

Handoyo, Sofik; Yudianto, Ivan; Fitriyah, Fury Khristianty

Article

Critical success factors for the internationalisation of small-medium enterprises in Indonesia

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*Corresponding Author Sofik Handoyo,
Center for Accounting Studies,
Faculty of Economics and Business,
Universitas Padjadjaran, Gedung
Pertamina Lantai 3, Dipati Ukur 35,
Bandung, 40132 INDONESIA
Email: sofik.handoyo@unpad.ac.id

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Iman Rahimi, Young Researchers
and Elite Club, MALAYSIA

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MANAGEMENT | RESEARCH ARTICLE

Critical success factors for the internationalisation of small–medium enterprises in indonesia

Sofik Handoyo^{1*}, Ivan Yudianto¹ and Fury Khristianty Fitriyah¹

Abstract: The purpose of this study was to identify critical success factors (CSFs) for Indonesian small–medium enterprises (SMEs) accessing international markets. The study used the resource-based view, the knowledge-based view, and network theory as a theoretical framework to assess CSFs. The population consisted of Indonesian exporting SMEs registered with the Indonesian Ministry of Cooperatives and Small Businesses. The total sample contained 153 SME exporters, which were selected using convenience sampling techniques. Paper-based and electronic questionnaire instruments were used to collect the data. The questionnaires were distributed through small–medium enterprises' export networks and to SME respondents at an international trade exhibition. Factor analyses, namely exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), were applied. The research findings revealed that international market knowledge, product innovation knowledge, and institutional networking are critical success factors for the internationalisation of small–medium enterprises in Indonesia. The study contributes by enriching the body of knowledge regarding firm internationalisation theory and providing valuable information for understanding small–medium enterprises' internationalisation in an emerging country such as Indonesia.

ABOUT THE AUTHOR

Sofik Handoyo is a senior lecturer and research fellow at the Faculty of Economics and Business, Universitas Padjadjaran, Indonesia. His research interest focuses mainly on small business management, management accounting, and public sector management. He is actively involved in research projects initiated by the Indonesian Ministry of Education and Culture.

Ivan Yudianto is a PhD candidate in accounting at the Faculty of Economics and Business, Universitas Padjadjaran. He is also a member of the faculty as a senior lecturer at the same university. Public sector accounting and management, risk management, and taxation are his primary research field.

Fury Khristianty is a PhD candidate in accounting at the University of Sains Malaysia. She is also a member of the Faculty of Economics and Business, Universitas Padjadjaran. Her research interest is related to fraudulence, especially in government agencies.

PUBLIC INTEREST STATEMENT

Small–medium enterprises (SMEs) play a significant role in the economy of developing countries, including Indonesia. However, most SMEs are domestic economic players, and only a small number of them have access to the international market. To transform SMEs from domestic players into international players, we must learn from exporting SMEs. Therefore, it is relevant to conduct a study to identify the critical success factors for SMEs' internationalisation. The study results indicated that international market knowledge, product innovation knowledge, and institutional networking are vital for SMEs' internationalisation in Indonesia. The findings of this study are expected to be informative for non-exporting SMEs, especially in Indonesia and other developing countries, that intend to expand their business to the international market. The study may also provide insights for policy makers to set appropriate SME internationalisation strategies.

Subjects: Economics; Business, Management and Accounting; Industry & Industrial Studies

Keywords: Small–medium enterprises; resource-based view; knowledge-based view; network theory; convenience sampling; internationalisation

1. Introduction

The internationalisation of small–medium enterprises (SMEs) has been studied frequently and from diverse perspectives over the last few decades (Agustini, 2013; Mejri & Umemoto, K, 2010; Ruzzier et al., 2006). Prominent scholars have also developed numerous models to explain SMEs' international processes (Mejri & Umemoto, K, 2010). However, the studies' results have not reached a consensus on the critical success factors (CSFs) for SMEs' internationalisation (Mohapatra, 2020; Naldi, 2008). Furthermore, limitations in terms of the theoretical bases used, especially the adoption of a single entrepreneurship theory, have led to a partial understanding of SMEs' internationalisation (Agustini, 2013). SMEs' internationalisation is a multifaceted phenomenon, and it cannot be understood comprehensively by relying on only one entrepreneurship theory (Aliabadi et al., 2019; Jani, 2011). Scholars have attempted to develop a holistic approach to understanding SMEs' internationalisation. However, more empirical studies are still needed to develop a comprehensive model of SMEs' internationalisation (Mejri & Umemoto, K, 2010). Therefore, a further study to understand the CSFs for SMEs' internationalisation is relevant for theory development.

Research on SMEs in the Asian context still show a significant gap associated with internationalisation. In Indonesia, SME researchers primarily have an orientation towards understanding the factors that affect the performance of non-exporting SMEs. Ferri et al. (2012), Fitriati et al. (2020), and Hamdani and Wirawan (2012) examined the role of innovation in SMEs' performance and sustainability. Rahayu and Day (2017) studied the perceived benefits gained by Indonesian SMEs from e-commerce adoption. Meanwhile, only a limited number of internationalisation studies have focused on Indonesian exporting SMEs. Revindo and Gan (2018) investigated the factors affecting the variation in Indonesian SMEs' export intensity. However, the study lacked comprehensiveness due to the use of a single entrepreneurship theory, the resource-based view. Sari (2011) examined the role of human capital in SMEs' internationalisation in Indonesia. Besides using only a single entrepreneurship theory (the resource-based view), the study was restricted to SMEs in the manufacturing sector. Mohapatra (2020) examined the export behaviour of SMEs in the Indian manufacturing sector. He argued that the lack of clear evidence of the factors affecting SMEs' export performance highlights the need for additional research in this area (Mohapatra, 2020). Aliabadi et al. (2019) studied the components of the sustainability of entrepreneurial ecosystems in Iran. However, the study emphasised external ecosystems, such as political, cultural, and market conditions, rather than internal ecosystems. Many questions remain unanswered regarding SMEs' growth and internationalisation, especially in developing countries (A. A. Chandra et al., 2020b); therefore, further research on SMEs' internationalisation is still relevant.

