovation Capabilities	0.684***	0.682***
5. Intellectual Capital --> Perceived Financial Performance	-0.190	-0.255
6. Innovation capabilities --> Perceived Financial Performance	0.782***	0.788***
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7. Differentiation Strategy --> Perceived Financial Performance	0.014	-0.016
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Differentiation Strategy		
Innovation capabilities x Differentiation Strategy --> Perceived Financial Performance	-	0.254**
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Explained variance (R^2)		
1. Intellectual Capital	0.14*	0.14*
2. Innovation Capabilities	0.48***	0.48***
3. Perceived Financial Performance	0.49***	0.53***

Note. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 6 Indirect Effects

Mediated Paths	β	SE	P-value	95% CLs	
				LLCI	ULCI
1. Entrepreneurial Leadership --> Intellectual Capital --> Perceived Financial Performance	-0.073	0.063	0.245	-	0.012
2. Entrepreneurial Leadership --> Innovation Capabilities --> Perceived Financial Performance	0.026	0.071	0.713	-	0.132
3. Entrepreneurial Leadership --> Intellectual Capital --> Innovation Capabilities --> Perceived Financial Performance	0.207**	0.068	0.002	0.116	0.346

Note. ** $p < 0.01$; CIs = 95% bootstrap confidence intervals (sample size 10,000).



Note. $n = 105$; Standardized coefficients.; * $p < 0.05$; *** $p < 0.001$; $ns =$ not significant

Figure 2: A Mediation Model (Model 1 [without interaction])

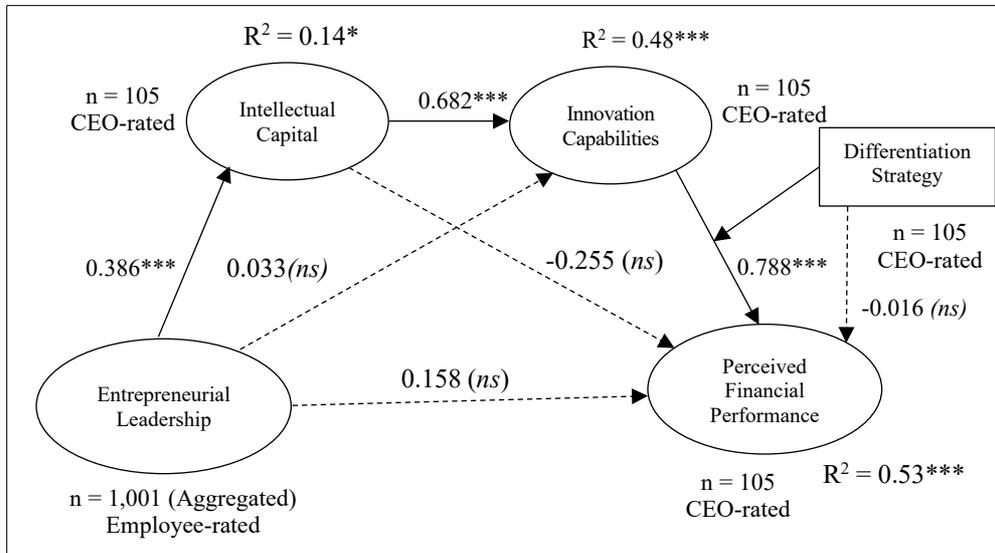
model that included both differentiation strategy (moderator) and the latent interaction term (innovation capabilities x differentiation strategy). As shown in Table 4 (Model 2), these results showed that, as expected, the latent interaction term had a significant effect on financial performance

($\beta = 0.254, p < 0.01$).

Furthermore, as shown in Table 7, the conditional indirect results reveal that entrepreneurial leadership was found to have a stronger effect on financial performance via intellectual capital and innovation capabilities when differentiation strategy was high ($\beta = 0.243, p < 0.01$), as compared to

Table 7 Conditional Indirect Effects (Moderated Mediation)

Mediated Paths	Levels of Strategy	β	SE	P-value
Entrepreneurial Leadership --> Intellectual Capital --> Innovation Capabilities --> Perceived Financial Performance	Low	0.124*	0.053	0.018
	High	0.243**	0.085	0.004



Note. $n = 105$; Standardized coefficients; ** $p < 0.01$; *** $p < 0.001$; ns = not significant

Figure 3: A Moderated Mediation Model (Model 2 [with interaction])

when it was low ($\beta = 0.124$, $p < 0.05$). These results provide support for hypotheses 7 and 8.

5. DISCUSSION AND CONCLUSION

This study examined the influence of business owners' entrepreneurial leadership on the financial performance of Thai SMEs. The study also investigated whether intellectual capital and innovation

capabilities could provide an explanation for this positive effect. The findings provided strong support for the proposed theoretical model. Additionally, it was found that the positive relationship between entrepreneurial leadership and financial performance is contingent upon the level of differentiation strategy employed by the SMEs. The discussion below considers the theoretical and practical implications of the study.

