



The Effect of Market Orientation on Entrepreneurial Competency in SMEs in Upper Northeastern Region of Thailand

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Abstract

The paper is aimed to examine the validity and reliability of the model of entrepreneurial competency in the upper Northeastern of Thailand. The research mainly involves a survey design.

It includes a pilot test using undergraduate business students at Udonthani Rajabhat University for pretesting questionnaire items. In addition, this investigates into market generation, market intelligence, leadership, and adaptability competency attributes necessitates uncovering variables of interest and this involves a large-scale field study. The data are collected via personal questionnaires from 395 samples. They include the managers of SMEs in four provinces including Udonthani, Nongkhai, Beungkan and Loei. Respondents are asked to rate, on a five-point Likert scale, their agreement or disagreement on the entrepreneurial competency attributes. Quantitative data are analyzed by the statistical techniques, namely exploratory factor analysis and structural equation modeling. It is found from the study that the four which consists of market generation, market intelligence, leadership, and adaptability competency of the SMEs in the upper Northeast of Thailand, are empirically fit the data. The managerial implications are discussed.

Keywords: Market orientation, Market generation, Competency, Leadership, Structural equation modelling.

1. Introduction

In most developing countries, the most important source of new employment opportunities is Small and Medium Enterprises (SMEs). SMEs make considerably contributions to employment and comprise the majority of businesses in the nation (Becker, 1993). SMEs utilize their products in industries as raw materials or semi-products (Tapaneeyangkul, 2001). In addition, SMEs establish the crucial element in supporting important units of industry together. SMEs' distribution is covered in all sectors including manufacturing, trade and service. Strengthening SMEs is important issue to the country when it comes to growth and income distribution. The Institute for Small and Medium Enterprises Development (ISMED) reported that SMEs in Thailand represent over 90 percent of the total number of entrepreneurs in nearly all business sectors, and employ over 60 percent of the labor force. Furthermore, SMEs contributed about 40% of the total GDP in Thailand from 2009 to 2010. In 2011, the value of industrial exports from Thai SMEs was over 45% of all industrial products exported from Thailand. These statistics show the large contribution of SMEs to the Thai economy. Also, SMEs

support a sufficiency economy by enhancing wealth to the grassroots level, which stimulates the economic and social development of Thailand (Unger et al., 2011).

Market orientation (MO) is a central construct in a theory developed to explain firm performance (Kholi and Jaworski, 1990; Kohli et al., 1993 and Narver and Slater, 1990). Recently, marketing scholars have focused on developing of marketing orientation in organizations. They have paid a great deal of attention to the subject of marketing orientation (Homburg et al., 2000; Shoham et al., 2005).

Market orientation is the aspect of business culture that motivates employees through the organization to place the highest priority on the profitable creation and maintenance of superior customer values (Slater, 2001, 230-232; Slater and Narver, 2000). Market oriented businesses have a competitive advantage in both the speed and effectiveness of their responsiveness to opportunities and threats (Slater, 2001, 230-232).

However, these studies provide little verification of the external validity of market orientation and entrepreneurial competency because they have been conducted in a developing economy setting. Accordingly, attention is now shifting to developing nations for new insights into the market orientation phenomenon. For example, Chelariu et al. (2003) examined the validity of two market orientation scales from Kholi (1990) and Jaworski and Narver and Slater (1990), in Ivory Coast.

Mavondo et al. (2005) stated that MO has related to human resource practices (HRPs). They also suggested that learning orientation should be viewed as exploration while MO is the interface between exploration and exploitation and, finally, HRPs and innovation must be viewed as exploitation or implementation issues.

In recent years, human resource and marketing scholars have paid a great deal of attention to the subject of capability and competency (Parry, 1998). It has been the strategic use of firm capabilities and distinctive competencies for competitive advantage. Firm capabilities are those things that a company does especially well that allow it to compete successfully and prosper in the marketplace. The capabilities refer to attributes, abilities, organizational processes, knowledge, and skills that allow a firm to achieve superior performance and sustained competitive advantage over competitors. Therefore, the paper's aim is to model the market orientation and entrepreneurial competency and examine the relationship between the market generation, market intelligence, adaptability, and leadership of a SMEs in the upper Northeast of Thailand.