SMEs are the backbone of the national economy in many countries and contribute approximately 50% to 80% of the gross domestic product (London, 2010). In Indonesia, the SME sector is the main contributor to domestic economic activities, a significant employment opportunity provider, and a source of additional income through home economic activities (Tambunan, 2009a). During the period 2005–2013, 99% of Indonesia's total business entities were SMEs (Revindo & Gan, 2018). The SME sector in Indonesia absorbed more than 97% of the workforce and contributed about 56–59% to the Indonesian GDP (Revindo & Gan, 2018). Despite the significant contribution to the national economy accounted for by SMEs, most of them are not involved in international economic activities (London, 2010). Indonesia's SME domination is limited to the domestic market. Compared with other countries in the Asia-Pacific region, Indonesian SMEs' contribution to the national economy in export value is relatively small (Tambunan, 2009a; Wignaraja, 2012). Indonesian SMEs lag behind their large-scale enterprise counterparts in taking advantage of export opportunities (Revindo, 2017; Tambunan, 2009a). In the late 2000s, nearly 91% of Indonesia's total exports were contributions from large-scale firms, and the remainder were from SMEs (Wignaraja, 2012).

This study aimed to identify the critical success factors (CSFs) for Indonesian SMEs entering international markets. Compared with previous similar studies, its novelty is the comprehensiveness of the theoretical bases used. Similar previous studies have used a single entrepreneurship theory to understand SMEs' internationalisation, an approach that has weaknesses when a comprehensiveness analysis is required (Hosseini & Dadfar, 2012). This study used multiple entrepreneurship theories, namely the resource-based view (RBV), the knowledge-based view (KBV), and network theory. By adopting multiple perspectives on entrepreneurship theory, a better understanding of the CSFs for SMEs entering the global market can be reached.

Scholars from various countries have conducted numerous studies in the field of SMEs' internationalisation. However, most of them have been conceptual and have focused on the barriers that SMEs face when entering the international market (Agustini, 2013). This study concentrated on the CSFs for internationalisation, an approach that is believed to provide a more useful lesson for SMEs that intend to expand their business to the international market. Understanding the factors that stimulate exports can effectively motivate local players in SMEs to enter international markets (Bianchi & Wickramasekera, 2016).

Firms' internationalisation is closely associated with country-specific factors, such as perceived risks, knowledge, and cultural differences (Arbaugh et al., 2008). The findings of SME internationalisation research tend to vary and to be associated with country-specific factors (Lecerf & Omrani, 2020). Furthermore, the internationalisation entrepreneurship literature has paid limited attention to emerging markets and has not considered the involvement of country-specific factors in SMEs' internationalisation process (Ranasinghe, 2020). Academically, this study contributes to enriching the literature on SMEs' internationalisation, especially from the perspective of emerging countries, such as Indonesia. The study's findings may be practically useful for non-exporting SMEs that intend to expand their business to the international market. This study may also provide valuable insights for policy makers, especially the Indonesian Government, to develop appropriate internationalisation strategies for SMEs.

2. Literature review

2.1. Resource-based view

The resource-based view (RBV) emphasises firms' use of resources as a tool to achieve a sustainable competitive advantage (Afsharghasemi et al., 2013; Barney et al., 2001; Bianchi & Wickramasekera, 2016). Resources and competences are two fundamental aspects that play crucial roles in the firm internationalisation process, including that of SMEs (Bose, 2016). The resources in the RBV are internal resources, such as the tangible and intangible assets owned by firms (Hoq & Chauhan, 2011; Jeronimo et al., 2019). The RBV is a conceptual framework that has been widely used in the literature to explain the mechanism for SMEs' growth and internationalisation activities (Pinho & Prange, 2016). SMEs' resources are essential for supporting their internationalisation process. SMEs cannot compete with larger firms without sufficient resources (Korsakiene, 2014; Michael et al., 2016). A lack of resources has been identified as the main barrier facing SMEs in obtaining access to the international market (Hutchinson et al., 2009). The RBV literature has described a wide range of firm resources based on the RBV; however, tangible and intangible resources, human capital resources, and organisational capital resources are the types of resources that have been mentioned most frequently (Othman et al., 2015).

2.2. Knowledge-based view

The knowledge-based view (KBV) emphasises managers' role and owners' knowledge as CSFs for firms' expansion abroad (Daszkiewicz & Wach, 2012). Knowledge is an essential resource for creating a competitive advantage for a firm (Randall, 2013). Bose (2016) argued that international experience, innovation capability, and market knowledge are the keys to successful internationalisation. Mejri & Umamoto, K (2010) suggested two primary types of knowledge that determine SMEs' internationalisation process: market knowledge and experiential knowledge. Market knowledge refers to SME managers' or owners' explicit information about domestic and foreign markets (Mejri & Umamoto, K, 2010). This includes information related to the size of market niches, competitors, product demand, and trade

regulations (Mejri & Umemoto, K, 2010). Market knowledge, especially international market knowledge, is crucial for SMEs' internationalisation (Randall, 2013). Market knowledge could decrease the foreign market risk (Petersen et al., 2002) and increase the potential market opportunities (Lecerf & Omrani, 2020). Experiential knowledge is a type of knowledge obtained through practice and can only be learned through personal experience (Mejri & Umemoto, K, 2010). Experiential knowledge encourages SMEs' early identification of foreign market opportunities (Child & Hsieh, 2014). It includes network knowledge and cultural knowledge (Child & Hsieh, 2014; Crowne, 2008; Mejri & Umemoto, K, 2010). Bose (2016) argued that a better understanding of foreign languages and cultural norms help SMEs in the internationalisation process.

