

Awareness, readiness and challenges of architectural Firmin Indonesia in entering ASEAN Economic Community (AEC)

Andi Harapan^{1,2}

¹Lecturer of Architecture Department of (Universitas Komputer Indonesia)

²Architect at PT. Bamko Karsa Mandiri (BITA)

andi.harapan@email.unikom.ac.id

Abstract. The purpose of this study was to study the awareness, readiness and challenges. ASEAN has been entering ASEAN Economic Community (AEC) since 2015 and for Indonesia this is one of the moments to grow up the economy and integrated within ASEAN Economic Development. Indonesia would be faced with some challenges and opportunity on AEC, specially related to architectural business consultancy. However, we have to know about awareness, readiness of some of the architectural business consultancy in Indonesia to face with AEC. The purpose of this paper is identifying some variable and measuring the effect of those variables on awareness and readiness of architectural consultancy company in Indonesia on facing with AEC as a challenges and opportunity of this business, especially in Bandung Region. The data analysis technique used in this paper is quantitative analysis techniques with using questioners to identify of some variables. Some of readiness and awareness indicators have been identified such as image of the company, architectural ability, financial of the company, marketing system, managerial system, human resources, and English language skill.

1. Introduction

In 2015, ASEAN member countries have been transformed into one market and production base area, named ASEAN Economic Community (AEC) or Masyarakat Ekonomi ASEAN (MEA) in Bahasa Indonesia. AEC is an integration of economy between ASEAN member countries that aim to establish a more stable, profitable, and highly competitive ASEAN economy. It also can be seen as an oeuvre to make ASEAN as a free market where there is a free flow of goods and service between its constituent countries. There are four pillars that support the establishment of AEC: 1) one market and production base, 2) a competitive economy area [1] 3) equally distributed economic development [1,2], 4) integration into global economy. As a consequence, there is no tariff on goods, service, investment, and capital between ASEAN countries. Furthermore, the implication of this policy is that every citizen of ASEAN country will have the same opportunity to get jobs regardless of their citizenship. To be said ASEAN country which has high-level of well-educated human resource will take more benefits in the ASEAN Economic Community.

While, Indonesian construction industry has been exposed to globalization since many decades before, AEC has been driven new opportunities and threats for them. According to Persatuan Insinyur Indonesia (Indonesian Engineer Guild), Indonesia is lacking a highly skilled worker. For example, the number of Indonesian engineer is only 164 per one million citizens; where Malaysia has 50 engineers per one hundred citizens [3]. Reports from Indonesian Ministry of Labour and Transmigration stated



that Indonesian labour is in critical quadrant because of two reasons. First, the number of unemployed is getting bigger. Second, the competency and skills of human resource is not in optimal stage. The condition is worsened by the lack of labour certification, especially in hard-skilled sector.

On the other hand, international market in construction industry, especially architecture, has more challenges than domestic Indonesian market. Indonesian Construction Company should be aware of the various variables influencing the process of project delivery that in many cases are different than variables they have found in Indonesian market. To understand the opportunities and threats in a new market is vital [3]. AEC has given Indonesian Construction Company to get new potential big client as long as they can overcome the legal and cultural barriers in the new market.

Until this day, there is no information about Indonesian architectural firm's responses in facing AEC although the implementation has been started since 2015. This paper is aiming to explore the awareness and readiness of Indonesian architectural firm in facing AEC through questionnaires given to ten architectural firms in Bandung, West Java.

This study is conducted through literature review and survey with ten architectural firms in Bandung as respondents. The literature review focused on prior research related to the strategy of construction companies, particularly architectural firms, in entering international construction market. The literature review aims to find out what factors affect the architectural firms in developing international markets, including studies related to awareness of architectural firms in facing globalization. The literature review also explores the conditions within ASEAN as a consideration to find other factors that may affect the readiness of architectural firms in the face of AEC. Factors found in the literature review were then assessed for their importance by respondents to determine the readiness of Indonesian architectural firms to face AEC and international construction markets in general.

2. Literature Review

Labor competitiveness is playing a vital role in open-market community like AEC [1]. This competitiveness is closely related to the labor's ability in delivering the products. In other words, the more outputs produced by a labor, the more productive s/he is. This concept is in line with modern economy theory of Adam Smith [4] which stated that a developed country has a specialization of labor. Specialization drives labor to advance his/her unique skill. Labor competitiveness is influenced by its skill and education. Other than skill related factors [5], which mean that labour competitiveness is also related to and highly influenced by wages. Higher the wages, more competitive the labor; lower the wages, less productive and competitive of the labour. Therefore, it is important to note the factor of costs, such as input factors (exchange rate, regional wages, material cost), transportation cost, communication cost, trade resistance, trade strategy to fulfil market specification.

In the bigger scope, comparative economic competitive of one nation is influenced by its resource efficiency, especially related to land management, labour, and capital. It is also related to 'economy of scope' and positioning in the market, where business opportunity, policy, price distortion of product quality differences, and marketing ability played important roles. Therefore, specialization of labour's skill, cooperation, and contribution exchange among nations is important in enhancing global economy.