2. Review of Literature

Marketing literature has indicated that the adoption of a marketing concept is the foundation of successful performance. The marketing concept is a distinct business philosophy that puts the customer in the center of the firm's thinking about strategy and operation (Hooley et al., 1990). It is made up of three pillars, namely, customer philosophy, goal attainment and integrated marketing organization.

According to Kohli and Jaworski (1990), while the marketing concept is defined as the philosophy that guides the allocation of resources and formulation of strategies for an organization, market orientation is considered to be the activity involved in the implementation of the marketing concept (Hooley et al., 1990).

Specifically, according to Kohli and Jaworski (1990), market orientation refers to three core aspects, namely, the generation of market intelligence, the dissemination of this intelligence and the organisation-wide responsiveness to it. The Narver and Slater (1990) definition complements this, with three behavioural components (customer orientation, competitor orientation, interfunctional co-ordination) and two decision criteria (long-term focus, profit objective). Based on the scales of Narver and Slater (1990) Jaworski and Kholi (1993), Gray et al. (1998) developed a comprehensive measure of market orientation including interfunctional co-ordination, profit emphasis, competitor orientation, customer orientation and responsiveness dimensions.

Still, Lafferty and Hult (1999) in synthesising 5 perspectives namely the decision-making, the market intelligence, the culturally-based behavioral, the strategic and the customer perspectives (Kohli and Jaworski, 1990; Narver and Slater, 1990), then define market orientation as 4 components: emphasis on customer, importance of information, inter-functional coordination and taking action.

Sin et al. (2003), in testing the Narver and Slater (1990) instrument on 200 Ivory Coast managers, found that there was a direct relationship, May-deu-Olivares and Lado (2003) who used the market orientation scales on a sample of 554 senior executives and directors in the European Union, found that any orientation-performance relationship was mediated by innovation.

While Chelariu et al. (2002), in testing the Narver and Slater (1990) and Kohli and Jaworski (1990) instrument on 200 Ivory Coast managers, found that the measure of Narver and Slater (1990) outperformed the Kohli and Jaworski (1990) instrument, Gray et al. (1998) found that the measure of Kohli and Jaworski (1990) performed better than that of Narver and Slater (1990). Furthermore, Chelariu et al. (2002) suggest that market orientation consisted of two components: intelligence generation and responsiveness.

Day (1994) defined capabilities as “complex bundles of skills and accumulated knowledge, exercised through organizational processes, which enable firms to coordinate activities and make use of their assets.” Management’s task is to exploit and leverage firm specific assets and capabilities.

Yeung et al. (1996) specified core competencies for HR executives as three areas that were business knowledge, customer orientation, effective communication, credibility and integrity, and systemic perspective.

Raelin and Cooledge (1996) identified the 14 competency factors which effect on organizational performance. These were managing work, managing people, technological leadership, innovation/change, client relations, ethics, communications, team orientation, system integration, financial management, extra effort, practical orientation, and quality commitment.