2.3. Network theory

Network theory emphasises that firm internationalisation is driven by the linkages and relationships between SME managers or owners and members of networks (Korsakiene, 2014). Intra- and inter-organisational networks are critical for a successful internationalisation process (Bose, 2016). Network theory assumes that interactions with various parties provide SMEs with access to knowledge that affects their ability to expand into foreign markets (Hughes et al., 2019; Korsakiene, 2014). Networks allow SMEs to identify and exploit opportunities, including opportunities in foreign markets (Johanson & Vahlne, 2009). Networking benefits SMEs in the internationalisation process by reducing foreign market risks, transaction costs, and process integration (Hosseini & Dadfar, 2012). Within networks, SMEs develop relationships with various parties, such as consumers, suppliers, competitors, government agencies, agents, distributors, financial institutions, colleagues, and families that support the process of internationalisation (Daszkiewicz & Wach, 2012; Oparaocha, 2015). Involvement in networks can accelerate SMEs' access to international markets by utilising network members' resources (Hughes et al., 2019). Networks allow SMEs to gain new knowledge from other network members (Johanson & Vahlne, 2009). Involvement in networking enables SMEs to identify and exploit market opportunities, including those in the international market (Bose, 2016). Oparaocha (2015) classified the typology of networks into three categories: 1) social networks, 2) business networks, and 3) institutional networks.

3. Methodology

3.1. Design of the study

The purpose of the study was to explore the critical success factors perceived by Indonesian SME exporters. Sekaran and Bougie (2016) argued that the appropriate research strategy for exploratory research is a survey approach. A survey is a system for collecting information from or about people to describe, compare, or explain their knowledge, attitudes, and behaviour (Fink, 2003). In this study, the target respondents were from exporting SMEs registered with the Indonesian Ministry of Cooperatives and Small Businesses. The respondents were asked their opinion about the key success factors in accessing the international market, based on their own experience. The factors in this study refer to constructs developed using theoretical frameworks, namely the resource-based view, the knowledge-based view, and network theory. Since the information was collected from the respondents in one particular period, this study can be categorised as a cross-sectional study (Sekaran & Bougie, 2016).

3.2. Sample and data collection

The respondents were SME managers, SME owners, and others related to SMEs' exports. The sampling method used in this study was non-probability sampling with a convenience sampling technique. The data collection was executed through both paper-based and electronic questionnaires. The electronic questionnaire was distributed through SMEs' networks using a mobile phone platform. Paper-based questionnaires were administered to respondents from exporting SMEs at international trade fairs. In total, 164 questionnaires were successfully collected. However, nine questionnaires were incomplete, and they were excluded from the data, resulting in a total of 153 completed questionnaires that fulfilled the requirement for further data processing. This total consisted of 74 electronic questionnaires (48%) and 79 paper-based questionnaires (52%).

Table 1. Demographics of the sample

Demographic	Frequency	Percentage (%)
Profile of the respondents		
Owners	69	45%
Owners and managers	55	36%
Managers	14	9%
Others	15	10%
Types of industry		
Handicrafts	72	47%
Furniture	19	13%
Food and beverages	17	11%
Agriculture	12	6%
Fashion	19	13%
Accessories	7	5%
Automotive	1	1%
Electronic	1	1%
Others	5	3%
Export destination (continent)		
Asia	66	43%
Europe	32	21%
America	23	15%
Australia	19	12%
Africa	13	8%

Only SME exporters were eligible as respondents, and the characteristics of the respondents are presented in **Table 1**. Their profile is dominated by owners (45%) and owners and managers (36%). Typically, SMEs' owner also acts as the manager, and in rare cases a professional is hired to manage the business. Meanwhile, respondents' type of industry is primarily handicraft production (47%). Creative industries, such as handicrafts, are one of the main contributors to SMEs' exports in Indonesia. A majority of the respondents reported the export destination to be Asia (43%) and Europe (21%). The top destinations of SMEs' exports in Asia are Japan, China, South Korea, Taiwan, and Singapore. Meanwhile, Germany, the Netherlands, and France are the primary destinations of Indonesian SMEs' exports to Europe.

3.3. Measurement

This study proposed 12 constructs to be examined as SME internationalisation factors. The constructs were derived from relevant theories and literature: the resource-based view (RBV), the knowledge-based view (KBV), and network theory. In total, 44 questions were used to develop the questionnaire instrument. The questionnaires were designed using closed questions with a five-point Likert scale model, where 1 = very low influence and 5 = very high influence. The respondents were asked to rate each construct's influence on the SME's success in accessing the international market. The questionnaire's consistency and stability as an instrument to measure variables were tested using the Cronbach's α reliability test. A Cronbach's α value of 0.7 was chosen as the minimum standard required to justify the variable measurement as reliable. The results of the reliability constructs are outlined in **Table 2**. The reliability test results indicate that some constructs, namely infrastructure resources, human resources, and social network, failed to achieve the minimum standard value (Cronbach's $\alpha = 0.7$). This implies that those constructs were not involved in further analysis.

Table 2. Reliability construct

Construct	Number of items measured	Cronbach's α
Infrastructure resources	4 items	0.657
Human resources	3 items	0.456
Managerial resources	3 items	0.915
International market knowledge	5 items	0.952
Network knowledge	3 items	0.911
Information technology knowledge	5 items	0.932
Product innovation knowledge	3 items	0.855
International culture knowledge	4 items	0.926
Entrepreneurship knowledge	3 items	0.920
Social network	3 items	0.522
Business network	3 items	0.824
Institution network	5 items	0.928

3.4. Analysis procedure

A two-step analysis procedure was followed in this study. The first step was to explore the preliminary factors, and the second step was to confirm the final factors. The first step of the analysis used a statistical tool known as exploratory factor analysis (EFA). Meanwhile, confirmatory factor analysis (CFA) was applied to identify the final factors that fit the model. EFA is a form of statistical analysis to validate the dimensions of measurements using a data reduction procedure. EFA is used primarily for validating measurement instruments of a latent variable that contains items that have never previously been validated (Taylor, 2005). In this study, the purpose of EFA was to identify the initial CSFs for SMEs' internationalisation based on the RBV, the KBV, and network theory. Since factor analysis requires a relatively large sample size, a suitability data test was conducted before the EFA test.

