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SMEs internationalization: The role of product innovation, market intelligence, pricing and marketing communication capabilities as drivers of SMEs' international performance

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ABSTRACT

Small and medium enterprise (SME) competitive advantage has been recognized as an important topic for researchers dealing with SME internationalization. Previous studies have long discussed the role of firm competitive advantage as a determinant of international performance, but there are few studies analyzing the determinants of firm competitive advantage and its potential mediating role in the relationship between organizational capabilities and SMEs' international performance. In this paper, we hypothesize four essential export capabilities (market intelligence, product innovation, pricing, and marketing communication) as determinants of competitive advantage for exporting SMEs. Based on a sample of 119 active exporting Malaysian SMEs and using partial least squares (PLS) structural equation modeling, the results revealed that three of the mentioned capabilities lead to competitive advantage. In addition, results indicated that competitive advantage only acts as a mediator between pricing capability and SMEs' international performance. The main conclusions of this investigation can be valuable to SMEs and startups that intend to explore or exploit opportunities in foreign markets.

1. Introduction

Small and medium enterprises (SMEs) play an important role for both economic growth and employment opportunities in Malaysia (Abdul-Halim et al., 2019; Yan Xin et al., 2014). In 2017, 97.3% of business establishments were SMEs and they contributed to 37% of the gross domestic product and 66% of the total employment in Malaysia (SME Corp, 2019). In view that SMEs can expand their market coverage through exporting, the government of Malaysia contently encourages SMEs to explore the international market for potential business growth. However, this has never been an easy task. SMEs need to achieve competitive advantage in order to compete with other industry players around the world.

Most of the export performance literature has investigated the relationships between capabilities and performance, but few studies considered the effects of organizational capabilities on competitive advantage. In addition, studies on the determinants of international performance obtained mixed results regarding the effects of capabilities on firm performance (Beleska-Spasova, 2014). The internationalization environment is complex and, therefore, the often focus on investigating capability-performance relationships has probably omitted a step-by-step understanding on whether inconsistent capability-performance results are because some of the organizational capabilities fail to produce competitive advantages.

Since firm competitive advantage and business performance are two different concepts, and considering that most of the studies have examined merely capability-performance relationships, there is therefore a need for further research on the capability-competitive advantage relationship (Kaleka, 2002; Lu et al., 2010). In addition, we posit that a possible cause of the mixed findings on the capability-performance relationship may be subject to omitted mediator variables such as competitive advantage. To the best of our knowledge, there is currently limited understanding of the following research questions: what essential capabilities may support the creation of firm competitive advantage for exporting SMEs? Could competitive advantage be a mediator link between these capabilities and SMEs' international performance? In this paper, we aim to shed light on these research gaps by investigating the essential capabilities associated with competitive

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advantage that may lead to SMEs' international performance and whether competitive advantage is a mediator linking these capabilities to SMEs' international performance. Understanding the essential capabilities which contribute to competitive advantage will guide SMEs that intend to explore international markets to assess their readiness. Policy makers and entrepreneurs can focus their capability development programmes on capabilities strongly associated with competitive advantage for exporting SMEs' (Soto-Acosta et al., 2016a).

The remainder of the article is organized as follows: The next section presents the literature review and hypotheses. Following that, the research methods drawing from a sample of 119 active exporting Malaysian SMEs are described. Then, data analysis and results are examined. Finally, the paper ends with a discussion of research findings, limitations and concluding remarks.

2. Literature review and hypotheses development

The role of competitive advantage for a firm's success has been widely discussed in the literature (Barney, 1991; Grant, 1991; Porter, 1985). To be competitive in foreign markets, an exporting firm must achieve specific advantages which necessarily need to be valuable and rare (Lee and Liu, 2018). More specifically, four criteria have been proposed in order to assess the sustainability of a firm's competitive advantage, which are: durability, transparency, transferability and replicability (Grant, 1991). According to the resource-based view (RBV), capabilities of a firm are complex (Barney, 1991). Capabilities are accumulated and formed by unique configurations and interrelations of firm's internal and external resources which are difficult to imitate (Grant, 1991; Soto-Acosta and Meroño-Cerdan, 2008, 2009). In other words, capabilities can be source of competitive advantage when they are durable, not transparent, not transferable and difficult to replicate.

