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Competitive Intelligence framework for Increasing Competitiveness Vocational High School Management

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Abstract-Vocational high school management have an important role in building strong competitiveness. Good management will make the competitiveness more improved. This study have purpose to improve the competitiveness of vocational high schools by using competitive intelligence tools. The method used in this research is competitive intelligence practice framework. This study uses measurement the competitive intelligence framework based on the combined use of two techniques: a questionnaire based survey and an empirical analysis. The survey has been used to achieve feedbacks from the subject's point of view. In particular, it has been useful to capture the increasing competitiveness of the vocational high schools. The results of this study indicate that the vocational high schools that implement the competitive intelligence framework have a significant increase in competitiveness. Why? This is caused by a gradual change of management in applying the competitive intelligence framework. The results of this study are expected to be applied to many vocational high schools so that there is a significant increase in competitiveness.

Keywords—competitive intelligence; competitiveness; framework; North Sulawesi; vocational high school

I. INTRODUCTION

Modern industrial progress has entered a new era, namely the industrial era 4.0. This era is marked by the use of information technology in interacting and building businesses. Information technology has driven businesses to reach a wider market in a relatively short time. Business becomes more advanced but at the same time also faces increasingly globalized competition. The industry is increasingly facing a lot of competition and challenges. This is not only for industry but all institutions, including vocational high schools (SMK).

Vocational High Schools carry out their functions as producers of skilled labor for the industry. Quality vocational schools will produce graduates who are well absorbed in the industry. Producing graduates who work competitively in the industry requires a special strategy to run the education process in vocational schools. This aims to make vocational schools more competitive to face the industrial era 4.0.

A good strategy in managing SMK management is produced through a comprehensive analysis using appropriate techniques and methods. Competitive intelligence is a tool and method to produce a strategy that is relevant, precise and efficient in producing vocational schools that are more competitive. The vocational high school management has an important role in building strong competitiveness. Good management will make the competitiveness more improved [1]. Institutions that have competitive skills will be the winners in the competition [2]. Therefore, it takes a way to create institutions more competitively.

Industry in fulfilling the needs of labor, using skilled workers produced by vocational schools (SMK). Vocational schools themselves become vocational schools that aim to produce skilled workers for the industry [3]. In Indonesia, there was an increase in the number of schools, in 2016 as many as 12,659 rose in 2017 by 13,926 of which 75% were managed by the private sector and the remaining 25% stated [4]. The number of students recorded in 2016 amounting to 4,334,987 [5] increased in 2017 to 4,911,184 (6). The number of graduates also increased from 1,429,870 [5] in 2016 to 1,285,178 in 2017 [6]. At least 5.50% of SMK graduates are unemployed in 2016 [7] and become contributors to the unemployment rate in Indonesia. This means that there are still many graduates who have not been able to compete and be competitive in the industrial world.

Vocational schools should have the ability to be more competitive. It is very important that Vocational Schools adopt models that can help improve competitiveness. One model that can improve competitiveness is Competitive intelligence model. Competitive intelligence becomes a model that can use the capabilities possessed by institutions to build competitiveness. Competitive intelligence uses stages ranging from gathering information, filtering techniques, analysis and building and attracting important information in a way to build a strong strategy, not to violate applicable ethics and norms and regulations so as to produce relevant knowledge [1]. Competitive Intelligence looks more at the competitive environment in order to produce a strong strategy in winning a



competition with other competitors [2]. Competitive intelligence becomes an ability that must be owned by competing institutions. Competitive strategies for going on. Competitive Intelligence is essential for producing the right decision making for the institution [8].

The problem in this study is The competitiveness of vocational high schools that are still low which is caused by school management that is less responsive and adaptive. Vocational High School management needs more effective and efficient [9]. Some researchers have chosen another strategy [10] for example by giving limited time internships in industry and there is also a suggestion to use a uniform curriculum as required by the government. However, these methods have not provided satisfactory results. This is because the school management suggested is not in accordance with the development and technological advances that are increasingly competitive so the above strategy has not been able to solve the problem.

This study have purpuse to improve the competitiveness of vocational high schools using by competitive intelligence tools and framework.

II. METHOD

The research was carried out by collecting data from surveys at Vocational High Schools and interviews with decision-makers in schools, namely the principal and their representatives. Survey through observation and also questionnaires distributed to SMK stakeholders. This research was conducted directly (face to face) and online (without face to face). The interview process was conducted on 15 principals using structured statements.

The method used in this research is competitive intelligence framework. This study uses measurement the competitive intelligence framework based on the combined use of two techniques: a questionnaire based survey and an empirical analysis. The survey has been used to achieve feedbacks from the subject's point of view. In particular, it has been useful to capture the increasing competitiveness of the vocational high schools. See figure 1.



Fig. 1. Competitive intelligence method: cycle of intelligence.

