

## Strategic role of Information System

Information system is like any other asset of organization which enables organization to have business value; that is Information System is considered as a value making proposition for organizations. Organizations invest in information system like they invest in other things. Organizations invest in machine, human resources, building with the expectation of good return for the organization in terms of money or facility. Similarly, investment is done in information system with expectation of having good return on investment. So, from business point of view information system can be viewed as value making proposition.

Organizations have to make different kind of strategies to success in the market. For example to increase profit margin, organization can develop and implement strategy to increase sales of product or reduce production cost or increase customer base etc. To design and implement strategies organization need information; here the role of information system as information provider becomes prominent.

To make strategies, information is required and information system will enable to acquire information of different types. For example to increase sales of product/service information about customers are required. Using the management information system, information about customers can be easily produced as transaction processing system has collected transaction data, and customer data.

Organizations can use different strategies to succeed in market; strategies can be implemented in different levels like:

- ∅ Business level: Business is a single firm producing different related products and services
- ∅ Firm level: a firm is a collection of different business firms.
- ∅ Industry level: industry is a collection of firms

### Business –level Strategy

In the business level, organizations seek to answer the key question “How can we compete effectively in the market?” The market can be of any thing like television, CLF bulbs, tires or services. The basic strategies can be used in this level are:

- ∅ Becoming low cost producer
- ∅ Differentiating product or service
- ∅ Finding niche market
- ∅ Efficient customer response systems

The strategy of becoming low cost producer can be implemented if the production and manufacturing cost can be reduced. The production and manufacturing costs can be reduced by synchronizing several activities like acquiring and storing raw materials, distributing finished products, promoting and selling products etc. Effective implementation of these activities will be only possible when the required information flow among them timely and properly. This can be made possible by leveraging information

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system in the value chain model. Value chain model enables to figure out activities of business where strategies can be applied.

Information system helps to

- ∅ Process feedbacks of customers
- ∅ Get suggestions about the quality of products
- ∅ Analyze sales of the product and compare sales with other products
- ∅ Find customer segments
- ∅ Provide efficient service to customers
- ∅ Design unique products and many more

### **Differentiating product or service**

By studying the features of products available in the market, new products with unique features can be developed. Organizations can make product with different features compared to other products if they have information about other products. Information system plays good role in studying features of products, finding similarity between products, and suggesting differences between products.

### **Finding Niche Market**

By analyzing transaction data, data about customers and demographic data, taste and preferences of customers can be known; that is information like: people of which location like which product can be known. This information may be of value to find niche market for the firms.

### **Efficient customer response system**

By knowing taste and preferences of customers, customer can be served accordingly. Customers can be served more efficiently by using information system; by easing tasks like searching products, suggesting about alternative products, efficient payment methods; customers will be facilitated. These tasks can be eased with information system.

### **Firm –Level Strategy**

Information system helps to improve overall performance of the organization by integrating different business units of the organization. In the firm level, organization use following strategies:

- ∅ Promoting synergies
- ∅ Promoting core competencies.

Promoting synergies mean integrating different functional units of the organization as a single unit. This can be done if output produced by one functional unit can be input to another functional unit. That is tying together operations of different business units so that they can act as a single unit.

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The performances of each business units can be maximized, enhanced if these business units can develop or create a concept of central core of competencies. If performances of different business units of the organization are maximized, the performance of the organization as whole will maximize. Core competency is an activity for which a firm is a best in the market. Information system helps to enhance competency by enabling to share knowledge, information across several business units and perform task and activities of each unit smoothly and timely.

### Industry level

In the industry level, strategies are used to find answer to question "How and when should organizations (firms) compete with as opposed to cooperate with others in the industry?" It is found that cooperating with each other in the same industry is more fruitful compared to competing with each other. The concept is to cooperate with other organizations to maximize profits. The strategies used in the industry level borrow idea from following concepts:

- Ø Information partnership
- Ø Competitive forces model
- Ø Business ecosystems and
- Ø Network economies.

