

Are SMEs ready for ASEAN Economic Community (AEC) in the coming year 2015?

Jarut Kunanoppadol

*Department of Mechanical Engineering, Faculty of Engineering and
Industrial Technology, Silpakorn University, Thailand
Corresponding author. E-mail address: jarut@su.ac.th*

Abstract

This research aimed to investigate the awareness and preparation of Small and Medium Enterprises (SMEs) in ASEAN Economic Community (AEC) in the coming year 2015. The primary data was collected from 100 SMEs in Nakorn Pathom province, Thailand by questionnaire. The characteristics of SMEs significantly affect the awareness and preparation of AEC. The small businesses, the local customer businesses, and the retailers have lowest score in both awareness and preparation. The knowledge transfer and information support are urgently necessary for these groups.

Key Words: ASEAN Economic Community, awareness, strategic preparation, SMEs, Thailand

Introduction

Small and Medium Enterprises (SMEs) are the businesses with no more than 200 employees and 2 million baht in assets (\$6.7 million approximately). Until 2010, SMEs have created more than 10.5 million jobs -three-fourths of Thai workforce (Office of Small and Medium Enterprises Promotion, 2010). In 2011, the Gross Domestic Product (GDP) value of SMEs was 3,859,587.6 million baht (\$128,652.92 million approximately) or 36.6% of the country's GDP (Office of Small and Medium Enterprises Promotion, 2012). In the coming year 2015, the ASEAN Economic Community (AEC) will be put into action and affect all businesses not only large companies, but also SMEs. The AEC aims to expand the economic relationship of countries in ASEAN by focusing on business transaction between the countries in the ASEAN Free Trade Areas (AFTA) (Jarunee Thongpaiboonkit, 2012; Peter A. Petri et al., 2010; Theresa Maria and L. Taguiang, 2009). According to the AEC blueprint, there are four main missions as the following: (1) to become the one market, (2) to improve the competitive advantage in global market, (3) to develop the economics of member countries equally, and (4) to connect the ASEAN economics to the global (Penchan Manawanitkul, 2011; Somkiet Treerattanapun, 2012). The coming of the AEC will be the important macro environmental change affecting all businesses. For large enterprises, they always have capability to research, plan, and develop themselves for this opportunity. The questions that should be concerned are: Are SMEs ready for the AEC? Is AEC an opportunity or a threat? With these questions, it is important to investigate the awareness and preparation of SMEs in AEC.

Methodology

The research population was 504 SMEs in Nakorn Pathom province, Thailand (The Federation of Thai Industries, 2012). The sample size was set to be 100 businesses (Yamane, 1967), and sampling was done by the simple random sampling method (Rovinelli and Hambleton, 1976). The questionnaire was written in Thai for convenience to collect the primary data from SMEs. It was divided into three parts based on the

research framework as shown in Figure 1. The first part focused on general information of SMEs: size, main customer, and type of business. The second part was for measure an awareness of AEC consisting details and benefits of AEC. The third part was for measure a preparation of SMEs for AEC including passive and active strategies. The details of an awareness of AEC and a preparation of SMEs for AEC are respectively shown in Table A-1 in the appendix.

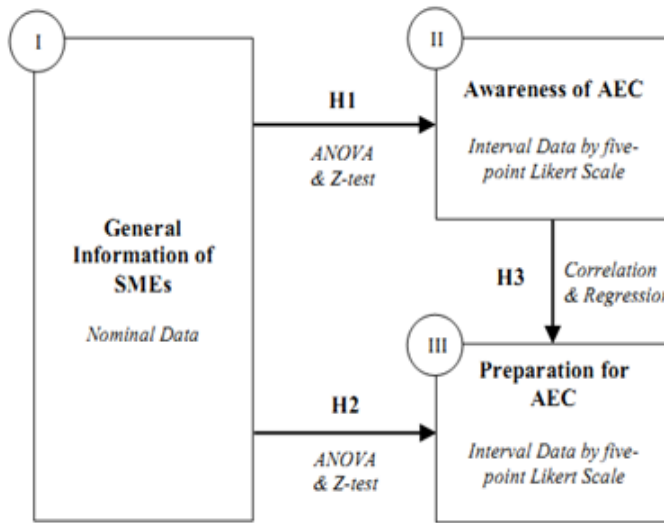


Figure 1: Research Framework

The questions in part I were designed in check-list format, while the questions in part II and III were designed in five-point Likert scale format. The index of Item Objective Congruence (IOC) and reliability analysis with Cronbach's alpha of the questionnaire was considered. The overall Cronbach's alpha of questionnaire was 0.978. The list of questions, the reliability analysis, and the item loading results are shown in Table A-1 in the appendix. The data collecting was done by various methods: walk-in, telephone call, and fax. This generated a 100% respond rate. Percentage was used to summarize the data for part I, while mean and 95% confidence interval were used for part II and III.

