

### Case lets on Information Technology for Management

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## **Cases on Information Technology for Management**

### **1) E Commerce**

SPINCA LTD., is leading company in manufacturing of cotton yarn. This company has client base in western Maharashtra region. The company has implemented an extensive IT application in their operations, which provides appropriate information support to their personnel about their day to day tasks. Now company thought to start their E-commerce portal in order to expand their business using internet technology.

As an IT expert you have been asked to define scope of e-commerce and requirement of e-commerce implementation for SPINCA LTD.,

### **2) IT Implementation in Production Organization**

Hawkins Cookers Ltd., manufactures pressure cookers and cookware at its plant in Mumbai, Hoshiarpur (Panjab) and Jaunpur (UP). Hawkins is the leading manufacturer of cookware in India and exporting its products to more than 60 countries including the Middle East, Europe, U.S.A. and South East Asia. Hawkins proposed to implement an online integrated system

As an IT expert:- you have been consulted to guide on areas of IT implementation, infrastructure requirements and network topology

### **3) IT Infrastructure for Manufacturing Unit**

Suntech is a family-run enterprise that started in 1989. Suntech produces and markets gear-cutting machines and grinding tools. It now has two facilities in France, plus subsidiaries in the United States, China and Iran. It employs a total of 450 persons in both customized and small-batch production, which to some extent use non-name parts. The main buyers of Suntech products are automotive, aerospace and mechanical engineering companies. The primary goal was to achieve computer-supported, integrated handling of all small business activities.

Assignments: a) Discuss the need and scope of IT for organization.

b) Outline infrastructure requirement for IT implementation

### **4) CBS Implementation**

The Bank of Himalaya is evaluating a request from the customer to provide an ATM services through all branches in India. At present bank install TBA banking application in urban areas and back office computer application in rural branches with LAN. All branches have adequate computers and telecommunication facilities. Considering the customer demand and present IT infrastructure, bank management proposed to implement CBS.

### **Assignments-**

- a) Based on above information, outline the scope for CBS implementation at HO and Branch level.
- 2) Suggest delivery channels other than ATM with its advantages and disadvantages.

### **5) E-Governance**

Govt. of Karnataka has decided to implement E- Governance in Education Department. Education department have two major section i.e. primary and higher education. There are four divisional offices and district level offices at district place and 240 block level offices.

As a IT Manager

- a) Outline Scope for IT implementation and network structure.
- b) Outline Hardware and software Infrastructure for E- Governance

### **6) Database Design**

Liva Electronics is leading firm having business in sales and distribution of computer peripherals and they are using traditional database system for managing sales data of organization.

- a) Discuss various issues in managing sales data with tradition system and Elaborate Need of DBMS to overcome these problems.
- b) Normalize sales data upto 3NF with suitable example.

### **7) E-Commerce Infrastructure**

Texmaco is leading company in manufacturing of industrial pumps. This company has client base in western Maharashtra region. The company has implemented an extensive IT application in their operations, which provides appropriate information support to their personnel about their day to day tasks. Now company thought to start their E-commerce portal in order to expand their business using internet technology.

As a IT expert you have been asked to define scope of ecommerce and requirement of e-commerce implementation for Texmaco,

### **8) E banking**

Ajinkyata Mahila Co-op. bank is leading co-op. bank in Satara district having branches in Satara and Pune districts. The Management of bank is evaluating a request from the customer to provide e-banking services in all branches. At present bank has computer based system for daily transaction processing operations. All branches have adequate computers with LAN. Considering the customer demand & present IT infrastructure bank management proposed to connect all branches with leased line and provide e banking services.

As an IT expert :- you are consulted to guide on areas of e banking including e payment system implementation and infrastructure requirements for e banking.

### **9) Database Design for Pharmacy Company**

Med Nova is pharmacy store at mid town and they are using paper based system for day today transactions. At present more than 5000 customers purchase various medicines per day from Med Nova, Present paper based system leads to various issues and management want to introduce DBMS for managing huge amount of data. As an IT expert you supposed to identify problems in existing system and suggest appropriate database model and database design for Medi Nova.

### **10) E Commerce implementation for Placement Company**

Excell Placement Services—specializes in providing suitable manpower for the organizations dealing in information technology. Even though the company deals with information technology, professionals, their internal systems are still manual. With the constant pressure from the customers, the company is now considering to start their E-commerce portal in order to expand their business using internet technology.

As a IT expert you have been asked to define scope of ecommerce and requirement of e-commerce implementation for Excell Placement Services

### **11) IS Design**

ABC LTD. is a leading manufacturer of industrial pumps employing 12,456 employees. The company would like to have an information system solution' that would provide appropriate information support to the top management for decision making.

As an IT expert:- you are consulted to guide on areas of IT implementation and infrastructure requirements.

### **12) RFP for E-Governance**

Govt.of Maharashtra is planning to introduce e-governance in Health Department. Health department has head quarter at Mumbai and its subsidiaries i.e. PHC(Primary Health Centre) are spread over all the districts of Maharashtra. Being you are an IT expert you have been asked to prepare RFP for e governance project.

