

Strategic Planning Of Sytem And Information Technology Based On Ward And Peppard (Case Study : State Junior High School 1 Waru Sidoarjo)

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ABSTRACT

State Junior High School 1 Waru Sidoarjo has a great responsibility towards the development of a government-administered educational programs such as creating graduates who learned and believe. But at less utilization of information technology is one of the factors is the maximum system working as well as the results achieved in the State Junior High School 1 Waru Sidoarjo. Ward and Peppard is a method of analysis that can assist in the strategic planning of isystems and nformation technology in order to maximize the achievement of vision and mission of the organization. Using analysis tools such as value chain, CSF (Critical Success Factor), PEST (Political, Economic, Social, Technology), five forces porter and McFarlan Strategic Grid can maximize the presence of application of information technology as one of the success factors in the achievement of the vision and mission of the organization. In this result produce recommendations for improvement that can maximize information technology as one of competitiveness with other competitors and quality improvement as technology progress.

Keywords: *Strategic Planning, Systems and Information Technology, Ward and Peppard*

1. Introduction.

Education in Indonesia always make improvements from time to time ranging from the facilities provided, how to provide knowledge to students to print students who have competitiveness. Of course, information technology plays a large role, with schools that are facilitated in a qualified then the learning system to existing organizational systems will run more leverage such as causing ease of teaching and learning activities. State Junior High School 1 Waru, Sidoarjo has implemented several example technologies such as Wifi or Face print for teacher and employee absences. But only with the existence of a technology without any future development plan can cause losses such as schools can not keep up with global technological developments so that the need for information technology is not met.

The rapid development of technology, usageInformation systems and technology within a company is one of manyfactors that can help the company to grow and competein the business world. With IS / IT

implementationthe company can improve the effectiveness and efficiencywork, company operations.[1]

Strategic planning is an activity that has long-term goals that describe a system and information technology. The focus is on the architecture of information technology to make the process of systems and information technology to be better in achieving the goal. It is considered as a mechanism to support organizations that ensure information technology activities in accordance with the needs of the organization so as to ensure appropriate technology activities are applied in accordance with the development needs and strategies of the organization.[2]

Ward and Peppard Framework

Focus on technology alone or business alone is not enough to bring success in strategic planning. Steps to doTo achieve the strategic advantage of information systems and technology is to re-concentrate the businessprocess by analyzing issues of business issues that are becoming interesting topics or that are becoming a

trend. [3]

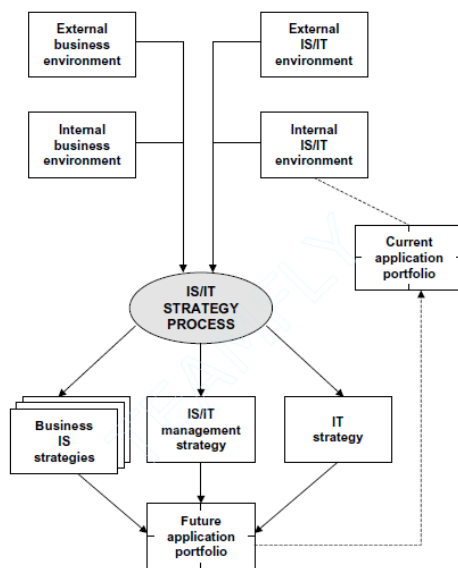


Figure 1. Strategic Model IS/IT [4]

Ward and Peppard Framework for IS/IT strategy formulation and planning process on Fig1 covers several phases as follows:[4]

1. Internal Business Environment: mapping the current business strategy, the purpose (objective), resources, processes, and culture of the organization. Analysis of internal business environment used to determine the organization's business strategy, vision, mission and the goals of the organization, activities and business processes of the organization, its resources, and information needed by the organization.
2. External Business Environment: mapping the economic conditions, industry environment, and competitive environment where the organization operates. External business environment can boost the organization to go ahead and compete, also can provide barriers and even a threat to organization survival.
3. Internal IS/IT Environment: the perspective of the IS/IT at the business process, its maturity, the scope and contributions of business, skills, resources and technology infrastructure, current portfolio application and the system that is

being developed or already budgeted but not yet completed are also part of the internal IS/IT environment.

4. The external IS/IT Environment: technology trends and opportunities usability/utilization generated by the IS/IT of other parties, especially customers, competitors, and suppliers. This analysis is used to gain an understanding of the development of the IS/IT outside the organization that may have an impact on the organization's survival.
5. Current Application Portfolio: an information system applications that have been or are being used by the organization. Identify the advantages and strength given by the application to confront the competition climate faced by organizations.

The process output of Ward and Peppard Framework describe as follow:

1. Business IS Strategic: the mechanics of each unit or function that will develop IS/IT in achieving a business objective, application portfolio, and overview of information architecture.
2. Information Technology Strategy: policies and strategies for technology management and human resources experts.
3. IS/IT Management Strategy: include that common elements of the strategy that used by organization overall to ensure consistency of IS/IT policy required.