The hypothesis was set based on the research framework as the following:

- H1:** Characteristics of SMEs affect awareness of AEC.
- H2:** Characteristics of SMEs affect preparation for AEC.
- H3:** Awareness of AEC affects preparation for AEC.

For hypotheses H1 and H2, one-way ANOVA was used for testing. In case a significantly difference was found, Post-hoc analysis was done by z-test. For hypothesis H3, correlation and regression were used to find the relationship between awareness and preparation of AEC.

Results and Discussion

From the descriptive results in Table 1, most of the SMEs in Nakorn Pathom province, Thailand are the medium businesses (80%) (Office of Foreign Workers Administration, 2010) with the local customers (41%), and most of them are manufacturers (56%). Figure 2 shows the main sources of AEC information that SMEs receive: radio and television (34%), newspaper (34%), and website (20%). Table 1 also shows the normal levels of AEC awareness and preparation (3.19 ± 0.17 and 2.91 ± 0.17 respectively).

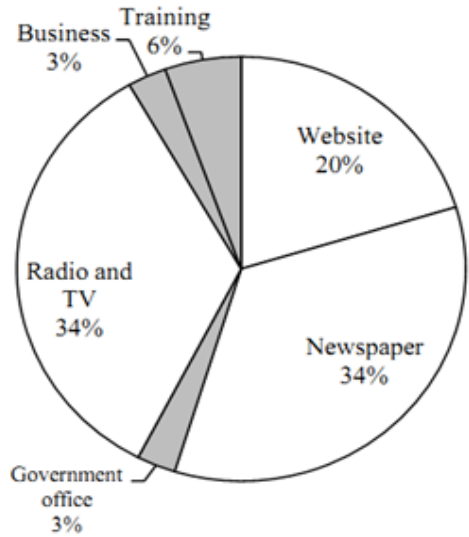


Figure 2: The source of AEC information that SMEs receive.

Table 1: General information of SMEs

		Awareness of AEC	Preparation for AEC
<u>Size of business (depended on capital)</u>			
Small: <50 million Baht (» \$1.7 million)	20%	2.72±0.42	2.46±0.48
Medium: 50-200 million Baht (» \$1.7-6.7 million)	80%	3.31±0.17	3.03±0.16
<u>Main customers</u>			
Local customers	41%	2.77±0.25	2.56±0.24
National customers	32%	3.15±0.26	2.83±0.30
International customers	27%	3.89±0.22	3.45±0.20
<u>Type of business</u>			
Manufaturer	56%	3.42±0.18	3.19±0.17
Service	11%	3.08±0.41	2.96±0.46
Wholesaler	10%	3.22±0.59	2.83±0.47
Retailer	23%	2.67±0.43	2.26±0.40
Overall SMEs		3.19±0.17	2.91±0.17

For hypothesis H1, one-way ANOVA is used and the results are shown in Table 2. The differences in characteristic of SMEs affect awareness of AEC significantly. The medium businesses have a higher score than the small businesses (3.31 ± 0.17 and 2.72 ± 0.42) (Tatchawan Kanitphong, 2009; Thidarat Choksuchat, 2010). Considering the main customers, significantly difference was found. From Post-hoc analysis, the businesses with foreign customers have the highest score (3.89 ± 0.22) (Office of Small and Medium Enterprises Promotion, 2010). Moreover, the difference in business types also affects AEC awareness. The retailers have the lowest score (2.67 ± 0.43), and they are significantly different from the other types (G. J. Hay and G. Castilla, 2006; Houben et al., 1999), while the manufacturers have the highest score (3.42 ± 0.18). These results support hypothesis H1.

For the hypothesis H2, the results in Table 2 show that the characteristics of SMEs affect preparation for AEC significantly. The medium businesses have a higher score than the small businesses (3.03 ± 0.16 and 2.46 ± 0.48 respectively). The businesses with foreign customers also have the highest score (2.56 ± 0.24). The manufacturers have the highest score

(3.19 ± 0.17). The retailers also have the lowest score (2.26 ± 0.40) and significantly differ from other groups (G. J. Hay and G. Castilla, 2006; Houben et al., 1999). The hypothesis H2 is supported by these results.

