SMEs' Export Performance: The Effect of Learning Orientation and Innovativeness

(Prestasi Eksport EKS: Kesan Orientasi Pembelajaran dan Daya Inovasi)

Md Daud Ismail Roshayati Abdul Hamid Zizah Che Senik Abdullah Sanusi Othman Noor Hasni Juhdi (Faculty of Economic and Management, Universiti Kebangsaan Malaysia)

ABSTRACT

This study investigates the role of innovativeness and learning orientation on the internationalisation performance of small and medium entrepreneurial firms. Exporting has been the most appropriate mode of expansion into foreign market for SMEs due to lower risk and less resource commitment. The literature insists that future study should pay more attention on how SMEs improve export performance. Review of literature brings to the conclusion that innovativeness and learning orientation are pertinent in building the success of SMEs in export markets. Notwithstanding the existing investigation on the impact of innovativeness on performance, the results are inconclusive, reinforcing the need for investigation in the context of emerging market and SMEs. In addition, learning orientation composed of three dimensions namely managerial commitment, system perspective and openness and experimentation. Previous studies view learning orientation as summate of all three dimensions. Unlike previous studies, this study investigates the effect of each dimension on innovativeness. A conceptual framework was developed based on the resource-based view. Data were collected from small and medium business exporters in the manufacturing sector of an emerging market. A total of 220 respondents participated in this study. Data were analysed using structural equation modeling to test the hypotheses, and the results show that innovativeness is positively related to export performance. In addition, the findings reveal that managerial commitment is a function of innovativeness. System perspective, and openness and experimentation have no significant effect on innovativeness. Implications and limitations are also discussed in this study.

Keywords: Export performance; innovativeness; learning orientation; small and medium enterprises; emerging market

ABSTRAK

Kajian ini menyelidik peranan daya inovasi dan orientasi pembelajaran ke atas prestasi pengantarabangsaan syarikat enteprise kecil dan sederhana. Eksport adalah mod yang paling sesuai untuk memasuki pasaran asing bagi EKS kerana risikonya adalah rendah dan memerlukan komitmen sumber yang kurang. Kajian lepas menekankan bahawa kajian akan datang seharusnya memberi tumpuan kepada aspek bagaimana EKS meningkatkan prestasi eksport. Sorotan kajian lepas membawa kepada kesimpulan bahawa daya inovasi dan orientasi pembelajaran adalah penting kepada EKS untuk mencapai kejayaan di pasaran eksport. Meskipun terdapat kajian berkaitan kesan daya inovasi ke atas prestasi, hasil kajian mendapati tiada keputusan yang telah dicapai dan ini menunjukkan bahawa ada keperluan untuk menjalankan kajian dalam konteks pasaran memuncul dan EKS. Sebagai tambahan, orientasi pembelajaran terdiri daripada tiga dimensi iaitu komitmen pengurusan, perspektif sistem dan keterbukaan dan eksperimentasi. Kajian terdahulu melihat orientasi pembelajaran sebagai gabungan semua tiga dimensi. Berbeza dengan kajian lepas, kajian ini menyelidik kesan setiap individu dimensi terhadap daya inovasi. Satu kerangka konsepsual telah dibangunkan mengikut pandangan berasaskan sumber. Data telah dikumpulkan dari syarikat pengeksport kecil dan sederhana dalam sektor pekilangan di pasaran memuncul. Sejumlah 220 responden telah mengambil bahagian dalam kajian ini. Data telah dianalisa menggunakan model persamaan bestruktur untuk menguji hipotesis, dan keputusannya menunjukkan bahawa hubungan di antara daya inovasi dan prestasi eksport adalah positif. Sebagai tambahan, keputusan menunjukkan komitmen pengurusan adalah satu fungsi bagi daya inovasi. Perspektif sistem dan keterbukaan dan eksperimentasi tidak mempunyai hubungan yang siknifikan dengan daya inovasi. Implikasi dan limitasi kajian juga dibincangkan dalam kajian ini.

Kata kunci: Prestasi eksport; daya inovasi; orientasi pembelajaran; enterprise kecil dan sederhana; pasaran memuncul

INTRODUCTION

Due to larger customer based, international market offers opportunities to attain bigger sale and higher profit especially for companies from small emerging market like Malaysia. Consequently, developing the competitive ability to achieve superior performance in foreign market is the main agenda of small and medium size enterprises (SMEs) managers. For SMEs exporting has been the most appropriate mode of expansion into foreign market (Chen, Sousa & He 2016) due to lower risk and less resource commitment. Existing studies in export domain reveal that the performance outcome of SMEs has been explored by recent studies (Thanos, Dimitratos & Sapouna 2017). This is not surprising because SMEs contribution to the economy is enormous (Alam, Omar & Hisham 2011). For example, in emerging economy SMEs contribute more than 70 percent of total employment and 40 percent of the GDP (Aga, Francis & Meza 2015). In light of this scenario, it is suggested that future research should pay more attention on how SMEs improve export performance (Chen et al. 2016). In this study, resource based view (RBV) assists in explaining how firm achieve greater performance by leveraging their internal and unique resources (Wernerfelt 1984). The literature features conceptual and empirical pieces of evidence on the effect of innovativeness on performance (Bortoluzzi, Kadic-Maglajlic, Arslanagic-Kalajdzic & Balboni 2018; Boso, Cadogan & Story 2012).

Innovativeness differs from innovation which is another construct that has been widely investigated in research on performance (Gkypali, Rafailidis & Tsekouras 2015). Innovation refers to '...the introduction and implementation of new ideas and knowledge' (Rhee, Park & Lee 2010: 65). Innovativeness on the other hand "...relate to firm capacity to engage in innovation" (Hult, Hurley & Knight 2004: 429) hence prerequisite to innovation and is one of the main factors that affect performance (Hult et al. 2004). In an innovative firm, managers are more likely to propose novel and effective solutions to problems (Tsai & Yang 2013) which in turn creates competitive advantage and helps firm to achieve success (Rhee et al. 2010).

Despite existing investigations on the innovativenessperformance interaction, researchers have not reached a consensus on the nature of the relationship (positive vs negative effects) (Park, Oh & Kasim 2017) and scholars still debating this issue (Gkypali et al. 2015). Recently Bortoluzzi and colleagues (2018) claim that the investigation of the role of innovativeness in internationalization is expansive in the context of developed country asserting the need for more study in developing country (the authors also refer this to emerging country). This call is consistent with the stance that in emerging countries institutional supports are often less developed (Boso et al. 2012) and resources are relatively limited thus the findings in developed countries may not necessarily relevant to emerging countries. This reinforces the need for more investigation into the role of innovativeness in export performance among emerging country's firms.

