# Competitive Intelligence Based Decision Making Model as a Global Market Competitive Strategy (MEA 2015) in Educational Institutions

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Keywords: Competitive intelligence, decision making, AEC.

Abstract: AEC 2015 generates borderless world paradigm - the world without time, place and territorial boundaries,

that creates highly competitive conditions both at national and international level. Such condition places the accuracy and speed in decision-making as fundamental factors for institutions to show their competitive strategy in securing place on the international competition board. This study used descriptive method with the quantitative approach and involved chairman and secretary of department, lecturers as well as registered students from UPI's Faculty of Educational Sciences as its respondents. This study was aimed at developing a model of decision making that can be used in this era of globalization of educational sector. The study came up with a decision-making model that was based on the particular condition and situation, as well as the urgent priorities. It also found that this model received fairly good satisfaction level from educators and learners. It was concluded that the accuracy and speed in making decision would affect the growth and development of educational institutions as well as be a competitive advantage among the globalization market participants.

# 1 INTRODUCTION

The ASEAN Economic Community (AEC) is a driving force that influences all aspects of life especially education, where AEC with its free market policy will settle the direction and vision of every educational institution. Each educational institution aims to provide outputs / graduates in accordance with the demands of the labor market as the graduate users, this is also seen as a liberalization of trading in goods, services, investments, skilled labor and capital flows, whereby in order to support the speed of skilled manpower, ASEAN which is structured in a mutual recognition arrangement (MRA), which aims to create mechanisms of procedure and accreditation to gain equality by recognizing the differences between countries in education, training, experience and licensing requirements for global competing professionals.

Indonesia itself has a fundamental problem to become a solid contender in the ASEAN Economic Community (AEC) 2015 of which is the low level of productivity because our industry is controlled by less skilled workers and the increasing number of unemployed labor as a result of incompatibility between graduate competences with the demands of

the labor market. While in order to produce educated workforce, it needs accuracy and speed in decision-making process, which depends on the ability of education leaders to sort the information into intelligence so as to create competitive strategy that has competitive advantage in dealing with AEC 2015. Accuracy and speed in making decisions will affect the growth and development of educational institutions and become a competitive advantage in dealing with the free markets.

## 2 LITERATUR REVIEW

The competitive intelligence strategy is a tool instrument in improving competitive advantage which is able to differentiate educational services from an educational institution to the other ones. Competitive strategy will bring the educational institutions to the stage of educational customers' demand because the services are in accordance with the demands and needs of theirs, stakeholders and the labor market. The goal of all implementations is the quality assurance of education as a driving force to the growth and development of educational institutions to survive.

Competitive Intelligence for educational institutions will assist in: (1) Anticipating changes in the labor market; (2) Anticipating the activities of competitors; (3) Finding new or potential competitors; (4) Learning from the successes and failures of other educational institutions; (5) Improve the number and quality of acquisition targets; (6) Learning about technology, educational products, and new processes that affect the performance of educational institutions; (7) Learning about political, legislative, or regulatory changes that will affect the administration of educational institutions; (8) Entering educational institutions that have new advantages; (9) Looking at the performance of educational institutions with an open mind and (10) Assisting in applying advanced management tools (Bulley, Baku, and Allan, 2014).

Based on the above concept, the purpose of this research is to create competitive strategy in decisionmaking quality through Competitive Intelligence model as competitive advantage from educational institutions that are oriented to global challenge. Competitive Intelligence is information (based on facts of numbers, statistics etc.) that have been filtered, distilled and analyzed, so that intelligence becomes something that can be followed up by educational leaders to make quick and precise decisions. Competitive intelligence is a very important tool of an organization strategic planning and management process. The formal exploration process of the marketing strategy paradigm has been linked with the environmental scanning interactive as a basis for gathering and processing the information and the information processing theory paradigm (Dishman and Calof, 2008).

### 3 RESEARCH METHODS

This research is a descriptive study with a quantitative approach to see how far the influence of decision-making model is used to provide satisfaction to the education customers and the development research employs the research and development (R and D) type. This research is the first year research script that aims to develop a model of decision making in encountering the free market in the world of education.

This research was conducted at 3 departments in Education Faculty of Indonesia University of Education. The respondents were (1) the Chairman and Secretary of the Department; (2) Educators that are taken by 3 persons randomly selected in each department; (3) 50 students from each department

that were selected using prototype sampling.

The causal relationship between these variables is assessed through the following stages: (1) the development of research instruments for each variable followed by a test to test the validity and reliability of the instruments used for the collection of research data; (2) data collection conducted by disseminating the instruments to a predetermined number of samples, the department chairman and secretary get a questionnaire about their routine decision-making stage, while educators and learners are given a questionnaire about satisfaction as an education customer; and (3) data analysis which is the data processing using a statistical technique. The statistical technique used in this research is Rank-Spearman Method.