The Kaiser–Meyer–Olkin (KMO) test and Bartlett's test measure the adequacy of data for factor analysis. The KMO index ranges from zero to one, a KMO value > 0.60 being considered to fulfil the requirement for factor analysis (Williams et al., 2010). Besides, Bartlett's test of sphericity should be significant ($p < 0.05$) to conduct factor analysis (Williams et al., 2010). Data were extracted using principal component analysis (PCA), and the rotation method *oblimin with Kaiser normalisation* was employed to create a pattern of matrix factors. A factor loading of 0.6 was set as the limit for construct measurement. Items with a factor loading below 0.6 were eliminated as constructs of measurement. A construct found to have two or more factor loadings on different components (cross-loading) was eliminated from the factor matrix. EFA was conducted using dimension reduction through the Statistical Package for the Social Sciences (SPSS).

Confirmatory factor analysis (CFA) was conducted to test the CSFs for SMEs' internationalisation that had previously been identified using EFA. CFA is a test of the measurement model and is used to determine whether the data set fits the measurement structure. CSFs based on EFA need to be tested further using CFA to obtain the goodness of fit. During the CFA test, the model was modified to achieve the best fit. During the model modification procedure, the elements and constructs were reduced. The standard parameters of the CFA test—the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), Tucker–Lewis index (TLI), and normed fit index (NFI)—were used to identify the goodness of fit of the CSFs for SMEs' internationalisation. The Amos (Analysis of Moment Structures) software was employed to conduct the CFA.

4. Results

4.1. KMO and bartlett's tests

By nature, a statistical technique using EFA requires a large amount of data. Therefore, sufficient data must be tested first before performing further analysis using EFA. The Kaiser–Meyer–Olkin (KMO) test and Bartlett's test are EFA instruments used to measure the sufficiency of data. To conduct exploratory factor analysis, the KMO value has to be higher than 0.6 and Bartlett's test should be less than 0.05 (Talib et al., 2014). The information outlined in Table 3 is the output of the KMO test and Bartlett's test. It shows that the KMO value is 0.894 (> 0.06) and that Bartlett's test is significant ($p = 0.000$), indicating that the requirement for data adequacy for factor analysis has been fulfilled. A KMO value with a range ≥ 0.80 indicates that the adequacy of the data to perform exploratory factor analysis is excellent. Bartlett's test of sphericity shows a significant indication ($p < 0.05$). The results of the KMO test and Bartlett's test imply that the amount of data in this study is adequate for conducting factor analysis.

4.2. Exploratory Factor Analysis (EFA)

After conducting an adequacy data test, the data were extracted to find a factor matrix pattern. EFA with *principal component analysis* (PCA) and the *oblimin with Kaiser normalisation* rotation method was employed. The EFA result indicates six initial factors identified as CSFs for SMEs' internationalisation and 18 elements of factors. Before extraction, 12 construct factors and 44 elements were proposed as candidates for SMEs' internationalisation. The extraction of data filters the elements of a factor by excluding elements with a factor loading value below 0.6. Some of the elements of factors were found to have two or more factor loadings on a different matrix of factors (*cross-loading*). The elements of a factor with cross-loading conditions were eliminated from the matrix of factors. The details of the factor analysis output after conducting data extraction and rotation of factors are presented in Table 4. Each factor was given a name according to the theoretical framework used. The name is based on judgements made by considering the characteristics of each factor's elements. Its variance value can identify the contribution of each factor to the critical success of SMEs' internationalisation.

Factor 1. Factor 1 consists of five elements based on the KBV theory. The elements of factor 1 are a combination of the international market knowledge construct and the entrepreneurship knowledge construct. Considering that factor 1 is dominated by international market knowledge elements, factor 1 was therefore given the name "international market knowledge". International market knowledge accounts for 50.3% of the variance, which means that 50% of the CSFs for Indonesian SMEs' internationalisation are determined by owners' or managers' international market knowledge. Factor 1 consists of the following elements: knowledge of foreign market opportunities, knowledge of products desired by export destination countries, technical knowledge of exporting, ability to take advantage of business opportunities, and knowledge of international trading regulations.

Factor 2. Factor 2 comprises elements of the business networking construct. Therefore, factor 2 was given the name "business networking". Factor 2 encompasses three elements based on network theory. The business networking factor accounts for 9.0% of the variance. This result implies that 9.0% of CSFs for SMEs' internationalisation in Indonesia is determined by business

Table 3. KMO and bartlett's test

Kaiser–Meyer–Olkin measure of sampling adequacy		0.894
Bartlett's test of sphericity	Approx. chi-square	7467.823
	df	946
	Sig.	0.000

Table 4. Exploratory factor analysis results

	Factor loading	Eigen value	Variance	Cumulative variance
Factor 1: International market knowledge		20.1	50.3%	50.3%
Knowledge of foreign market opportunities	0.865			
Knowledge of products desired by export destination countries	0.801			
Technical knowledge of exporting	0.742			
Ability to take advantage of business opportunities	0.701			
Knowledge of international trading regulations	0.624			
Factor 2: Business networking		3.6	9.0%	59.3%
Networking with raw material vendors	0.843			
Networking with customers	0.800			
Networking with business partners	0.795			
Factor 3: Organisational resources		2.1	5.3%	64.6%
Modern production machines and equipment	0.801			
Latest technology used in the production process	0.768			
Factor 4: Product innovation knowledge		1.8	4.6%	69.2%
Knowledge to make varied product designs	0.850			
Knowledge to create attractive product designs	0.806			
Knowledge to make products that are unique and different from those of competitors	0.753			
Factor 5: Institutional networking		1.3	3.1%	72.3%

(Continued)

	Factor loading	Eigen value	Variance	Cumulative variance
Networking with business incubator institutions	0.843			
Networking with national export development institutions	0.804			
Networking with the national trade association	0.798			
Factor 6: IT knowledge		1.1	2.8%	75.1%
Internet-based communication knowledge	0.675			
Internet technology literacy	0.633			

networking. The business networking factor consists of the following elements: networking with raw material vendors, customers, and business partners.