Previous studies in internationalization give raise to learning concept within the realm of knowledge development which aids firm to reconfigure resources and capability to compete successfully in foreign market (Vahlne & Johanson 2017). Others conceptualize learning as strategic orientation (Park et al. 2017) and capabilities (Skarmeas, Lisboa & Saridakis 2016) and hold the view that learning is key to sustainable advantage and performance, particularly among SMEs (Juhdi, Hong & Juhdi 2015). In export context, literature converges on the critical function of overseas market knowledge (Casillas et al. 2009) which is more diverse than knowledge in domestic market and critical to export performance (Xie & Li 2018). Therefore, the ability to facilitate knowledge acquisition and dissemination should also be considered in parallel and learning orientation (LO) is pertinent to the process. This study assesses LO as antecedent to innovativeness. We posit that LO is critical to the success of a business (Souchon, Sy-Changco & Dewsnap 2012) and extant literature suggests that the notion of learning allows continuous improvement and innovation (Lages, Silva, Styles & Pereira 2009).

Although a number of studies have investigated the performance outcome of innovativeness and the effect of LO on innovativeness, this study differs from previous investigations. First, unlike previous studies such as Hult et al. (2004) and Rhee et al. (2010) that focus on Fortune 500 companies and technology intensive firms respectively, this study investigates non-high tech SMEs. Second, LO is multi-dimensional construct and despite the empirical investigation reported in many studies, the insight into LO construct implying the individual role of the dimension is still lacking. Following previous studies (Skarmeas, Lisboa & Saridakis 2016; Dess, Lumpkin & McGee 1999), this study insists that each dimension may differ individually and its relationship with other variable can vary hence inadequate representation of aggregate measure. Therefore, unlike previous research (Park et al. 2017), this study investigates the relationship between each of the dimensions of LO and innovativeness. Third, our study focuses on emerging market due to scarcity of such research in this context (Bortoluzzi et al. 2018) and variation in country's development (between emerging and developed countries) may limit the implications of existing research to developed countries only (Boso et al. 2012).

This study contributes to the literature in multiple ways. First, the contribution to literature on export performance is novel in term of explaining the interaction between innovativeness and export performance hence responding to call for more research on how SMEs improve export performance. Second, the results of this study add to the body of knowledge in export domain by providing empirical evidence on the positive influence of innovativeness on export performance and increase the generalizability to non-high tech SMEs and emerging country. Third, this study underscores that not all component of LO positively influenced innovativeness and therefore providing find-grained information than the aggregate measure.

Based on the research gaps, the objective of this study is twofold. One is to empirically investigate the effects of innovativeness on export performance, and the other is to examine individual effects of the dimensions of LO, including managerial commitment, system perspective, and openness and experimentation, on innovativeness.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This study builds the research framework from the perspective of RBV, which proposes that competitive advantage is developed on the basis of distinctive resources and capabilities that are owned by the firms (Barney, Wright & Ketchen 2001). In this light, Knight and Cavusgil (2004) assert that entering foreign market compels firms to develop new methods of conducting businesses in new environment, specifically when survival in rapidly change international market is dependent on exporting (Chen et al. 2016). When the market is dynamic, the firm offering may possibly differ from customer's preferences (Cadogan, Kuivalainen & Sundqvist 2009). Since firm's performance rests on scarce resources (Teece, Pisano & Shuen 1997) therefore these resources must support adaptation of firm's internal routines and processes to fit in with market requirements (Bortoluzzi et al. 2018; Cadogan et al. 2012).

As SMEs are deprived of tangible assets therefore the source of idiosyncratic resources is intangible properties. The critical function of intangible resources in export performance is also highlighted by Cadogan and colleagues (2009). Adopting this view, this study asserts that export performance is the outcome of superior value offering to customer which in turn is dependent on foreign market knowledge and thus these resources must also promote knowledge acquisition (Cadogan et al. 2012; Xie & Li 2018). This insight leads to the advanced notion of some scholars that the source of competitive advantage of SMEs is linked to the values shared among members of the organization, whereby flexibility and adaptability are implicitly defined (Sapienza et al. 2006). Along this line, Knight and Cavusgil (2004) observe on the culture-related values, namely innovativeness and LO, that aid SME's¹ capability. This view is echoed by others (Bortoluzzi et al. 2018; Tsai & Yang 2013).

In the context of knowledge-dependent international business activities (Vahlne & Johanson 2013) such as exporting (Xie & Li 2018), innovative and learning cultures increase the capabilities of firms, resulting in the formation and exploitation of the market know-how (Knight & Cavusgil 2004; Rhee et al. 2010). Based on the above discussion, RBV provides salient perspective in the development of our research model whereby relationships between LO, innovativeness and export performance are hypothesized and tested.

INNOVATIVENESS AND EXPORT PERFORMANCE

Based on the above discussions, this study proposes that the development of innovative culture is essential to the successful performance of export ventures. Studies on innovativeness in the context of export domain are abound (Cassiman & Golovko 2011). However, the literature conclude that existing research on the relationship between innovativeness and performance exhibits mixed results (Tsai & Yang 2013) and emerging country context is inadequate (Bortoluzzi et al. 2018). In the case of SMEs, for research on innovation the evidence is inconclusive (Higon & Driffield 2011).

Innovativeness is significantly related to the growth rate of a firm (Moreno & Casillas 2008) and intensifies the activities of firms in existing foreign markets or increases the potential of firms to enter into new market (Bortoluzzi et al. 2018) as a means of leveraging its ability. The lack of innovativeness is often associated with failures among firms (Omar, Aris & Nazri 2016). Along this line, innovativeness will likely to be a strategic means by which firms deal with changes in the internal and external environment (Rhee et al. 2010). Innovativeness helps firm to acquire new knowledge (Knight & Cavusgil 2004) and thus initiate business solutions hence the introduction of new products and processes (Hult et al. 2004). In export context, knowledge of foreign market helps firm identify changes in products that will lead to greater acceptance (He et al. 2018). From the perspective of learning by exporting, the new knowledge is useful in making the firm to be become more innovative hence superior performance (Xie & Li 2018).