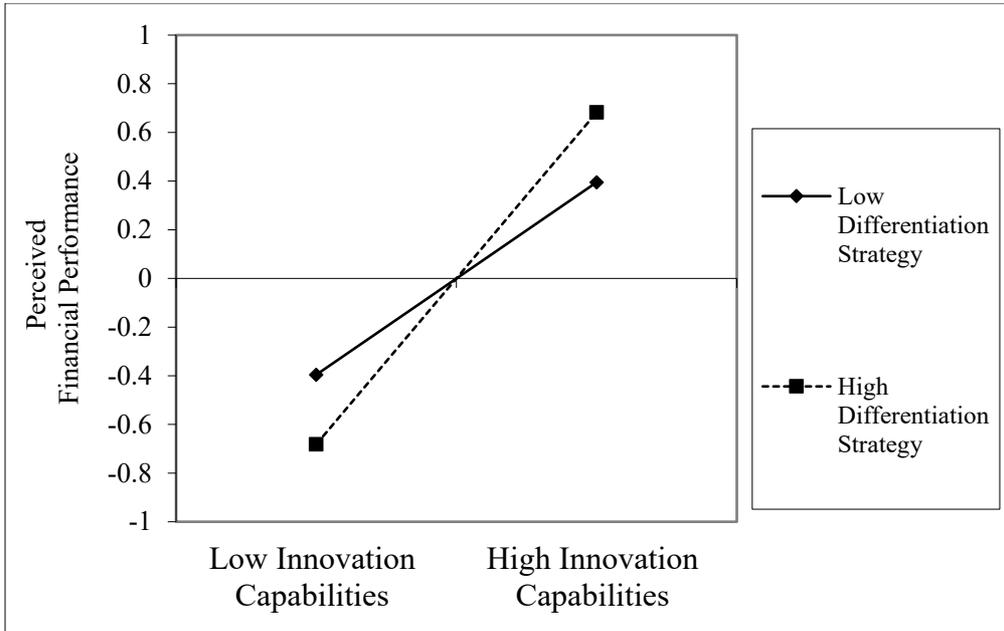


Figure 4: The Interaction Effect

5.1 Discussion

This study contributes to a better understanding of the role of entrepreneurial leaders in achieving financial performance for their firms. In line with strategic choice theory (Child, 1972; Hrebiniak & Joyce, 1985; Oliver, 1991), the study reveals that business owners’ entrepreneurial leadership qualities can play a critical role in determining the strategic choice of their firms by creating intellectual capital and innovation capabilities. These results are also consistent with the RBV theory (Barney, 1991), which states that a firm’s sustained competitive advantage can be derived from acquiring valuable resources and capabilities that are rare, inimitable, or hard to substitute.

In light of COVID-19, these results suggest that in order for SMEs to successfully navigate through this pandemic, it is important for them to focus their attention, energy, and resources, on establishing different elements of organizational capital, as well as the innovation capabilities of their firms. In practical terms, this includes investing in HRM, streamlining internal production process and management processes, and building a strong rapport with important external stakeholders. However, based on conversations with business leaders in the current sample, we believe that some of these investments already took place among certain SMEs well before the COVID-19 pandemic began. As the results suggest, firms with more entrepreneurial leaders were able to

fare better than others despite the significant constraints imposed by the economic slowdown and government policies, which discouraged consumer spending during the pandemic.

Taken together, these findings suggest that SMEs' survival depends, to a certain degree, on the ability of their organizational leaders to recognize and exploit business opportunities and to transform their business strategies, by, for example, switching their physical business operations to online platforms in order to adjust to consumers' changing purchasing behavior. Nevertheless, the findings also indicate that the positive effect of entrepreneurial leadership is more likely to be found in SMEs that employed higher levels of differentiation strategy. This lends further support for the importance of the match between the strategies employed and business processes. Investing too much in innovation can become a less effective strategy for firms that do not aim to gain a competitive advantage by differentiating themselves from their competitors.

5.2 Limitation

Despite the study contributions, it is acknowledged that all of the study variables are 'perceptual' in nature. Although it was possible to collect data from multiple sources consisting of more than 100 business owners and 1,000 employees, which mitigated CMB, future research will benefit from replicating the findings using objective firm-level data (e.g., actual

profits). Furthermore, future research should consider adopting a qualitative research design to gain deeper insight into how business leaders managed to navigate through the COVID-19 crisis. For example, what kind of sales and marketing strategies were employed by SMEs during this pandemic? How did business leaders adjust their business operations and production volumes to the changes in government policies?

5.3 Conclusion

The findings indicate that business owners' entrepreneurial leadership plays an important role in fostering their firms' intellectual capital, which, in turn, influences innovation capabilities and financial performance. Furthermore, the influence of innovation capabilities on financial performance was found to be stronger among SMEs that employed a higher level of differentiation strategy. It is hoped that this study will stimulate further interesting research in the area of SME management.

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