

The Mediating Effect of the Internationalization Process on Knowledge Management and Export towards SMEs Export Performance

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The increase of the growth of export performance followed by import performance in Indonesia and the growth of SME growth has been interesting to study. The growth of SMEs has made little contribution to Indonesia export value while their business orientation is ready to export in real data. The purpose of this study is to analyse the mediating effect of the Internationalisation process on knowledge management export SMEs Export Performance. The research strategies used include the associative quantitative method where the data collection method consists of a survey distributed to 154 Export-Oriented SMEs respondents while data analysis technique incorporates path analysis using double regression method. The results show that the internationalisation process has a mediating effect on knowledge management and the dynamic capabilities that affect SMEs export performance. Knowledge management and dynamic capabilities have a direct impact on SMEs export performance. The value of mediating effect is lower than its direct effect, showing that the internationalisation process enhances the effect of knowledge management and dynamic capabilities towards SMEs export performance.

Keywords: Export Performance, Knowledge Management, Dynamic capabilities, Internationalisation Process, mediating effect.



Introduction

Export performance is defined as overseas sales in different organizational and environmental conditions (Zehir, et. al., 2015). Increased company export performance will have a positive impact on economic growth in the macroeconomic perspective (Diamantopoulos, 1999; Zehir, et. al., 2015). Export performance indicates a company's success in exporting, as favourable export performance will determine a company's long-term sustainability for profit based on studies conducted by (Madsen,1994; Kumlu, 2014). Research undertaken by Sousa et al. (2008) shows that certain antecedents had a significant direct impact on export performance. Sousa (2008) identified the determinant in two different factors, internal factor based on Resource-Base Theory (RBT) and external factor based on Institutional Base View (IBV). Internal variables consist of factors at the company's internal level which refer to export marketing strategies, company characteristics / capabilities and management characteristics. (Cadogan et al., 2009; Kraaijenbrink et al., 2010, Chen et al, 2016). While external factors are characteristic at the company external level and country level characteristics (Dacin et al., 2002; Peng et al., 2008; Lipuma et al., 2013; Chen et.al, 2016). The RBT-based internal factor approach based on Sousa et al. (2008) has become a reference for export performance determinants within this study.

Indonesia has 55.2 million small and medium enterprises (SMEs) with a contribution value of 57.9 % or IDR 852 trillion of GDP and employment of 97.2 % (BPS, 2018). Based on the above data, SMEs make a significant contribution to Indonesia's Gross Domestic Product (GDP). Whereas in the ASEAN region, more than 96% of companies in ASEAN are SMEs and their contribution to the country's GDP is between 30-50%. In addition, SMEs also have a large export potential to penetrate new markets. However, in its realisation, only a few export figures were achieved by UKM (kontan.co.id, 2018). This has certainly become a contradiction, with high export potential but the realisation of export value is still low, and an interesting topic for further study.

The internationalisation process is seen as an important element in the strategy of SMEs to achieve superior growth and performance (Kubíčková, et.al, 2014; Ruigrok & Wagner, 2003). It is indispensable to the international market and strengthen competitiveness of SMEs in order to survive against increasing international competition through diversification, economies of scale and learning excellence (Coviello, McDougall & Oviatt, 2011). However, current research related to internationalisation has focused more on Multi-National Enterprises (MNC) while the phenomenon of the internationalisation process in SMEs is still not completely examined (Kazlauskaitė, et. al., 2015; Korsakienė & Tvaronavičienė, 2012).

In addition, inadequate research about the internationaliation process based on the application of innovative knowledge management practices and behaviours that are adaptive to dynamic



capabilities and focus on SMEs require support for information and empirical research as research mostly focuses on large companies or multinational companies only (Kazlauskaite, et. al., 2015; Andersson, Evers & Kuivalainen, 2014). Besides the internationalisation process, the greater challenges and increasingly rapid technological trends of the disruptive new business environment can only be faced by organisations that can handle organisational and individual knowledge effectively by using KM. In this case, KM becomes one of the factors in maintaining a company's sustainability and increasing efficiency and innovation by achieving competitive advantage (Wang, M-H and Yang, T-Y, 2016).

Based on previous studies, antecedents of export performance which include knowledge management and dynamic capabilities mediated by the internationalisation process haven't been studied thoroughly, therefore this study aims to bridge this gap. The purpose of this study is to analyse the mediating effect of the internationalisation Process regarding knowledge management and export towards SMEs Export Performance.

