Strategic Planning For The Implementation Of Tourism Information Systems

Asri Mulyani, Dede Kurniadi, Yosep Septiana, Teguh Wahyono

Abstract: This research aims to plan a tourism information system implementation strategy to increase the number of visitors, with a case study on animal park tourism. Based on the evaluation of the organizations business processes with information systems that are running is considered not effective, the strategic planning of information systems is needed to help leaders and managers in carrying out their duties to improve work efficiency by automating the information management process, increasing management effectiveness by satisfying information needs for decision making, and improve competitiveness to improve the organizations competitive advantage by changing the style and manner of doing business. The methodology uses the Ward and Peppard strategic planning model with the stages of the analysis of Value Chain Analysis, PEST Analysis, Analysis of the Five Strength Models. The output stage uses the McFarlan Grid Strategic technique and the Balanced Scorecard to evaluate the results of implementing an information system strategic plan. The results of the research are in the form of a strategic framework and information system implementation plan and technology that is in line with the organization's business strategy plan.

Index Terms: Information Systems, Strategic Planning, Tourism, Ward and Peppard.

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1   INTRODUCTION

The dynamics of changes in the strategic environment both externally and internally is a process that cannot be avoided by business organizations. Therefore, to have the ability to exist and be meaningful to stakeholders, the organization must be able to improve facilities and services that are comparable to the challenges created by strategic environmental changes [1]–[3]. Information technology governance is needed by every company that will utilize information technology, and information technology governance is a reference in making information technology investments [4]–[6]. Without precise planning, the investment in information technology that will be carried out will run without direction, give a contribution that is not optimal, and not in line with the goals to be achieved [7]–[9]. Information technology must be adapted to the organization to provide the information needed because the relationship between information technology and organizations can influence each other [10]–[12] Utilization of Information and Communication Technology, especially the application of the use of information systems, is now a mandatory requirement to increase competitiveness [13]–[15]. Strategic planning is a set of concepts, procedures, and tools designed to help leaders and managers carry out their duties. Information system strategic planning is the process of identifying a portfolio of computer-based applications to support organizations in carrying out business plans and business objectives [16]. This research aims to plan a strategy for implementing tourism information systems to increase the number of visitors, with a case study on tourism in Cikembulan animal parks in Garut district, West Java, Indonesia. Based on the evaluation of the organization's business processes with information systems that are running is considered not effective, the strategic planning of information systems is needed to help leaders and managers in carrying out their duties to improve work efficiency by automating the

effectiveness by satisfying information needs for decision making, and improve competitiveness to improve the organization's competitive advantage by changing the style and manner of doing business. The methodology used is the Ward and Peppard strategic planning model [17]. The results of the research are in the form of a strategic framework and information system implementation plan and technology that is in line with the organization's business strategy plan.

2 METHOD

2.1 Data Collection

Data collection carried out in this study are as follows:
1. Observation, research directly to the animal park which is focused on business processes, information systems, and information technology.
2. Interviews, question and answer directly to decision makers to understand more in business processes and information systems/information technology planning.
3. Questionnaires spread out questionnaires that will be filled by users who are directly involved with information systems/information technology applications.

2.2 Framework Ward and Peppard
The Ward and Peppard version of the methodological approach in Figure 1, starts from the investment conditions of the IS / IT in the past that are less useful for the organization's business goals and captures business opportunities and phenomena of increasing the competitive advantage of an organization because it is able to utilize IS / IT to the maximum [17].

