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Market Orientation and Performance within Community Enterprises in Upper Northeastern Region of Thailand

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ABSTRACT

The paper is designed to provide a quantitative measure of the effects of market orientation on the performance of the silk-weaving community enterprise's network in the upper Northeast of Thailand. The objectives of this study are two-fold, (1) to examine the validity and reliability of the measure of the market orientation, and (2) to examine the causal relationship between intelligence generations, intelligence dissemination and organizational responsiveness and the performance of the community enterprise network in the upper Northeast 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 investigation into intelligence generations, intelligence dissemination and organizational responsiveness attributes necessitates uncovering variables of interest and this involves a large-scale field study.

The data were collected via questionnaire interviews from 192 samples. They included the members of textile community enterprises in 3 provinces (Nong Bua Lamphu, UdonThani, and Loei). Respondents were asked to rate, on a five-point Likert scale, their agreement or disagreement on the market orientation attributes. LISREL 8.30 was used for data analysis since the proposed model is a simultaneous system of equations having latent constructs and multiple indicators. Quantitative data were analysed by the statistical technique, such as structural equation modelling.

The study found that market orientation consists of intelligence generations, and organizational responsiveness of the silk-weaving community enterprise network in the upper Northeast of Thailand. The study also found that there is a causal relationship between intelligence generations, and organizational responsiveness on the performance of the community enterprise network in the upper Northeast of Thailand. The managerial implications are discussed.

Keywords: Marketing concept, Market orientation, Community Enterprise.

INTRODUCTION

Market orientation 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). In recent years, marketing scholars have focused on the development of marketing orientation in organizations. In recent year, marketing scholars 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 because they have been conducted in a developed 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 Kohli (1990) and Jaworski and Narver and Slater (1990), in Ivory Coast.

According to the tenth National Social and Economic Development Plan of Thailand, small and micro community enterprises (SMCE) will be developed. For sustainable growth, it is substantial to empower the local people in SMCEs. SMCEs are owned and managed by local communities, using the community's resources, with the community creating its own innovations, wisdom being integrated between local and global knowledge, integrating the various activities into the system, with learning as the key factor, and self-reliance being the ultimate goal. Since Thai SMCEs, located in northeastern of Thailand, are quite diverse across different industry sectors there are limits to local clustering and production systems, such as textile, agriculture, milling and tourism. Therefore, this study replicates and extends the market orientation research of Jaworski and Kohli (1993), using a silk-weaving SMCE sample in Thailand. The paper's aim is to study the development market orientation of the SMCE.

REVIEW OF LITERATURE

Defining Market Orientation

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 centre 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 Kohli (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.

It should be noted that there is still some equivocality over the market orientation-performance relationship. While 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.