Related to business activities at international level, the importance of a good understanding of the opportunities and threats that may arise in international business [3]. It is a necessity if a construction company wants to expand its business into the international market. They emphasize the existence of the development of the company's strength in order to follow the development of international markets. Their research also finds the internal factors of any company that can affect the company's performance in the international market.

Meanwhile, in Chinese construction company position in global construction market through SWOT analysis [2]. Opportunities and threats in global construction market can be anticipated by understanding shift of culture in the area [6]. But, several important shifts of global construction market that company should anticipate in order to keep their presence globally [7]. In the other

research has created a framework to measure consultancy company's performance in global construction market [8].

In Hong Kong construction industry, the outcome of research has helped architectural firm to identify its strength and weakness thus they able to plan their company strategy effectively [9]. Those indicators from Tan, et al research will be used in this study to measure Indonesian architectural firm's readiness and awareness in facing AEC.

3. Methods

The method which used for this research is literature review and questioner. Questioner was distributed into ten architectural firms in Bandung. Based on literature review, there are six factors that illustrate competitive ability of architectural firms.

3.1. Company brand

Company brand is conceived by company's credibility from the perspective of client, public, and partners. Company brand is important in business competition [10]. While that company brand is established through company's reputation, it is social responsibility program, it's portfolio, as well as it employee's perception [8].

3.2. Technical skill

Technical skill is synonym with company's knowledge and ability to use various kind of technology in construction industry. This skill is reflected by company's previous works and its adaptability in using new design tool [8]. The skill also can be seen in company's familiarity in using information technology (IT) devices and application that needed in delivering, especially, internationally-scale project.

3.3. Financial ability

Financial ability is reflected in company's ability to hire high-skilled labor, local or foreigner, as well as to obtain license of design software, such as Autodesk Revit, Autodesk 3D's Max, etc.). Pointed that financial ability is crucial for international firm in overcoming tariff and non-tariff challenges [5, 8]. Financial ability is also stressed that financial ability's role in doing joint-operation project. Moreover, financial ability is getting more important for build-and-design type of project [3, 6].

3.4. Marketing skill

Marketing skill can be seen in company's good relationship with its partners and government as a client. Architectural firm should have an adequate skill of negotiation and basic understanding of non-price factor in offering their services since the client's concern in the project is mainly minimizing risks [7]. The client is not the only other parties important for architectural firm, other companies (local and international) is important to be understood. Architectural firms should do mapping of competitor's strength and willing to learn from other's company. On the other hand, those architectural firms should be able to fully understand many aspects of construction industry in its targeted market [7, 9, 11].

3.5. Managerial capability

Managerial ability describes the ability of consultants to deliver quality products and services. Consulting firms need to understand the project's work culture in the expansion destination country and have good negotiation skills if a dispute problem is encountered, primarily with local people around the project site [6, 12]. The companies must understand and understand about contract arrangements that are much different from the country of origin [10]. Furthermore, consulting firms will face many competitors both local and foreign so they need to map their competitors' strengths and make internal improvements to add strength to the company, and focus on the company's capabilities

for project development, both in terms of funding, management, human resources and technology [7, 13].

3.6. Human resource capacity

Proper organizational structure and good human resource training will produce qualified human workers [3, 4]. The competitiveness of worker is the deciding factor in both local and foreign competition [2, 10]. There are several things to note regarding the company's human resources [11, 12]: a) The company's human resources have good ethics in the project, especially if dealing with bribery behavior in the country where the project is going, b) The company has a good human resource development system so that the turnover of human resources can be minimized, c) The company's human resources have sufficient foreign language communication skills, d) The company understands the rules of the union in the country where the project takes place.

In this study, respondents' perspective on the importance of those indicators measured in Likert scale (1-5). The respondents are ten architectural firms in Bandung. Those firms are A-class and B-class consultant member of Inkindo (Indonesian Consultancy Firms' Guild). The importance of indicators can reflect the company's priority in preparing itself to face AEC.

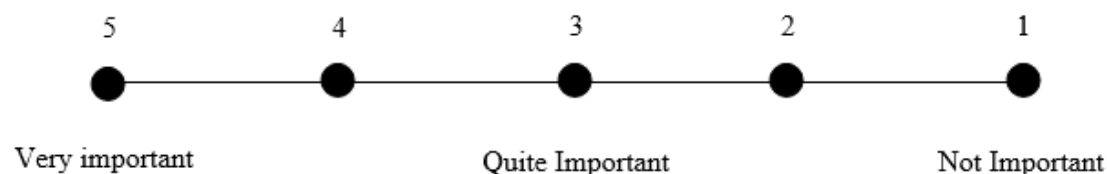


Figure 1. Degree of importance of architectural firm's competitiveness factors in facing MEA.

4. Result and discussion

Based on questionnaires that are filled by ten architectural firms in Bandung, the results are:

4.1. Company brand

Out of ten architectural firms, six stated that company brand is "very important" in facing AEC. While the rest stated that company brand is "important". In general, all architectural firms agreed that company's credibility is really important.

