# Teaching Plan

## Sub:
**MANAGEMENT INFORMATION SYSTEM (2015-17)**

**Year:** I/II  
**Faculty:** Mrs. C. Supriya

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Topic</th>
<th>No. of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unit I – Organisation and Information Systems</td>
<td>2</td>
</tr>
</tbody>
</table>
| 2.   | The Organisation structure  
Managers and activities – Data, information and its attributes | 1 |
| 3.   | The level of people and their information | 3 |
| 4.   | Introduction to IS models and types of information systems –  
Nolan stage Hypothesis, IS Strategic Grid | 2 |
| 5.   | Critical success factors, Socio – Technical systems approach (Mumford) | 1 |
| 6.   | Prototype and End User computing | 1 |
| 7.   | Application packages | 2 |
| 8.   | Outsourcing | 1 |
| 9.   | Case: Discussion | 1 |
| 10.  | Total | 12 |
| 11.  | Unit II : Building of Information Systems | 2 |
| 12.  | SDLC – system development stages | 2 |
| 13.  | System analysis and design – Requirement determination, strategies | 3 |
| 14.  | Structure analysis tools | 1 |
| 15.  | System design – Design objectives, conceptual design, Design methods | 2 |
| 16.  | Case | 2 |
| 17.  | Total | 11 |
| 18.  | Unit III: IS Security and Control | 2 |
| 19.  | System vulnerability and abuse | 1 |
| 20.  | Business value of security and control, need for security | 2 |
| 21.  | Computer crime – Hacking, Cyber theft and unauthorized use at work | 2 |
| 23.  | Privacy – Issues and internet privacy | 1 |
| 24.  | Challenges – working condition, individuals, health and social issues | 1 |
| 25.  | Case | 2 |
| 26.  | Total | 12 |
| 27.  | Unit IV: ERP and Benefits of ERP | 2 |
| 28.  | Overview of ERP | 1 |
| 29.  | MRP, MRP II, Evolution of ERP | 1 |
| 30.  | Integrated management systems | 3 |
| 31.  | Reasons for growth of ERP | 1 |
| 32.  | Business modeling integrated data model | 1 |
| 33.  | Foundation of IS in business | 1 |
| 34.  | Obstacles of applying IT | 2 |
| 35.  | ERP Market modules – ERP Modules Finance, Accounting, manufacturing and production, sales and distribution, hr, plant maintenance system, material management, quality management systems | 5 |
| 36.  | ERP system options and selection, ERP proposal evaluation, ERP benefits | 2 |
| 37.  | Case | 1 |
| 38.  | Total | 14 |
| 39.  | Unit V: ERP implementation and Maintenance | 2 |
| 40.  | Implementation strategy options | 2 |
| 41.  | Features of successful ERP implementation | 1 |
| 42.  | Strategies to attain success | 2 |
| 43.  | User training | 1 |
| 44.  | Maintaining ERP and IS | 2 |
| 45.  | Case | 2 |
Unit I

Short Answer questions:

1. MIS
2. IS models
3. Nolan stage model
4. Critical success factors
5. Mumford model
6. Application packages
7. Outsourcing

Essay questions:

1. What is a system? Explain the system concept with an example?
2. Discuss various types of Information systems.
3. Briefly explain various stages of Nolan Model
4. Differentiate data and information and their attributes.
5. What are the critical success factors for an information system
6. What is prototype and end-user computing? What are the application packages?
7. Briefly explain the importance of strategic grid.
8. Explain prototyping steps? Explain the advantages and disadvantages of prototyping?
9. What do you mean by integrated application software packaging?
10. Define outsourcing. Describe how outsourcing is a key issue in attaining strategic alignment.