Factor 3. Factor 3 consists of three elements referring to the resource-based theory, which are a combination of the constructs of tangible and intangible resources. Those elements in factor 3 are considered to be a fundamental aspect of an organisation; therefore, factor 3 was given the name “organisation resources”. Based on the variance value of factor 3, it contributes 5.3% of the CSFs for SMEs’ internationalisation in Indonesia. Organisational resources (factor 3) consist of the following elements: modern production machines and equipment and the latest production technology.

Factor 4. Factor 4 contains three elements consistent with the knowledge-based view. All three elements of factor 4 are from the product innovation knowledge construct. Therefore, factor 4 was given the name “product innovation knowledge”. Factor 4 accounts for 4.6% of the total variance in this research. It implies that product innovation knowledge contributes 4.6% of CSFs for SMEs’ internationalisation in Indonesia. Product innovation knowledge in factor 4 refers to the knowledge necessary to make varied product designs, attractive product designs, and unique product designs.

Factor 5. Factor 5 consists of three elements based on network theory. All four elements of factor 5 are from the institutional networking construct. Therefore, factor 5 was named “institutional networking”. Institutional networking accounts for 3.1% of the total variance, meaning that 3.1% of Indonesian SMEs’ success in accessing the international market was determined by institutional networking. In this study, the institutional networking in factor 5 refers to networking with business incubator institutions, national export development institutions, national trade associations, and other governmental agencies.

Factor 6. Factor 6 contains two elements of information technology knowledge. Factor 6 was given the name the “information technology knowledge” factor. The variance value of factor 6 is 2.8% of the total variance in this study, indicating that information technology knowledge contributes 2.8% to SMEs’ success in accessing international markets. The information technology knowledge in factor 6 refers to internet-based communication knowledge and internet technology literacy.

Based on the EFA test, we obtained the preliminary model that explains the CSFs for SMEs' internationalisation. The results indicate that the CSFs for SMEs' internationalisation are functions of international market knowledge, business networking, organisational resources, product innovation knowledge, institutional networking, and information technology knowledge. The EFA outcome shows that the total amount of cumulative variance of the six factors is 75.1%, which implies that the six factors identified through EFA explain 75% of the CSFs for SMEs' internationalisation. The remaining amount, 24.9%, is explained by other factors that were not identified in this study. These remaining CSFs have the potential to be investigated in similar studies in the future.

4.3. Confirmatory Factor Analysis (CFA)

The outputs of EFA produce a preliminary model that identifies the CSFs for SMEs' internationalisation. The preliminary model based on EFA needs to be examined further to find the goodness of fit model of CSFs for SMEs' internationalisation. The goodness of fit model test indicates that a factor that passes is reliable in explaining the particular model under investigation. In this study, the variable investigated is the CSFs of SMEs' internationalisation. Based on the EFA test, the goodness of fit model is required to generalise the proposed model. The preliminary model of CSFs for SMEs' internationalisation that resulted from the EFA was tested using CFA. CFA has several parameters and suggests values of measurements to identify the goodness of the model fit. In this study, the indicator to justify the goodness of the model fit followed the studies by Jain and Raj (2013), Schmitt (2011), and Yang and Montgomery (2011). The parameter of measurement and the CFA results are comprehensively outlined in Table 5.

During the CFA test, several constructs and elements resulting from the EFA were found not to fit with the measurement model. Therefore, the model was modified through the elimination of elements and constructs. An indication of the model fit is the test results fulfilling the suggested CFA parameter values. Table 6 outlines the CFA model fit test parameters and the CFA test results after the modification of the data. Based on the CFA test outcome, three CSFs for SMEs' internationalisation passed the goodness of fit test: international market knowledge, product innovation knowledge, and institutional network. The details of the CSFs for SMEs' internationalisation and their elements after conducting the CFA test are presented in Table 6.

The CFA test results indicate that business networking, organisational resources and information technology knowledge were found not to fulfil the requirement of the goodness of fit test. Therefore, those two factors were dropped from the model of CSFs for SMEs' internationalisation. Graphically, the model of CSFs for SMEs' internationalisation after conducting the CFA test is depicted in Figure 1.

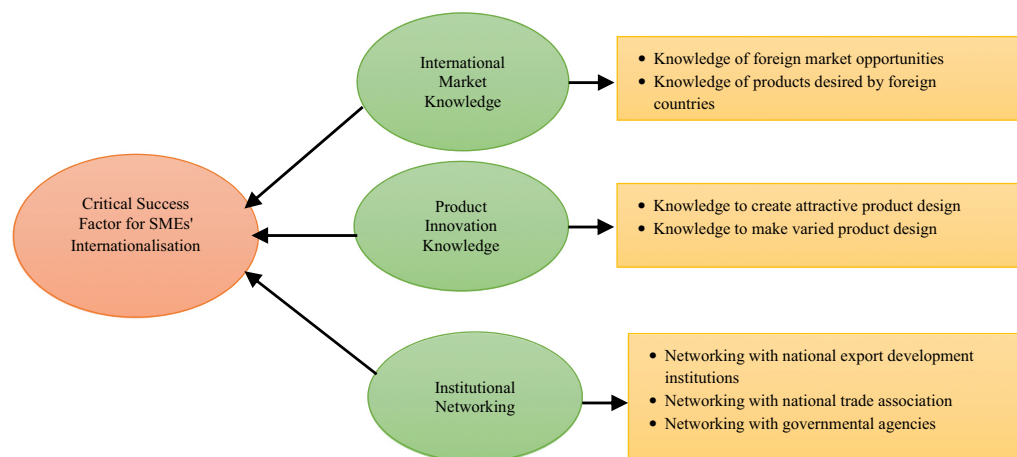
Table 5. CFA model fit parameters and results