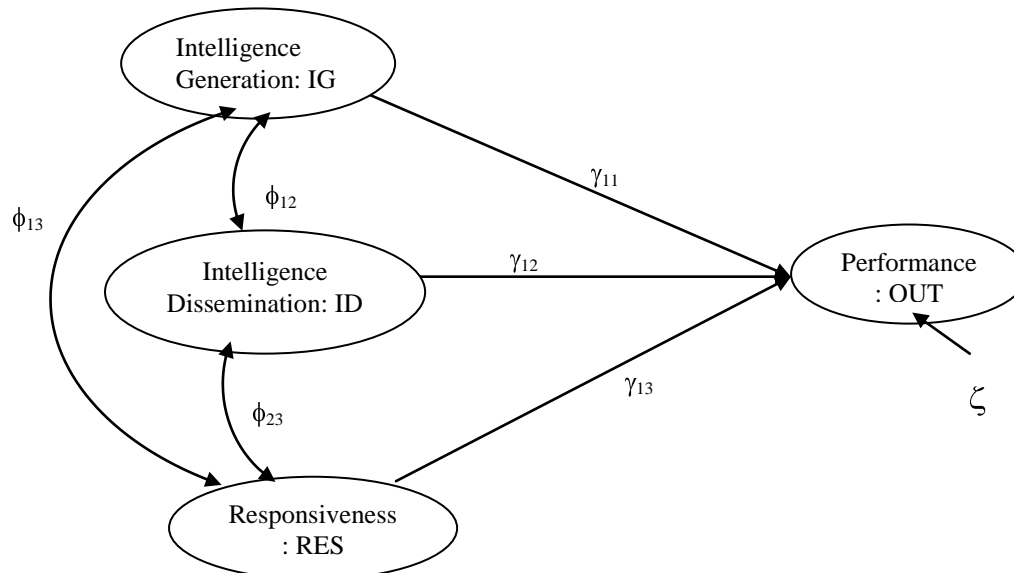


Figure 1: Path diagram of market orientation.

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.

A synthesis of recent empirical studies suggests that the following research model (see Figure 1) could be useful for exploring market orientation and performance relationships in a wide variety of country-market contexts. Figure 1 illustrates a visual presentation of 4 hypotheses.

OBJECTIVE AND HYPOTHESIS

The purpose of this study is to investigate the market orientation construct. The objectives of this study are twofold, (1) to examine the validity and reliability of the measure of the market orientation, and (2) to examine the relationship between intelligence generations, intelligence dissemination and organizational responsiveness and the performance of the community enterprise network in the upper Northeast of Thailand.

Kohli and Jaworski (1990) concluded that market orientation consists of three components: 1) the organization – wide generation of market intelligence pertaining to current and future customer need. 2) dissemination of the intelligence across departments, and 3) organization-wide responsiveness to this market intelligence (Jaworski and Kohli, 1993; Narver and Slater, 1990). Thus the following hypothesis is postulated:

H1) market orientation consists of intelligence generations, intelligence dissemination and organizational responsiveness ($\phi_{12}, \phi_{13}, \phi_{23} \neq 0$).

Most research studying the link between market orientation and performance has been conducted in the U.S. Empirical evidence has showed that market orientation has a positive effect on financial performance. 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 – performance link are formulated and tested in this study.

H2) there is a causal relationship between the intelligence generations and the organizational performance of the community enterprise network in the upper Northeast of Thailand ($\gamma_{11} \neq 0$).

H3) there is a causal relationship between intelligence dissemination and organizational performance of the community enterprise network in the upper Northeast of Thailand ($\gamma_{12} \neq 0$).

H4) there is a causal relationship between the organizational responsiveness and the performance of the community enterprise network in the upper Northeast of Thailand ($\gamma_{13} \neq 0$).

METHODOLOGY

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. In addition, this investigation into intelligence generations, intelligence dissemination and organizational responsiveness attributes necessitates uncovering variables of interest and this involves a large-scale field study.

The sample was drawn from a list of all small and micro community enterprises provided by the Secretariat Office of Community Enterprise Promotion Board (SCEB), Department of Agricultural Extension, Thailand. From the initial list of 568 firms, a sample of 226 was purposively selected.

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 November 2007, 226 questionnaires were distributed to 226 members of silk-weaving community enterprises in 3 provinces (Nong Bua Lamphu, UdonThani, and Loi). There were 192 completed questionnaires. The response rate of 85% was very high.

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, useful. Developing a more parsimonious and generalisable 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, the present study omits these. It is considered important to first establish the dimensions of market orientation in the Thailand context, before examining environmental and organisational antecedents and the consequences of a market orientation-performance relationship. This paper adapts the MARKOR scale in Thai SMCEs.

Questionnaire Design

This study utilised parts of the instruments (see Table 1) to test market orientation (Jaworski and Kohli, 1993; Narver and Slater, 1990) in Thailand SMCEs. 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 3 sections such as intelligence generation, intelligence dissemination and responsiveness.