Table 2: Hypotheses testing (H1, H2) by ANOVA

	SST	SSE	DF1	DF2	MST	MSE	F-Value	P-value
H1: Characteristics of SMEs affect awareness of AEC								
Size of business	5.539	68.101	1	98	5.539	0.695	7.971	0.006
Main customers	20.643	52.997	2	97	10.322	0.546	18.892	<0.0001
Type of business	9.508	64.132	3	96	3.169	0.668	4.744	0.004
H2: Characteristics of SMEs affect preparation for AEC								
Size of business	5.2	66.098	1	98	5.2	0.674	7.709	0.007
Main customers	16.015	55.282	2	97	8.008	0.57	14.051	<0.0001
Type of business	14.17	57.127	3	96	4.723	0.595	7.937	<0.0001

To investigate the hypothesis H3, the correlation analysis between the awareness of AEC and the preparation for AEC is done. The result shows that the awareness of AEC significantly relates to the preparation for AEC in every items. Therefore, the summarized score of the awareness of AEC and the preparation for AEC are calculated for regression analysis. The relationship between the awareness of AEC and the preparation for AEC is shown in Figure 3. The correlation of summarized awareness of AEC and summarized preparation for AEC is found to be 0.891 at significant level of 0.01. This result supports hypothesis H3. Figure 3 shows the effect of AEC awareness on the preparation. The simple regression equation is found to be:

$$P = 0.1125 + 0.8769^{***} A, (R^2 = 0.794) \quad (1)$$

The variable A is the AEC awareness score, P is the preparation for AEC, and *** means the statistical significant at the level 0.01. Finally, the awareness of AEC and the preparation for AEC are presented separately based on the characteristics of SMEs as shown in Figure 4. The small businesses, the local customer businesses, and the retailers have low level in the AEC awareness, therefore, they have low level in the preparation for AEC as well.

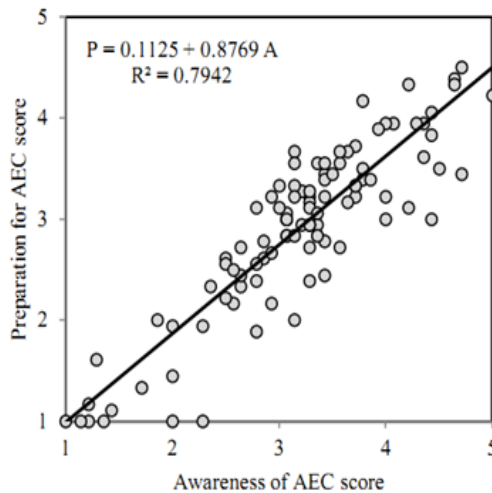


Figure 3: Correlation between Awareness (A) and Preparation (P) of SMEs in the ASEAN Economic Community (AEC)

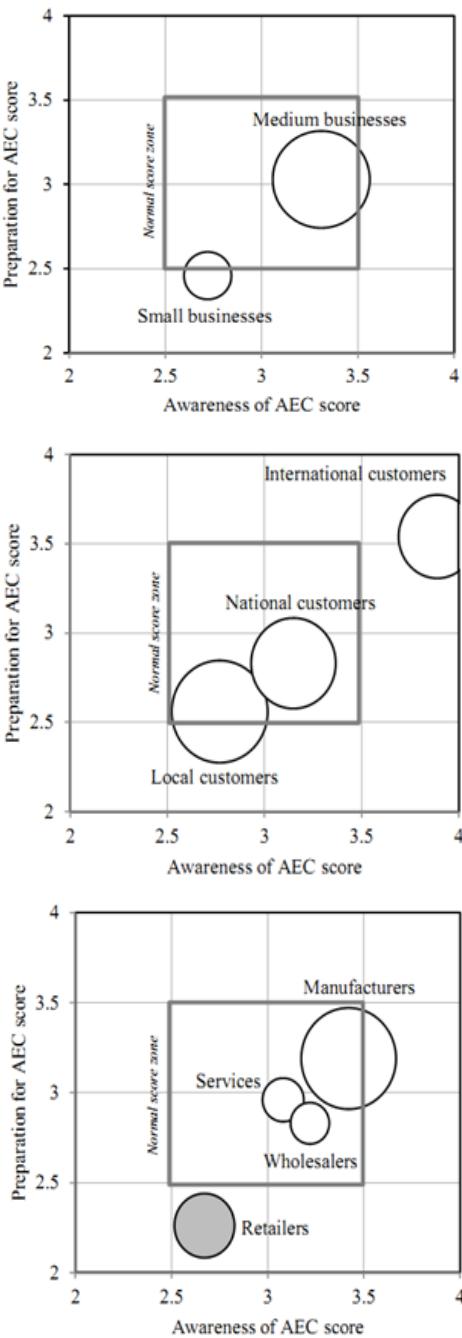


Figure 4: The awareness and preparation of SMEs in the ASEAN Economic Community (AEC)

Conclusion

The characteristics of SMEs in Nakorn Pathom, Thailand significantly affect the AEC awareness and the preparation for AEC. The businesses with international customers have high score in both. However, the small businesses, the local customer businesses, and the retailers have lowest score. The knowledge transfer and information support are urgently necessary for these groups because the AEC is coming in the year 2015. The high level in awareness can improve the preparation level significantly. This is importance for SMEs in Thailand.