Unit II:

Short Answer questions:

1. SDLC
2. Approaches to System development
3. System design objectives
4. Design methods

Essay QUESTIONS

1. Define SDLC. Mention the SDLC approach.
2. How are the information systems designed to meet the various types of information needs in an organization.
3. What are the various design methods for an MIS.
4. How do you determine the requirement and strategies of an information system?
Unit III

**Short Answer questions:**

1. System security and abuse
2. Computer crime
3. Piracy vs Privacy
4. Challenges of IS security
5. Hacking
6. Cyber crime

**Essay questions:**

1. What is system abuse? Explain the importance and need for system security for a business.
2. What is information security? Explain information system controls.
3. Explain the value chain for information system security and control.
4. List out different types of threats for system information. Explain.
5. Explain the term IS audit. Why is it conducted?
6. What are the challenges of IS system privacy and piracy.

Unit IV

**Short Answer questions:**

1. ERP evolution
2. Integrated management systems
3. Business modeling
4. Integrated data model
5. Obstacles of applying IT
6. ERP modules
7. Finance module
8. Sales and Distribution module
9. Plant maintenance system etc.
10. ERP System options and selection
11. ERP proposal evaluation
12. ERP benefits

**Essay questions:**

1. Discuss the evolution of ERP.
2. Discuss briefly various reasons for the growth of ERP.
3. What is integrated data model? Explain how is this useful in ERP?
4. What are the foundations of IS in business.
5. Explain some of the most common modules of ERP implemented in organisations?
6. What are the various obstacles of applying ERP?
7. How do you select the various ERP systems for an organization?
8. Describe briefly benefits of implementing ERP.
Unit V

Short Answer questions:

1. ERP implementation strategies
2. Features of successful ERP implementation
3. Strategies to attain success
4. Maintaining ERP and IS.

Essay questions:

1. Why the methodology of implementing ERP is considered very important and what are the advantages of implementing a suitable methodology?
2. What are the stages found in project investigation or screening?
3. Explain the BPR approach to an ERP implementation.
4. Explain various approaches found during ERP implementation.
5. Discuss on the success and failure of ERP taking some examples.
6. Discuss on the costs and risks of failure in implementing an ERP system.
7. Explain the maintenance activity of ERP and also that of IS.

Cases Reference:

1. Owens corning – Pg. 309, CSV Murhty, MIS, HPH, 2010
2. NIBCO, - Pg 311, CSV Murhty, MIS, HPH, 2010
3. IBM – Pg 313, CSV Murhty, MIS, HPH, 2010
MODEL QUESTION PAPER  
MBA I–II YEAR 
MANAGEMENT INFORMATION SYSTEM

Short notes: 5X4=20 marks

2. Describe Structure analysis tools.
3. Differentiate piracy & privacy?
4. What are the Obstacles of applying IT?
5. What are the Features of Successful ERP Implementation?

Long notes: 8x5=40 marks

6a) Explain in detail about Nolan Stage Hypothesis. 
Or
b) How IS will be helpful in Service Industry.
   a) Define SDLC, Explain the process of SDLC in the Development of System Programme.
Or
7b) Define System design, explain the design methods in System Design.
8) What is the Need for Security? Discuss about Business value of security and control.
or
b) Explain the Challenges in working condition, individuals, Health and Social Issues for IS Security.

Or
Explain the Benefits of ERP in the Present Business Scenario

10 A) Explain the ERP Implementation Process, Implementation Strategy Options  
Or
B) Explain Features of Successful ERP Implementation in Service Industry.
Section – A (Short Answer type questions) (10X2=20 Marks)
Answer all questions, each question carry equal marks.

Write a short note on the following:
1. Define and Differentiate Data & Information.
2. What do you mean by Prototype?
3. What are the design methods for building of Information System?
4. What are the tools are used for Structure analysis?
5. Define Hacking.
6. What is Piracy and Privacy?
7. Define ERP & MRR?
8. What is Human Resource System & Plant Maintenance System?
9. What are the features of Successful ERP Implementations?
10. What do mean by user training in the field of ERP implementation?

Section – B (Essay Type Questions)
Answer all the questions. 5x8=40 marks

11. A) What is Information System and Explain different types of Information Systems?
    OR
    B) What is an organization and explain the functions of various departments in the organization.

12. A) Define SDLC, explain the different stages in SDLC.
    OR
    B) What is System design? Explain different design methods in system design.