Despite most studies on capabilities examined the relationship between organizational capabilities and firm performance without the presence of competitive advantage, some authors as, for instance, Weerawardena (2003) assessed the role of the marketing capability and competitive advantage by conducting a research on 324 manufacturing firms. Weerawardena's (2003) findings suggested a positive relationship between marketing capability and competitive advantage. Others as Zou et al. (2003) studied the relationship between four capabilities and competitive advantage for export financial performance, finding that distribution, communication and product development capabilities are positively related to export financial performance, whereas pricing capability is not. Kamboj et al. (2015) carried out a study on the relationships among marketing capability, competitive advantage and firm performance. Still others as Rua et al. (2018) analyzed the mediating role of competitive advantage on the relationships among entrepreneurial orientation, intangible resources and absorptive capabilities. Thus, although research has advanced during the last decades, understanding the determinants of competitive advantage as well as the mediating role of competitive advantage on different types of capabilities requires further research.

SMEs' international performance can be measured through financial and strategic performance (Falahat et al., 2018; Silva et al., 2017; Popa et al., 2018). Competitive advantages can be considered as predictors of SMEs' international performance (Rua et al., 2018). Beleska-Spasova (2014) conducted a literature review on the determinants of international performance and summarised the following: management characteristics and perceptions, export strategy, marketing mix, export expertise, export knowledge, business relationships, firm characteristics, export and domestic market characteristics. In the specific context of exporting firms from emerging markets, Pham et al. (2017) found positive associations of market intelligence learning capability, product innovation capability, pricing capability, and marketing communication capability with international performance.

Following the thought that competitive advantage and international performance are two separate concepts, we intend to investigate the essential capabilities associated with competitive advantage that may lead to SMEs' international performance and whether competitive advantage is a mediator linking these capabilities to SMEs' international performance. Grounded on the RBV, capabilities are configurations of resources which are valuable, rare, inimitable and non-substitutable and, as a consequence, source of competitive advantage. Based on the work of Pham et al. (2017), we selected four essential capabilities which we hypothesize that may support the creation of competitive advantage for exporting SMEs and may mediate the relationships between these capabilities and SMEs' international performance. The research model is outlined in Fig. 1 and the relevant studies supporting the hypothesis development are discussed in the following subsections.

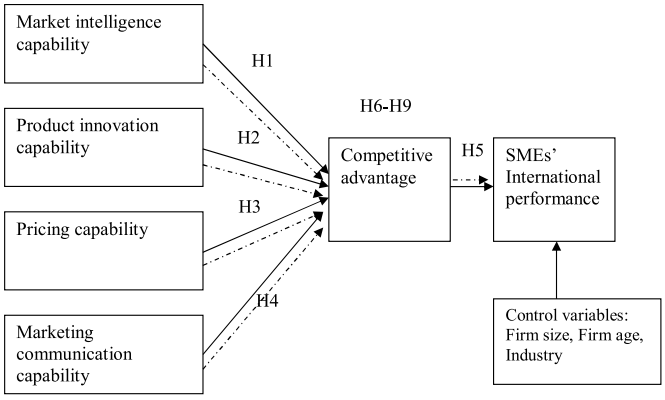

Fig. 1. Research model (Note: Dotted lines denote mediating effects).

2.1. Exporting SMEs' capabilities and competitive advantage

Market intelligence capability refers to the firms' ability to predict changes in their markets and respond in consequence with marketing actions (Day, 1994; Pham et al., 2017). According to Day (1994), market intelligence includes understanding competitors, customers and other business stakeholders and, as result, it enables firms to obtain competitive advantage by exploiting opportunities in markets. Market intelligence capability enhances entrepreneur's competence to identify and exploit external opportunities and, thus, may foster internationalization (Mishra and Zachary, 2015). Market intelligence capability may improve firm performance through the deployment of competitive advantage on market information management, organizational learning and intellectual capital (Colomo-Palacios et al., 2011, 2014; Vătămănescu et al., 2016). Today, companies are making more and more investments in information technologies to develop superior market intelligence capabilities (Carayannis et al., 2018; Soto-Acosta et al., 2014, 2018).