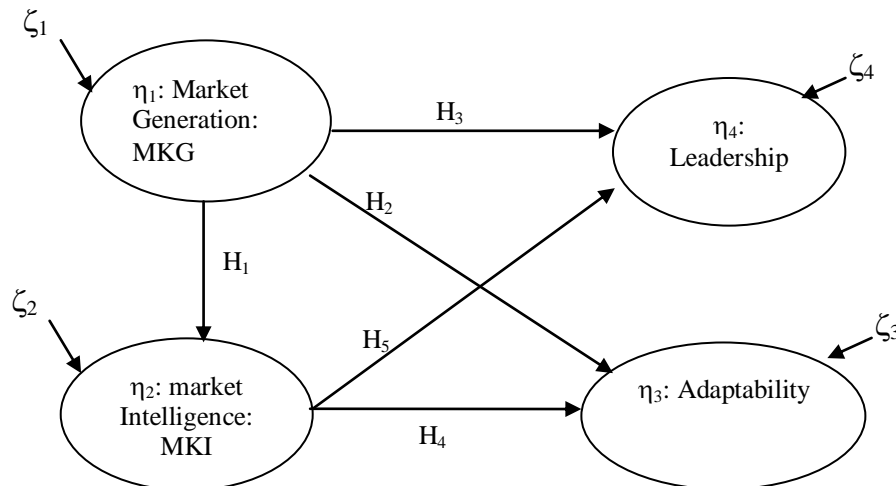
Buckley and Monks (2004) have classified manager competencies into three factors. They include basic knowledge and information (i.e. command of basic facts, and relevant professional knowledge qualities), skills and attributes (namely continuing sensitivity to events, analytical problem-solving skills, social skills and abilities, emotional resilience, and proactivity qualities), and meta-qualities (such as creativity, mental ability, balanced learning habits and skills, and self-knowledge qualities). Haber and Reichel (2007) suggested that human capital of entrepreneur, particularly managerial skills, were the greatest contributing factor to performance. There was the influence of skilled work force, efficient production, and new business development capabilities on the human resource efficiencies (Wright, 1998). The capabilities of adaptive, resourceful innovation, proactive change, and risk anticipation were the core component of strategic human resource management (Wang, and Wang, 1995).

Day (2011) explicated an adaptive marketing capabilities evolve three stages such as static, dynamic and adaptive. Static stage centers on inside-out, internal efficiency, and reliability of process, whereas dynamic stage focuses on outside-in and anticipate and respond.

Kahn (2009) proposed that marketing functional initiatives be easier to implement and be less resource consuming than multi-functional initiatives and cross-functional initiatives. Furthermore, functional initiatives reflect levels of combination, externalization, internationalization, and socialization than multi-functional initiatives and cross-functional initiatives. In short effective organizations have achieved proper differentiation and integration of functions within the organization. Chiou and Chang (2009) suggested that the effect of management leadership style on market orientation and collaboration between the management and the employees, and business performance.

In addition to Gao and Bradley (2007) indicated that, the openness to change values, conservation, self-enhancement, and self-transcendence are positively related to MO such as customer orientation, competitor orientation, and inter-functional coordination. Similarly, Scott (2012) pointed out that the leadership construct encompasses 4 attributes include charisma, intelligence, vision, and integrity are effected on market management.

A synthesis of recent empirical studies suggests that the following MMAL model (see figure 1) could be useful for exploring market generation, market intelligence, leadership, and adaptability competency of the SMEs in the upper Northeast of Thailand.

Figure-1. The MMAL model

3. Objectives and Hypothesis

The paper is aimed to model the market orientation and entrepreneurial competency and examine the relationship between the market generation, market intelligence, adaptability, and leadership of a SMEs in the upper Northeast of Thailand.

Most research studying the link between market orientation and entrepreneurial competency has been conducted in the United States of America. Jaworski and Kholi (1993) found a positive relationship between market orientation and overall performance (Sin et al., 2003; Hooley et al., 1990). Specifically, Matsuno and Mentzer (2000) reported a positive relationship between market orientation and market share growth, relative sales growth, and new product sales (Baker, and Sinkula, 1999). Based on the above discussion, the following hypotheses about the market orientation – entrepreneurial competency link are formulated and tested in this study. Thus the following hypothesis is postulated:

H₁) there is a causal relationship between the market generation and market intelligence in SMEs Thailand ($\beta_{21} \neq 0$).

Gao and Bradley (2007) indicated that, the openness to change values, conservation, self-enhancement, and self-transcendence are positively related to MO such as customer orientation, competitor orientation, and inter-functional coordination (Chiou and Chang, 2009). Mavondo et al. (2005) stated that MO has related to human resource practices. Thus the following hypothesis is postulated:

H₂) there is a causal relationship between the market generation and adaptability in SMEs Thailand ($\beta_{31} \neq 0$).

H₃) there is a causal relationship between the market generation and leadership in SMEs Thailand ($\beta_{41} \neq 0$).

H₄) there is a causal relationship between market intelligence and adaptability of the community enterprise network in the upper Northeast of Thailand ($\beta_{32} \neq 0$).

