

### **Information System: Strategic and Operational Value for an Organization**

The use of computers in organizations increased rapidly from 1955 to 1977. However, only very few of the computing strategies are useful for the management and decision-making. Information system involves a combination of components that work together to collect, process, and store information so that it could help to achieve the organizational goal. The use of Information technology involves the installation of all the necessary hardware and software to enhance or expand the business. It is also necessary for the organizations to make an effective use of technology so that they could compete with the global trends. Information system plays an important role in the business strategies. Many surveys and researches show that the organizations which have better information systems provide better customer satisfaction. Whether you want to make a transaction processing level or a complex information system, in both cases computer based system will be the ultimate solution. To achieve the business goals and make the organization prosperous, information system needs to cater the strategic demands of the organizations.

Information system, or information technology, has an impact on the improved inventory management, production and customer service. The purpose of the information system is to provide smooth computer operations so that computers could help the top level managers in decision-making. Sometime information itself offers obvious decisions. Information is the output of an information system, according to Gupta (2002). In planning the information system suitable for the given organization, the first step should be the identification of needs. It is necessary for an information system to be effective, the system should respond to the needs of the company. Planning for the information system and strategic planning in management

is almost the same. Both require the identification of objectives and priorities.

Information system requires the analysis of a corporation's information and its process using information.

### **How Can an Information System Help?**

Investigating an organization, i.e. AspenTech, one can say that objectives, goals and strategic plans are required by the managers. It can be summarized from the databases in the form of the printed reports. Information system also provides other analyses data. An information system can help conduct a multi-dimensional information analysis. An information system helps the managers in AspenTech to cope with the new trends and changes that can affect the need for banking products or services. Information system helps the managers to deliver the products and services in effective way to satisfy the needs of the customers as well as of the organization.

There are several competitors' forces that effect the business environment. Michael E. Porter (Gupta, 2002) defines the five forces competitive model. The five competitive forces defined by him are bargaining power of suppliers, bargaining power of customers, threat for the new entrant, threat of substitutes and competitive rivalry between existing parties. The above-mentioned forces are very important to evaluate the organizations. The five models help an organization realize external threats and allow organizations to decide how to manipulate certain characteristics of industry. The live forces described in this model emphasize the importance of competition in the market.

Suppliers are input sources that are required by the organization to produce goods and services. If the customers are split, the bargaining power of the supplier will be low. Suppliers bargaining power will be high if the market is ruled by few large

suppliers. There is no substitute for the suppliers' product in the market. In the given case, customers can be the hindrance to suppliers if the former are not accepting the new products in the markets. Definitely, switching cost is dependable on the supplier.

Substitute are those products which are from a different industry but perform similar functions. As there are many substitutes available in the market to the consumers, it makes the customers powerful. Therefore, consumers also have high bargaining power, which means that the first step would be to analyze the scope of the industry. There are many ways to treat the substitutes like brand royalty to customers, close customer relations or switching costs for customers. Thus, huge market share can be attracted and sales for the existing firms can be reduced. Patents and license can restrict the new entries. Porters' model can be applied to particular companies and industries or regions (Gupta, 2002).

A customer can also have high bargaining power if (s)he buys large amounts of goods. By using Porter's five-force competitive model, an organization can take its own place in the market. Michael Potter's five-force framework is especially designed for keeping an eye on organization's objectives and key goals. Five forces can be used in AspenTech in order to determine attractiveness of industry to obtain desirable results. The five forces of Substitutes, Buyers, Entry, Rivalry, and Suppliers combined provide the intensiveness of competition and profit potential for both large and small industry/market sectors.

According to Wal-Mart, there are the following factors which every organization faces and depends on: organization's creativity and the way an enterprise copes with certain factors to achieve high position in market. Positional competitors cause medium pressure; according to Porter's Entry (Gupta, 2002), barriers are comparatively high, as Wal-Mart holds an outstanding distribution

systems, brand name, locations, capital and financial resources. Wal-Mart pricing techniques are specially designed to decrease the bargaining power of a consumer. Bargaining of buyers and suppliers imposes a great pressure on Wal-Mart management.

### **Into the Structure of the Business**

Wal-Mart gives a clear idea of how business works. The following factors play a pivotal role in the success of AspenTech or any other business: growth, industrial leadership, strong financials, absence of threats, good management, success and future growth. Applying porter's and Wal-Mart points, AspenTech has gained a huge popularity among its clients. The use of information technology has added a dramatic change in its popularity graph.

Information technology has reformed all marketing strategies and management policies in all multinational organizations. Recently, all organizations were updating their policies and strategies by adopting new technologies. Information systems and technologies are the best aid on the path of success. There are numerous organizations which are using information systems in order to establish their position in international market. In United States and United Kingdom, information systems have brought the dramatic change in marketing and management policies of organizations. The use of information systems enables organizations to update their manual system as well as to introduce new products. During the past few years, the use of information system has led to great transformations in techniques and policies of AspenTech, introducing a spectacular change in our society. This transformation is also known as Information Revolution.

Information Revolution basically refers to the consolidation of different organizational procedure by enabling new and advance information technologies and

information systems. The result of the transformation is unpredictable and uncalculated, but numerous researchers and policy-makers have rendered the result in various terms. The main objective of this report is to analyze the change in AspenTech organization due to the use of information system. Information technology is a marvelous tool which revives organizations. There is a considerable need to analyze a popular view of how technology has introduced a wide social change by emphasizing the traditional aspect of industry, agriculture and information (Etheredge, 2003). The most important perspective demonstrates the context for various new ideas. There are a number of discussions that consider the information technology history, its usage, etc., but thousands of readers are aware of the issues discussed, and the objective of this report is not to enter the debate about controlling technology.