Acknowledgement

This work was supported the Department of Mechanical Engineering, Faculty of Engineering and Industrial Technology, Silpakorn University, Thailand.

Appendix

There is the list of questions in part II and III - Awareness in AEC, and Strategic preparation. These also show the reliability analysis results.

Table A-1: Awareness and strategic preparation

Table A-1: Awareness and strategic preparation

Items	λ	α
Part II: The awareness in AEC		0.955
<i>Which level do you know about the AEC?</i>		
1) AEC aims to expand the economic relationship of countries in ASEAN by focusing on business transaction between the countries in the ASEAN Free Trade Area (AFTA)	0.951	
2) ASEAN has 10 member as follow: Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand, Cambodia, Laos, Myanmar, and Vietnam.	0.955	
3) AEC will have the international law to control quality, standard, price, tax rate, and transaction.	0.951	
4) Business will get more benefit in products transferring.	0.951	
5) Business will get more benefit in services transferring.	0.952	
6) AEC will generate worker transferring as follow: Engineer, Nurse, Architecture, Surveyor, Doctor, Dentist, and Accountant.	0.954	
7) Foreigner investor in AEC can hold the common stock to 70%.	0.954	
8) Business can invest in member countries freely.	0.951	
9) Protective tariff will be reduce into 0% within 2015.	0.952	
10) Business will be protect in copyright and licensing.	0.951	
11) Business will be supported in fair competitive.	0.950	
12) Business will be developed in communication, finance, bank to become more up-to-date and convenience.	0.950	
13) Business will be fairly developed and supported.	0.953	
14) SMEs will be improved performance and consulted by AEC offices.	0.956	

Items	λ	α
Part III: Strategy preparation for AEC		
<i>Which level of strategy do you prepare business for coming of AEC in 2015?</i>		
1) Find new raw material suppliers	0.962	0.964
2) Study the requirement of new markets	0.962	
3) Study the probability to move manufacturing base	0.962	
4) Study to improve the logistic system	0.965	
5) Study the probability to find the labels	0.962	
6) Study to competitive in new markets	0.962	
7) Study the new business competitors	0.963	
8) Study to improve the manufacturing processes	0.962	
9) Study to increase business strength and reduce the weakness	0.961	
10) Study to improve the customer's loyalty	0.963	
11) Study to generate skill-worker's loyalty	0.963	
12) Study to develop supply chain	0.962	
13) Follow the news of AEC	0.961	
14) Study to make the partnership with other countries	0.963	
15) Study to use English language in business	0.962	
16) Increase salary and wage to protect worker move out	0.962	
17) Improve worker skill	0.961	
18) Develop the operation system to be international and up-to-date	0.961	
Overall		0.978
<i>Note: Grading by five-point Likert scale, $n = 100$, λ is Item loading, and α is Cronbach's alpha</i>		

References

- G. J. Hay, G. Castilla, 2006. Object-based image analysis: Strengths, Weaknesses, Opportunities and Threats (SWOT).
- Houben, G., Lenie, K., Vanhoof, K., 1999. A knowledge-based SWOT-analysis system as an instrument for strategic planning in small and medium sized enterprises. *Decis Support Syst* 26, 125–135.
- Jarunee Thongpaiboonkit, 2012. SMEs to prepare for ASEAN Economic Community. *J. Dep. Ind. Promot.* 54, 17–18.
- Office of Foreign Workers Administration, 2010. Management of foreigners working in Thailand. [WWW Document]. URL www.mfa.go.th
- Office of Small and Medium Enterprises Promotion, 2010. The adjustment of SMEs to the south of Thailand into the ASEAN Economic Community 2015.
- Office of Small and Medium Enterprises Promotion, 2012. Situation and economic indicators of SMEs in 2011 and 2012 [WWW Document]. URL www.sme.go.th
- Penchan Manawanitkul, 2011. Asean Economic Community handbook for business Jakarta, ASEAN Secretariat. Public Outreach and Civil Society Division.
- Peter A. Petri, Michael G. Plummer, Fan Zhai, 2010. The Economics of the ASEAN Economic Community. Brandeis University and East-West Center.
- Somkiet Treerattanapun, 2012. Guidelines and advancement of the government. Presented at the The liberalization of ASEAN Economic Community of Thailand.
- Tatchawan Kanitphong, 2009. The competitiveness of Thailand in the challenges AEC. NIDA Center for Enhancing Competitiveness.
- The Federation of Thai Industries, 2012. List data of Small and Medium Enterprise (SME) in Nakhon Pathom province.
- Theresa Maria, L. Taguiang, 2009. Borderless ASEAN Community 2015. Office of ASEAN Affairs.
- Thidarat Choksuchat, 2010. Asian Economic Community : Importance and Thai preparations.
- Yamane, T., 1967. Statistics : an introductory analysis / by Taro Yamane, 2nd ed. ed. Harper and Row New York.