Exporting SMEs have limited knowledge on foreign market conditions. In these circumstances, market intelligence capability may have a significant effect on SMEs' international performance by enabling them to develop competitive advantages in order to handle challenges during the internationalization process (Evangelista and Mac, 2016). Thus, the following hypothesis is proposed:

Hypothesis 1. There is a positive relationship between exporting SMEs' market intelligence capability and competitive advantage.

Many studies have found positive links between organizational innovation and firm performance (Leal-Millán et al., 2016; Martinez-Conesa et al., 2017; Meroño-Cerdán et al., 2008; Popa et al., 2017; Soto-Acosta et al., 2016b). The ability to develop and produce innovative and unique product determines a firm's competitiveness, especially when considering firms operating in international markets. Product innovation capability represents a firm's ability to develop, modify or innovate its product offerings in order to meet customer requirements (Pham et al., 2017; Weerawardena, 2003; Zou et al., 2003). Product

innovation capability improves time to market when introducing new products (Sok and Cass, 2011). As a result, Kaleka (2002) found that product innovation capability leads to product advantage. Therefore, product innovation capability can be valuable and rare and, hence, it may bring competitive advantage when supports a firm in adapting to the changing needs of customers (Yang and Ju, 2018). The following hypothesis incorporates these expectations:

Hypothesis 2. There is a positive relationship between exporting SMEs' product innovation capability and competitive advantage.

Pricing capability stands for a firm's ability to set prices based on a balanced consideration of costs, competition and customer expectations (Dutta et al., 2003). Firms with a better pricing capability may gain competitive advantage through its ability to enable better customer deals (Hofer et al., 2019; Katsikeas, 1994). There are few studies on pricing capability, suggesting that firms with more flexibility in pricing can offer the best value for money deals. The majority of the works' findings revealed that a firm's pricing capability leads to competitive advantage linked to lower costs relative to its rivals (Vorhies and Morgan, 2005; Pham et al., 2017; Zou et al., 2003). Hence, the second hypothesis posit a positive relationship between exporting SMEs' product innovation capability and competitive advantage.

Hypothesis 3. There is a positive relationship between exporting SMEs' pricing capability and competitive advantage.

Marketing communication capability is a firm's ability to plan, manage, and launch its marketing communication program (Pham et al., 2017; Zou et al., 2003). Kamboj et al. (2015) found that a firm with marketing capability leads to superior financial performance as compared with those focusing solely on operational capabilities. Ahmadi et al. (2014) found that marketing communication helped a new technology venture in India to demonstrate its product advantages. The ability to differentiate product offerings from competitors through an effective marketing program can add value. Marketing communication capability enables firms to identify, connect and serve their market better, enhancing business performance (Hao and Song, 2016; Takahashi et al., 2016). Marketing communication capability may help firms to gain competitive advantage, especially for those exporting firms being able to balance their national and international communication programs (Weerawardena, 2003). The following hypotheses incorporate these expectations:

Hypothesis 4. There is a positive relationship between exporting SMEs' marketing communication capability and competitive advantage.

2.2. Exporting SMEs' competitive advantage and SMEs' international performance

Competitive advantage refers to the specific value of a product or service in which a firm can perform better than its competitors (Porter, 1985). For example, competitive can be gained by offering low cost or differentiated products or services (Kaleka, 2002). Despite Porter (1985) proposed that low cost and differentiation are two incompatible concepts, Kaleka and Morgan (2017) found that many firms try to gain price and product advantage simultaneously. In fact, their study showed that achieving both price and product advantage has positive effects on international performance. Most of previous research's findings conclude that competitive advantage is positively related to firm performance (Kamboj et al., 2015; Rua et al., 2018; Zou et al., 2003). However, others such as Chelliah et al. (2010) found that competitive advantage has no significant effect on SME internationalization. Therefore, more research validating the relationship between competitive advantage and international performance is needed, especially for SMEs. Thus, the following hypothesis is proposed:

Hypothesis 5. There is a positive relationship between SMEs's competitive advantage and SMEs' international performance.