Final output of Ward and Peppard framework is Future Application Portfolio, an application proposals that will be developed by the organization in the future with the aim to integrate each organizational unit and adjust the rhythm of technological development with organizations business development. Strategic Planning of information system is now of the key in achieving the institution goals, as must be aligned with the business strategy being

executed[5]. Information systems (IS) are strategic in so far as they are used to realize strategic intent. Yet, while much has been said about aligning IS functionality with the strategic intent and how to organizationally implement strategically aligned systems, less is known of how to successfully implement strategic change associated with system use – a truly critical challenge within strategic IS implementation.[6]

2. Research Method

The research flow determines what method will be used then the author chose Ward and Peppard as his analysis method. After that the authors collect the required data by way of document work program or interview to a resource at State Junior High School 1 Waru. If the data is considered sufficient and valid then the author will use analysis tools such as SWOT, PEST, 5 Forces Porter, Value Chain, Critical Success Factor and McFarland Strategic Grid. The results of the analysis will be in the form of strategic systems and information technology that will be in the form of topology blueprint IT

3. Discussion

PEST (Politic, Economic, Social, Technological) In the political field of State Junior High School 1 Waru has no political view other than the one specified by the government all the legal provisions in State Junior High School 1 Waru follow the orders of this government in because State Junior High School 1 Waru is a state school.

For operational learning system in State Junior High School 1 Waru fund has been funded by BOS (school operational assistance) while for the improvement of facilities, school maintenance and some fund construction can be drawn from school committees and guardians. Funds that are administered privately are funds earned from school funding streams of cooperatives, as well as some events hosted by OSIS (school organization).

In terms of social scope State Junior High School 1 Waru has a good effect for the environment. There is no complaint that

goes to State Junior High School 1 Waru per year 2013, it is in because before the year 2013 State Junior High School 1 Waru share the land with a private school Dharma Wanita 8 Sidoarjo which according to Elly's mother as public relations people think that the delinquency in the community from the students of State Junior High School 1 Waru while from the uniform can already be distinguished where the school origin of the student

Technological developments that exist in State Junior High School 1 Waru outline has been determined by the education offices Sidoarjo and national. All competent and competent employees including the committee can discuss how the technological developments that exist in State Junior High School 1 Waru. And until until the year 2016 State Junior High School 1 Waru never proposed technology to the education office Sidoarjo like what technology to be developed or in the application

Figure 2 describes the result of the 5 Forces porter analysis where the threat from the external factor of the school where the data from the analysis of 5 forces porter can be made reference to the strategic determination of the system and information technology in order to compete with the competitors in 5 forces porter.

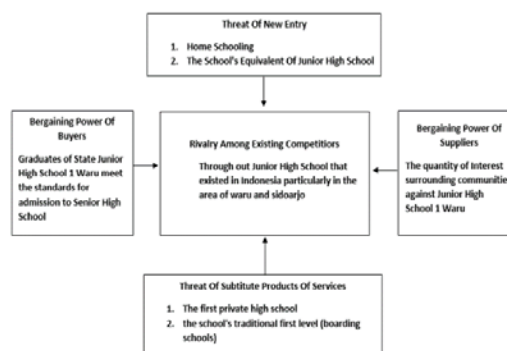


Figure 2. Five Forces Model

Table 1 describes the result of SWOT analysis (Strength, Weakness, Oppurtunity, Threat) can be from strategic plan or work program of Junior High School 1 Waru Sidoarjo where the result of this analysis is used to determine the strategic system and information technology for Junior High School 1 Waru Sidoarjo.

Table. 1 Results of SWOT Analysis

<i>Strength</i>	<i>Weakness</i>
1. It has an annual program, the medium and long term to realize the vision and mission 2. Have certificates ISO 9001 3. Has accredited the school A and score 94.98	1. His low awareness of the scope of the State Junior High School 1 Waru Sidoarjo against the importance of the care system and information technology 2. The large number of kinds of student behavior causes the onset of obstructions in the work program State Junior High School 1 Waru Sidoarjo
<i>Opportunity</i>	<i>Threat</i>
1. The increased interest of teachers and students to engage the system and information technology in the teaching and learning process in a positive 2. Develop systems and information technology as one of the factors in achieving a work program, vision and mission	1. The era of globalization that minumbulkan change of mindset on some people with a mind to better send her son in a non formal school. 2. When his ability was too high in using the system and information technology can be a nuisance the learning process

Table 2 is a recommendation of information technology systems and systems at State Junior High School 1 Waru Sidoarjo based on a McFarland Strategic Grid analysis tool where the determination of system level and information technology is determined through data collection and interview quisioner to State Junior High School 1 Waru Sidoarjo. And here is the system strategic design and information technology at State Junior High School 1 waru Sidoarjo

Table 2. McFarland Strategic Grid

STRATEGIC	HIGH POTENTIAL
1. Archival information system for students and teachers 2. The STUDENT information system 3. Cooperative information systems 4. CCTV (closed circuit television)	1. Teacher promotion information system 2. Website (maintenance &update) 3. Microsoft office (update) 4. piritual information system for class 9
1. Face Print	1. Wi-Fi 2. Information alumni tracer systems 3. Honorary teacher acceptance of digital forms based HTML 4. Library information

	system	
	5. Operating (windows latest	system
KEY OPERATIONAL	SUPPORT	

4. Conclusion

The results of this research provide the proposed draft strategic systems and information technology. Where recommendations are given in the form of advice or information systems information technology that has been in selaraskan with the vision, mission and objectives of the Organization in order to strengthen competitiveness against competitors as well as a factor supporting work program the school.

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