13. A) What is the importance of security and explain different security mechanisms for the organizational development
    OR
    B) What is system vulnerability? Explain in detail about Business value of security and control.

14. A) Explain the Following
    I. Define and Differentiate MRP & MRP II. II. What are the reasons for the growth of ERP? III. Foundations of IS in Business.
    OR
    B) What are the different modules in ERP and explain any 5 modules?

15. A) What are the different strategy options for implementation of ERP and explain in detail.
    OR
    B) Explain the process of User Training & Maintaining of ERP.
Section – A (Short Answer type questions) (10 2 20 marks)

Answer all questions

Write a short note on the following:

1. Give one reason for using computer for MIS in the organization
2. System Develop Life Cycle
3. System Vulnerabilities
4. Internet privacy
5. Material management System
6. Quality Management System in ERP
7. Lead Time Reduction.
8. Cycle time.

Section – B (Essay type questions) (5 x 8= 40 marks)

Answer all questions, each question carry equal marks

11. a) Explain about the role of MIS in Management. Or

   b) Briefly describe the role of MIS-In hospital, hotel & bank.

12. a) What are the methods of minimizing risks by IS Audit? Or

   15. What is the difference between Hacking, cyber theft? How we can overcome security vulnerabilities in information systems.

13. a) What are the reasons for growth of ERP? Or

   b) What are the obstacles for applying Information Technology in business?

14. a) What are the benefits of ERP in business? Or

   b) Explain with examples that ERP packages increased flexibility

   a) Give the guidelines for ERP implementation? Explain different strategies to attain success in ERP implementation.

   Or

   b) How ERP packages implemented first time in existing firms
Section – A (Short Answer type questions) (10 2 20 marks)
Answer all questions
Write a short note on the following:
1. Critical Success Factors
2. IS Strategic Grid
3. Cyber theft
4. IPR
5. Business Modeling
6. MRP
7. Cycle Time
8. On-time Shipment
9. User Training
10. ERP Maintenance

Section – B (Essay type questions) (5 x 8= 40marks)
Answer all questions, each question carry equal marks
11. A) Describe advantages of computerized operational information systems. (or)
    B) Explain the advantages of outsourcing IS development.

13. A) Explain why IS are vulnerable and illustrate some threats to IS. (or)
    B) What are IPRs and explain how they can be protected in the Internet environment.

13. A) Explain the evolution of ERP. (or)
    A Explain the Human Resource System module features of ERP.

14. A) Explain how ERP package helps in resource utilization and reduction in operating costs. (or)
    B) Explain the role of ERP in design making capabilities.

15. A) Explain the importance of maintenance of ERP packages. (or)
    B) Explain the various strategies for implementing ERP.
Background
XY Trading Limited is a young and dynamic exporting company in the mobile market. The company has been growing very quickly since they had a breakthrough with their initial product in 2002. Since then the company has developed a number of new and ancillary products and has successfully managed to commercialise these products in Ireland, the UK and across the main markets in Europe. XY Trading has a manufacturing plant and sales office in Ireland, and a mixture of direct sales and channel partners in the UK and Germany. The additions of the UK and Germany outlets to the company were achieved through acquisition; both transactions were successfully completed in 2011.

The company is keen to take advantage of their designs and new products but are already beginning to see competition increase in their current markets. The management team have been discussing, more and more regularly, the challenges that they are experiencing associated with identifying and understanding the most important measures for their business including individual product profitability, country product penetration, customer turnover and profitability, market shares… to-date there has been a lot of debate but a lack of decisions.

Strategic Issues
XY Trading does not currently have a formal MIS / Performance measurement system (or methodology) that covers all areas of the organisation, including manufacturing and sales. The main challenges that the company face, from an MIS and company performance management perspective, include:

- Company performance has been measured and managed through excel, with differing approaches and understanding across the various business units and countries
- There is now a distributed management team and goals and tracking of goals and objectives is not transparent
- There is a growing number of employees involved in developing reports and clarifying reporting / report definition ambiguities across the company
- Country and Business Unit performance is difficult to compare and overall company performance is also difficult to measure and forecast

Case Study Questions
What approaches should be considered by the management team to create an effective performance management and reporting capability for the whole organisation – concentrating on people, process and technology?