## Cases on MIS

### 1) F&B Management in Restaurant

A waiter takes an order at a table, and then enters it online via one of the six terminals located in the restaurant dining room. The order is routed to a printer in the appropriate preparation area: the cold item printer if it is a *salad*, the hot-item printer if it is a hot *sandwich* or the bar printer if it is a *drink*. A customer's meal check-listing (bill) the items ordered and the respective prices are automatically generated. This ordering system eliminates the old three-carbon-copy guest check system as well as any problems caused by a waiter's handwriting. When the kitchen runs out of a food item, the cooks send out an 'out of stock' message, which will be displayed on the dining room terminals when waiters try to order that item. This gives the waiters faster feedback, enabling them to give better service to the customers. Other system features aid management in the planning and control of their restaurant business. The system provides up-to-the-minute information on the food items ordered and breaks out percentages showing sales of each item versus total sales. This helps management plan menus according to customers' tastes. The system also compares the weekly sales totals versus food costs, allowing planning for tighter cost controls. In addition, whenever an order is voided, the reasons for the void are keyed in. This may help later in management decisions, especially if the voids consistently related to food or service. Acceptance of the system by the users is exceptionally high since the waiters and waitresses were involved in the selection and design process. All potential users were asked to give their impressions and ideas about the various systems available before one was chosen.

#### Questions:

1. In the light of the system, describe the decisions to be made in the area of strategic planning, managerial control and operational control? What information would you require to make such decisions?
2. What would make the system a more complete MIS rather than just doing transaction processing?

### 2) ESS

Multibase Company Limited is a diversified business group with interests in fabric and yarn manufacturing, paper and pulp, and cement. Its manufacturing units are located across the country and number eight- one for fabric, two for yarn, two for paper and pulp, and three for

cement. While the head of each unit has considerable operational autonomy, strategic decisions considering these units, such as capacity expansion, procurement of new technology involving substantial investment, etc., are made at the headquarters, located in Delhi. The head quarters monitor the performance of every unit through weekly and monthly reports which are prepared by CBIS installed at each unit. Often considerable amount of time of the senior executives based at the headquarters is taken away in analyzing these reports and drawing inferences for planning and control. The result is that the senior executives have little time for strategic thinking which they feel is a must in the present competitive environment. The CEO of the company has thus proposed to develop suitable computer based systems which might be helpful in understanding the current status of various manufacturing units in terms of their overall performance, the type of environmental constraints that operate in the three business areas that exist for enhancing capacity in these business areas.

- a. What systems would you propose that would serve the company's needs?
- b. Considering that the company already has CBIS installed, will you contemplate complete overhaul of the systems or add functionalities of the existing systems? Justify your line of action

### **3) HRIS**

The company is a leading manufacturer of industrial pumps employing 12,456 employees. Recently an advertisement was released for a specific post. It was revealed that there were many employees who were having the qualifications and experience that was needed. The company would like to have an information system solution that would provide appropriate information support to the personnel manager about the employees. Suggest an appropriate information system for the aforesaid situation.

### **4) Marketing Information System**

The company is a manufacturer of writing and printing papers. The company is considering computerization of sales order processing, production planning and warehousing. For this purpose, each product will need to be assigned a unique product code number. The company requires a coding structure for die products that they make. Suggest an appropriate information system for the aforesaid situation.

### **5) SCM System**

The company manufactures special purpose compressors. The company has four regional offices in four metros. The company is in a competitive market where customers are not willing to wait for weeks to get their compressors delivered. In order to ensure prompt delivery, the company implemented distributed resource planning methodology. After six months of implementation, the team conducted a post implementation review that revealed problems. Suggest an action plan for development of Information system for the company needs to formulate action plan to get better results from the system.

### **6) MIS Design & Development**

Midas Touch Inc., a software company having a large pool of computer professionals. For each project, a project team is formed. At die end of the project, the team is disbanded and members go back to a bench. At times, the company finds that all their professionals are out on projects and there is no one on the bench to be assigned to a new project that has been finalized. The company has to employ new personnel. Project leaders find it difficult to work



with "raw hands". The company would like to have an information system that would provide actionable information to forecast the manpower requirement and estimate the need for recruitment and training. Analyse the case and quote your finding and suggestions for developing a MIS.

## **7) MIS Design & Development for Service Organization**

Ad Support Inc., is a company provides different kinds of support services for advertises and advertising agencies. One of the most popular services is monitoring television commercials on different channels. In the present manual system, the final report gets generated only after three weeks. Ad Support Inc. is considering a computer based information system that will improve the reporting time and office staff productivity. Analyse the case and quote your finding and suggestions for developing a MIS.