Table 1: Market orientation questions

Scale	Scale Items
Intelligence Generation	<ol style="list-style-type: none"> 1. In the community enterprise, we meet with customers at least once a year to find out what products they will need in the future 2. In the CE unit, we do a lot of in-house market research. 3. We are slow to detect changes in our customers' product preferences. 4. We poll end users at least once a year to assess the quality of our products and services. 5. We are slow to detect fundamental shifts in our industry. 6. We periodically review the likely effect of changes in our business environment,
Intelligence Dissemination	<ol style="list-style-type: none"> 7. We interdependence meetings at least once a quarter to discuss market trends and developments. 8. Market personnel in our community enterprise spend time discussing customers' future needs with other functional department. 9. When something important happens to a major customer of market, the whole community enterprise knows about it within a short period. 10. Data on customer satisfaction are disseminated at all levels in this community enterprise on a regular basis.
Responsiveness	<ol style="list-style-type: none"> 11. It takes us forever to decide how to respond to our competitor's price changes.(R) 12. Principles of market segmentation drive new product development efforts in the community enterprise. 13. For one reason or another we tend to ignore changes in our customer's product needs. (R) 14. We periodically review our product development efforts to ensure that they are in line with what customers want. 15. Our business plans are driven more by technological advances than by market research (R). 16. Several departments get together periodically to plan a response to changes taking place in our business environment. 17. The product lines we sell depend more on internal politics than real market needs (R). 18. If competitors were to launch an intensive campaign targeted at our customers, we would implement a response immediately. 19. The activities of the different departments in this community enterprise are well coordinated.

Six questions deal with intelligence generation. This is one of the three constructs developed and validated by Jaworski and Kohli (1993). Market intelligence is the starting point of market orientation

and is a much broader concept than just finding out about customers. It includes informal mechanisms for generating information.

Intelligence dissemination is the subject of four questions. To effectively respond to market needs requires the participation of virtually all departments in the organisation. This involves both formal and informal means to keep the information flowing freely.

Nine questions deal with responsiveness to market intelligence. If the organisation generates intelligence and disseminates it, but then fails to act on it, then implementation of the marketing concept has stalled. Responsiveness involves the whole organisation, not just marketing personnel. This construct provides the final dimension for the measurement of market orientation.

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 SMCE performance 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 intelligence generation, intelligence dissemination, and responsiveness, 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 intelligence generation, intelligence dissemination, and response.

Analytical Techniques

Before the data were analysed, 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 analysing 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 analyse the SMCE data. They were factor analysis, multiple regression and structural equation modelling (Bollen, 1989; Byrne, 1998; Hulland et al., 1996).

RESULTS

Hypotheses Testing

Assessing fit between model and data

The overall adequacy of the proposed theoretical framework is examined using LISREL 8.30 causal modelling procedures (Joreskog and Sorbom, 1996). A substantial portion of the variance in the market orientation and SMCE performance has been explained by the model. The results are shown in Table 2. The model is a poor fit to the data at χ^2 (203) value of 764.89 ($P < 0.0000$), GFI of 0.71, AGFI of 0.64, and CFI of 0.80. In addition, the squared multiple correlation of structural equations for organizational performance is 0.54. Nevertheless, the fit indices yield information bearing only on the

model's lack of fit; the three hypothesized direct effects are supported significantly at levels of $p < 0.05$ level (Bentler, 1990; Bentler & Bonett, 1980).

Table 2: Estimates of Final Model

Hypothesis	Path		Hypothesized sign	Full sample	
	From	To		Std.	T-value
2	IG	OUT	$\gamma_{11} \neq 0$	-0.32	-3.10
3	ID	OUT	$\gamma_{12} \neq 0$	0.04	0.13
4	RES	OUT	$\gamma_{13} \neq 0$	0.87	2.56
Overall statistics for structural equation:					
			Full sample		
Squared multiple correlation (R^2): OUT			0.54		
Chi square statistic with 203 d.f.			764.89		
Goodness of Fit Index			0.71		
Adjusted Goodness of Fit Index			0.64		
CFI			0.80		

The intelligence generation has its predicted negative relationship ($t=-3.10$, H2 supported) with performance. The response has its predicted positive relationship ($t=-2.56$, H4 supported) with performance. However, contrary to my expectation ($t=0.13$, H2), intelligence dissemination is not related significantly to performance.

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 3. 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 3, which greater than .70(Bagozzi, 1988).