- How should they go about linking performance metrics to company strategy, which includes moving into additional markets in America?
- What key areas do you believe they should focus on for metrics, across the whole business?
- Given the distributed nature of the workforce (manufacturing and sales teams) how could online / mobile reporting tools support the organisation?
CASE 2
“SystemX Inc., called off its acquisition of SoftGuide Knowledge Consultants, Friday, saying that 1 Billion was too high a price.” (SoftGuide has a considerable market share in Training and Development services and would therefore help SystemX to diversify and expand its range of services to customers.)

“Although SystemX officials would not comment further, several observers said that problems discovered at SoftGuide probably lay behind the decision…. The article said that SystemX feared that SoftGuide’s data-processing system was inadequate to handle the new products planned for the SoftGuide sales staff. SystemX officials were also concerned about the 30 percent annual turnover among sales personnel… Tabrez A., SoftGuide CEO, responded that the SoftGuide’s data-processing was quite competent and has absorbed at least one new product a month for two years.”

Questions:

a. Why should SystemX be so concerned about the capabilities of SoftGuide’s data-processing?

b. What competitive advantages to a Training and Consultancy services company may be provided by an information system?

CASE 3

Ten Guidelines for 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 or 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?

CASE 4

Information System 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:

a. 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?

b. What would make the system a more complete MIS rather than just doing transaction processing?

Explain the probable effects that making the system more formal would have on the customers and the management.

CASE 5

Security Loopholes

Utpal had just joined SystemX as Systems Manager. But he was a worried man looking at the current state of affairs at SystemX. As a part of assessing hardware and software requirements, it was found that out of the 364 desktops at the corporate office; more than half did not have their anti-virus software updated with recent virus signature files. Three-fourths had not changed the default e-mail password (it was the user name) and no one had installed OS patches. And one of its local mail servers seemed to be an open relay! For a fleeting moment, he wondered about the situation at the seven branch offices across the country.

SystemX used the Net extensively in dealing with its branches, customers and suppliers. Information like contract documents, marketing plans, Cheque and Draft numbers, bank account details and collection details were regularly transmitted by e-mail. Utpal’s first thought was that he would recommend that SystemX bring in a security consultant. But the budget constraints meant that his recommendation was unlikely to find favour. He was beginning to feel a bit out of depth and was wondering what he should do to ensure that SystemX’s data remained safe and secure.

Questions:

a. What security loopholes come to the fore in the situation described? How can these be plugged?

What is the importance of a “security budget” in the context of the given situation?

MIS Case Studies

Case 1

SystemX Inc. Withdraws Rs. 1 Billion SoftGuide Acquisition Offer
The following is an excerpt from a news article in the Daily Update, March 07, 2010

“SystemX Inc., called off its acquisition of SoftGuide Knowledge Consultants, Friday, saying that 1 Billion was too high a price.” (SoftGuide has a considerable market share in Training and Development services and would therefore help SystemX to diversify and expand its range of services to customers.)

“Although SystemX officials would not comment further, several observers said that problems discovered at SoftGuide probably lay behind the decision…. The article said that SystemX feared that SoftGuide’s data-processing system was inadequate to handle the new products planned for the SoftGuide sales staff. SystemX officials were also concerned about the 30 percent annual turnover among sales personnel… Tabrez A., SoftGuide CEO, responded that the SoftGuide’s data-processing was quite competent and has absorbed at least one new product a month for two years.”

Questions:
   b. Why should SystemX be so concerned about the capabilities of SoftGuide’s data-processing?
   c. What competitive advantages to a Training and Consultancy services company may be provided by an information system?

Case 2
Professor Challenges Basic Assumption about Planning and Control

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?

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Ten Guidelines for Strategic MIS Planning
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16. Develop a system for tabulating and forecasting utilization of installed data processing (DP) equipment.
17. Fix the organizational responsibility for systems planning.
18. Rotate the assignment of technical personnel to the planning staff in order to avoid an “ivory tower aura.”
20. Set up a comparative systems intelligence activity.

