

MANAGEMENT INFORMATION SYSTEMS FOR ORGANIZATIONAL COMPETITIVE ADVANTAGE

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ABSTRACT

Over the past few years, the topic of competitive advantage has been the focus of much discussion. Competitive advantage can be achieved through processing physical resources, but virtual resources can also play a big role. Organizations are formal, stable structures that take resources from the environment and process them to produce outputs. Organization is also a social structure because it is a collection of social elements. A more realistic picture of organizational behavior is a set of rights, obligations and responsibilities that are balanced over a period of time through conflict and conflict resolution. Information systems and organizations influence each other, in order to provide the information needed in a particular part that is important to the organization. Organizations on the other hand must also be alert and open to the influence of information systems in order to benefit from new technology.

Information technology provides tools for managers to complete both their new and traditional roles. Finding ways to utilize information technology to achieve competitive advantage at the business, corporate and industry level is a key responsibility for managers.

Technology today can lead to efficiency and major organizational changes and reduce transaction costs and can also be a source of competitive advantage. Information technology offers new ways to organize work and use information that can increase wealth and sustain organizational life.

Keywords: Management, Organizational Competitiveness.

INTRODUCTION

Over the past few years, the topic of competitive advantage has been the focus of much discussion. Competitive advantage can be achieved through processing physical resources, but virtual resources can also play a big role. Michael E. Porter is recognized as the person who most expressed the concept of competitive advantage and contributed thoughts about the value chain (value chain) and value system (value system), which is equivalent to seeing something systemically on the company and its environment. The integration between the general systems model and the eight elements environment model will form the basis of a concept that is receiving a lot of attention today in supply chain management.

A company's information resources include hardware, software, information specialists, users, facilities, databases, and information. Information has the four dimensions desired, relevance, accuracy, timeliness, and completeness. Knowledge management realizes that information will reflect the company's knowledge resources. Knowledge management is needed to organize, access and leverage company data and information for decision making. A strategic plan for information resources will identify the goals that the company's information system will need to meet in the coming years and the information resources that will be required to achieve those goals.

Problem Formulation

1. What is the definition of organization
2. How information systems affect organizations and companies
3. How do managers, decision making and information systems
4. How to use information systems to achieve competitive advantage

Purpose

1. To know the definition of organization
2. To find out information systems affecting organizations and companies
3. To find out the manager, decision making and information systems
4. To find out using information systems to achieve competitive advantage

DISCUSSION

Definition of Organization

The organization is a formal, stable and formal structure that takes resources from the environment and processes them to create outputs. Organization is also a social structure because it is a collection of social elements. A more realistic picture of organizational behavior is a set of rights, obligations and responsibilities that are balanced over a period of time through conflict and conflict resolution.

In addition, according to Kenneth, in the book's 8th edition, there are also two definitions of organization, namely organization (technical definition) is a stable official social structure that has sources from the environment and processes those sources to produce output. organization (behavioral definition) is a collection of rights, special rights, obligations and responsibilities that must be carefully balanced over a period of time through conflict and conflict resolution.

Organizational characteristics
Standard Operating Procedures

Standard routine rules are compiled into rigorous and rational rules, procedures and practices which are developed to cover all possible situations.

Organizational Politics

People in organizations occupy different positions with different skills, considerations and perspectives. As a result, they naturally have different points of view on how resources, rewards, punishments should be administered.

Organizational culture

All organizations have basic, indisputable, and unquestionable assumptions that explain the organization's goals and products. Organizational culture includes a set of fundamental assumptions about what products the organization should produce, how the organization produces them, where, and for whom. At the same time, organizational culture is a strong barrier to change, especially technological change.

Organizational Environment

The organization and the environment have a give and take relationship. On the one hand, organizations are open to, and dependent on, the social and physical environment that surrounds them. On the other hand, organizations can affect the environment.

Organizational Structure

According to Mintzberg, 1979 shows 5 basic organizational structures, namely;

Type of Organization	Description	Example
Entrepreneur structure	Small company, fast changing environment, simple organizational structure, managed by an entrepreneur who acts as the sole managing director.	Small business just starting up.
Machine bureaucracy	Big bureaucracy, slow changing environment, products are standard goods, dominated by teams and centralized.	Middle scale manufacturing company.
Divisional bureaucracy	The combination of various machine bureaucracies, producing different products and services, is controlled by the headquarters.	General motors which has a company of 500.
Professional bureaucracy	Knowledge-based organizations, service products according to the expertise and knowledge of	Law firms, school systems, hospitals.

	professionals, are dominated by department heads with weak centralized authority.	
Adhocracy	A “task force” organization, responsive to environmental changes, consisting of an organized group of specialties, a short-term multidisciplinary team and a central management weakness	Consulting firm

Information Systems Affect Organizations and Companies

Information systems and organizations influence each other, in order to provide the information needed in a particular part that is important to the organization. Organizations on the other hand must also be alert and open to the influence of information systems in order to benefit from new technology.