Despite studies on the determinants of international performance obtained mixed results regarding the effects of capabilities on firm performance (Beleska-Spasova, 2014), recent research suggests that a possible cause of the mixed findings on the capability-performance relationship may be subject to omitted mediator variables such as competitive advantage (Rua et al., 2018). Hence, we posit that competitive advantage mediates the relationships between exporting SMEs' capabilities and SMEs' international performance. The following hypotheses incorporate these expectations:

Hypothesis 6. Competitive advantage mediates the relationship between SMEs' market intelligence capability and SMEs' international performance.

Hypothesis 7. Competitive advantage mediates the relationship between SMEs' product innovation capability and SMEs' international performance.

Hypothesis 8. Competitive advantage mediates the relationship between SMEs' pricing capability and SMEs' international performance.

Hypothesis 9. Competitive advantage mediates the relationship between SMEs' marketing communication capability and SMEs' international performance.

3. Research methodology

3.1. Data

The organizations selected for this study are exporting SMEs from Malaysia. The decision maker targeted by the survey was normally the person responsible for exporting activities within the company, typically the export manager. Nonetheless, to ensure the sample involved active and regular exporting SMEs, only firms with at least 25% of their sales from exports were considered (Falahat et al., 2018). The study used the MATRADE (Malaysia External Trade Development Corporation) directory as the sampling frame because most exporters are members of MATRADE. The sample drawn was a random sample of companies from the respective sector population with the objective of fulfilling strata with respect to business size and business subsectors in Malaysia. A total of 1000 were identified for participation. Data collection was conducted in two phases: a pilot study and a questionnaire. First, five SMEs were randomly selected from a database to pretest the questionnaires. Based on the responses and subsequent interviews with participants in the pilot study, minor modifications were made to the questionnaire for the next phase of data collection (Presser et al., 2004). Data was collected in 2018. In total, a final dataset of 119 valid cases was obtained, meeting the 25% export sales criterion as mentioned above.

3.2. Measures of variables

Measurement items were introduced on the basis of a comprehensive literature review. To facilitate cumulative research, operationalizations tested by previous studies were used. Measures were operationalized as multi-item constructs and measured on a 5-point Likert scale with anchors from strongly disagree (1) to strongly agree (5). The survey questionnaire is separated into two parts. Part 1 consisted of questions related to variables and Part 2 included questions related to company information. A description of the constructs and the associated indicators is provided in Table 1. Based on the scale developed by Falahat et al. (2018) a construct was drawn up to measure SME international performance. Overall, eight items were adapted to measure SME international performance. Competitive advantage was operationalized using a ten-item scale from Kaleka and Morgan (2017), whereas market intelligence capability, product innovation capability, pricing capability, and marketing communication capability were operationalized by using the scales established by Pham et al. (2017).

Table 1
Results of measurement model.

