MANAGEMENT INFORMATION SYSTEMS (MIS)
Term 1; ECTS: 10
(July 3-31, 2013 including exam)

Professor D P Goyal
Management Development Institute
Gurgaon-122007, INDIA
dpgoyal@mdi.ac.in; dpgoyal_23@yahoo.com
Title of the course

MANAGEMENT INFORMATION SYSTEMS (MIS)

Duration of the Course Delivery

3-24 July, 2013

Faculty

Professor D P GOYAL,
Professor & Dean,
MANAGEMENT DEVELOPMENT INSTITUTE,
GURGAON, INDIA

OBJECTIVES OF THE COURSE

The main objectives of the course are to provide the management student a broad understanding of:

- Information Systems (such as Transaction Processing systems, Decision Support systems, Executive Support systems, etc) from a Business Perspective
- Information Systems Planning
- Key IT technologies, and the implications of these technologies for managers
- Identifying Information Requirements and Systems Analysis
- Issues in managing ISs/IT such as Enterprise Resources Planning (ERP), Supply Chain Management (SCM), Customer Relationship Management (CRM), Business Intelligence (BI) etc.

Main Issues

The purpose of any Information System is to help an Organisation manage its business better. For instance, an Inventory Management System would assist the organisation in keeping track of stocks and optimising stock levels. An HR Information system would help in managing the key Human Resources of the organisation, and so on. With ever increasing complexities of business as well as management, now a days, Information systems are not merely required for improving efficiency of business operations; rather these systems are used for effective business decisions and achieving strategic advantage. As a result of the increasing role of Information Technology (IT) in an enterprise, the functions of information systems are changing. It is transforming from a technology provider to a strategic partner and from a resource to a strategic tool. Because of the
increasing use and participation of IT in all processes and projects, all the managers, irrespective of their functional areas, need to understand, deploy and effectively manage Information Systems (ISs)/IT.

The research on IS has clearly established that in many cases, Information Systems do not meet the business needs for which they were originally intended and thus fail to provide the expected return on investment/business value. There are several reasons for this failure that include lack of planning; lack of alignment of business and IT, communication gap between the business and IT professionals; lack of effective IT project management and so on. Most organizations tend to delegate the planning process to the IT Department, which in most cases views this as a technical problem rather than a solution to a business need.

The key to successful IS Deployment, therefore, is to create a “Business – linked Information Systems Plan”. Accordingly, IS planning forms a key component of this MIS course.

The other important issue in the area of MIS is the underlying IT technologies that support Information Systems. Most managers need to take decisions with regard to these technologies. Unfortunately however, most of them do not have sufficient understanding of these technologies, and therefore leave key decisions to technologists – with disastrous consequences.

Therefore, another component of this course will cover the basics of IT technologies that are today commonly used in organisations, along with implications for managers. This component would be based on presentations made by groups of students.

Finally, once the IS Plan is in place; the systems decided upon must be either bought out or developed, and ultimately implemented. The last component of the course would therefore focus on ERP systems (which are the most commonly available bought out systems in the market). It would also cover the process of Information System Analysis and Design, with emphasis on Requirements Analysis, which would be used when systems are to be developed.

**TEACHING METHODOLOGY**

As the course aims at higher level of learning and application that requires visualizing IS/IT in an integrated organizational setup, it is imperative to have the pedagogy as learner centric and discussion oriented. Students are expected to study the readings and cases assigned to them before the forthcoming class for a valuable class-discussion. Wherever need be, concepts will be addressed in a lecture format for ease of understanding and application. Also, the participants will be encouraged to contribute to class learning by raising queries and replying to those raised by others.

In brief, the course will be delivered through
LEARNING OUTCOME

On completion of the course, the participants are expected to learn:

- The importance and concept of Information Systems (ISs) / Information Technology (IT)
- Creating Information Systems Plan
- Identifying Information Requirements and Methods of Systems Analysis
- Issues in managing ISs / IT such as Enterprise Resources Planning (ERP), Supply Chain Management (SCM), Customer Relationship Management (CRM), Business Intelligence (BI) etc.

PERFORMANCE EVALUATION

Assessment Components

i) Group presentation & discussion by groups & class participation 20 %
ii) MIS Project work 20 %
iii) End-Term Exams 60 %

The students will be divided in groups of four each for the Group (technical) presentations (Topics are assigned at the end of this document) and for discussing issues involved in the exercises, caselets and full cases scheduled for discussion on the scheduled day. The assessment of one's contribution, however, will be done on individual basis. The class should choose a Class Representative (CR) for communicating with the faculty. Groups must be formed by the students and the CR should mail the group composition to the faculty by the evening of 3rd July, 2013 (7 p.m.). Groups must come to the class with due preparation of the scheduled topics and case/s for the day as has been clearly mentioned in the sessions’ schedule.