H₅) there is a causal relationship between market intelligence and leadership in SMEs Thailand ($\beta_{42} \neq 0$).

4. Methodology

4.1. The Sample and Data Collection

The research mainly involves a survey design. It includes a pilot test using undergraduate business students at Udon Thani Rajabhat University, for pretesting questionnaire items. The data were collected via personal interview questionnaires. Respondents were asked to rate, on a five-point Likert scale, their agreement or disagreement on the market orientation dimensions. In March 2013, 450 questionnaires were distributed to SMEs in 4 provinces (Udonthani, Nongkhai, Beungkan and

Loei). There were 395 completed questionnaires. The response rate of about 88% which was very high.

4.2. Developing a Better Measure

The aims of the present study are to validate what appear to be promising measures of market orientation and to develop scales for measuring market orientation in the Thailand context. Most measures have been academically, rather than managerially. Developing a more efficient scale has important implications for senior executives who may wish to assess their companies' levels of market orientation and to take steps to improve this, given some evidence of an orientation-performance link. Whereas Jaworski and Kohli's (1993) later study also addresses managerial and organisational antecedents and consequences of a marketing orientation. It is considered important to first establish the dimensions of market orientation in the Thailand context, before examining environmental and organizational antecedents and the consequences of a market orientation- entrepreneurial competency relationship.

Table-1. Measurement of MMAL constructs

Scale	Scale Items
Market Generation	<p>In the SME, we do a lot of in-house market research (T2).</p> <p>We periodically review the likely effect of changes in our business environment (T6).</p> <p>We interdependence meetings at least once a quarter to discuss market trends and developments (T7).</p> <p>Market personnel in our SME spend time discussing customers' future needs with other functional department (T8).</p> <p>When something important happens to a major customer of market, the whole SME knows about it within a short period (T9).</p> <p>Data on customer satisfaction are disseminated at all levels in this SME on a regular basis (T10).</p> <p>For one reason or another we tend to ignore changes in our customer's product needs (T13).</p> <p>We periodically review our product development efforts to ensure that they are in line with what customers want (T14).</p> <p>Several departments get together periodically to plan a response to changes taking place in our business environment (T16).</p> <p>The activities of the different departments in this SME are well coordinated (T19).</p>
Market Intelligence	<p>We are slow to detect changes in our customers' product preferences(T3).</p> <p>We are slow to detect fundamental shifts in our industry(T5).</p> <p>Principles of market segmentation drive new product development efforts in the SME (T12).</p> <p>If competitors were to launch an intensive campaign targeted at our customers, we would implement a response immediately (T18)</p>
Adaptability	<p>General knowledge (X13.)</p> <p>Expertise(X14.)</p> <p>Flexibility(X15).</p> <p>Intelligence(X16).</p> <p>Technical knowledge(X17.)</p>
Leadership,	<p>Change Agent/Change leader (X1.)</p> <p>Team Motivation(X2.)</p> <p>Resource Allocation(X3.)</p> <p>Human Resource Management(X4.)</p> <p>Continuous improvement(X6.)</p>

4.3. Questionnaire Design

This study utilized parts of the instruments (see Table 1) to test market orientation (Jaworski and Kohli, 1993; Narver and Slater, 1990) in Thai SMEs. A total of 19 items were chosen using Cronbach Alpha scores from the original studies as the basis for selection. All these questions are divided into 4 sections including market generation, market intelligence adaptability and leadership.

4.4. Validity

This study adopted the Gerbing and Anderson (1988) methodology to determine the construct, criterion and discriminant validity of the market orientation measures. This necessitated asking a number of questions about entrepreneurial competency in SMEs to determine criterion or predictive validity, as there is some empirical evidence which suggests that market orientation should be positively related to performance. Three relative/subjective marketing measures (sales growth, dividend provision, and member satisfaction) were used to provide criterion validity.

Three business philosophy statements used by Kohli et al. (1993) to determine the convergent and discriminant validity of the market orientation measures were also included in the questionnaire. These cover market generation, market intelligence adaptability and leadership, with marketing philosophy expected to be more closely associated with the major market orientation measures than other business philosophies.