Table 3: Properties of the CFA for the market orientation

Construct indicators	Standardized loadings	t-value	Composite reliability	Variance extracted estimate	Cronbach's Alpha
Intelligence Generation			0.83	0.45	.85
X1	.45	6.39*			
X 2	.56	10.86*			
X 3	.63	10.90*			
X 4	.52	10.14*			
X 5	.60	11.41*			
X 6	.32	6.49*			
Intelligence Disseminate			0.78	0.48	.85
X 7	.20	4.63*			
X8	.40	10.19*			

X9	.44	11.48*
X10	.46	13.30*
Response		0.77 0.33 .70
X 11	.17	3.29*
X 12	.30	5.58*
X 13	.35	9.05*
X 14	.32	8.57*
X 15	.31	1.36
X 16	.28	7.38*
X 17	.49	8.82*
X 18	.41	10.40*
X 19	.48	14.02*

* Indicates significance at $p < .01$ level

Fornell and Larcker (1981) suggest that variance extracted estimates for the construct is of .50 or larger. The result was that that the variance extracted estimates construct are all a lower than .50. However, very often variance extracted estimates will be below .50, even when reliabilities are acceptable.

Convergent validity is demonstrated when different instruments are used to measure the same construct, and scores from these different instruments are strongly correlated. The convergent validity can be assessed by reviewing the *t*-test for the factor loadings (greater than twice their standard error) (Anderson and Gerbing, 1988). The *t*-test for each indicator loading is shown in Table 3. The result was that the construct demonstrates a high convergent validity because almost *t*-values are significant at the .01 level (except the R5 indicator).

Table 4: Test of discriminant validity for the market orientation-confidence interval

Dimension	Estimate	Standard Error	t-value	Lower boundary	Higher boundary
IG-ID	.61	.06	9.67	.49	.73*
IG-Res	.64	.06	11.16	.52	.76*
ID-Res	.92	.03	32.35	.86	.98*

* Does not contain the value 1.0

In addition, the confidence interval test to assess the discriminant validity between 3 factors involves calculating a confidence interval of plus or minus two standard errors around the correlation between the factors, and determines whether this interval includes 1.0. If it does not include 1.0, discriminant validity is demonstrated (Anderson and Gerbing, 1988). Table 4 shows the values of interval between 2 factors. They were 0.73, 0.76 and 0.98. That is to say that discriminant validity for the market orientation scale is supported because no range includes the value 1.0.

Table 5: Test of discriminant validity for the market orientation-extracted variance test

Dimension	Estimate	Square correlation	Variance extracted estimate
IG-ID	.61	.37*	.46
IG-Res	.64	.40	.40
ID-Res	.92	.84	.40

* The square of the correlation is less than both variance extracted estimates

Average variance extracted for each paired dimension is shown in Table 5. The average variance extracted of $(0.45+0.48)/2 = 0.46$ exceeds the square of the correlation (0.61^2) , which suggests that generation and intelligence dissemination are distinct. While the average variance extracted of $(0.45+0.33)/2 = 0.40$ is below the square of the correlation (0.92^2) , this suggests that intelligence dissemination and response are similar. This provides partial support for H1.

Table 6: Test of discriminant validity: χ^2 difference

Dimension	Name	Discriminant model (model 1)	Convergent model (model 2)
IG-ID	χ^2	150.82	291.72
	Degree of freedom (df)	34	35
	χ^2 difference	140.90*	
ID-Res	χ^2	251.45	259.72
	Degree of freedom (df)	64	65
	χ^2 difference	7.27*	
IG-Res	χ^2	551.24	708.37
	Degree of freedom (df)	89	90
	χ^2 difference	157.13*	