Questions:
   b. What can be the drawback of having a formal system as mentioned in point 5?
   c. Can transparency make organizational responsibility more effective?

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Case 4
Unraveling the Jargon

The consultant’s reply was: “In my investigation of your applications portfolios, I’ve applied … to the logical data structures and have discovered a very high frequency – approximately 93.286% - of data embedded in application program logic which is largely responsible for the integrity and synchronization problem currently being encountered. As a solution, I would recommend the design of a master database each of which would employ relational technology to reduce the database to third normal form. This would eliminate the possibility of semantic disintegrity upon querying the database.”

Questions:
   a. Try to guess what the consultant said?
   b. Justify the use of technical jargon.

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Case 5
Information System in Restaurant
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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:

- c. 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?
- d. What would make the system a more complete MIS rather than just doing transaction processing?
- e. Explain the probable effects that making the system more formal would have on the customers and the management.

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Questions:

- b. What security loopholes come to the fore in the situation described? How can these be plugged?
- c. What is the importance of a “security budget” in the context of the given situation?
At Du Pont Co.’s (www.dupont.com) $4 billion performance coating grope, the critical issue was content management. “We have a very large number of documents for marketing: brochures, press releases, warranty information on products and general support content for our distributors and car repair body shops”, explains Catherine March and, the groups e- business strategy manager. “Our salesmen were driving around with 23 kg of obsolete literature in their trunk.”

Du Pont opted to deliver the information through a web-based intranet/ extranet portal, using technology from Bow-street, a portal s/w and web development tools company. Du Pont wanted the ability to customize information about its half a dozen coating brands. It also wanted each of its 2500 distributors and repair shops worldwide to see the information displayed in almost 4000 different site views; which the technology would allow it to do.

Since the content capability was initiated, Du Pont’s site has grown rapidly. The body shops can now get training, bench marketing tools, and can paint colour formulas via the portal. There are also jobposting and resume services. And for the distributors, Du Pont is researching adding order-tracking and order accuracy capabilities soon.

Questions:

a. What are the business benefits of the web portal? Make a critical assessment.

b. What is the importance of ‘content management’ for enterprise web portals?

c. Can a small business develop and maintain such a portal?

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**Case 8**

**Building the IT Infrastructure**

Alfred is a do-it-yourself entrepreneur who built up his fortune in trading. He traded in anything and everything, and kept close control of every activity. That was how he had grown rich enough to indulge in his one dream — to build a college in his hometown. A college that would be at par to the ones in the better cities, the ones in which he could not study himself.

Work started a year back and the buildings were coming along well. He himself did not use computers much and became hooked to the Internet and e-mail only recently. He was determined to provide a PC with Internet connectivity to every students and faculty member. He was currently engrossed in plans for the 100 - seater computer lab.

What was confusing him was the choice of Internet connectivity. He had about a dozen quotes in front of him. Recommendations ranged from 64 kbps ISDN all the way to 1 Gbps leased line to Guwahati, which was almost 200 km away. Prices ranged from slightly under a lakh all the way up to Rs 25 lakh and beyond. He did not understand most of the equipment quoted — firewall, proxy server, cache appliance. Nor was he sure what the hidden costs were. Although it went against his very nature, he would have to identify a trustworthy consultant who would help him make sense of the whole thing.

Questions:

a. In the context of the given case, what managerial issues need to be addressed by Alfred? Why is it important for managers to be tech savvy?

b. What is the importance of a ‘systems consultant’ to an organization? What skills should he/she possess?
Having spent considerable time paring back staff, consolidating servers and storage equipment, rendering servers and storage equipment, renegotiating vendor contracts, and conducting selective outsourcing, CIOs are struggling to find new ways to reduce costs while still developing and implementing the new or improved business systems their companies need. In their quest to come up with even more ways to keep lid on costs, dauntless IT leaders are exploring everything from barter agreements with vendors to reselling services and joining purchasing consortiums for volume price discounts on equipment. At amazon.com, CIO Rick Dalzell followed the following strategies:

- Embrace open source
- Recognize when you have to spend to save
- Help your partners help you
- Use a tight budget as an excuse to get creative

**Questions:**

a. What are the business benefits and limitations of Rick Dalzell’s strategies?

b. Why are business houses finding it difficult to keep costs down in spite of the fact that technology is getting cheaper?