Discriminant validity is required when evaluating measures (Churchill, 1979), especially when the measures are interrelated, as in the case of market generation, market intelligence adaptability and leadership.

4.5. Analytical Techniques

Before the data were analyzed, the questionnaires were reviewed to ensure that appropriate information was being collected and defective questionnaires were discarded. The complete questionnaires were coded and the data keyed into the computer. At this time, the LISREL 8.30 was applied to the analyzing process and a data analyst was employed to supervise.

It was the most important part of the survey. This paper mainly employed three statistical techniques to analyze the SMEs data. They were factor analysis, multiple regressions and structural equation modeling (Bollen, 1989; Byrne, 1998; Hulland et al., 1996).

5. Results

5.1. Hypotheses Testing

Assessing fit between model and data

The analysis begins with the calculation of the mean and standard deviation for each unweighted, interval scale. We also report covariance between each summed scale in Table 3. The overall adequacy of the proposed theoretical framework is examined using LISREL 8.30 causal modeling procedures (Joreskog and Sorbom, 1996).

A substantial portion of the variance in the market orientation and entrepreneurial competency in SMEs has been explained by the model. The results are shown in Table 3. RMSEA of 0.049, GFI of 0.85, AGFI of 0.82, and CFI of 0.97. The five hypothesized direct effects are supported significantly at levels of $p < 0.05$ level (Bentler, 1990; Bentler & Bonett, 1980).

Table- 3. Hypotheses testing

Hypothesized Paths	Expected Sign	Standardized Coefficients	t	A/R
H1 MKG → MKI	+	0.30	4.29***	✓
H2 MKG → adapt	+	0.56	7.25***	✓
H3 MKG → Leader	+	0.56	7.42***	✓
H4 MKI → adapt	+	0.34	4.94***	✓
H5 MKI → Leader	+	0.21	3.25***	✓

Notes: $\chi^2=524.42$; significance 0.0; df=225; NFI=0.95; NNFI=0.97; CFI=0.97; GFI=0.85; AGFI=0.82; RMSEA=0.049.

A/R, acceptance or rejection of hypothesis. ^aHypothetical sign of the relation, **p<0.05 and t>1.96; ***p<0.01 and t>2.58

* Indicates significance at p<.01 level

Table-2. Mean, standard deviation, covariance matrices

	t3	t5	t12	T18	X1	X2	X3	X4	X6	x13	x14	x15	x17	T2	T6	T7	T8	T9	T10	T13	T14	T16	t19	
t3	0.77																							
t5	0.57	0.87																						
t12	0.58	0.58	0.90																					
t18	0.49	0.57	0.55	1.01																				
x1	0.06	0.07	0.12	0.09	0.41																			
x2	0.13	0.15	0.12	0.13	0.26	0.44																		
x3	0.14	0.16	0.12	0.16	0.28	0.31	0.44																	
x4	0.16	0.21	0.17	0.23	0.22	0.28	0.30	0.54																
x6	0.11	0.13	0.09	0.14	0.20	0.23	0.26	0.28	0.54															
x13	0.16	0.19	0.18	0.20	0.11	0.17	0.18	0.23	0.18	0.47														
x14	0.14	0.16	0.12	0.14	0.11	0.16	0.15	0.17	0.14	0.24	0.46													
x15	0.14	0.24	0.16	0.18	0.15	0.20	0.20	0.24	0.22	0.27	0.24	0.51												
x17	0.15	0.22	0.16	0.19	0.14	0.21	0.21	0.23	0.20	0.23	0.21	0.26	0.48											
t2	0.15	0.09	0.09	0.11	0.13	0.18	0.15	0.17	0.13	0.15	0.15	0.11	0.15	0.47										
t6	0.13	0.21	0.12	0.23	0.09	0.17	0.15	0.21	0.16	0.19	0.14	0.18	0.19	0.26	0.56									
T7	0.14	0.12	0.15	0.22	0.15	0.17	0.16	0.23	0.18	0.18	0.10	0.11	0.15	0.30	0.28	0.76								
T8	0.10	0.10	0.09	0.17	0.13	0.19	0.16	0.19	0.17	0.18	0.15	0.17	0.15	0.31	0.25	0.48	0.57							
T9	0.10	0.09	0.09	0.18	0.14	0.17	0.17	0.19	0.19	0.16	0.11	0.13	0.15	0.26	0.25	0.41	0.38	0.49						
t10	0.08	0.08	0.09	0.20	0.13	0.16	0.13	0.16	0.16	0.15	0.11	0.14	0.13	0.26	0.28	0.37	0.36	0.38	0.53					
t13	0.14	0.18	0.24	0.19	0.15	0.16	0.15	0.17	0.17	0.17	0.12	0.15	0.13	0.27	0.27	0.30	0.29	0.26	0.25	0.52				
t14	0.10	0.14	0.14	0.13	0.13	0.17	0.15	0.17	0.16	0.17	0.13	0.14	0.15	0.25	0.24	0.30	0.26	0.25	0.24	0.31	0.47			
t16	0.11	0.13	0.10	0.13	0.13	0.13	0.15	0.17	0.13	0.16	0.14	0.13	0.14	0.23	0.24	0.27	0.27	0.24	0.23	0.23	0.27	0.45		
t19	0.05	0.12	0.06	0.11	0.09	0.13	0.12	0.14	0.12	0.14	0.10	0.16	0.11	0.20	0.21	0.25	0.25	0.22	0.21	0.25	0.24	0.22	0.45	