**Information Partnership:** Information system can help to connect information systems of different organization so that they can share data/information with each other. The sharing of information with each other will allow organizations to work more efficiently.

**Competitive force model:** "Competitive advantage can be gained by enhancing the firm's ability to deal with customers, suppliers, substitute products and services, and new entrants to the market."

If the organizations can share complete and accurate information with each other then they can define standard for products so that it becomes difficult for new entrants from penetrating into the market. Bargaining power of customers can be reduced by fixing price of the product by all the organizations producing same product. In Nepal, price of noodles of different manufacturer is same.

### Business EcoSystem and Network economies:

Organizations can use network to connect their information systems so that they can share complete and accurate data/information with each other. This enables to know what is happening to each other. Organization can cooperate with each other if they can share their information and develop strategies to maximize profit for all. Organizations can set up single web portal to do marketing of their products, define standard for the products they manufacture, fix price of their products.

Internet helps them to reach larger area and do business every where. Organizations can implement single security mechanism to protect information system of all organizations; this will reduce the cost incurred in implementing security mechanism for each organization.

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### Question and Answer

*How information system can be used to realize these different strategies used in different business level?*

- **Becoming low cost producer:** By strengthening the supply chain and making business processes of organization efficient, the reduction in the cost of production may be possible. To make supply chain strong the flow of accurate, complete and timely data is necessary. Information system enables to flow information among the different components of supply chain with quite ease and cost effectively.
- **Increasing switching cost for customers:** The making the business processes of the organization efficient and effective quality product can be produced cost effectively. By providing quality product in lower price encourages customers to continue the organization, they think several times before switching to another organization.  
**Making unique product.** By studying market it can be known the features of products that are selling in the market. Information system can provide information to differentiate features of product that is to make unique product.
- **Finding niche market.** By studying past data about the transactions made by customers, preferences and likelihood of customers can be known; further by studying customer data and transaction data, it can be know which location people like which product. On the basis of this information marketing strategies can develop to sell that product in that location.
- **Reducing agency cost.** With the use of devices like surveillance cameras employees' activities can be monitored, that results in more effective monitoring compared to monitoring by humans and also reduction in the operating costs.

*What do you mean by strategy?*

Answer: Strategy is steps or method to perform some tasks and activities effectively.

*How information system enables to develop or implements business strategies?*

Answer: To develop business strategies, information is required. To handle any situations knowledge about that situation is necessary. Information system enables to study and understand the situation; it provides insight about the effect of variables involved in the situation. By analyzing effect of variables, information system provides different information about the situation, produces alternatives solution to situation.

*What are the business level strategies?*

Answer: Finding Niche Market  
Developing unique products  
Improving customer satisfactions

*Do you think Internet has weakened the competitive force model?*

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Answer:

- Ø Internet has made easy for customer to find alternative products;
- Ø Finding new markets
- Ø Eased to penetrate in market for new entrants

From these points, it seems that Internet has changed the role purpose in the competitive force model. But Internet has also made easy to set up fixed price market, where customers can not do bargaining; Internet has enable to increase horizon of the organization by making information rich and increasing reach of the organization; have enable to improve customer satisfaction more by developing conepts on online shopping where customers can know feedbacks about products, comparative analysis of similar products, saving of time.

How information system can improve synergies between different units of the organization?

Answer: Synergy means cooperating with each other to have combined power. Units of organization can be combined. For example, manufacturing and production unit need raw materials, machinary, human resources and other miscellaneous things. The manager calculates how much time, fund and effort are required to make certain number of products. If that information, mainly about fund is available to account and finance managers, he/she will check the status of fund of the organization and suggest manufacturing and production manager whether fund required for manufacturing given number of products within specified time frame is possible or not or how it can be made possible. Here if the informaton about these two functional units flow properly and timely, then the production process will be efficient and timely. Here output of manufacturing and production unit is input to account and finance unit and vice versa. With the use of information system distribution of information among functions units can be made effective, as the jobs of information system is to produce and disseminate information. This will improve the synergy between different units of organization.