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**Case 10**

**Overhauling the Information Systems Environment**

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 though weekly and monthly reports are 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 that exist for enhancing capacity in these business areas.

**Questions:**

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.
Rosenbluth, a privately held, family owned company, is the second largest travel services firm in the world, with American Express being number one. Rosebluth’s Global Distribution Network (GDN) is a worldwide telecommunications network through which the airline reservation systems are accessible. All Rosenbluth agents are connected to GDN as most of the company’s travel software applications. Client’s planning trips can either use the network to research or book their travel arrangements, or they can work through a Rosebluth agent. Moreover, clients can choose to use a local Rosenbluth agent, or they can turn to specific agents of their choice anywhere in the world.

Hal Rosenbluth of the company had this to say, “…Now we will not only connect people by planes or trains but we will connect them through technology.”

Questions:
  a. How has technology helped companies like Rosenbluth deliver customized services?
  b. Is it possible for small companies to adopt technology similar to Rosenbluth’s? Why or why not? Justify.
  c. What is the significance of Rosenbluth’s statement? Give your viewpoint.

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Read the following news snippets:

• On 20 November, 1985, the Bank of New York lost over $5 million as a result of an error in the software of the digital system that registered all the bank’s financial transactions.

• In 1992, a software problem created total chaos in the communication system of ambulance services in London. The delay in communications caused the death of 30 people.

• On 7 August, 1996, the computer system of Internet-provider America Online (AOL) failed for 19 hours when new software had been installed. Over 16 million subscribers were affected. Before this took place, the AOL experts had strongly suggested that the system was immune to this kind of disaster.

Questions:
  a. Is it justified to say that digital systems are unreliable and carries enormous risks?
  b. What countermeasures should be put in place to minimize damages due to failure of digital systems? Give your answer for each of the above three situations.
Many people think that the most widely used tool in a construction project is the hammer, but it’s probably a filing cabinet or fax machine. The $3.4 trillion US construction industry is highly paper intensive. A complex project such as a large building requires the coordination of many different groups and hundreds of architectural drawings and design documents, which can change daily. Costly delays because of misplaced documents could make or break a company in an industry with razor-thin profit margins of 1 to 2 percent.

Web technology is starting to address this problem. New web-based construction project management systems enable project managers to exchange documents and work online wherever they are using web browser software. Auto Desk Building Corporation Services, for example, offers customers a shared central space where project managers can exchange documents with engineers and architects, track scheduling and performance, and hold online meetings.

Questions:

a. What are the management benefits of using web-based construction management software?

b. How can the systems as mentioned be used to share knowledge and experiences for better management of projects and tasks at hand?

c. What problems might be associated with such web-based systems? How can those problems be tackled?
X University has of late expanded very rapidly introducing a number of programmes and increasing student intake capacity. It has recently computerized its examination process based on some off-the-shelf software. The library had already been computerized a couple of years back using a freely distributed Library Automation System. Daily cash transactions are also handled by computers in the Finance and Accounting Division, using an accounting software. For further improvement of efficiency, the new governing body of the University have entrusted the task of developing an MIS for the University to a Software Company.

All these developments were welcomed by a cross-section of the University Community except a few. One of them is a faculty member at the Management Science Department who commented that the University is burdening itself with too many independent information systems. He strongly favoured an integrated information system on the lines of an ERP for a business organization.

Questions:

a. Do you agree with the faculty member? Give reasons.
b. What do you understand by Integrated Information System, the faculty member is talking about? Elaborate in the context of the X University.
c. Visualise that the University governing Body decides to drop the MIS plan and agrees to the idea of developing an integrated IS. What problems are likely to creep in?
d. Assess the role of Information System specialists and consultants in situations as described in the caselet.

References:

5. PCQuest, April 2002 Issue
6. PCQuest, January 2003 Issue