There are two 2 main variables, which are X and Y. X is competitive intelligence-based decision making model, that includes X1 (identification of problem), X2 (internal and external analysis), X3 (Alternative decisions), X4 (decision making). While, Y variable is free market (AEC 2015) that consists of (Y1) Anticipating changes in the labor market; (Y2) Anticipating the activities of competitors; (Y3) Finding new or potential competitors; (Y4) Learning from the successes and failures of other educational institutions; (Y5) Improve the number and quality of acquisition targets; (Y6) Learning about technology, educational products, and new processes that affect the performance of educational institutions; (Y7) Learning about political, legislative, or regulatory changes that will affect the administration of educational institutions; (Y8) Entering educational institutions that have new advantages; (Y9) Looking at the performance of educational institutions with an open mind and (Y10) Assisting in applying advanced management tools

# 4 RESULTS AND DISCUSSION

All decisions made by the Chairman and Secretary of the Department we based on the most urgent situations, conditions and priorities. The most essential point is a win-win solution for the department and for the customers. The main priorities are related to the problems that exist in the department. The programs proposed in the department's APAB (Annual Plan of Activities and Budget) are consistent with the guidelines of the institution and almost remain similar for each year, in the sense of not having a superior strategy to change the leadership process in accordance with global

demands. The most interesting is how they prepare to meet **AEC** by conducting international seminars and study visits abroad.

Table 1: Rank-Spearman method.

Rank-	X1	X2	Х3	X4
Spearman				
Y1	10%	10%	5%	3,5%
Y2	10,5%	10%	7%	5,6%
Y3	5,5%	10%	8%	6,1%
Y4	10%	10%	5%	15,7%
Y5	7%	10%	20%	16,3%
Y6	4%	10%	10%	6,3%
Y7	10%	10%	10%	11,7%
Y8	18%	10%	5%	6%
Y9	15%	10%	15%	12,8%
Y10	15%	10%	15%	6%

#### 4.1 Education Customer Satisfaction

It revolves around how the customer's feelings are related to decisions taken by the department chairman and secretary. 97% educators reacted that the program is always the same every year, the difference is only in the place or location visited. Likewise with the program to be done, about 65% suggested that each program is distributed to all educators, but the implementation is still held by the department, so the value of responsibility is reduced. 80% educator subjects mentioned that there is no good cooperation between lecturers in the implementation of duties and responsibilities (except in lectures) so that almost all programs are not running according to plan. 67% argued that in reality there was an intergroup gap so the value of trust was reduced.

Learner subjects responded to 54% leadership satisfaction, assuming that departments rarely socialize the policies at the institution and feel disappointed not knowing important information. For example in relation to institutional programs on activities that are global, scholarship

s, government-funded research as well as career guidance. Institutional programs such as student exchanges, abroad Community Service Program, career guidance for those who are willing to work and who continue to study in post-graduate and others.

Overall the level of student satisfaction is at a fairly good range.

#### 4.2 Discussion

Routine decision-making, basically results in something that can be predicted as long as the program is implemented and only provides a minimal value of the benefits, thus the satisfaction also ranks in the minimal range. The decision-making process will have a major impact on the success and usefulness of the program, so it takes intelligence to determine the right program in accordance with the demands of global change. The capability to predict the success of a decision depends largely on whether the decision solves a problem or an innovative leap forward to the upcoming changes, the importance of translating existing data into precise predictions will lead to higher level decision making resulting in the processes that are out of the box and worth to be applied to encounter the fast pace of global changes which are industry and work demands.

# 4.3 Competitive Intelligence Based Decision-Making Model

In facing this free market, educational institutions must begin to be wary of the presence of other countries' invasion to market their educational services along with the great institutions in their countries, this will be a new threat and challenge for our world of education. By presupposing generally that whatever products come from outside, our society sees that it is better and better quality, moreover it is supported by the famous name of their institution, it will certainly be a reference in determining which educational service is most appropriate for their children.

Competitive intelligent is data that has been filtered and distilled so that becomes a powerful data that will be a recommendation in decision making. The default rule of making the decision is 90% data and 10% intuition, so the data is a most valuable item that will determine the quality of decisions taken. In the process of making decisions by using competitive intelligences there are several phases, among them are,

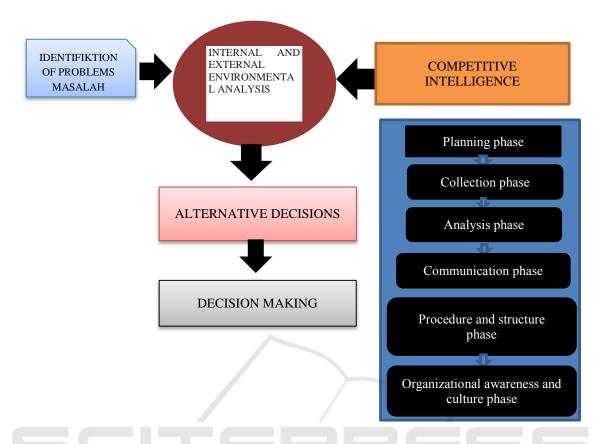


Figure 1: Competitive intelligence based decision making model.