The results of the hypothesis testing are provided in Table 3, along with parameter estimates, their corresponding t- values, and the fit statistics. As shown in Table 3, the H₁₋₅ are supported.

H₁ suggested that there is a causal relationship between the market generation and market intelligence in SMEs was supported ($\beta_{21} = 0.30, p < 0.01$).

H₂ predicted that there is a causal relationship between the market generation and adaptability in SMEs was supported ($\beta_{31} = 0.56, p < 0.01$).

H₃ predicted that there is a causal relationship between the market generation and leadership in SMEs was supported ($\beta_{41} = 0.56, p < 0.01$).

H₄ predicted that there is a causal relationship between market intelligence and adaptability in SMEs was supported ($\beta_{32} = 0.34, p < 0.01$).

H₅ predicted that there is a causal relationship between market intelligence and leadership in SMEs was supported ($\beta_{42} = 0.21, p < 0.01$).

5.2. Assessing Reliability and Validity of Constructs

In the paper, the composite reliability, variance extracted estimates, convergent validity, and discriminant are examined.

Composite reliability reflects the internal consistency of the indicators measuring a given factor (Fornell and Larcker (1981). The composite reliability values for each market orientation dimension are shown in Table 4. As shown, the composite reliability score for each dimension is relatively high (>.70). In addition, the Cronbach’s Alpha values for each of market orientation dimensions are shown in Table 4, which greater than 0.70 (Bagozzi, 1988).

6. Discussion and Conclusion

The purpose of this study is to model the market orientation and entrepreneurial competency and examine the relationship between the market generation, market intelligence, adaptability, and leadership of SMEs in the upper Northeast of Thailand. This finding would be consistent with the research by many scholars. The result was that hypothesis 1, the market generation is related to market intelligence. This finding would be consistent with the research by Caruana (1999); Chelariu et al. (2002) and Verhees and Meulenber (2004). However, it does not coincide with the studies by Kohli et al. (1993); Kohli and Jarwoski (1990); Pitt et al. (1996); Matsuno et al. (2000), Varela and del Rio (2003), Lafferty and Hult (1999) and Gray, et al. (1998); and Henderson (1998).

The result was that hypothesis 2 is supported. It is shown that the generation has its predicted relationship with adaptability. This hypothesis confirms the results of Matsuno and Mentzer (2000); Baker, and Sinkula, (1999).