No one can deny the importance of information technology. Information technology has added lots of advantages to AspenTech, making the company operations easy and flexible, reducing manpower and enhancing employees' productivity. Information technology has revolutionized the view of business and marketing strategies around the globe. There are numerous questions arising. Who will take advantage from IT? Does IT add value to organization? Does IT help in increasing revenues? Since the beginning of the history, business is organized in order to gain advantages, both financial and social. Has IT added value to AspenTech? In order to answer these questions, it is very important to understand the meaning and context of the word "value".

According to Warren, the term "value" can be defined as the goods people obtain after paying the price of the product (Gupta, 2002). In the light of another definition of value, the latter can be considered as something that is "worth in

usefulness or importance to the possessor; utility or merit" (American Heritage Dictionary, 2000, p. 88). Aspen Tech has a wide network of managers, and other staff. If it is supposed to create value to an organization, every member of an organization must get advantage from it within an organization.

In AspenTech, productivity and business profitability are the interest of the owners and stakeholders, and consumer's surplus is of consumer's interest. Many analysts have cleared that information technology is lifeblood for an organization in recent days. Analysts declared that information technology is important for the survival of organization in international market. Research showed that organizations that did not utilize information technologies are less profitable than others. Evidences proved that information technologies are important if the organization wants to remain competitive; however, it does not mean that additional spending on informational technologies will bring great revenues to the organization.

In AspenTech IT has added a huge advantage to the organization's success. The use of IT has dramatically changed the employees' creativity and productivity. IT reduced the time that it took the employees to complete the task previously. With the help of IT, employees are able to work faster. IT also provided flexibility in timings, work hours and productivity for all employees. Flexibility provided by information technology assures the quality and creativity of employees. On the other hand, customers have really gained a huge advantage from using IT in order to locate lower prices for the goods, for example, in online shopping services, which provides goods instantly, which means that one can take advantage of online shopping anywhere at any time.

The use of IT technologies helps customer in finding new and right products at economical rates. At AspenTech, customers are taking full advantage as IT has

provided convenience and ease of finding new information about company products anytime. Customers have gained advantage to shop anytime in any store they would like to. The use of information technology in the organization's strategies has given a great advantage to AspenTech, its staff members and its customers. Owing to information technologies, there are a number of services/products available at economical rates. Every person linked with organization, either directly or indirectly, has gained an advantage from Information technology.

At AspenTech, IT helps in processing more information accurately. In other words, at AspenTech every one gains and loses something. There are some cases when IT does not offer value to the business. IT has gained great popularity, yet at AspenTech, the management faces few problems with customers regarding the use of information technology. At Aspen tech, information technology has added huge advantages in both financial and marketing veins. The use of information technology at AspenTech helps in developing marketing techniques; IT can also be used in exploring new and advance ideas for the promotion of sales and revenue. At AspenTech, with the help of Information technology, a number of tasks are now done faster than earlier.

The importance of information technology at AspenTech cannot be denied. Information technology also helps to create and attract customers. AspenTech sales and revenues have increased a lot over past decades due to the use of information technology. AspenTech collected the feedback from customers in order to evaluate the satisfaction level of its customers, and the results show that AspenTech has gained more popularity over the past few months.

Competitive advantage is one of the top most requirements of an organization for its long survival. The widespread impact of IT has been noticed in numerous

organizations during past few decades. For example, in AspenTech, the use automation increases the effectiveness of the organization. It has been observed that IT expenditures are rapidly increasing around the globe (Gupta, 2002). IT provides easy access to information for all customers. In AspenTech, the use of information technology has bought a huge advantage, which can be determined from their sales increase.

AspenTech sales have increased in comparison to the previous years. The income of the consumer or client is remaining constant, yet AspenTech sales increased. The rise in AspenTech revenue curve indicates that users are rendering their services efficient than before. Revenue curve shifts upward because of staff activeness, time saving, etc. Information technology and information system at AspenTech have given a new drive to its strategies. Information technology has offered a new strategy to AspenTech. IT at AspenTech provides easy access to the information. The use of information technology and information system at AspenTech brought an advantage for all members. With the help of information technologies, the clients of AspenTech are more satisfied, according to the feedback. Employees waste less time and complete more tasks, which means that the revenue of the organization increases. AspenTech has gained much popularity due to the use of information technologies. Information technologies add a huge advantage to the organization. There are numerous analysts who proved the use of information technology in an organization is necessary for organizations' success.

Aspen Tech managers and stake holders have observed the way their sale curve has increased during past few months due to the use of information technology and constant staff availability. At AspenTech, the graph of user and employees satisfaction has reached its optimum level as the use of information

technologies came to the forth, showing a great change in sales and revenue. It was observed that information technology is important for organization on its way to success. IT has now become congruent; in the recent days IT is more involved in the strategically management areas. The IT value to competitive advantage becomes more nebulous in the world.

Information technology and new advantage technologies have offered new opportunities in the business world. Numerous organizations are taking advantage of new technologies in making huge revenues. Moreover, it was observed that AspenTech sales curve has increased, making the company's stakeholders more influential in the business world. It can be concluded that information systems are an Important strategic weapon for achieving reputable position in market.

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