The export performance outcome is a result of competitive advantage (Navarro et al. 2010). Competitive advantage is a function of superior value offering against the competitors (Kaleka 2002). Along this line, innovation allows the exploration of new business opportunities and improvement of competitiveness (Casillas & Moreno 2010) by means of new products, which are valuable to customers (Lumpkin & Dess 1996). This notion is consistent with the proposition of Knight and Cavusgil (2004), who asserted that firms with embedded innovative culture are motivated to develop high-quality goods that are distinctive and technologically advanced in international markets. In the context of export market, Lages, Silva and Styles (2009) similarly find that product innovation enhances the export performance of firms. The perspective that innovativeness is related to performance is widely accepted (Tsai & Yang 2013). Accordingly, the relationship between innovativeness, which tends to undertake innovation (Rhee et al. 2010), and export

performance is expected to be significant. Based on the above discussion, this study draws the following hypothesis:

H₁ Innovativeness positively affects export performance.

LEARNING ORIENTATION

This study delves into the learning capability of entrepreneurial firms to engender innovativeness. Extant literature demonstrates that innovativeness is closely related to organisational learning (Alegree & Chiva 2008). Lages et al. (2009) explain that the notion of learning allows continuous improvement and innovation. The culture of learning drives the organisation to promote values and beliefs on new ideas and innovation (Hurley & Hult 1998). Hence, the degree of innovativeness may rely on the extent to which a firm becomes learning-oriented (Park et al. 2017; Rhee et al. 2010).

LO is conceptualised as a cultural context dimension (Nasution et al. 2011). Sinkula, Baker and Noordewier (1997) affirm that LO is linked to organisational values that facilitate the formation of knowledge. LO guides firms to unlearn obsolete market knowledge by questioning existing organisational learning norms that may have led to biased learning processes and by proactively replacing these norms with new perspectives, systems, and procedures (Baker & Sinkula 1999). Empirical findings demonstrate that LO is an important driver of innovativeness (Hult et al. 2004; Park et al. 2017; Rhee et al. 2010). However, LO is a multi-dimensional construct that suggests an individual influence on innovativeness. This study considers the proposition of Jerez-Gomez et al. (2005) that LO has three dimensions, namely, managerial commitment, system perspective, and openness and experimentation. Hence, in gaining new insights into learning-innovativeness interaction, individual effects of these dimensions will be investigated in this study.

MANAGERIAL COMMITMENT AND INNOVATIVENESS

Managerial commitment refers to the recognition of the management on the importance of learning to promote internal and external innovation for firms (Sinkula et al. 1997). This dimension develops values that are related to the acquisition, formation, and transfer of knowledge (Jerez-Gomez et al. 2005). In the organisational context, Souchon et al. (2012) view learning as a function of behavioural change, and it requires managerial commitment (Sinkula et al. 1997). Exposure to diverse knowledge affects the managers' learning capabilities particularly in stimulating and catalysing innovativeness (Rodan & Galunic 2004), which in turn transform into the firm's core competencies.

Given the responsibility of the top management to implement change and strategic decision making (Hutzschenreuter & Horstkotte 2013), their commitment fosters the cultural values and behaviours conducive for the creation of new ideas and processes (Hult et al. 2004). Accordingly, the commitment of the top management allows the development of the innovative culture within the organisations. In addition, previous studies have suggested that successful firms have visible signs of management commitment for product innovation (Oke 2007). Thus, we argue that the change of behaviour is linked to values and believes held by the firm where the managerial needs to show high degree of commitment and support throughout the firm's learning process. Hence, the commitment of the management to learning is likely to enhance the innovativeness of the firm. According to this analysis, the following hypothesis is proposed:

H₂ Commitment to learn positively affects innovativeness.

SYSTEM PERSPECTIVE AND INNOVATIVENESS

System perspective refers to the shared identity of various members (Jerez-Gomez et al. 2005) based on the notion that a firm is a system built by the relationships among individuals and departments. System perspective also helps members clearly perceive the objectives of the organisation. A shared vision considers individuals as learning agents with organisational expectations (Wang 2008). Individual learning at an early level is eventually extended to organisation-level learning (Nasution et al. 2011). Individuals and departments that work in a coordinated fashion and that share knowledge, perceptions, and beliefs (Jerez-Gomez et al. 2005) support the organisation in engaging in new ideas and processes, such as new products and technologies. Therefore, system perspective aids in the development of innovative culture. As such, this study proposes the following hypothesis:

H₃ System perspective positively affects innovativeness.

OPENNESS AND EXPERIMENTATION AND INNOVATIVENESS

Openness and experimentation are important among firms to ensure acceptance of new ideas. Learning directs firms during behavioural change (Perez-Nordtvedt, Babakus & Kedia 2010) in which old routines are unlearned and are replaced by new ones (Saka-Helmhout 2010). Openness allows firms to constantly renew and improve their knowledge (Jerez-Gomez et al. 2005), which is crucial for innovation. This perspective suggests that learning increases the ability to unlearn existing knowledge (Farrell & Mavondo 2004) and also the organisational value of open-mindedness that may be necessary for the unlearning efforts to transpire (Sinkula et al. 1997). Unlearning existing knowledge and accepting new ideas are highly important within the volatile environment of an international market to derive innovative outcomes. Experimentation is the process of searching for innovative solutions to current and future problems. Experimentation is important for generative learning (Jerez-Gomez et al. 2005). When a firm gains new knowledge and perspective, its inclination to search for alternatives and innovation is enhanced (Nielsen & Nielsen 2009). Accordingly, experimentation facilitates the formation of values and beliefs that are related to innovation. Based on this argument, the following hypothesis is presented:

H₄ Openness and experimentation positively affect innovativeness.

Based on the above discussions, this study develops a conceptual model, which is presented in Figure 1. The model shows the relationships between each dimension of LO and innovativeness and the relationship between innovativeness and export performance.