Table- 4. Properties of the CFA for

Construct indicators	Standardized loadings	t-value	Composite reliability	Variance extracted estimate: AVE	Cronbach's Alpha
MKG			0.91	0.52	0.85
T2	0.71	-			
T6	0.64	9.94			
T7	0.76	11.84			
T8	0.83	12.91			
T9	0.82	12.80			
T10	0.77	11.99			
T13	0.69	10.84			
T14	0.70	10.48			
T16	0.67	9.67			
MKI			0.87	0.63	0.76
T3	0.83	-			
T5	0.84	15.20			
T12	0.80	14.31			
T18	0.71	12.19			
LEADER			0.86	0.57	0.79
X1	0.73	-			
X2	0.81	12.46			
X3	0.86	13.21			
X4	0.72	11.18			
X6	0.64	9.79			
ADAPT			0.80	0.51	0.78
X13	0.75	-			
X14	0.66	9.71			
X15	0.74	10.73			
X17	0.69	10.06			

*indicates significance at $p < 0.01$ level

In addition, the result of hypothesis 3 shows that market generation is linked to leadership in SMEs. This hypothesis is contrary to the finding by Kohli et al. (1993); Kohli and Jarwoski (1990). Thus, this finding would be consistent with the research by studies by Gao and Bradley (2007); Chiou and Chang, (2009) and Mavondo et al. (2005).

Then, the result of hypothesis 4 indicates that in SMEs, market intelligence has a positive relationship with adaptability. This finding confirms most previous studies by studies by Chiou and Chang, (2009) and Mavondo et al. (2005).

Eventually, hypothesis 5 reveals that in SMEs, market intelligence has a positive relationship with leadership. This finding confirms most previous studies by Gao and Bradley (2007); and Mavondo et al. (2005) that MO has related to human resource practices.

7. Research and Managerial Implications

For the researchers, this study has implications on the examination of the link between the market orientation and entrepreneurial competency. Firstly, this paper provides a test of the applicability of the western paradigm to the Thai economy with cultural and economic systems different from the US.

My paper validates Kohli et al. (1993)'s market orientation scales in a Thai context based on data obtained from the members of Thai SMEs. Though this scale was originally developed in the US for the SBU level, findings suggest that the scale appears to be less likely to capture the construct of market orientation in Thailand with different economic and cultural environments. It might be risky to conclude that Kohli et al.'s market orientation scale is a valid and reliable scale that can be used across a variety of companies, industries and cultures.

For a managerial perspective, an entrepreneur who implements strategies in different environment settings cannot have an ethnocentric view about management imperatives. The entrepreneur in Thai SMEs should have a marketing manager for continuously monitoring customer needs and competitors' strategies to propose integrated marketing strategies in a timely manner in the market. In addition, SMEs should increase communication channels, or develop a means for distributing customer and competitor intelligences to their members. It might be collaborated among Thailand officials, such as The Institute for Small and Medium Enterprises Development (ISMED) and Commission on Higher Education. However, this study found that market orientation is strongly related to entrepreneurial competency. The SMEs should place emphasis on customer care, concern for employees and members' welfare, have reliance on intuition and awareness of the competitive and technological environments.

8. Limitations and Future Research

Although this paper has provided relevant and interesting insights into the understanding of the components of market orientation structure and the relationship between market orientation and entrepreneurial competency in Thai SMEs, it clearly recognizes the limitations associated with this study. First, cross-sectional data were used in the paper. Subsequently, the time sequence of the relationships between market orientation and entrepreneurial competency cannot be determined unambiguously. Therefore, the results might not be interpreted as proof of a causal relationship, but rather as lending support for a prior causal scheme. The development of a time-series database and testing of the market orientation relationship with entrepreneurial competency in a longitudinal framework would provide more insight into probable causation.

Second, the conceptualization of market orientation may be somewhat limited and it is arguable that market orientation may consist of more than market information gathering, and the development and implementation of a market-oriented strategy.

Third, the LISREL methodology may be construed as a limitation because the results presented here are based on the analysis of a causal non-experiment design.

9. Acknowledgement

The author sincerely thanks anonymous reviewers for their very helpful comments and input; Professor Nash for his very thorough readings of the paper and his welcomes suggestions for explanations regarding particular topics. Financial support from Thailand Research Fund is gratefully acknowledged.

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