Goodness of fit index	Suggested value for model fit	CFA results after modification
Chi-square (χ^2)	-	28.158
p-value	> 0.05	0.136
Chi-square (χ^2)/df	< 3.0	1.341
Goodness of fit index (GFI)	> 0.9	0.961
Adjusted goodness of fit index (AGFI)	>0.8	0.916
Comparative fit index (CFI)	>0.9	0.991
Root mean square error of approximation (RMSEA)	<0.1	0.047
Tucker-Lewis index (TLI)	>0.9	0.985
Normed fit index (NFI)	>0.9	0.968

Table 6. Summary of CSFs for the internationalisation of SMEs

	Standardised regression weight (R2)	Cronbach's alpha (α)
Factor 1: International market knowledge		0.909
Knowledge of foreign market opportunities	0.93	
Knowledge of products desired by foreign countries	0.89	
Factor 2: Product innovation knowledge		0.849
Knowledge to create attractive product designs	0.97	
Knowledge to make varied product designs	0.76	
Factor 3: Institutional network		0.917
Networking with national export development institutions	0.87	
Networking with the national trade association	0.94	
Networking with governmental agencies	0.85	

Figure 1. Model of critical success factors for SMEs' internationalisation.



5. Discussion

5.1. international market knowledge and SMEs' internationalisation

This study indicates that knowledge of the international market is a CSF for SMEs' internationalisation. In the Indonesian context, the study results support the previous study conducted by Tambunan (2009a). Tambunan (2009a), who studied SMEs in the furniture industry in Jepara and Bali, Indonesia, found that international buyers play a significant role in the internationalisation process by providing pivotal information and technical assistance and managerial and marketing assistance during interactions with SMEs. Information about the foreign market from foreign

buyers has made access to the international market relatively easy for the SME furniture industry in Jepara compared with other SMEs that do not have international market knowledge.

A case in Bali, Indonesia, involved SMEs acquiring international market knowledge from tourists who were visiting Bali. Interaction with tourists allowed SMEs in Bali to gain international market information, such as information about European countries' markets (Tambunan, 2009b). This indicates that international market knowledge is not always associated with SME owners' or managers' learning processes but can also be obtained through interaction with foreign customers. The study by Tambunan (2009a) found that Indonesian SMEs' typical internationalisation process follows the Uppsala model. Initially, they export their products to neighbouring countries, such as Singapore, Malaysia, and Thailand, which are geographically close. After that, in line with the increased foreign market knowledge that they acquire over time, they expand to more distant markets (Tambunan, 2009a).

In the international context, the findings of this study are consistent with those of similar studies previously conducted in Tunisia, Kazakhstan, Slovenia, Sweden, the US, Spain, India, Taiwan and Algeria. Mejri and Ramadan (2017) found that the ability to identify and exploit an international opportunity is a CSF for the internationalisation of Tunisian high-tech SMEs. In Slovenia, Ciszewska-Mlinaric and Mlinariè (2010) found that managerial attitudes towards internationalisation and internationalisation knowledge are significantly related to the level of SMEs' internationalisation. A study in Sweden indicated that SME managers' and owners' accumulation of experiential knowledge about international markets played a significant role in SMEs' international growth and export performance (Naldi, 2008).

Wang and Olsen (2002), who studied SMEs in the US, found that background knowledge, including international market knowledge, is a CSF that contributes to SMEs' export performance. A study conducted in Spain indicated that one of the critical success factors of high-performing SMEs is closer interaction with foreign countries to access diverse knowledge in those markets (Villar & Pla-Barber, 2018). Hånell et al. (2019) found that a lack of foreign-market knowledge and dealing with foreign-market institutions hinder SMEs in Sweden from becoming international. The study conducted in India by Santhosh and Bala Subrahmanya (2019) justified the importance of foreign market knowledge. They found that intense engagement with the international market channel speeds up SMEs' internationalisation process.

In Taiwan, empirical findings have shown a positive relationship between SMEs' dynamic internationalisation capability and their export performance (Peng & Lin, 2019). A study on non-exporting SMEs' carried out in Algeria by Haddoud et al. (2021) indicated that entrepreneurial orientation and international orientation determine export intention. Meanwhile, the success of born-global SMEs in Spain is influenced by the ability to use knowledge in accordance with the demands of the international market (Rodríguez-Serrano & Martín-Armario, 2019). Billore and Billore (2020) found that knowledge about foreign customers is fundamental for Sweden SMEs in the initial internationalisation stages.

International market knowledge helps SMEs during the early internationalisation process and extends geographic markets post-internationalisation (Fletcher & Harris, 2012). SMEs acquire international market knowledge from both domestic and international networks. The scope of operations and mode used to enter a foreign market determine the extent of the international market knowledge acquired by SMEs (Zahra et al., 2009). A lack of market knowledge results in uncertainty and risk in SMEs' internationalisation process (Fletcher & Harris, 2012). Problems related to barriers to entry and the cost of internationalisation due to the complexity of exporting decrease when market knowledge improves (Wang & Olsen, 2002).

International market knowledge is essential for all firms seeking internationalisation (Musteen & Datta, 2011). In a dynamic business environment, firms need essential information, such as

market knowledge, to identify and take advantage of opportunities faster and more effectively (Esposito et al., 2009). International market knowledge is closely associated with understanding national cultures in other countries. Social knowledge of the cultures, traditions, and values of certain societies is essential for understanding foreign markets (Zahra et al., 2009). It helps SMEs to deal with foreign business partners and improve product innovation capabilities (Zahra et al., 2009). Active engagement with a local and international network, industry association, and international fairs and trade are keys to SMEs' internationalisation (Puthusserry et al., 2020).

5.2. Product innovation knowledge and SMEs' internationalisation

This study's findings indicate that product innovation knowledge is a CSF for SMEs' internationalisation. In the Indonesian context, the result is consistent with the previous study conducted by Tambunan (2009a), who studied SMEs in the furniture industry. He found that the CSFs for accessing the international market are product design and product quality. Foreign buyers have made a significant contribution to small and medium-sized furniture producers in Indonesia by assisting with the product design and the quality standards required to access the international market (Tambunan, 2009a). In the Asian context, a positive impact of innovation on SMEs' internationalisation and export performance has also been found in Vietnam and Korea. The study by Trinh, long Q (2016) indicated that innovation is a CSF that drives SMEs' internationalisation in Vietnam and Korea. Innovation plays a significant role not only in the early stage of internationalisation but also post-internationalisation. A study on SME exporters in Vietnam and Korea found a significant positive correlation between SMEs' innovation capability and their export performance (Trinh, long Q, 2016).