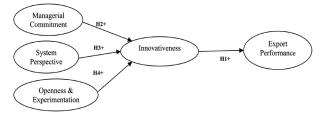


FIGURE 1. Conceptual model

METHODOLOGY

SAMPLE AND DATA COLLECTION

The country setting of this study is Malaysia. The sample consisted of SMEs with number of employees ranging from 20 to 250, selected from the directory of Federation of Malaysian Manufacturer. In this study, small firms are defined as enterprises with 50 or fewer full-time employees and medium firms as those with 51 to 250 fulltime employees. A minimum cut-off of 20 employees was applied to capture an appropriate measure of constructs and to ensure the respondent qualifies as a key informant (Marino et al. 2008). On another note, the chosen limit of 250 was made because a large number of studies have (e.g. see Crick 2007; Majocchi, Bacchiocchi & Mayrhofer 2005; O'Regan & Ghobadian 2005; Wiklund & Shepherd 2003) precisely limit the definition of an SME as up to 250 employees. For that reason, the definition of SMEs in this study maintains the comparability of the results.

Several criteria were used in selecting firms for this study, such as the firms at the time of this study must be current exporters, the firms should be independent and not a subsidiary of a larger domestic or international company to avoid potential resource and cultural influences on decision-making, and the selected companies engage in foreign market entry and expansion in global markets through the use of independent foreign importers. A total of 851 firms fulfilled the criteria of the investigation. Of the 851 firms, 68 refused to participate, were inaccessible, or had closed down, while 220 firms (28.10 per cent response rate) participated in the survey.

The unit of analysis was firm and data were collected from a single key informant who is directly involved in the firm export activities. The informants' background consists of chief executive officers (8 per cent), managing directors (60.3 per cent), export managers (6.03 per cent), and marketing/sales managers (24.43 per cent). Several methods of collecting data, including drop-off, mail survey, and use of a local research company, were employed. These methods were subsequently compared using Analysis of Variance (ANOVA), and no significant difference was identified. Meanwhile, the early (60 per cent) and late (40 per cent) respondents were compared in the process of monitoring non-response biases. The comparative results showed that no significant differences persisted among the respondents.

Table 1 shows the demographic profiles of the respondents. The table indicates that slightly more than half of the respondents were small firms and the rest were medium firms. The table also demonstrates that 57 per cent of the participating firms were owned by Malays, 30.63 per cent were managed by Chinese, and 11.71 per cent were controlled by other races. Meanwhile, almost half of the respondents belonged to the food and beverages industry.

TABLE 1. Profile of the sample

Firm Size (number of employee)	Percentage (%)			
Small	54.19			
Medium	45.81			
Firm by Ownership (Ethnicity)	Percentage (%)			
Malay	57.66			
Chinese	30.63			
Others	11.71			
Industry of the respondent	Percentage (%)			
Food and beverage	42			
Wood and wood products	8			
Chemical and petrochemical	8			
Rubber products	8			
Plastic products	8			
Machinery and engineering	7			
Electric and electronic	7			
Pharmaceutical	4			
Palm oil based products	3			
Paper and printing	2			
Textile, apparel and leather	2			
Transport equipment	1			

INSTRUMENTS

The survey instrument was tested in two stages. The first stage involved personal interviews with experts from academic institutions, industrial associations, and SMEs. This is in line with Churchill (1979), who suggests refinement of measures through interviews with people capable of understanding the nature of the concept being measured. The second stage involved a pilot study on a sample of 10 SMEs to identify and eliminate potential problems (Malhotra 2007). Accordingly, feedback from the tests was used to revise the questionnaires.

In this study, we use well-established measures which then were adapted to suit the context of this study. The scales for LO were based on the research by Jerez-Gomez et al. (Jerez-Gomez et al. 2005), Sinkula et al. (1997), and Nasution and Mavondo (2008). The scales for innovativeness were revised and adapted from the studies of Leonidou, Katsikeas and Hadjimarcou (2002) and Skarmeas et al. (2008). The scales for export performance were amended and adapted from the research of Katsikeas, Leonidaou and Morgan (2000) and Shoham (1998). All measurement items are shown in the appendix.

VALIDITY AND RELIABILITY

The scales were purified by deleting the items with lower standardised factor loading (less than 0.60) and the results are shown in Table 2. Then, using the purified scales, a five-factor confirmatory factor analysis (CFA) was employed to test for constructs' validity and composite reliability. The results for the measurement models for all constructs are presented in Table 2. The fit indices indicate a good fit model ($\chi^2 = 365.92$, $\chi^2/df = 1.83$, p < 0.001, NFI = 0.92, TLI = 0.96, CFI = 0.96, RMSEA = 0.06).

Composite reliability was calculated to obtain evidence on the internal consistency of the scale as suggested by Fornell and Larcker (1981). The coefficient of the constructs (see Table 2) ranged from 0.87 to 0.98, which was above the acceptable standard (Fornell & Larcker 1981; Nunnally 1978) and consistence with other study (e.g. Knight & Cavusgil 2004).

All factor loadings ranged from 0.72 to 0.98 (all t-values greater than 11.00). In addition, the values for average variance extracted (AVE) were 0.63 and above, which were above the minimum level of 0.50 indicating convergence validity for all constructs.

			2		
Constructs	Items	SFL	t-values	Composite Reliability	AVE
Managerial Commitment	MC1*	0.87	0.63		
C C	MC2	0.72	11.02		
	MC3	0.83	13.05		
	MC4	0.78	-		
	MC5	0.84	13.55		
System Perspective	SP6*		0.88	0.66	
	SP7	0.83	13.89		
	SP8	0.83	13.90		
	SP9	0.81	-		
	SP10	0.77	12.62		
Openness and Experimentation	OE11	0.78	14.24	0.92	0.68
	OE12	0.76	13.87		
	OE13	0.80	15.36		
	OE14	0.89	19.11		
	OE15	0.88			
nnovativeness	INV1*	0.88	0.64		
	INV2*				
	INV3	0.72	-		
	INV4	0.81	11.38		
	INV5	0.83	11.43		
	INV6	0.85	12.07		
Export Performance	EXP1	0.93	21.54	0.98	0.82
-	EXP2	0.97	23.66		
	EXP3	0.92	21.50		
	EXP4	0.84	30.22		
	EXP5	0.88	-		

TABLE 2. The measurement analysis

SFL = Standardized Factor Loading; AVE = Average Variance Extracted; (-) Item fixed for estimation; (*) Item deleted during the purification process.