	Description of items	Mean	SD	Outer Loading	CR	AVE
	Competitive advantage					
Please rate your company's competitive advantages in comparison with your main competitors. (1- Much worse——5-Much better)						
CA_1	Our cost	3.39	0.967	0.772	0.909	0.509
CA_2	Our selling price	3.47	0.910	0.810		
CA_3	Product quality	4.09	0.748	0.765		
CA_4	Uniqueness in term of packaging / branding / product design	3.85	0.809	0.817		
CA_5	Make / modify product according to customer requirements / needs	4.19	0.692	0.851		
CA_6	Product accessibility	3.83	0.837	0.624		
CA_7	Technical support and after-sales service	3.92	0.839	0.593		
CA_8	Delivery speed and reliability	3.83	0.705	0.685		
CA_9	End-customer rating of service quality	3.94	0.642	0.548		
CA_10	Overall end-customer satisfaction with service offering	3.92	0.671	0.589		
Export capabilities						
Please rate your company's competitive capabilities in the following areas. (1-Very poor————5- Very good)						
	Market intelligence capability				0.958	0.820
MI_1	The ability to learn quickly about changes in regulations of export markets	3.67	0.865	0.879		
MI_2	The ability to learn quickly about changes in export customers' preferences	3.76	0.833	0.922		
MI_3	The ability to learn quickly about changes in competitors' strategies	3.45	0.890	0.910		
MI_4	The ability to learn quickly about changes in distribution channels	3.62	0.902	0.907		
MI_5	The ability to learn quickly about changes in demand and tastes in export markets	3.67	0.884	0.910		
	Marketing communication capability				0.973	0.901
Mkt_1	The ability to develop effective export marketing communication programs	3.50	0.862	0.942		
Mkt_2	The ability to launch export marketing communication programs	3.42	0.888	0.951		
Mkt_3	The ability to manage export marketing communication programs	3.47	0.891	0.959		
Mkt_4	The ability to skillfully use marketing communication programs	3.52	0.910	0.944		
	Product innovation capability				0.954	0.873
PI_1	The ability to modify products to fit export markets' demands and tastes	3.95	0.852	0.915		
PI_2	The ability to develop new products / services for export markets	3.89	0.881	0.942		
PI_3	The ability to successfully manage new product development for export markets.	3.88	0.875	0.946		
	Pricing capability				0.956	0.844
Price_1	The ability to adjust the prices in export markets	3.84	0.873	0.922		
Price_2	The ability to respond quickly to export competitors' pricing actions	3.77	0.887	0.932		
Price_3	The ability to respond quickly to customers' demands in terms of price considerations	3.87	0.812	0.930		
Price_4	The ability to effectively communicate pricing information to customers	3.86	0.837	0.890		
	SMEs' International performance				0.958	0.741
How would you rate your satisfaction with below statements? 1- Not satisfied at all————-5- Very satisfied						
Perf_1	Profits from export sales	3.76	0.820	0.778		
Perf_2	Export sales	3.72	0.892	0.892		
Perf_3	Contribution of export sales to total sales	3.87	0.863	0.830		
Perf_4	Expanding market coverage	3.76	0.965	0.903		
Perf_5	Entering new market segments in international market	3.62	0.991	0.882		
Perf_6	Establishing product presence in international market	3.66	0.952	0.900		
Perf_7	Improving knowledge on international markets	3.76	0.770	0.880		
Perf_8	Speed of customers' product acceptance	3.65	0.869	0.814		

Note: CA- Competitive advantages, MI-Market intelligence capability, Mkt- Marketing communication capability, PI- Product innovation capability, Perf-International Performance, Price-Pricing capability.

Table 2
Discriminant validity (Fornell-Larcker Criterion).

	CA	Perf	MIL	Mkt	Price	PI
CA	**0.713**					
Perf	0.327	**0.861**				
MI	0.482	0.401	**0.906**			
Mkt	0.472	0.418	0.758	**0.949**		
Price	0.511	0.316	0.612	0.655	**0.919**	
PI	0.477	0.314	0.669	0.595	0.665	**0.934**

Note: CA- Competitive advantages, MI-Market intelligence capability, Mkt-Marketing communication capability, PI- Product innovation capability, Perf-SMEs' International Performance, Price-Pricing capability. Diagonal values in bold represent the square root of the AVE, while the off-diagonal figures are correlations.

3.3. Measurement model

We used Structural Equation Modeling (SEM) for the measurement, validation and testing of the structural model. SEM is particularly useful for testing complex models and when researchers need to incorporate latent variables. More specifically, we opted to apply the Partial Least Squares (PLS) SME approach, using SmartPLS 3.2.8 software (Ringle et al., 2015). The unidimensionality and reliability of the data set were assessed by different procedures. Construct reliability assesses the degree to which items are free from random error and, therefore, yield consistent results. This study calculated reliability of measures using the composite reliability (CR) index and the average variance extracted (AVE) index. For all the measures both indices were higher than the evaluation criteria, namely, 0.7 for the CR index and 0.5 for the AVE index. Convergent validity assesses the consistency across multiple constructs. As shown in Table 1, all values were within the recommended threshold indicating internal consistency reliability and convergent validity (Hair et al., 2014).