The planning phase which is the most essential step in the competitive intelligence process. An effective intelligence process does not only gather as much information but focuses on issues that are important to the organization. (Daft et al., 1988; Gilad, 1989; Herring, 1998; Montgomery and Weinberg, 1979; Porter, 1980 in Prihatin, 2009). This phase provides the necessary direction for competitive intelligence efforts to ensure that operations focus on collecting and analyzing key data relevant to specific intelligence needs aimed at specifically identifying the intelligence needs of an institution. The Key intelligence Topics (KITs) are assigned to one of three functional categories: strategic decisions and actions, including the development of strategic plans; early warning topics, including competitors' initiatives, technological shocks and government action; and description of key players in certain markets including competitors, customers, suppliers, regulators, and potential partners.

During the collection phase, information is collected from various sources both primary and secondary sources by utilizing various available techniques. Primary sources mentioned include

government agencies, employees, suppliers, customers, conferences. While some common secondary sources include magazines, TV, radio, analyst reports. The choice of information resources directly relate to the type of information itself, which usually focuses on factors such as ease of access, ease of source processing, cost, availability, quantity and quality of information which will likely impact on options. Bulley et al., 2014, identifies that 80% of the information needed to make intelligence actually exist within the company (Rouach: 2001).

In the analysis phase, the information collected during this collection phase is transformed into actionable intelligence where strategic and tactical decisions are made (Kahaner, 1997, Calof and Miller, 1997, Herring, 1998, in Prihatin, 2009). This is where the meaning attaches to the volume of information and is put into the context of sufficiency. Decision makers need for effective decision making. One of the analytical tools that can be used to analyze information, includes PEST (political / legal, economical, socio-cultural, and technological analysis), Porter's Five Forces Model, SWOT analysis (Strength, Weakness, Opportunity and Threats) and competitor profiling.

The next phase is communication, the results of the intelligence process (or individual projects) need to be communicated to people with the authority and responsibility to act on the findings. Often, communication findings are in the form of a report, dashboard, or meeting (Bose, 2008). communication phase also includes evaluation of competitive intelligence processes, assessment of effectiveness in the decision-making process. The decision maker is the person responsible for the evaluation of competitive intelligence programs. Feedback from decision makers is also important in the development and improvement of future competitive intelligence plans, as well as review and reassessment of organizational strategies (Fleisher 2001 in Prihatin, 2009).

In the procedure and structure phase, the success of the competitive intelligence process requires both formal and informal policies, procedures and infrastructure that enable employees to contribute effectively to the competitive system of intelligence (Saayman et al., 2008). Without the support of management, the competitive intelegent will not appear as the priority in the initiatives exist within the larger organization. The aforementioned formal structure is by involving leaders to guide and direct the collection, analysis and dissemination of intelligence within the organization.

The next phase is organizational awareness and culture, in order to take advantage of competitive intelligence efforts, it is needed for organizational awareness (Saayman et al., 2008) and cultural competition. Awareness of the importance of competitive intelligence needs to be made on the organization. Without the proper awareness and attitudes that support information sharing, it is difficult to develop intelligence within an organization. Competitive intelligence is an ability to understand, analyze, and assess the internal and external environments associated with customers, competitors, markets, industries and to utilize the knowledge gained to discover new and remaining competitive opportunities. High awareness of a company's competitive environment tends to be one of the foundations for organizational learning theory (Garvin, 1993; Sinkula, 1994; Slater and Narver, 1995 in Prihatin, 2009).

Subsequently entering on the phase of quality of intelligence provided, the value of intelligence, generated through a competitive intelligence process, can be measured in one or more of the following features, including: 1) Accuracy; 2) Clarity; 3) Usability; Depth; Relevance; 4) 5) 6) Responsiveness; and 8) 7) Timing

Comprehensiveness (Eppler, 2007).

# 5 CONCLUSION

In order to deal with AEC 2015, educational institutions are required to produce educated workers, therefore it requires accuracy and speed in the decision making process, which depends on the ability of educational leaders in sorting information into intelligence so as to create competitive strategy that has a competitive advantage in encountering AEC 2015. The accuracy and speed in decision making will affect the growth and development of educational institutions as well as a competitive advantage in encountering free markets.

In an educational institution, the department is the ace of institutional strength so that the relationship is very close between the activities in the department with the higher level of institutional excellence, so that every decision of each department and study program becomes the determinant of institutional development. The decision making model in the department has a choice based tendency over the activities that the institution has established so that its development level can be predicted, as well as the level of customers' satisfaction has also been established. The decision-making model which is based on competitive intelligent will be one of the alternatives in creating competitive strategy that becomes the quantum development of the institution.

The results of the distillation of the data becomes the foothold in the decision making of the strategic excellence of each institution that usually revolves around how to build customer relationship management, create trust and confidence, forming competitive advantage centers, the determination of ICT applications in accordance with technology changes, professionalism and foster cooperation, partnership, and networking.

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