SMEs' Export Performance: The Effect of Learning Orientation and Innovativeness

The square root of AVE was performed to examine the validity of the discriminant. Table 3 illustrates that, although some cross-loadings exist, an AVE score higher than the correlation between two constructs proves the discriminant validity. On another note, a strong correlation among managerial commitment, system perspective and openness and experimentation, i.e. correlation coefficient above 0.7, may support the notion that LO is composite of all three variables. Following the research of Bagozzi, Yi and Philips (1991), a series of confirmatory factor analyses were conducted in this study. For every pair of constructs, the chi-square of the constrained model was compared with that of the unconstrained model. Table 4 shows that the comparative results revealed the chi-squares of the two models were significantly different in all cases indicating that all three constructs were distinct.

TABLE 3. Test of Chi-square difference for covariance parameter constrained unconstrained Chi-square

Covariance	Parameter	Constrained		Unconstrained		Chi-square	
		CMIN	Df	CMIN	df	difference	
Managerial Commitment – Sys perspective	1	55.531	20	41.648	19	13.883***	
Managerial Commitment – O & E	1	58.693	26	49.929	25	8.764***	
Managerial Commitment – Innovativeness	1	71.920	20	56.902	19	15.018***	
Managerial Commitment – Export Perform.	1	226.842	27	185.851	26	40.991***	
Sys Perspective – O & E	1	78.752	27	67.504	26	11.248***	
Sys Perspective – Innovativeness	1	42.663	20	29.817	19	12.846***	
Sys Perspective – Export Performance	1	60.647	24	37.759	23	22.888***	
O & E – Innovativeness	1	66.965	26	61.058	25	5.907*	
O & E – Export Performance	1	217.152	34	24.193	33	24.193***	
Innovativeness – Export Performance	1						

Note: *, ** and *** indicate significance at the 10%, 5% and 1% levels respectively.

TABLE 4. Square root average variance extracted and correlation of constructs

Construct	1	2	3	4	5
1. Managerial Commitment	0.79				
2. System perspective	.68***	.81			
3. Openness & Experimentation	.73***	.75***	.82		
4. Innovativeness	.69***	.52***	.61***	.80	
5. Export Performance	.44***	.44***	.42***	.41***	.91
Cronbach Alpha	.87	.88	.92	.87	.97
Mean	5.34	5.24	5.29	5.24	4.73
Standard deviation	.97	.92	1.00	1.03	1.30

Note: *, ** and *** indicate significance at the 10%, 5% and 1% levels respectively.

RESULTS

The variance inflation factor (VIF) was performed to test multi-collinearity, the results (all VIF values less than four) indicated that multi-collinearity is not an issue. The independence of error was also examined because the scores for any particular subject may not be independent of those for other subjects because of the nature of the research survey. The results of the examination specified that the non-independence of errors was not significant (Durbin-Watson statistics for all models showed that the scores are within the acceptable range, 1.918 and 1.940).

This study employed structural equation modeling technique (AMOS 16) to estimate the research model. The results of the tests that assess the hypothesised relationship are shown in Table 5. Scores for model fit indices indicate acceptable fit measures.

TABLE 5. Results of analysis on hypothesized relationships

Hypotheses	Relationship	β	t-values	Results
Innovativeness – Export Performance.	+	.42	6.46***	Supported
Managerial Commitment – Innovativeness	+	.71	4.46***	Supported
System Perspective – Innovativeness	+	08	66	Not Supported
Openness & Experimentation – Innovativeness	+	.25	1.93	Not Supported

Notes: *, ** and *** indicate significance at the 10%, 5% and 1% levels respectively. Model fit: $x^2 = 303.00$; df = 162; $x^2/df = 1.87$, RMSEA = 0.06; TLI = .94; NFI = .90; CFI = .95)

The results provide strong evidence that innovativeness is a determinant of export performance ($\beta = 0.42$; t-value = 6.46; p < 0.001), supporting hypothesis H₁. These results indicate that innovativeness is prevalent among SMEs in emerging market. In export context, innovativeness is strategically helpful in overcoming resource limitation and guides SMEs manager to make decision that ensure competitive value offerings and promote superior performance.

Managerial commitment is found to be a determinant of to innovativeness ($\beta = 0.71$; t-value = 4.46; p < 0.001), supporting hypothesis H₂. However, the positive relationship between system perspective and innovativeness is not significant, and thus, hypothesis H₃ is not supported. Finally, the findings also reveal that openness and experimentation is not significantly related to innovativeness, hence H₄ is also not supported. These findings demonstrate that each dimension of LO has different impact on innovativeness, supporting argument against composite measure. Still, the insignificant effects of system perspective, and openness and experimentation come as a surprise.

IMPLICATIONS

This study contributes to the existing literature by providing new insights into the relationship among LO, innovativeness, and export performance of SMEs. We aim to address the gaps in literature and accordingly, based on RBV, the theoretical model was developed depicting the effects of innovativeness on export performance and difference dimensions of LO on innovativeness.

First, this study lends support to innovativeness as antecedent factor to performance. Previous studies show conflicting results (Tsai & Yang 2013). In export context, scholars are still debating and one of the issues is the causality direction between exporting and innovation activities suggesting inverse relationship (export performance influences innovation) as an alternative hypothesis (Gkypali et al. 2015). Although this study investigates innovativeness, comparing the inverse causality direction of innovation and export performance with this study may still conceptually relevant because innovation is the outcome of innovativeness. Nevertheless, this study highlights that innovativeness is firm valuable intangible resource that is idiosyncratic and the results of empirical investigation seem to accord with RBV. This study maintains that innovativeness is helpful in developing SMEs competitiveness in export market and thus gain superior performance.

Second, this study adds to the stock of knowledge in export performance by responding to the call for more study in emerging countries and on how firms improve performance in export market (Chen et al. 2016). This is in line with the view that firms from emerging market are different than those of developed country (Xie & Li 2018) Third, this study goes against previous research that examine the aggregate level of LO (Hult et al. 2004; Park et al. 2017) by investigating the individual effect of each dimension of LO on innovativeness. The results of this study provide valuable insight into LO and confirm that each dimension of LO has difference effect on innovativeness.

This study has several managerial implications. First, managers of small and medium sized firms in emerging market can rely on intangible resources that is unique and carries strategic value to compete with resourceful multinational firms. Managers of small and medium businesses must emphasize the culture of innovativeness if they want to succeed specifically in dynamic environment of export markets. In an environment where the market change rapidly innovativeness is helpful in knowledge acquisition and creating novel processes and products (Bortoluzzi et al. 2018). Innovation through the newly acquired knowledge of foreign market may require massive adaptation (Xie & Li 2018). Nevertheless, managers in an innovative firm tend to act innovatively by creating novel solution to problems (Tsai & Yang 2013).