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4714

Fig. 1. Framework Ward and Peppard.
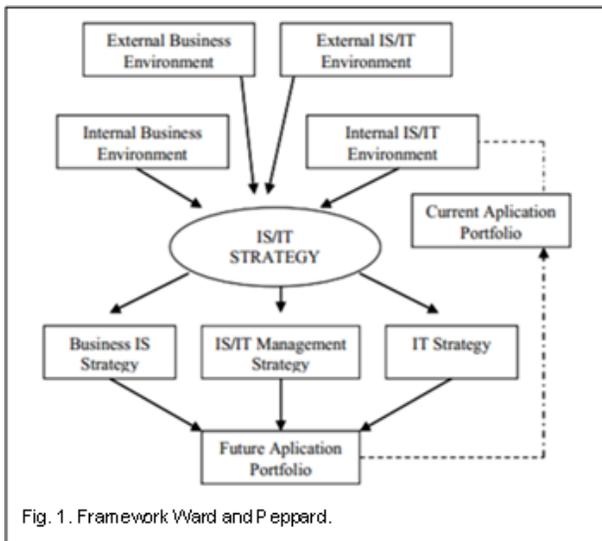
The analytical tool used is Value Chain Analysis, PEST Analysis, Five Strength Model Analysis, and SWOT Analysis to analyze internal, external and internal and external business environments. Furthermore, the output stage includes business information systems, information system management strategies, and information systems strategies using the McFarlan Grid Strategic technique [18]–[20]. An additional solution proposed in this study is the IT Balanced Scorecard to evaluate the results of implementing an information system strategic plan in the organization and application user feedback [21]–[23].

3 RESULTS AND DISCUSSION

3.1 Value Chain Analysis
1. **Support Activities**

   Inbound Logistics, including animal care, control of animal populations, procurement and maintenance of animal cages, and procurement of animal feed.
   a. Operations, including a recording of animal collections and recording attendance of employees.
   b. Outbound Logistics, includes the procurement of animal collections and ticket sales.
   c. Marketing and Sales, including ticket pricing, procurement of online ticket sales, and promotions and advertisements.
   d. Service, including Procurement of Sign Systems, Procurement of playgrounds, Repair of facilities and infrastructure, and Provision of parking lots.

2. **Infrastructure**
   a. Inbound Logistics, including designing a well-integrated application system so that it makes it easier to order and buy tickets.
   b. Operations, including managing operational permits, and making financial reports.
   c. Marketing and Sales, including the procurement of operational funds, and the design of a sound distribution system to facilitate the delivery of tickets to the customer.

3. **Human Resource Management**
   a. Operations, including Recruitment and training of

employees, Providing Employee Benefits and Insurance, Workers who are experts in operating existing applications, Giving awards to the best employees, Product and Technology Development.
   b. Inbound Logistics, including the company, continues to keep abreast of technological developments by analyzing company requirements.
   c. Outbound Logistics, including the procurement of a computerized ticketing system.
   d. Marketing and Sales, including website creation.
   e. Service, including the purchase of electronic Sign Systems, and procurement.
   f.   Marketing and Sales, including cooperation with the Regional Government and investors.

3.2 PEST Analysis

1. **Political factors:**
   a. According to the Constitution No.10 / 2009 on tourism, what is meant by tourism is a variety of tourism activities which are supported by various facilities and services provided by the community, people in business, government and regional government.
   b. The existence of tourist attractions such as the Cikembulan Animal Park in Garut regency that provides knowledge of existing cultures has the support of the government and the community. So that makes visitors interested in creating a tourist visit to Animal Park.
   c. Based on the analysis of the political factors above, the impact of Taman Satwa tourism is to provide opportunities for the development of tourism businesses related to the attractiveness of visitors.

2. **Economic factors:**
   a. The financial crisis has made the Indonesian economy worse off. The increase in the number of facilities and maintenance costs makes the price of admission to tourism places jump. However, the Cikembulan Animal Park tourism in Garut provides a relatively low price for a ticket. So that people prefer Animal Park tourism as a place to travel.
   b. Based on the analysis of economic factors above, it can be concluded that the impact for the Cikembulan Garut Animal Park is to provide an opportunity to increase the number of visitors who come to the Garut Cikembulan Animal Park.