Literature Review

Export Performance

Export performance is defined as the extent of a company's ability to market products abroad. This can be achieved through planning and implementing export marketing strategies (Cavusgil and Zou, 1994; Adidarma, 2015). Export performance is the company's goal in selling products to foreign markets which is achieved by planning and implementing international marketing strategies (Cavusgil and Zou, 1994; Lingden, 2014). There are three aspects that measure export performance: market aspects, financial aspects and consumer aspects (Adidarma, 2015).

Most studies about export performance only focus on the determinants of export performance (Aaby & Slater, 1989) and a comprehensive and integrative review of export performance (Cavusgil, 1994; Zou & Stan, 1998; Morgan, Kaleka, & Katsikeas, 2004; Navarro et al., 2010). In addition, only a few researchers use moderating effects other than determinant factors to explain a company's performance in exports . This study attempts to bridge the gap in the literature about the determinants of export performance and the use of moderating variables as determinants of export performance.

The Internationalisation Process

Internationalisation is a concept used to describe "the process of increasing involvement in international operating activities within companies" (Welch and Luostarinen, 1990: 84 in Amal M and Filho A.R.F., 2009). Several studies on internationalisation link the increase in company



performance, growth and competitiveness with internationalisation (De Loecker, 2007). Recent studies by Dutot, Bergeron, & Raymond (2014) and Schweizer (2012) reveal that internationalisation in an SME is a key requirement so that these SMEs have a sustainable competitive advantage, so that efforts are needed to improve and manage the company's internationalisation process. A way to manage information related to internationalisation is certainly needed by companies so that the effectiveness of the process can be measured (Child & Hsieh, 2014; Knight & Liesch, 2002), building collaborative networks (Ciravegna, et.al, 2014; Musteen, et.al, 2010; Spence, et.al, 2008) and learning as well as using knowledge related to internationalisation itself (Basly, 2007; Fletcher & Harris, 2012; Rodriguez, Barcos, & Arezlvarez, 2010). The process of internationalisation is not easy, and SMEs will face various problems and challenges, such as knowledge of the market, financial constraints, lack of experience and supporting infrastructure, limitations of technology and innovation, limited human resources, business competition and government policies (Cahyadi, 2015).

Knowledge Management

Knowledge Management Practices (KMP) are considered as organisational routines (Nelson & Winter, 1982) which are oriented towards exploitation. An efficient KMP is concerned with the application of knowledge, facilitating the development of routines and capabilities, given that companies can use different resources. Alegre et al. (2011) consider two main KMPs: Knowledge Dissemination Practice (KDP) and Knowledge Storage Practice (KSP). The first deals with applications, while the second requires a system to retrieve relevant knowledge within organisations.

Knowledge Dissemination Practice (KDP) includes processes that allow the application of knowledge through formal and informal channels (Zahra & George, 2002). This valuable knowledge is then distributed both inside and outside the company, including codifying explicit knowledge, where in many cases ineffective transfer of knowledge arises from problems in coding the knowledge. Information distribution systems for exports, customers and suppliers are also included (Villar et. al,2014; Alavi & Leidner, 2001). This knowledge also consists of techniques to encourage export motivation to share knowledge and participation through quality circles or multidisciplinary teams (Villar et.al, 2014; Alavi & Leidner, 2001; Nonaka & Tackeuchi, 1995). The existence of internal knowledge structures is relative, as external communication channels in SMEs are used more frequently than internal channels (Durst & Edvardsson, 2012).

Knowledge Storage Practices (KSP) are information-based systems developed to support the process of collecting and storing operational knowledge (Villar et.al,2014; Alavi & Leidner, 2001): information processing and global control systems, control and revision procedures, and systems that allow the availability of the use of knowledge created. This structure allows the

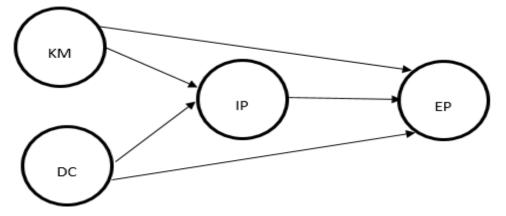
collection and alteration of relevant information and applies it to further operational activities, providing valuable feedback. Knowledge is often retained at the individual level, especially in the reduced number of managers, so the creation of formal structures for knowledge storage is an important challenge for SMEs (Wong & Aspinwall, 2005).