Also, each group will write a report mainly focusing on any company of her or his choice that has adopted some of the themes of MIS being discussed in this course. In doing so, the student should bring out clearly references to the literature that has been
developed on these MIS themes and how the company concerned is applying these themes (practices) in its peculiar context. The information about the practice of the relevant themes may be obtained from the internet, company websites, management journals, business books, magazines and newspapers. You may choose a company from private-sector or public sector. While the report contents are being developed, the participant must also link her/his formulations with the conceptual learning gained from the course.

The project report will be due to be submitted by each student in soft as well as a hard copy on or before 17th July, 2013 (5. p.m.) and shall have a length of about 2000 words, double spaced (References and appendices can be separate). It should be concise and crisp and bring in all relevant issues. The report should reflect the student’s diagnostic, analytical and application skills.

The project report summary will be presented by each student on 23rd July, 2013.

**SESSIONS PLAN**

<table>
<thead>
<tr>
<th>Date</th>
<th>Subject Topic &amp; Issues</th>
<th>References</th>
<th>Assignments / Case / Exercices, etc.</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
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<tr>
<td>Day 1</td>
<td><strong>Overview of the Course Information Systems in Global Business</strong>&lt;br&gt;  - Why Information systems?&lt;br&gt;  - MIS – What?&lt;br&gt;  - Perspectives on Information Systems</td>
<td><strong>Readings:</strong>&lt;br&gt;  - Laudon &amp; Laudon Ch. 1&lt;br&gt;  - O’Brien &amp; Marakas Ch. 2</td>
<td><strong>Case Study:</strong>&lt;br&gt;  <em>Morgan Stanley’s Return on System Noninvestment</em>&lt;br&gt;  Laudon &amp; Laudon Ch. 1</td>
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<tr>
<td>Wednesday, July 03, 2013 9 – 13</td>
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<td>Day 2</td>
<td><strong>Information Systems in Global Business (contd.) Business IS Applications</strong>&lt;br&gt;  - Types of Information Systems (TPS, MIS, DSS, ESS)&lt;br&gt;  - Business Information Systems (MkIS, FIS, HRIS, M&amp;PIS etc)&lt;br&gt;  - Enterprise Information Systems (SCM, CRM, BI, ERP Systems,</td>
<td><strong>Readings:</strong>&lt;br&gt;  - Laudon &amp; Laudon Ch.2, Ch. 9</td>
<td><strong>ISs in Practice:</strong>&lt;br&gt;  <em>Managing Travel Expenses: New Tools, New Savings</em>&lt;br&gt;  Laudon &amp; Laudon, Ch. 2 (Interactive Session: Management)</td>
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<tr>
<td>Day 3</td>
<td>Critical Success Factors for IS</td>
<td>Readings:</td>
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<td>Friday, July 05, 2013 9 - 13</td>
<td>Why do ISs fail? CSF for ISs</td>
<td>Laudon &amp; Laudon Ch.3</td>
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<td>IS Planning, Part I</td>
<td>Strategic Analysis</td>
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<td></td>
<td>The link between Business Strategy and IT</td>
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<td>IT – led Strategies</td>
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<tr>
<th>Case Study:</th>
<th>Charles Schwab Corp. (A)</th>
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<tr>
<td>All groups to come prepared with this case: (any group can be asked to present &amp; discuss)</td>
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| Exercise: | Develop Strategies for a new B School |

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<thead>
<tr>
<th>Day 4</th>
<th>IS Planning, Part II</th>
<th>Readings:</th>
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<tbody>
<tr>
<td>Monday, July 08, 2013 9-13</td>
<td>Information Analysis</td>
<td>Laudon &amp; Laudon Ch.3</td>
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<td>Critical Success Factors, Gap Analysis</td>
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<td></td>
<td>Information Analysis</td>
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<td>Prioritization</td>
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</table>
| Day 5 | IS Planning, Part III  
- Prioritization  
- Business Case | Readings:  
- Goyal, Ch. 6 | Online Assignment:  
Prepare a business case for potential ISs for an organization (use MS-Excel). |