To assess the discriminant validity – the extent to which different constructs diverge from one another – Fornell and Larcker's (1981) criterion, that the square root of AVE for each construct (diagonal elements of the correlation matrix in Table 2) should be greater than the absolute value of interconstruct correlations (off-diagonal

Table 3
Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT)).

	CA	Perf	MI	Mkt	Price	PI
CA						
Perf	0.352					
MI	0.520	0.424				
Mkt	0.502	0.435	0.794			
Price	0.556	0.333	0.648	0.687		
PI	0.520	0.335	0.715	0.629	0.711	

Note: CA- Competitive advantage, MI-Market intelligence capability, Mkt-Marketing communication capability, PI- Product innovation capability, Perf-SMEs' International Performance, Price-Pricing capability.

elements), was used. All constructs met this criterion, suggesting that the items share more variance with their respective constructs than with other constructs. In addition, the Heterotrait-Monotrait Ratio of Correlations (HMTM) for testing discriminant validity was used (Henseler et al., 2015). A HTMT value that exceeds 0.85 represents an issue of discriminant validity. As shown in Table 3, all HTMT values of the constructs were below 0.85. In summary, these tests suggested that discriminant validity was not a serious threat in our study.

4. Empirical results

This paper performs PLS SEM to test the hypotheses. More specifically, we applied complete bootstrapping setting with 5000 subsamples, mean replacement for missing values and two-tailed test for hypothesis testing. As shown in Table 4, market intelligence capability, product innovation capability and pricing capability are positively related to competitive advantage, supporting hypotheses H1 to H3. Competitive advantage was positively related to SMEs' international performance, hence hypothesis H5 was confirmed. hypothesis H4 did not find support, indicating a non-significant relationship between marketing communication and competitive advantage. The Variance Inflation Factor (VIF) was examined to identify multicollinearity issue. Table 4 shows that multicollinearity is not an issue among the exogenous latent constructs, since all VIF values were below 5. Thus, multicollinearity is not a threat in this study.

The bootstrapping procedure was conducted to test the mediating effects. This is the most recommended approach for testing mediation in the PLS-SEM context (Hair et al., 2014; Zhao et al., 2010). The indirect relationships together with the hypothesis testing results are presented in Table 5. The results of the statistical analysis did not find support for hypotheses H6, H7 and H9. In contrast, findings indicated that competitive advantages mediates the relationship between pricing capability and SMEs' international performance and, thus, hypothesis H8 was confirmed. Based on the R square results, the research model explained 44.2% of competitive advantage variance and 23.1% of SMEs' international performance variance. Therefore, the predictive relevance of the model met the rule of thumb of $Q^2 > 0$ (Hair et al., 2014).

Table 5
Mediation effect testing.

Paths	Std. Beta	Std. Error	t-value	Decision
H6: MI → CA → Perf	0.049	0.031	1.578	H6 not supported
H7: PI → CA → Perf	0.047	0.030	1.584	H7 not supported
H8: Price → CA → Perf	0.083	0.030	2.76**	H8 supported
H9: Mkt → CA → Perf	0.035	0.032	1.079	H9 not supported

Note 1: CA- Competitive advantages, MIL-Market intelligence capability, Mkt-Marketing communication capability, PI- Product innovation capability, Perf-SMEs' International Performance, Price-Pricing capability.
Note 2: *$p < 0.05$,.
** $p < 0.01$.