* Indicates significance at $p < .01$ level

The discriminant validity is also tested by setting individual paths of the Phi matrix to one and testing the resultant model against the original model (Cowdhury et al., 1998) using the D-square statistic. The model 1 shows intelligence generation, intelligence dissemination, and response as related but discriminant concepts. χ^2 differences for each paired dimension are shown in Table 6. The χ^2 s are 150.82, with a GFI of 0.85 ($p < 0.000$), 7.27, with a GFI of 0.82 ($p < 0.000$) and 157.13, with a GFI of 0.70 ($p < 0.000$). The second model presents intelligence generation, intelligence dissemination, and response as the same constructs with the resulting statistics of $\chi^2 = 291.72$ and GFI of 0.75 ($p < 0.000$), $\chi^2 = 259.72$ and GFI of 0.81 ($p < 0.000$), and $\chi^2 = 708.37$ and GFI of 0.65 ($p < 0.000$). The discriminant model (model 1) has a better fit and indicates that intelligence generation and intelligence dissemination are correlated at 0.61, 0.64 and 0.92 respectively supporting H1.

DISCUSSION

Our aim was to examine the market orientation in small and micro community enterprises in Thailand.

The result was that hypothesis 1 is partially supported. It is shown that the market orientation consists of 3 components including the intelligence generation and responsiveness. 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 intelligence generation has its predicted negative relationship with performance. This hypothesis confirms the results of Verhees and Meulenber (2004) and Blankson et al. (2006). But it is contradictory to Mavondo, et al. (2006), Maydeu-Olivares and Lado (2003)'s empirical finding that there is a positive relationship with performance. One explanation for the findings may be that, given the scarcity of financial resources and marketing expertise in an SMCE setting, intelligence generation is perceived as a costly and uncertain undertaking (Chelariu et al., 2002)

In addition, the result was that hypothesis 3 is not supported. It suggests that intelligence dissemination is not linked to the organizational performance of a community enterprise. This hypothesis is contrary to the finding by Kohli et al. (1993); Kohli and Jarwoski (1990). The rationale of this finding might be that the relatively small size of SMCE makes diffusion of information less problematic. Nevertheless, this finding would be consistent with the research by Caruana (1999); Chelariu et al. (2002).

The result was also that hypothesis 4 is supported. It is indicated that in SMCEs, responsiveness has a positive relationship with performance. This finding confirms most previous studies by Kohli et al. (1993); Shoham et al. (2005); Sin et al. (2003); Green, et al (2005); and Untachai (2007).

Research and Managerial Implications

For the researcher, this study has implications on the examination of the link between the market orientation and performance. 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 SMCEs. 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.

Secondly, the market orientation related to performance. It might be concluded that the link can be tested in other sectors such as retailing and hotel.

For a managerial perspective, an entrepreneur who implements strategies in different environment settings cannot have an ethnocentric view about management imperatives. This study provides some guidelines for entrepreneurs handling market orientation across the country. For example, the result of the study demonstrates that intelligence generation has a negative link to performance. The entrepreneur in a Thai SMCE 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. Subsequently, the study found a non-significant link between intelligence dissemination and performance. Thus, SMCEs 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 Department of Agricultural Extension, Community Development Department and Commission on Higher Education. However, this study found that responsiveness is strongly related to performance. The SMCEs should place emphasis on customer care, concern for employees and members' welfare, have reliance on intuition and awareness of the competitive and technological environments.

In summary, despite a lack of a formal approach to market research and marketing planning, the SMCEs were found to have a positive effect on their margins.

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 performance in Thai SMCEs, 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 performance 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 performance 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.

CONCLUSION

The purpose of this study is to examine the causal relationship between intelligence generations, intelligence dissemination, organizational responsiveness and the performance of the community enterprise network in the upper Northeast of Thailand.

Three out of the four hypotheses have been supported in this study. Consistent with the first hypothesis, the market orientation consists of intelligence generations and organizational responsiveness. The second hypothesis reveals that the intelligence generation has its predicted negative relationship with performance. One explanation for the findings may be that, given the scarcity of financial resources and marketing expertise in a developing economy, intelligence generation is perceived as a costly and uncertain undertaking (Chelariu et al., 2002). Hypothesis three is not supported. In short intelligence dissemination does not relate to organizational performance of community enterprise's network in the upper Northeast of Thailand. Finally, the fourth hypothesis also supported the view that there is a causal relationship between organizational responsiveness and the performance of the community enterprise network in the upper Northeast of Thailand.

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