This method was built with the initial top executive steps, namely the principle according to the vision of the vocational high school. Organizational vision is an important foundation for building more competitive vocational schools. This step starts with 3 basic questions, namely: Where are we now? Where do we want to go? How to go there? The question is based on problems that must be resolved. This is important in creating a strategy that is more competitive in accordance with the conditions that occur in school organizations throughout vocational education. Steps that must be taken in generating a strategy towards more competitive vocational schools are: The first step begins with collecting information, in this step information is collected from various sources that can be accounted for ethically and legally. Information is collected based on 2 main sources, namely formal information such as journals, reports, books, and sources from informal information such as exhibitions, or other information. The second step, information is collected and regulated in good knowledge management and arranged through a database, intranet, and et.al. The third step, the information is then analyzed in depth both by automatic and manual using various available tools such as SWOT analysis, five force analysis, and et.al. The fourth step, is done by building an accurate strategy based on the results of the analysis. In this step, a strategy will be formulated that will be recommended to the school principal to decide whether to run or not. The results of this recommendation are built on the vision of the organization so that the resulting strategy can be run by the school efficiently and effectively. The school principal through management builds a management strategy for vocational schools in ways that have been recommended so that the vision of the Vocational organization can be realized and more competitive.

To produce a SMK management model, a framework is needed that can provide direction and be easily implemented. The framework offered is competitive intelligence framework as shown in Figure 2.



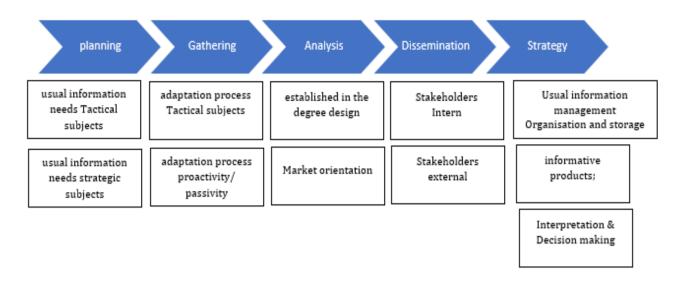


Fig. 2. Competitive intelligence framework.

III. RESULTS AND DISCUSSION

The results of the study, it was found that by making good and proper planning, SMKs could improve their abilities quickly because they could organize human resources well. HR can be moved properly by maximizing the strength of each available human resources so that vocational schools are more effective in carrying out their organizational vision. These results allow SMKs to be able to maximize every opportunity that exists so that it becomes a more competitive vocational school. The implementation of this framework has produced the right strategy for vocational schools, schools have been able to gather the right information by choosing the right and accurate techniques and sources of information. Accurate information is able to encourage SMK to get a more competitive strategy design.

The second stage of the implementation of this competitive intelligence framework, Vocational Schools are able to carry out a fixed application when gathering information. In this meeting, the SMK has been able to carry out the process of adaptation to the subject at hand. This adaptation process has been carried out well through a more proactive process and more on the creation of products that are able to compete in the market. Besides this, the Vocational School also conducts passivity processes where Vocational Schools are waiting and seeing what their competitors are doing then Vocational Schools begin to create innovations and strategies that are more competitive so that they can still compete with their competitors [11].

The results of this study also show that Vocational Schools that carry out an accurate and accurate analysis process can produce an excellent strategy in the face of competition. This analysis process refers to the information that has been collected and looks at the vision of the organization so that the right profile design is created for the Vocational High School. This profile is in the form of graduate profiles produced by vocational schools in accordance with industry needs and existing market conditions. The orientation that is built by

Vocational Schools looks at the overall market and future specific market needs. Vocational schools have been able to see opportunities that can be utilized effectively. Vocational Schools have been able to produce accurate analysis data and the results can be used in creating the right strategy. This is very helpful for SMKs in improving quality to compete and increase high competitiveness. The results of the analysis should be well received by stakeholders. Stakeholders can provide input that can be used as input in creating a strategy [12].

The results of this study illustrate that the results of the analysis that have been made must be well-disseminated by stakeholders. Stakeholders consist of internal stakeholders, namely within the Vocational organization itself and also external stakeholders in the form of vocational service users and the graduates of the SMK. The results of a good dissemination will make SMKs become more advanced and modern institutions able to compete with their competitors.

The results of this study show that the best strategy is built on accurate information and analyzed with the right techniques. Vocational Schools can produce a strategy to become a competitive institution. This strategy contains clearly the products produced and also their application in detail and clear. The strategy that has been made must be interpreted by the principal as the decision maker in the institution he leads [13]. The principal is able to do the right interpretation in running the management towards an institution that is more competitive [14]. The principal has been able to create the right decision according to the conditions the institution will achieve. The principal is able to make the right decisions and can be run properly. The results show that vocational secondary schools have increased competitiveness. This affects the role of vocational schools in supplying skilled labor for the industry.

The results of this study indicate that the vocational high schools that implement the competitive intelligence framework have a significant increase in competitiveness. Why? This is



caused by a gradual change of management in applying the competitive intelligence framework.

IV. CONCLUSION

The results of this study are expected to be applied to many vocational high schools so that there is a significant increase in competitiveness. This study concludes that the implementation of the framework of competitive intelligence accurately and accurately can make SMKs experience significant competitiveness improvements. This can make vocational schools a competitive choice in the process of education and learning of quality workforce for the industry. Vocational Schools can be the right choice in becoming partners for the industry because they are able to compete and produce skilled workforce according to industry needs. Vocational schools are also able to maximize available opportunities, by creating the right products to meet market needs quickly and accurately so that they can compete with other competitors.

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