Second, managers of SMEs must focus on the top managerial commitment to develop innovativeness. Therefore, in the context of the competitive strategic planning of SMEs in export markets, managers of SMEs must look into the capabilities of forming new ideas and processes by focusing on learning, specifically managerial commitment, and innovative capabilities. Based on the analyses of this study, the strong commitment of managers to develop shared values that are based on innovation among all employees is the key to the success of SMEs. In addition, this results show that the strategic decisions and the operational facet of SMEs, such as the development of innovative culture, is intimately related to the manager's values and believes. Finally, this study provides guidelines for managers in allocating resources to ensure productive investment, particularly in export markets.

LIMITATION AND FUTURE STUDIES

Although this study is able to achieve its research objectives, several limitations are noted. The sample is notably limited to the firms within the manufacturing sector. Hence, the results cannot be generalised to other sectors, such as the service sector. Future studies must look into the perspective of the service sector. In addition, this study uses single respondent for each participating firm. Although the results of the test indicate that the common method variance is not an issue, using two respondents for each firm will add rigor to the findings. Moreover, the relationship takes place within external environments which might have moderating impact on the relationship hence the suggestion for future study to investigate the influence of moderating variable. Finally, the results should be interpreted in light of high cross loadings on some measures.

CONCLUSION

International markets are complex and highly competitive, and rapid change in the environment is common phenomenon. The challenges in these markets are greater for SMEs because of their scarce resources. SMEs in emerging markets encounter more difficult business environments than other firms because the institutional supports in this arena are relatively underdeveloped. Nevertheless, many SMEs are not disconcerted by the complexity of the market. Some of these firms have demonstrated superior competitive advantage and successful export performance. Therefore, this study considers that the competitive ability of SMEs does not depend on their possession of tangible resources.

Based on the RBV, we develop the conceptual framework and tested the hypothesized relationships. The notion of RBV posits that firm's competitive advantage is dependent on unique resources that are internally own by the firm (Barney et al. 2001). Since competitive advantage is closely link to performance, this study put forward the idea that intangible resources of SME positively influence export performance. Specifically, this study aims to empirically investigate the effects of innovativeness on export performance, and examine individual effects of the dimensions of LO, including managerial commitment, system perspective, and openness and experimentation, on innovativeness.

Innovativeness in this study refers to the cultural perspective of innovation, implying the tendency to engage in new ideas or processes. Despite the important role of innovativeness in the competitive development and the performance of firms, few studies had investigated such role in the context of SMEs and emerging market. Rhee et al. (2010) examined the role of learning and innovativeness on the performance of small firms. Meanwhile, Tsai and Yang (2013) examined the innovativeness-performance relationship within the context of medium and large firms. In Gkypali and colleagues (2015) the sample is R&D active manufacturing firm in emerging country but no mention about the firm size. Notwithstanding the results of this study are consistent with the previous investigations and support the positive effect of innovativeness on performance. Few previous studies failed to find positive relationship between the two constructs, the findings in this study on the other hand becomes the empirical evidence on the important of innovativeness in SMEs survival in export markets.

To the best of the researchers' knowledge, no study has examined the individual effect of each of the learning dimension on the innovativeness of small and medium firms in the export domain. Therefore, this study contributes to the existing literature in term of the impact of difference component of learning on innovativeness in the context of SMEs. The findings entail that the innovative activities of small and medium entrepreneurial firms in the export market are essentially driven by the commitment of the top management to learning. The profound influence of managerial role on decision making in the export market has been manifested in the literature (Sousa, Ruzo & Losada 2010). Supporting the extant research (Hult et al. 2004), the results of this study imply the centrality of managerial commitment to develop organisational values and beliefs that facilitate the formation of new products or processes.

The effects of system perspective and openness and experimentation on innovativeness are not significant. The findings of this study, however, need further discussions. In term of system perspective, one explanation that seems to accord with the findings is that slightly more than half of the respondents were small firms. The smallness of the firms reflects the vagueness of the concept of departmentalisation or function in the organisational structure through which information directly flows from the managers/owners to employees. Hence, the need for information sharing among employees does not seem to be pressing. The respondents in this study do not consider system perspective as an important determinant of innovativeness in firms.

The insignificant effect of openness and experimentation on innovativeness can be explained by the notion that family-owned business is common among SMEs (Westhead & Howorth 2007) resulting in family inertia within the operational activities of the firm. Due to the family inertia, the management of family-owned businesses inclines to interfere in employee decisions hence the constraint of employee freedom in expressing ideas (Chirico & Nordqvist 2010). Based on the finding of this study, SMEs seem to reject the idea of openness and therefore the effect of openness and experimentation on innovativeness is not significant.

Based on the above discussion, this study found positive relationship between innovativeness and export performance in the context of SMEs and emerging market. This study also clearly differs from the previous research that investigate the aggregate view of LO and its relationship with innovativeness. Particularly, two constructs namely system perspective and openness and experimentation did not significantly influence innovativeness. This finding indicate that the three learning dimensions vary independently in terms of its relationship with innovativeness.

ENDNOTE

¹ Sample of this study is small firms, based on the US definition [up to 500 employees]. It is also reported that average firms had 190 employees. Therefore, in line with our definition, the sample consist of small and medium sized businesses.