Information systems become an integral, online, interactive tool that is closely related to every minute of operation and decision making in large organizations. In a company there is an information systems department which is a formal organizational unit that is responsible for maintaining the functions of information systems within the organization.

The information systems department consists of experts such as programmers (trained technical experts who code software and computer instructions), systems analysis (experts who translate business problems and their requirements into information and system requirements and as compilers of links main between groups), information systems managers (leaders of various experts in the information systems department), chief information officers (senior managers in charge of the information systems function within the company) and end users (representatives outside the information systems group as the target object of application development) .

Over the last decade, information systems have fundamentally changed the economy of organizations and increased the likelihood of managing jobs. This has several impacts on the organization and company. Among the impacts of information systems affecting organizations and companies, namely:

Economic Impact

Information systems technology was actually rejected by a number of middle managers and data workers because information technology took their jobs. However, information technology also helps companies reduce size because it can reduce costs. According to the transaction cost theory, companies and individuals always minimize transaction costs, as well as

production costs. Harnessing the market is expensive (Williamson, 1985; Coase, 1937) because it requires costs such as location and communication with long-distance suppliers, purchasing insurance, obtaining product information, etc.

According to agency theory, the company is seen as a "contract link" between individuals who are only oriented for personal gain rather than a single entity that is profit-oriented (Jensen and Meckling, 1976).

Organizational Impact and Behavior

Based on behavioral research, a theory is compiled which says that information technology is able to change the hierarchy of decision making in organizations by emphasizing the costs required by information and expanding informal distribution. (Malone, 1997).

Other behavioral approaches view information systems as a way out of political competition between organizational groups to influence organizational policies, procedures, and organizational resources. (Laudon, 1974; Keen, 1981; Kling, 1980).

Manager, Decision Making and Information System Role of Manager in the Organization

Manager plays a role in the organization. His responsibilities include making decisions, making reports, attending meetings, organizing celebrations. Classic Management Model, is a traditional description of management that focuses on the formal functions of management, namely planning, organizing, coordination, decision making and control. The behavioral model explains management based on behavioral research about what managers actually do in developing their tasks.

The role of manager is a manager activity that must be carried out by managers in an organization. The role of manager according to Mintzberg is divided into 3 categories, namely:

- 1) Interpersonal role, the manager acts as a figure head and leader of the organization.
- 2) The informal role, namely the manager becomes the pulse center of the organization, receiving and disseminating important information.
- 3) The decisional role, namely the manager initiating activities, dealing with difficulties, allocating resources and negotiating conflicts.

Decision making models

The decision-making model focuses on individual decision making and partly focuses on group decision making.

Individual decision-making models assume that humans are rational. Rational models, models of human behavior based on the belief that people, organizations and nations carry out value maximization calculations that are fundamentally consistent. Cognitive models, namely the fundamental disposition of personality to the treatment of information, Alternatives, options and evaluation of consequences. Systematic decision makers approach problems by structuring problems based on several formal methods. They evaluate and collect information based on their structured methods. And intuitive decision makers approach problems with a variety of methods, using trial and error to find solutions. They tend not to structure information gathering or evaluation. (McKenney and Keen, 1974).

However, sometimes decisions are not taken individually but by the group or the whole organization. Organizational model decision making, taking into account the political and structural characteristics of the organization. According to bureaucratic decision making, the most important goal of an organization is to maintain the organization itself and the resulting decisions are formed from standard operating procedures. Political model decision-making is a decision-making model in which the resulting decisions come from competition and bargaining between related groups and the main leaders in the organization. In addition, the theory of decision making is the "waste basket" model, which is a decision-making model which states that organizations are not rational and that decisions are solutions to problems by chance.

Implications for the design and understanding of information systems

To be able to provide benefits, information systems must be built with a clear understanding of the organization in which the system is applied and how the information system appropriately contributes to managerial decision making. The central factors in the organization that need to be considered in planning the system are:

- a. The environment in which the organization must function.
- b. Hierarchical organizational structure, specializations and standard operating procedures.
- c. Organizational culture and politics.
- d. The type of organization and its leadership style.
- e. The main groups involved that influence the system and the behavior of workers who will use the system.
- f. Types of tasks, decisions, and business processes that will be assisted by information systems.

Information system designers must design systems that have the following characteristics:

- a. Flexible and provides many options for handling data and evaluating information.
- b. Able to support a variety of styles, skills and knowledge as well as being able to trace many alternatives and consequences.
- c. Sensitive to organizational bureaucracy and political provisions.