## **8) DSS**

A-dec, Inc. is one of the largest dental equipment manufacturers in the world. The company designs and builds most of what you see in your dentist's office, then markets its products through a worldwide network of authorized dealers. The company's growth over its 36-year history resulted in a large management information problem,

Regional managers, responsible for about 75 territory managers around the world, would meet annually to estimate sales revenue for the next year. Then they would guess at what that meant in terms of actual production. They were not even in the ballpark when forecasting the product mix needed, costing the company much more money to respond to customers' needs. A-dec needed a decision support system to help solve the problem.

A-dec was able to solve its sales forecasting and production scheduling problem. The system was Web-based and was compatible with A-dec's mainstream database technology. Also, A-dec managers were able to use the system interactively as a reporting and information gathering and deployment tool. A-dec territory managers can now communicate their sales forecasts, the product mix they need, and when they need it, to finance and manufacturing via

the Web.'In addition, the system shows trends that can help the managers identify how to help dealers boost sales.

The system enables A-dec to manufacture the products that its customers need when they need them, while saving the company time and money, and increasing customer satisfaction. The net effect of the new system is increased sales. The new system also cut overtime pay by almost \$1 million, by making the manufacturing planning process easier and more accurate.

### Questions

1. Why was a DSS needed in this case?
2. Identify the different decisions supported by the DSS.

## **8) Role of IS in planning Function**

Professor A. Van Cauwenbergh of Antwerp University, in a paper presented at the Tenth Anniversary Conference of the European Institute for Advanced Studies in Management, presented four revisions to traditional Management Theory. In summary, the revisions are:

- (1) The initiative for the renewal and adjustment of the activities of a firm should come from the different levels in the management hierarchy. "Strategy is not a privilege of top management".
- (2) Firms, especially big firms, are incoherent systems (goals of the different component systems are not simply subdivisions of an overall goal; there are individual, conflicting goals as well). Some of these differences are manifestations of organizational initiative and vitality. Using information systems and central planning and rule making to suppress all differences is destructive to organizations.
- (3) The most vital "fluid" of an enterprise is the aggregate of its entrepreneurial values. The most fundamental and motivation and control come through these shared values relative to work, quality, efficiency, etc. Management often neglects these values and assumes that the collection and dissemination of information will provide sufficient motivation and control.

(4) Enterprises are open systems; their structure and operating processes are determined by their environment. This means organizations must be designed to continually adjust to the environment.

**Questions:**

- a. If these revisions are correct, how is planning to be organized? How should the information system support the planning organization?
- b. Can the information system aid in achieving shared values?
- c. How might a comprehensive system be used to stifle initiative?

**9) Strategic MIS Planning**

Robert V. Head, a consultant on MIS planning, provided ten guidelines to help MIS executives who are on the threshold of experimenting with strategic MIS planning:

- 1. Make provisions in the systems plan for taking small steps rapidly. “Don’t have a plan with goals extending so far into the future that there is no way of tracking it.”
- 2. Develop alternative plans when significant contradictory trends are discerned in business objectives and technology
- 3. Interface the systems plan with the corporate plan, modifying both appropriately.
- 4. Document the systems plan in a format intelligible to top management and arrange for personal presentation
- 5. Establish a formal mechanism for review and reiteration of the systems plan.
- 6. Develop a system for tabulating and forecasting utilization of installed data processing (DP) equipment
- 7. Fix the organizational responsibility for systems planning.
- 8. Rotate the assignment of technical personnel to the planning staff in order to avoid an “ivory tower aura”
- 9) Budget for research and development
- 10. Set up a comparative systems intelligence activity.

**Questions:**

- a. What can be the drawback of having a formal system as mentioned in point 5?

b. Can transparency make organizational responsibility more effective?

### **10) ESS for Diversified Business Group**

Multibase Company Limited is a diversified business group with interests in fabric and yarn manufacturing, paper and pulp, and cement. Its manufacturing units are located across the country and number eight- one for fabric, two for yarn, two for paper and pulp, and three for cement. While the head of each unit has considerable operational autonomy, strategic decisions considering these units, such as capacity expansion, procurement of new technology involving substantial investment, etc., are made at the headquarters, located in Delhi. The head quarters monitor the performance of every unit through weekly and monthly reports which are prepared by CBIS installed at each unit. Often considerable amount of time of the senior executives based at the headquarters is taken away in analyzing these reports and drawing inferences for planning and control. The result is that the senior executives have little time for strategic thinking which they feel is a must in the present competitive environment. The CEO of the company has thus proposed to develop suitable computer based systems which might be helpful in understanding the current status of various manufacturing units in terms of their overall performance, the type of environmental constraints that operate in the three business areas that exist for enhancing capacity in these business areas.

a. What systems would you propose that would serve the company's needs?

b. Considering that the company already has CBIS installed, will you contemplate complete overhaul of the systems or add functionalities of the existing systems? Justify your line of action

c. Justify the requirement of a Chief Information Officer (CIO) in the context of the given caselet.

### **11) System Development Approach**

Insurance company having corporate office in UK wants to develop IS for middle level management. Suggest appropriate system development methodology.