REFERENCES

- Aga, G., Francis, D.C. & Meza, J.R. 2015. SMEs, age and jobs: A review of the literature, metric and evidence. Policy Research Working paper. Available at https://www. enterprisesurveys.org/~/media/GIAWB/EnterpriseSurveys/ Documents/ResearchPapers/SMEs-age-and-jobs.pdf
- Alam, S.S., Omar, N.A. & Hisham, N.M.H.N. 2011. Applying the theory of perceived characteristics of innovating (PCI) on ICT adoption in the SMEs in Malaysia. *Australian Journal* of Basic and Applied Sciences 5(8): 8-17.
- Alegree, J. & Chiva, R. 2008. Assessing the impact of organizational learning capacity on product innovation performance: an empirical test. *Technovation* 28: 315-326.
- Bagozzi, R.R., Yi, Y. & Phillips, L.W. 1991. Assessing construct validity in organizational research. *Administrative Science Quarterly* 36: 421-458.
- Baker, W.E. & Sinkula, J.M. 1999. The synergistic effect of market orientation and learning orientation on organizational performance. *Journal of the Academy of Marketing Science* 27(4): 411-427.
- Barney, J.B., Wright, M. & Ketchen, D.J. 2001. The resourcebased view of the firm: Ten years after 1991. *Journal of Management* 27(6): 625-641.
- Bortoluzzi, G., Kadic-Maglajlic, S., Arslanagic-Kalajdzic, M. & Balboni, B. 2018. Innovativeness as a driver of the international expansion of developing markets' firms. *International Marketing Review* 36(2): 215-235.
- Boso, N., Cadogan, J.W. & Story, V.M. 2012. Entrepreneurial orientation and market orientation as drivers of product innovation success: A study of exporters from a developing economy. *International Small Business Journal* 31(1): 57-81.
- Cadogan, J.W., Kuivalainen, O. & Sundqvist, S. 2009. Export market-oriented bahavior and export performance: Quadratic and moderating effects under differing degrees of market dynamism and internationalization. *Journal of International Marketing* 17(4): 71-89.
- Cadogan, J.W., Sundqvist, S., Puumalainen, K. & Salminen, R.T. 2012. Strategic flexibility and export performance. *European Journal of Marketing* 46(10): 1418-1452.
- Casillas, J.C. & Moreno, A.M. 2010. The relationship between entrepreneurial orientation and growth: The moderating role of family involvement. *Entrepreneurship and Regional Development* 22(3-4): 265-291.
- Casillas, J.C., Moreno, A.M., Acedo, F.J., Gallego, M.A. & Ramos, E. 2009. An integrative model of the role of knowledge in the internationalization process. *Journal of World Business* 44(3): 311-322.
- Cassiman, B. & Golovko, E. 2011. Innovation and internationalization through exports. Journal of International Business Studies 42: 56-75.
- Chen, J., Sousa, C.M.P. & He, X. 2016. The determinants of export performance: A review of the literature 2006-2014. *International Marketing Review* 33(5): 626-670.
- Farrell, M. & Mavondo, F.T. 2004. The effect of downsizing strategy and reorientation strategy on a learning orientation. *Personnel Review* 33(4): 383-402.
- Fornell, C. & Larcker, D.F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(1): 39-50.

- Gkypali, A., Rafailidis, A. & Tsekouras, K. 2015. Innovation and export performance: Do young and mature innovative firms differ? *Eurasian Business Review* 5: 397-415.
- Higon, D.A. & Driffield, N. 2011. Exporting and innovation performance: Analysis of the annual small business survey in the UK. *International Small Business Journal* 29(1): 4-24.
- Hult, G.T.M., Hurley, R.F. & Knight, G.A. 2004. Innovativness: Its antecedents and impact on business performance. *Industrial Marketing Management* 33: 429-438.
- Hurley, R.F. & Hult, G.T.M. 1998. Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing* 62: 42-54.
- Hutzschenreuter, T. & Horstkotte, J. 2013. Performance effects of international expansion processes: The moderating role of top management team experiences. *International Business Review* 22: 259-277.
- Jerez-Gomez, P., Cespedes-Lorente, J. & Valle-Cabrera, R. 2005. Organizational learning capability: A proposal of measurement. *Journal of Business Research* 58(6): 715-725.
- Juhdi, N.N., Hong, T.S. & Juhdi, N. 2015. Market orientation and entrepreneurial success: Mediating role of entrepreneurial learning intensity. *Jurnal Pengurusan* 43: 27-36.
- Kaleka, A. 2002. Resources and capabilities driving competitive advantage in export markets: Guidelines for industrial exporters. *Industrial Marketing Management* 31(3): 273-283.
- Katsikeas, C.S., Leonidou, L.C. & Morgan, N.A. 2000. Firmlevel export performance assessment: Review, evaluation, and development. *Journal of the Academy of Marketing Science* 28(4): 493-511.
- Knight, G.A. & Cavusgil, S.T. 2004. Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies* 35: 124-141.
- Lages, L.F., Silva, G. & Styles, C. 2009. Relationship capabilities, quality, and innovation as determinants of export performance. *Journal of International Marketing* 17(4): 47-70.
- Lages, L.F., Silva, G., Styles, C. & Pereira, Z.L. 2009. The NEP scale: A measure of network export performance. *International Business Review* 18: 344-356.
- Leonidou, L.C., Katsikeas, C.S. & Hadjimarcou, J. 2002. Executive insights: Building successful export business relationships: A behavioral perspective. *Journal of International Marketing* 10(3): 96-115.
- Lumpkin, G.T. & Dess, G.G. 1996. Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review* 21(1): 135-172.
- Marino, L.D., Lohrke, F.T., Hill, J.S., Weaver, K.M. & Tambunan, T. 2008. Environmental shocks and SME alliance formation intentions in an emerging economy: Evidence from the Asian Financial Crisis in Indonesia. *Entrepreneurship Theory and Practice* 32: 157-183.
- Moreno, A.M. & Casillas, J.C. 2008. Entrepreneurship orientation and growth of SMEs: A causal model. *Entrepreneurship Theory and Practice* 32(3): 507-528.
- Nasution, H.N. & Mavondo, F.T. 2008. Organisational capabilities: Antecedents and implications for customer value. *European Journal of Marketing* 42(3/4): 477-501.
- Nasution, H.N., Mavondo, F.T., Matanda, M.J. & Ndubisi, N.O. 2011. Entrepreneurship: Its relationship with market orientation and learning orientation and as entecedents

to innovation and customer value. *Industrial Marketing Management* 40: 336-345.