Dynamic Capabilities

Dynamic Capabilities (Teece, Pisano, and Shuen, 1997; Giniuniene and Jurksiene, 2015), are used as a tool to analyse a company's ability to build competitive advantage when uncertainties and changes arise. Knowledge Management Dynamic Capability is the ability of organisations to reconfigure knowledge management practices by integrating them into new, more specific and flexible ways to develop new knowledge management systems if needed or as changes occur (Zahra and George, 2002; Tallman et al., 2004; Cepeda and Vera, 2007; Easterby-Smith and Prieto, 2008; Alegre, et.al, 2011). The dynamic ability of knowledge management focuses primarily on the creation of knowledge and the company's long-term knowledge goals (Alegre, et.al, 2011; Villar, et.al, 2014). The dynamic ability of knowledge management can also be defined as a formula for achieving constant suitability of these resources or a link where organisations can adapt their skills to a changing foreign environment (Villar, et.al, 2014).

A study by Alegre et al. (2011) proposes two dimensions of KMDC, namely Internal Knowledge Development (IKD) which involves the creation and dissemination of new knowledge within the company, requiring prior exploitation process (Cohen & Levinthal, 1993) and External Knowledge Integration (EKI) which enables the creation of a basis broader knowledge through exploration beyond company boundaries (Durst & Edvardsson, 2012). Figure 1 is a conceptual model developed in this research.

Figure 1. Theoretical Framework





Methodology/Materials

The data collection method used in this study consists of a survey by distributing questionnaires to 154 SMEs owners. Sample calculations are used according to Ferdinand (2002) in Michael and Ronald (2015), with a sample of 154 respondents. Data is analysed using path analysis with a double regression approach by dividing it into two substructures and analysis using regression analysis.

Valid responses provided by respondents represent 7 products sold by SMEs in the expo. There are 43 SMEs for Craft product categories, 16 SMEs for Fashion, 41 SMEs for food and beverages, 11 SMEs for Furniture, 36 SMEs for Commodities (23%), 3 SMEs for Cosmetics (2%), and 4 SMEs for Jewellery (3%). The demographic characteristics of responding firms are shown in Table 1.

 Table 1: Demographic Characteristic of SMEs

CATEGORIES		SALES REVENUE	
Craft	43	50 - 208 MILLION	68
Fashion	16	209 - 500 MILLION	39
Food and Beverages	41	501 - 750 MILLION	21
Furniture	11	751 MILLION - 1	26
		BILLION	
Commodities	36		
Cosmetics	3		
Jewellery	4		
Length Of Operation		Human Resources	
1-3 YEARS	54	< 5	59
4-6 YEARS	36	5-10	48
7-9 YEARS	22	11-20	22
10-12 YEARS	6	21-30	3
>12 YEARS	36	31-40	22

All variable constructs were measured using five-point Likert scales with scores ranging from 1 (strongly disagree) to 5 (strongly agree). Items for measuring knowledge management were adopted from Villar et. al (2014). This scale consists of two items that measure KDP (information sharing and Distribution of information), two items that measure KSP (Collecting and processing information and Evaluation). Two items measure IKD (knowledge from industry associations and knowledge of R&D institutions), two items measure EKI (export academic qualifications and innovation) to measure Dynamic capabilities. The Internationalisation Process was adopted from Costa et. al (2016) and Ravelomanana (2015) consisting of two items for decisions to enter (foreign language skills and network), two items



for Entry modes (export entry and investment entry), two items for market selection (business relation and partner network), two items for entry mode selection (country risk, market size, international experience). Finally, items for measuring export performance were adopted from (Beleska-Spasova, 2014), which measured using two different dimensions. These dimensions are sales related (export intensity, sales growth) and market-related (Export market share and new market entry level).

In this study, item-total correlations and Cronbach alpha were used to assess the psychometric properties of the measurement scale. On the item-total correlation test, there was a 5% significance level and for a sample size of 154, value of r table is 0.13 and t table are 1.66. All items in all variables obtained a value above 1.66 that proved the validity of items in knowledge management, dynamic capabilities, the internationalisation process and export performance. In the reliability test, Cronbach Alpha = $0.84 \ge 0.60$ and therefore knowledge management, dynamic capabilities, internationalisation process and export performance are reliable.

Results and Findings

Baron and Kenny (1986) in Saputra et.al (2018) recommend using a three-step approach to test the mediation. First, the mediator is regressed on independent variables. Second, the dependent variable is regressed on the independent variables. Finally, the dependent variable is simultaneously regressed on both the independents and the mediator. The findings show a partial mediating effect of KM on Export performance and Dynamic Capabilities on export performance. Therefore, the Internationalisation Process partially mediates the relationship between KM and export performance, and mediation of Dynamic Capabilities on export performance. In other words, KM and dynamic capabilities affects export performance, directly and indirectly to export performance through the internationalisation process. The results are useful for future research. Thus, the primary finding show that the Internationalisation Process is likely to enhance the effect of Knowledge Management and Dynamic Capabilities on export performance.