In the international context, product innovation has frequently been found to be a CSF for SMEs' internationalisation in various countries. Cassiman et al. (2010), who studied SMEs in Spain, found that product innovation enhances SMEs' likelihood of accessing the international market. The research findings from Czechoslovakia obtained by Musteen and Datta (2011) revealed that SMEs' export performance is influenced directly and indirectly by product innovation capability. Meanwhile, a study of SMEs in Germany found that export propensity is associated with the output of innovation activities such as new product development and the number of patents (Lejpras, 2015). Another SME study conducted in Germany suggested that innovation capability and the adoption of information technology can enhance SMEs' likelihood of accessing the global market (Lecerf & Omrani, 2020).

A positive influence of innovation on SMEs' internationalisation has also been found in the UK (Higón & Driffield, 2011). A study carried out in Fiji indicated that innovation speeds up internationalisation among SMEs (A. Chandra et al., 2020a). Innovation activities provide a stimulus to SMEs in their internationalisation process (Alayo et al., 2021). Dadzie et al. (2020) revealed that innovativeness, risk taking, and competitive aggressiveness play a significant role in SMEs' internationalisation in Ghana. Innovation capability also contributes positively to the likelihood of Australian SMEs exporting (Chang & Webster, 2019).

Even though most studies have indicated that product innovation is one of the critical factors for SMEs' internationalisation, the results are not conclusive. Cassetta et al. (2020) revealed no positive impact of product innovation on SMEs' internationalisation in Italy. A similar result, that it has no significant role in product innovation and SMEs export performance, was also found in Germany (Lejpras, 2019). Alfoqahaa (2018), who studied SMEs in Palestine, found that the correlation between innovation and SMEs' internationalisation is weak.

The knowledge-based approach emphasises that being a learning organisation is the key to business organisations' success. Knowledge accumulation drives innovation activities and improves firms' competitive advantage (Lecerf & Omrani, 2020). Knowledge accumulation can be obtained from internal sources and external sources. The study by Puthusserry et al. (2020) found that internal sources of knowledge, such as self-learning, increase product quality, market

and technological knowledge, and product diversification. Product innovation capability encourages SMEs to operate in the international market (Cassiman & Golovko, 2011). Meanwhile, a lack of market and product knowledge impedes SMEs' internationalisation (Hashim, 2015).

Product innovation knowledge can also be obtained from external sources, such as interaction with foreign business partners. Multiple studies have indicated that product innovation knowledge improves after SMEs begin to deal with foreign buyers. SMEs' exposure to international markets increases the pool of knowledge and technology, which leads to more innovation capability (Trinh, long Q, 2016; Zahra et al., 2009). Internationalisation allows SMEs to promote their products in bigger markets and exploit knowledge-related product innovation from foreign business partners (Zahra et al., 2009). Hahn and Park (2012), who studied manufacturing SMEs in Korea, found a positive influence of export activities on product innovation and productivity. A study of high-tech SMEs in the UK indicated that export activities subsequently improve innovation performance (Love & Ganotakis, 2013).

Greater involvement of SMEs in international markets enhances their product innovation capability even more (Zahra et al., 2009). A study conducted in Norway by Azari et al. (2020) found that the degree of internationalisation affects innovation capability. The more intense the engagement with a foreign business partner, the more innovation knowledge is transferred to exporting SMEs. However, the effectiveness of the knowledge transfer also depends on the absorptive capacity of SMEs' host country (Freund et al., 2020).

5.3. Institutional networking and SMEs' internationalisation

Indonesian SMEs' internationalisation process takes place not directly through foreign markets but indirectly through intermediary agencies (Tambunan, 2009b). SMEs in Indonesia use intermediary agencies to access international markets and expand their international markets (Tambunan, 2009a). The results of this study indicate that institutional networking is a CSF for Indonesian SMEs' internationalisation. SMEs' institutional networking is typically enacted through engagement with formal institutions established by the government to support SMEs' development. The role of formal institutions in Indonesia has been significant in supporting SMEs' internationalisation during the last ten years compared with previous years. Formerly, informal institutional networking and social networking were dominant factors for SMEs' internationalisation. The latest studies of SME exporters in Indonesia have shown that export performance is determined by SMEs' involvement with institutional networks, such as trading houses (Tambunan, 2009a) and central governmental agencies (Revindo & Gan, 2018).

In the international context, the study results mainly support the premise that institutional networking is a CSF for SMEs' internationalisation. A study of SMEs in Brazil found a significant correlation between network relationships, including institutional networking, and success in accessing the international market, market diversification, innovation, and export performance (Amal & Filho, 2010). SMEs in Bangladesh, aside from receiving business management assistance from the government, network with governmental institutions, which leads to positive attitudes among managers and entrepreneurs towards the opportunities of the foreign market (Ali & Shamsuddoha, 2007).

Support from governmental institutions has been found to be the most important factor affecting SMEs' success in China (He, 2011) and Saudi Arabia (Al-Tit et al., 2019). Governmental institutions, such as export promotion agencies, play a crucial role in internationalising SMEs in developing countries (Ali & Shamsuddoha, 2007). The existence of governmental export agencies benefits SMEs by increasing their export knowledge and export performance (Ali & Shamsuddoha, 2007). A lack of governmental support was reported to be a barrier to SMEs accessing the international market of SME retailers in the UK (Hutchinson et al., 2009) and Mexico (García, 2015). Study SMEs in Uganda revealed that network extension and network integration matter in SMEs' internationalisation (Ahimbisibwe et al., 2020). Fernández-Olmos et al. (2021) found that

Spanish SMEs with a higher number of networks with institutions tend to have better survival prospects than SMEs with fewer institutional networks (Fernández-Olmos et al., 2021).