Using Information Systems to Achieve Competitive Advantage

Information system is a virtual system of data they reflect the physical system of a company. Information systems can be used to give a company a competitive advantage. As the company meets the product and service needs of its customers, it will strive to gain an edge over competitors. They gain this advantage by providing products and services at lower prices, providing products with higher service and quality, and meeting the specific needs of certain market segments.

One thing that is not always obvious is the fact that a company will also achieve a competitive advantage through the use of virtual resources. In the field of information systems, competitive advantage refers to the use of information to gain leverage in the market. Remember that company managers use virtual as well as physical resources in meeting corporate strategy objectives. The broad view of competitive advantage recognizes that there are organizations that compete with companies as well as professionals and staff in other countries competing for jobs with company employees. Multinational companies often contract out work (outsource) to other organizations in order to achieve an economic advantage. Companies that do business globally have specific information and coordination needs. Usually competitive advantage can be achieved through the management of physical resources.

Some companies perform better than others. Companies that perform better than others are said to have a competitive advantage. Firms that have a competitive advantage usually have access to specialized resources that others do not have, or are also able to use publicly available resources more efficiently — usually superior knowledge and information assets.

As the company meets the product and service needs of its customers, it will strive to gain an edge over its competitors. Companies can achieve this advantage by providing products and services at lower prices, providing products and services of a higher quality, and meeting the specific needs of certain market segments.

In information systems, competitive advantage refers to the use of information to gain leverage in the market. The main proponent of competitive advantage is Michael Porter, who developed concepts such as value chains and value systems.

Dimensions of Competitive Advantage

Competitive advantage can be realized in terms of gaining strategic, tactical and operational advantages.

- a. Strategic Advantage

This advantage is one that has a fundamental impact in shaping the company's operations. This strategic advantage information system can be seen in a company that decides to convert all company data it has into a database that allows it to be shared with customers or business partners, a standard data base that can be accessed via a web browser. Multiple connections to the internet allow web browsers to access virtual reports from any place in the world. In the same way, potential customers and suppliers in various places around the world have adequate access to the company's raw materials and finished goods to accelerate the company's sales and purchase transactions. The strategic level will determine the direction and goals of the company, but there is still a need for a plan that can achieve a strategy that realizes the importance of security.

b. Tactical Advantage

Tactical advantage is defined as the method of creating and refining a strategy using a method that is better than the means used by competitors. Strategic decisions are made so that the company's information system is able to provide satisfying services to customers, this also means that the tactical information system developed by the company not only increases customer satisfaction but also increases company profits.

c. Operational Excellence

Operational excellence is an advantage related to daily transactions and processes. Information systems will interact directly with the process. Websites being able to remember customers and preferences through the past represent a professional advantage. Browsers often have cookies and other information related to customer transactions. Customers use of computers to enter data will be more accurate. Because the data entered by the user himself, there is a feeling of ownership from the user, if the data entered turns out to be inaccurate then the user must not blame the company. For various operational reasons, web access to company information systems enhances the company's relationship with customers. Of the three levels of competitive advantage above will work together. Information systems that are affected by these three levels will have the best possibility of substantially improving a company's performance.

CONCLUSION

Information technology provides tools for managers to complete both new and traditional roles. Finding ways to utilize information technology to achieve competitive advantage at the business, corporate and industry level is a key responsibility for managers. Today's technology can lead to efficiency and major organizational changes and reduce transaction costs and can also be a source of competitive advantage. Information technology offers new ways to organize work and use information that can increase wealth and sustain organizational life.

BIBLIOGRAPHY

Ali Ramdhani. 2014. Management Information Systems. Bandung: CV PUSTAKA SETIA

Deni Darmawan. 2013. Management Information Systems. Bandung: PT REMAJA ROSDAKARYA

<http://moo-selamanya.blogspot.com/2012/12/sistem-informasi-untuk-keomotif.html> ACCESSED ON 15 October 2018 at 16:30

<http://kumpulmakalahsim.blogspot.com/2014/05/sistem-informasi-untuk-keomotif.html> ACCESSED ON 15 October 2018 at 16:30

Kenneth C Laudon. 2016. Management information System. South Jakarta: Four Salemba

Lena Ellitan & Lina Anatan. 2009. Management Information System. Bandung: ALFABETA

Laudon, C. Kenneth., Laudon, P. Jane, (2007), Management Information Systems Edition 10 Book 1 Salemba Empat: Jakarta

Utari Soemarmo & Ishak Abdulhak. 2012 Information and Communication Technology Education Bandung: PT REMAJA ROSDAKARYA

Sondang P. Siagian. 2016 Management Information Systems. Jakarta; PT Bumi Aksara