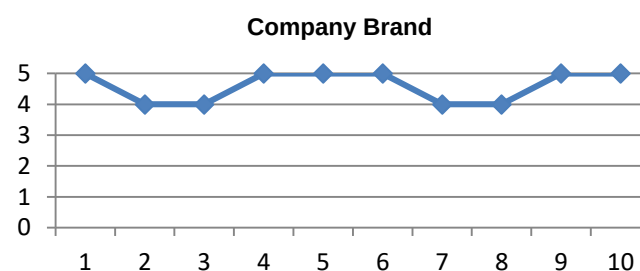


Figure 2. Respondents' perspective on importance of Company Brand.

4.2. Technical skill

Out of ten architectural firms, eight stated that technical skill is "very important" in facing AEC. While the rest stated that technical skill is "important". In general, all architectural firms agreed that company's credibility is really important. Every firm stresses that technical skill regarding software mastership as the most important factor in competing against other firms within ASEAN countries. They suggest more certification program, either by government or non-government institution, in order to produce more high-skilled workers.

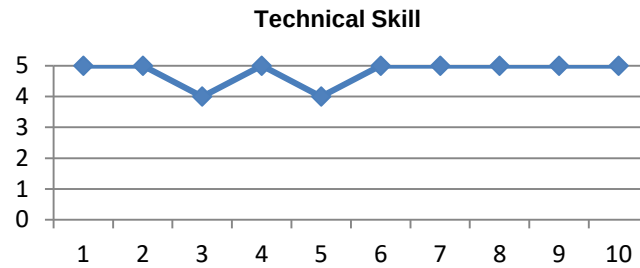


Figure 3. Respondents' perspective on importance of Technical Skill.

4.3. Financial ability

Out of ten architectural firms, two stated that technical skill is “very important” in facing AEC, three stated as “important”, and five stated as “quite important”.



Figure 4. Respondents' perspective on importance of Financial Ability.

4.4. Marketing skill

Every architectural firms agreed that marketing skill is “very important” in facing AEC.

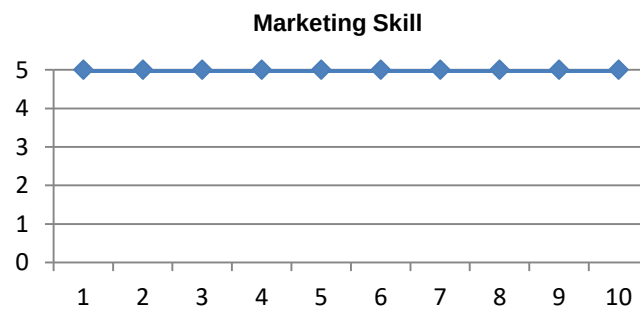


Figure 5. Respondents' perspective on importance of Marketing Skill.

4.5. Managerial capability

Out of ten architectural firms, two stated that managerial capability is “very important” in facing AEC, two stated as “important”, and six stated as “quite important”.

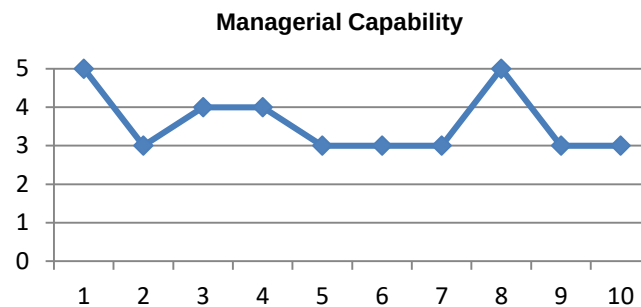


Figure 6. Respondents' perspective on importance of Managerial Capability.

4.6. Human resource capacity

Out of ten architectural firms, five stated that human resource capacity is “very important” in facing AEC, while the rest stated as “important”. Every firms agreed that English language skill is really important.

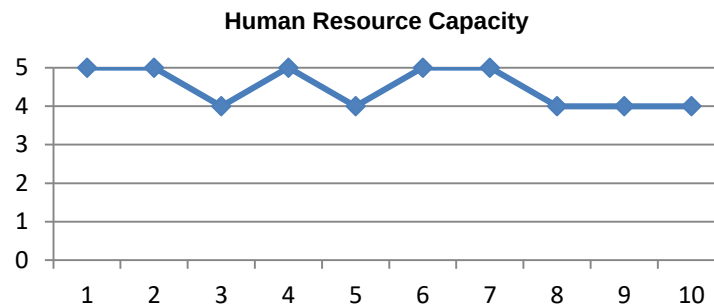


Figure 7. Respondents' perspective on importance of Human Resource Capacity.

5. Conclusion

Based on literature study and the result of survey conducted to ten architectural firms in Bandung, there are five points can be drawn. The first item that we found is all architectural firms surveyed agreed that six factors discussed above can be perceived as main indicator that shows firm's ability to compete within ASEAN Economic Community. Marketing ability is the most important factor for architectural firm's success in obtaining projects within ASEAN Economic Community. The second most important factor is technical skill, especially in mastering design software. Human Resource Capacity, especially regarding English language skill, is the third most important factor. Also, to improve labor competitiveness in ASEAN Economic Community, programs regarding standardization of competency, competency-based training and certification, should be more held, both in local level (Indonesia) and ASEAN level.

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