- Navarro, A., Losada, F., Ruzo, E. & Diez, J.A. 2010. Implications of perceived competitive advantage, adaptation of marketing tactics and export commitment on export performance. *Journal of World Business* 45(1): 49-58.
- Nielsen, B.B. & Nielsen, S. 2009. Learning and Innovation in International Strategic Alliances: An empirical test of the role of trust and tacitness. *Journal of Management Studies* 46(6): 1031-1056.
- Nunnally, J.C. 1978. *Psychometric Theory*. 2nd ed. New York: McGraw Hill.
- Oke, A. 2007. Innovation types and innovation management practices in service companies. *International Journal of Operations and Production Management* 27(6): 564-587.
- Omar, N.A., Aris, H.M. & Nazri, M.A. 2016. The effect of entrepreneurial orientation, innovation capability and knowledge creation on firm performance: A perspective of small scale enterprise. *Jurnal Pengurusan* 48: 187-200.
- Park, C., Oh, C.H. & Kasim, A. 2017. Market challenges, learning and customer orientation, and innovativeness in IJVs. *International Marketing Review* 34(6): 945-967.
- Perez-Nordtvedt, L., Babakus, E. & Kedia, B.L. 2010. Learning from international business affiliates: Developing resourcebased learning capacity through networks and knowledge acquisition. *Journal of International Management* 16(3): 262-274.
- Rhee, J., Park, T. & Lee, D.H. 2010. Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation. *Technovation* 30: 65-75.
- Rodan, S. & Galunic, C. 2004. More than network structure: How knowledge heterogeneity influences managerial performance and innovativeness. *Strategic Management Journal* 25: 541-562.
- Saka-Helmhout, A. 2010. Organizational learning as a situated routine-based activity in international settings. *Journal of World Business* 45(1): 41-48.
- Sapienza, H.J., Autio, E., George, G. & Zahra, S.A. 2006. A capabilities perspective on the effects of early internationalization on firm survival and growth. Academy of Management Review 31(4): 914-933.
- Shoham, A. 1998. Export performance: A conceptualization and empirical assessment. *Journal of Marketing* 6(3): 59-81.
- Sinkula, J.M., Baker, W.E. & Noordewier, T. 1997. A framework for market-based organizational learning: Linking values, knowledge, and behavior. *Journal of the Academy of Marketing Science* 25(4): 305-318.
- Skarmeas, D., Katsikeas, C.S., Spyropouiou, S., & Salehi-Sangari, E. 2008. Market and supplier characteristics driving distributor relationship quality in international marketing channels of industrial products. *Industrial Marketing Management* 37: 23-36.
- Skarmeas, D., Lisboa, A. & Saridakis, C. 2016. Export performance as a function of market learning capabilities and intrapreneurship: SEM and FsQCA findings. *Journal Business Research* 69(11): 5342-5347.
- Souchon, A.L., Sy-Changco, J. & Dewsnap, B. 2012. Learning orientation in export functions: Impact on export growth. *International Marketing Review* 29(2): 175-202.
- Sousa, M.P.C., Ruzo, E. & Losada, F. 2010. The key role of managers' values in exporting: Influence on customer responsiveness and export performance. *Journal of International Marketing* 18(2): 1-19.

- Teece, D.J., Pisano, G. & Shuen, A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal* 18(7): 509-533.
- Thanos, I.C., Dimitratos, P. & Sapouna, P. 2017. The implications of international entrepreneurial orientation, politicization, and hostility upon SME international performance. *International Small Business Journal* 35(4): 495-514.
- Tsai, K.H. & Yang, S.Y. 2013. Firm innovativeness and business performance: The joint moderating effects of market trubulence and competition. *Industrial Marketing Management* 42: 1279-1294.
- Vahlne, J.-E. & Johanson, J. 2013. The Uppsala model on evolution of the multinational business enterprise – From internalization to coordination of networks. *International Marketing Review* 30(3): 189-210.
- Vahlne, J.-E. & Johanson, J. 2017. From internationalization to evolution: The Upsala model at 40 years. *Journal of International Business Studies* 48(9): 1087-1102.
- Wang, C.L. 2008. Entrepreneurial Orientation, Learning Orientation, and Firm Performance. *Entrepreneurship Theory and Practice* 32(4): 635-657.
- Wernerfelt, B. 1984. A resource based view of the firm. Strategic Management Journal 5(2): 171-180.
- Xie, Z. & Li, J. 2018. Exporting and innovating among emerging market firms: The moderating role of institutional development. *Journal of International Business Studies* 49(2): 222-245.

Md Daud Ismail (corresponding author) Faculty of Economic and Management Universiti Kebangsaan Malaysia 43600 UKM Bangi, Selangor, MALAYSIA. E-Mail: mddaud@ukm.edu.my

Roshayati Abdul Hamid Faculty of Economic and Management Universiti Kebangsaan Malaysia 43600 UKM Bangi, Selangor, MALAYSIA. E-Mail: wanrose@ukm.edu.my

Zizah Che Senik Faculty of Economic and Management Universiti Kebangsaan Malaysia 43600 UKM Bangi, Selangor, MALAYSIA. E-Mail: zizahcs@ukm.edu.my

Abdullah Sanusi Othman Faculty of Economic and Management Universiti Kebangsaan Malaysia 43600 UKM Bangi, Selangor, MALAYSIA.

E-Mail: asza@ukm.edu.my Noor Hasni Juhdi

Faculty of Economic and Management Universiti Kebangsaan Malaysia 43600 UKM Bangi, Selangor, MALAYSIA. E-Mail: n_hasni@ukm.edu.my

APPENDIX

SCALE ITEMS

LO

Managerial Commitment

- 1. Managers involve their staff in important decision making processes
- 2. Management seeks to keep ahead of new environmental situations
- 3. Employee learning is considered a key factor in this firm's success
- 4. In this firm, innovative ideas are rewarded
- 5. Managers agree that our ability to learn is the key to our competitive advantage

System Perspective

- 1. All employees have knowledge regarding this firm's objectives
- 2. Every department, sections, work team, and individual in this firm is aware of how they contribute to achieving the overall objectives
- 3. All our departments work in a coordinated fashion
- 4. Every person in this firm is aware of long term vision of the firms
- 5. There is an agreement in our business unit's vision

Openness and Experimentation

- 1. We promote experimentation as a way of improving the work processes
- 2. We adopt the practices and techniques of other firms believed to be useful
- 3. We consider experiences and ideas provided by external sources [advisors, customers, training firms etc.] useful for learning
- 4. Our employees can express their opinions and make suggestions regarding the procedures and methods in place for carrying out tasks
- 5. We value employees' ideas that may increase firm's success

Innovativeness

- 1. We are open to innovative ways of exploiting international market opportunities
- 2. We continuously search for new export markets
- 3. We actively "adopt "new ways of doing things" by main competitors
- 4. We are willing to invest in new ways of doing business
- 5. We encourage our people to think and behave in novel ways
- 6. We value creative new solutions

Export Performance

- 1. Percentage of export volume to total sales volume (quantity)
- 2. Percentage of export revenue to total sales revenue
- 3. Contribution of export profit to total profits
- 4. Growth rate of export sales
- 5. Overall export performance