3. **Social factors:**
   a. With the increasing level of saturation of the community causing a high level of desire to recreation in tourist attractions.
   b. Based on the analysis of social factors above, it can be concluded that the impact for the Garut Cikembulan Animal Park is to provide opportunities because it can increase the number of visitors.

4. **Technological factors:**
   a. Information technology is a technology that is rapidly developing along with the development of the electronics industry and computers and the internet. So that for the company's internal activities

4715

such as the use of an animal park information system, online ticket sales, payroll and for marketing and promotion of Garut Cikembulan Animal Park can take advantage of information technology advances.

b. Based on the analysis of technological factors above, it can be concluded that the impact for the Garut Cikembulan Animal Park is to provide opportunities because it can improve the company's internal activities.

3.3 Five Strength Model
1. The threat of newcomers, including a reduced number of visitors.
2. Supplier bargaining power, covering the bargaining power of food suppliers and the need for expensive animal parks will result in low profits.
3. The bargaining power of visitors, including the interests of visitors, and the level of income of visitors.
4. Product threat includes:
   a. Facilities that are not maintained can endanger visitors, such as children's games that have been damaged but have not been repaired, buildings that are not maintained and weathered, cages that have started to damage can cause fauna to come out of their cages.
   b. Animals that are not properly maintained can cause death in these animals.
   c. Corrosion on the cage can facilitate the fragility of the cage and reduce the beauty of the drum.
   d. Poor treatment of animals can cause animals to die.
   e. Poor supervision and negligence of officers allow loose animals and endanger the lives of living creatures around them.
5. Competition within the organization, covering the incumbent response and economic scale.

3.4 SWOT Analysis
The following is a SWOT analysis table for animal park tourism.

TABLE 1
SWOT QUALITATIVE MATRIX APPROACH

External/ Internal	Opportunity	Treat
Strength	Comparative advantages: Build more facilities by utilizing the available land. Use investment funds to build many new facilities.	Mobilization: With easy access to the entrance, it will be easier for visitors to visit the animal park.
Weakness	Divestment/Investment: Recruit employees to be employees in each platform. Use investment funds to carry out maintenance in some facilities.	Damage Control: Utilizing existing funds to make a ticket system that is practical and integrated. Provide training to every employee recruited.

3.5 IT Balanced Scorecard analysis
The following is an analysis table of IT Balanced Scorecard animal park tourism.

TABLE 2

BALANCE SCORECARD ANALYSIS

Strategic Theme	Strategic Target	Strategic Size
Customer Perspective	Vitality Environment	Improve visitor safety for existing vehicles.	The level of customer security.
		Repair damaged facilities.	Adequate use of facilities.
		Improve the quality of existing vehicles.	Level of customer satisfaction.
Financial Perspective	Economy, Efficiency and fiscal integrity	Securing service partners who have business relationships with Animal Park tourism.	Amount and funding of new partners.
		Increased revenue plans for the following year.	Increased Animal Park revenue.
		Maintaining the level of income from tourists.	The level of income from the Animal park Park company from tourists visiting.
Internal Business Perspective	Superior service capacity	Interaction with tourists is more intensive by holding various events that are directly related to tourists.	Time cycle interaction with more tourists.
		Increase the productivity of Animal Park tourism employees.	The level of service to tourists increases.
Learning and Growth Perspective	Workers who are motivated and ready	Providing benefits and insurance to workers.	Employee satisfaction.
		Conducting labor training.	Increased employee productivity.

4 CONCLUSIONS
Based on the strategic analysis that has been carried out, the strategic plan that will be implemented is to make various efforts to change and implement information systems and technology following the results of strategic planning. The struggles that must be made are making an information system that includes the application of animal collections, ticket sales applications, financial applications, company asset management applications, sign systems, and free Wi-Fi services while the web-based information system must also be built for the needs of media promotion, advertising, and ticket sales online through the official tourism animal park website.

6 ACKNOWLEDGMENT

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4716

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