Studies on the impact of an export promotion programme run by a French government institution (Catanzaro & Teyssier, 2020) and an Italian government institution (Comi & Resmini, 2020) reported conclusive results. SMEs that engage with government institutions through an export promotion programme tend to have better export performance than non-assisted SMEs. Meanwhile, a lack of institutional and government support was identified as one of the primary barriers hindering young Sri Lankan entrepreneurs from growing their business, including expansion to the international market (Ranasinghe, 2020).

Institutional networks emphasise a firm's relationship with public and private agencies to gain resource advantages that cannot be obtained through individual or social networks (Oparaocha, 2015). To ensure the accomplishment of internationalisation, SMEs should be integrated and coordinated with established institutional networks to support, facilitate, and monitor the internationalisation process (Senik et al., 2011). Institutional networking helps SMEs to utilise the business opportunities overseas and gain a source of long-term sustainability (Mayer et al., 2021). Engagement with governmental institutions is crucial for SMEs' internationalisation. SMEs naturally lack resources (Mejri & Umemoto, K, 2010), so they face barriers to entry into the international market. Network capability can provide SMEs with greater leverage for successful internationalisation (Torkkeli et al., 2019).

A study conducted in Italy confirmed that micro and small firms benefit the most from institutional networking, especially with a government export and promotion agency (Comi & Resmini, 2020). Support from governmental institutions makes it possible for SMEs with a lack of resources to access opportunities in the international market. Institutional networks facilitate SMEs' internationalization by providing a conducive business environment that can foster cross-border investments and improve business success locally and internationally (Oparaocha, 2015). However, engagement with a particular institutional network is not necessarily associated with success in international performance. Battaglia and Neirotti (2020) studied the impact of collaboration between SMEs and universities and research centres in R&D endeavours in Italy. The findings, however, indicated that there is no significant effect of collaboration with institutions on export intensity. Srivastava and Tyll (2020) argued that, to obtain the maximum benefits from involvement in institutional networking, networking behaviour should be finetuned based on the typical SME industry.

6. Conclusion

6.1. Key findings

This study aimed to assess the perceived critical success factors of internationalisation for Indonesian exporting SMEs. It adopted three fundamental theories: the resource-based view (RBV), the knowledge-based view (KBV), and network theory. From these theories, 12 constructs of internationalisation factors were drawn and tested with a sample of Indonesian exporting SMEs. An early exploratory factor analysis (EFA) identified six factors, namely international market knowledge, business networking, organisational resources, product innovation knowledge, institutional networking, and IT knowledge. However, the final-stage analysis, confirmatory factor analysis (CFA), indicated only three factors as being critical success factors for the internationalisation of SMEs: international market knowledge, product innovation knowledge, and institutional networking. The findings support the validity of the RBV, the KBV, and network theory for explaining the critical success factors for SMEs' internationalisation. However, it seems that those theories' validity is conditional, depending on country-specific aspects such as political, economic, social, and cultural factors (Lecerf & Omrani, 2020; Prasanthi & Bhaskara Rao, 2019). The factors considered to be critical success factors for SMEs' internationalisation in certain countries might not play a significant role in other countries.

6.2. Contributions and implications for theory and practice

The study contributes to the existing SME internationalisation literature aiming to understand the CSFs for accessing international markets. Each country has specific characteristics that may influence business entities' particular practices (Trireksani & Djajadikerta, 2016; Zhang et al., 2018). This study provides empirical evidence that enriches the body of knowledge of SMEs' internationalisation, especially in a developing country such as Indonesia. Furthermore, the findings may justify the idea that existing entrepreneurship theories, such as the resource-based view (RBV), the knowledge-based view (KBV), and network theory, cannot be used equally to predict particular entrepreneurship behaviour in any country. Each country is unique in terms of the political, economic, social, and cultural aspects that can affect entrepreneurship behaviour. Therefore, there is a strong possibility that using the same basis for entrepreneurship theory may produce different results in different countries.

The study may also contribute to providing lessons for non-exporting Indonesian SMEs that intend to promote their products to the international market. By understanding SMEs' CSFs for exporting, they can take the necessary actions to ensure that the internationalisation process succeeds. Finally, this study's findings may provide valuable insights for governmental agencies related to SMEs' development for formulating policies for SMEs' internationalisation. To promote SMEs' ability to become international, the government should pay attention to policies such as innovation and capacity building for SMEs (Bose, 2016).

6.3. Limitations and future research

The study proposed critical success factors based on three fundamental theories (the RBV, the KBV, and network theory). Some of the construct measurements (infrastructure resources, human resources, and social networking) failed to pass the reliability test. Therefore, this study's EFA and CFA outcome could not fully identify all the possible CSFs for SMEs' internationalisation, referring to the theoretical basis used. Future similar research should consider improving the design of the questionnaire. Since the study only applied the RBV, the KBV, and network theory, additional entrepreneurship theoretical frameworks could be used in future studies to improve the understanding of the CSFs for SMEs' internationalisation.

Another limitation of this study is the involvement of a relatively small number of exporting SMEs. Therefore, future research should consider a larger sample to ensure that the findings can be generalised. Researchers are encouraged to conduct similar studies to obtain comparable results, especially in developing countries. To prove the validity of the findings, the model of CSFs for SMEs' internationalisation proposed in this study should be tested by other researchers. Besides testing, the model in this study needs to be modified. A. Chandra et al. (2020) and Dadzie et al. (2020) argued that the international market is a moderating variable between product innovation and SMEs' propensity to internationalise and export performance.

Author details

Sofik Handoyo¹
E-mail: sofik.handoyo@unpad.ac.id
ORCID ID: <http://orcid.org/0000-0001-5894-116X>
Ivan Yudianto¹
Fury Khristianty Fitriyah¹
ORCID ID: <http://orcid.org/0000-0003-1600-6426>
¹ Faculty of Economics and Business, Universitas Padjadjaran, Bandung, Indonesia.

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