Hierarchical regression analysis is used to assess the mediating effect of the Internationalisation Process between KM and Dynamic Capabilities on export performance. In the first substructure model, KM and Dynamic Capabilities are posited as the independent variable and the Internationalisation Process is posited as the dependent variable. There is a positive and significant relationship between KM and the Internationalisation Process (β =.42; p<.05), Dynamic Capabilities and Internationalisation Process ((β =.23; p<.05). In the second model, KM, Dynamic Capabilities and the Internationalisation Process are posited as predictors of Export Performance. In this model, KM is positively related to Export performance (β =.21; p<.05), Dynamic Capabilities to Export performance (β =.44; p<.05) and the Internationalisation Process to Export performance (β =.16; p<.05).



Subsequently, the indirect effect of KM to export performance mediated by the Internationalisation Process and the indirect effect of Dynamic Capabilities to export performance mediated by the Internationalisation Process are posited to test the mediating variable. KM had a significant indirect effect on export performance (β =.068; p<.05) through the Internationalisation process although it has a mediation effect of 31. 4 % on the Internationalisation Process from KM to Export performance having bigger value compared to DC. Dynamic Capabilities through the Internationalisation Process have significant indirect effects on export performance (β =.037; p<.05) with a value of 44.6% mediation effect on the Internationalisation Process from Dynamic Capabilities to Export performance. The results of these analyses are shown in Table 2.

Table 2: Result analysis

Independent Variable	Dependent Variable				
	Internationalisation	Export	Mediating (β)		
	Process(β)	Performance (β)			
Knowledge	0.42	0.21	0.068		
Management					
Dynamic capabilities	0.23	0.44	0.037		
Internationalisation		0.16			
Process					
	$R^2 = 0.314$	$R^2 = 0.446$			

The results of regression analysis reveal that both KM and Dynamic Capabilities help us to understand the determinant of export performance. When KM and Dynamic Capabilities are compared on the Internationalisation Process or export performance, KM has a larger value of aggregation (19%) than Dynamic Capabilities on the Internationalisation Process, however in contrast Dynamic capabilities have a larger values of difference (23%) than KM which influence export performance. Although when the Internationalisation Process is considered as independent values joined together, we see that the significance and coefficient of Dynamic Capabilities is still the highest value (44%) which affects Export performance compared to KM and the Internationalisation Process to export performance.

Conclusion

Based on the results of research conducted on Export Oriented SME owners who took part in the exhibition at the 2018 Indonesian Trade Expo, the following conclusions can be made. Knowledge Management and Dynamic capabilites have a significant direct effect on the Internationalisation Process and to Export Performance, while the Internationalisation Process has a significant and mediating/indirect effect on KM and DC towards export performance. KM has ahigher value of influence to the Internationalisation Process than Dynamic



capabilities, which improves the internationalisation process. KM needs to be improved by as much as 44%. When it comes to Export Performance, higher influence value comes from Dynamic capabilities, which means improving SMEs Export Performance needed to enhance dynamic capabilities to 44%. The mediating effect is lower than the direct effect which determines export performance, it's more beneficial to use the direct effect of KM, DC and the Internationalisation Process rather than using mediation .

In conclusion, in order to enhance SMEs export performance, SMEs need to foster KM (especially in the knowledge dissemination and knowledge storage process) and Dynamic Capability within an Organisation. The main contribution of this study is to fill the research gap of the enhancing effect of KM and DC towards export performance mediated by the internationalisation process. The study shows the importance of implementing KM and DC in SMEs to enter the international market for the internationalisation process or to improve export performance. Future research perspectives in this area can extend respondents to larger numbers of SMES and expand the method to include qualitative data or using a structural equational model to extend the path model. Real data was considered difficult to obtain as data from the SMEs association, Ministry of Trade, Ministry of Industry, Ministry of Co-operation and SME and Bekraf have differences. As a result, more research can be carried out by synchronising data across Ministries, Associations and Bekraf so further biases can be reduced. In addition, an in-depth analysis should be performed to determine KM and DC indicators for each specific SMEs category. This study makes a distinctive contribution, in terms of theoretical gains, to the use of specific indicators on KM Practice and Dynamic capability for KM, the SMEs Internationalisation Process and SMEs Export Performance using path analysis. In the international trade perspective, the study provides an insight and model in enhancing SMEs export performance using KM and DC through an internationalisation process in the macroeconomic perspective for further study.

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