5. Conclusions, limitations and future research

The results revealed that market intelligence capability, product innovation capability and pricing capability are three essential capabilities that lead to competitive advantage of Malaysian exporting SMEs. In other words, competitive advantages of Malaysian exporting SMEs are supported by the companies' abilities to respond to market intelligence, innovate on their products to exploit market opportunities and offer reasonable prices. This study contributes to shed light on the determinants of competitive advantages for SMEs' international performance. It reflects that exporting SMEs rely on both product advantages and price advantages. The finding is consistent with the work of Kaleka and Morgan (2017), which emphasized asymmetries between different competitive advantages. In addition, our results indicated that only the pricing capability has an indirect significant effect on SMEs' international performance. This confirms the critical role of the pricing capability for international success. Thus, even though a firm could achieve competitive advantage through product innovation, a reasonable pricing may be essential to capitalize product innovation.

Our findings indicate a non-significant effect of the marketing communication capability on competitive advantage for Malaysian exporting SMEs, which counters the study of Pham et al. (2017). A possible explanation to this can be found on the different context of the research, Pham et al. (2017) is conducted in the United Kingdom, while ours is based on Malaysian exporting SMEs. In addition, this probably means that this type of firms may have less emphasis on their marketing communication capability as compared with other capabilities. This could be related to the fact that Malaysian exporting SMEs are more willingly to invest in product and process innovation rather than investing in marketing communication programmes.

Theoretically, this study provides empirical evidence on the determinants of competitive advantage and mediating role of competitive advantage in the Malaysian context. The RBV of the firm suggests that only capabilities which are valuable, rare, inimitable, non-substitutable can be source of competitive advantage. In line with this argument, we examined whether all four essential capabilities are 'valuable' to competitive advantage. In this sense, this study's findings extend previous

Table 4
Structural relationship and hypothesis testing.

Paths	Std. Beta	Std. Error	t-value	VIF	R-square	Decision
H1: MI → CA	0.150	0.087	1.724*	2.850	0.442	H1 Supported
H2: PI → CA	0.144	0.083	1.739*	2.236		H2 Supported
H3: Price → CA	0.254	0.081	3.156**	2.21		H3 Supported
H4: Mkt → CA	0.106	0.091	1.16	2.722		H4 Not supported
H5: CA → Perf	0.327	0.06	5.48**	1.007	0.231	H5 Supported

Note 1: CA- Competitive advantages, MI-Market intelligence capability, Mkt- Marketing communication capability, PI- Product innovation capability, Perf- SMEs' International Performance, Price-Pricing capability.
Note 2: VIF < 5;.
* $p < 0.05$,.
** $p < 0.01$.

research on the relationships among organizational capabilities, competitive advantage and international performance.

By testing four essential capabilities as determinants of competitive advantage for SMEs' international performance, this study shed light on entrepreneurs and policy makers who are involved in organizational capabilities development. The results confirm that market intelligence, product innovation and marketing communication capabilities are insufficient to lead to satisfactory performance in international markets. Parallel with the efforts on enhancing market intelligence and product innovation capabilities for competitive advantages, exporting firms must not ignore their pricing capability to improve international performance. A continuous process improvement together with a tight control of costs and the elimination of unnecessary operational wastages could be some options to enhance pricing capability. Policy makers should organize more seminars and training on how to improve product and process innovation among exporting SMEs.

This study has some important limitations. First, it took into account the three common competitive advantages as tested by Kaleka (2002), which are limited to price, product and service. Therefore, the effect of other possible competitive advantages which may apply to exporting SMEs have not been considered. Second, restricted by budget and time constraints, only 119 valid responses were received, a relatively small sample size with medium effect size 0.15 at statistical power of 90% based on G*Power analysis. Third, this study only considered the direct relationship between capabilities and competitive advantage, without taking into consideration the possible interrelations among the four capabilities.

For future studies, researchers may consider to extend the model by studying the determinants of each capability or exploring other capabilities (such as networking capability, digital capability…) which may contribute to competitive advantage for SMEs' international performance. Future research may also investigate the interrelations among capabilities. In addition, researchers may consider carrying out a comparative study between low intensity exporters and high intensity exporters.

CRediT authorship contribution statement

Mohammad Falahat: Conceptualization, Methodology. **T. Ramayah:** Validation, Formal analysis. **Pedro Soto-Acosta:** Writing - review & editing, Supervision. **Yan-Yin Lee:** Writing - original draft.

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Supplementary materials

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