**Week 2**

| Day 6 | Approaches to Systems Development  
- SDLC Approach  
- Waterfall Model  
- Prototyping Model  
- Hybrid Model | Requirements Analysis  
- Data Gathering Techniques  
- Mapping Tools | Readings:  
- Laudon & Laudon Ch.13  
- Effy Ch.12 | Exercise(s)  
Group Presentations:  
Groups 3 & 4 |

| Day 7 | Requirements Analysis (Contd.)  
- Mapping Tools  
- Specifying requirements | IS Project Plan  
- Critical Success Factors  
- Scope  
- Identification of activities  
- Risk Assessment  
- Project estimations | Readings:  
- Laudon & Laudon Ch.13, Ch.14 | Online Assignment:  
Prepare a Project Plan for an IS, that has been approved by the approving authority of the organization. (use MS-Project).  
Group Presentations:  
Groups 5 & 6 |

| Day 8 | Other IS Alternatives  
- System Procurement  
- Software As a Service  
- Outsourcing | Readings:  
- Effy Ch. 13 | Case Study:  
Cathay Pacific: Doing More with Less  
All groups to come prepared with this case: (any group can be asked to present & discuss) |
<table>
<thead>
<tr>
<th>Day 9</th>
<th>System Implementation</th>
<th>Readings:</th>
<th>Case Study:</th>
</tr>
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</table>
| Tuesday, July 16, 2013 9-13 | • Implementation Issues  
• Implementation Process  
• Implementation Strategies  
• Change Management | • Goyal Ch. 11 & Ch. 13 | *Cisco Systems, Inc : Implementing ERP*  
All groups to come prepared with this case: (any group can be asked to present & discuss) |

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<thead>
<tr>
<th>Day 10</th>
<th>Post Implementation</th>
<th>Readings:</th>
<th>Group Presentations:</th>
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</table>
| Wednesday, July 17, 2013 9-13 | • System Support  
• System Evaluation  
• System Maintenance | • Goyal Ch. 14  
• Effy Ch. 14 | Groups 7 & 8 |

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<tr>
<th>Week 3</th>
<th>Key IS Applications</th>
<th>Readings:</th>
<th>Case Study:</th>
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</table>
| Day 11 | | • Laudon & Laudon Ch 10 | *Mobile Customer Services at Deutsche Lufthansa International Case Study, Laudon & Laudon*  
All groups to come prepared with this case: (any group can be asked to present & discuss) |

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<th>Group Presentations:</th>
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<td></td>
<td>Groups 9 &amp; 10</td>
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</table>
Please finalize your project report so as to be ready to submit it by evening of 19th July (6 p.m.). You are advised to read the concluding chapter 15 in Laudon & Laudon while you finalize your project contents.

<table>
<thead>
<tr>
<th>Day 12</th>
<th>Enhancing Decision Making using ISs</th>
<th>Readings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday, July 19, 2013 9-13</td>
<td></td>
<td>- Laudon &amp; Laudon Ch.12</td>
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<td></td>
<td></td>
<td>- Brady, Monk, Case 1 &amp; Case 2</td>
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<td>Online Assignment:</td>
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<td>Take a real life business problem. Develop Database and some queries to be answered. (use Ms-Access / Ms-Excel)</td>
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<td>Case 1</td>
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<td>Preliminary Case, The Mrs Grey Rooming House Database</td>
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<td></td>
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<td>Case 2</td>
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<td></td>
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<td>Preliminary Case, The Purple and Green Faculty Club Database</td>
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<tr>
<th>Day 13</th>
<th>IT Investments &amp; Competitive Advantage</th>
<th>Readings:</th>
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<tbody>
<tr>
<td>Tuesday, July 23, 2013 9-13</td>
<td></td>
<td>Article:</td>
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<tr>
<td></td>
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<td>- Investing in the IT that makes a competitive difference, Harvard Business Review.</td>
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<td>- Reengineering Work: Don't Automate, Obliterate, Harvard Business Publishing</td>
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<td>Case Study:</td>
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<td></td>
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<td>Does IT Payoff? Strategies of Two Banking Giants</td>
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<td>All groups to come prepared with this case: (any group can be asked to present &amp; discuss)</td>
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</table>
Learning from the course through presentation of the project summary by each student individually.

Week 4 Exam Preparation

STUDENT PRESENTATIONS

- Each Group is expected to make one technical presentation to the entire class.
- Assume you are making these presentations to your CEO, who is completely non-technical. The focus should be on implications for management.
- All members of the group must participate. You will lose marks if any member does not participate. **Keyboarding skills are not enough.**
- Each member of the group should be prepared to present all parts of the presentation.
- Each group will get 15-20 minutes including questions. Your marks would also depend on your ability to manage time.
- It doesn’t have to be a boring PPT. Use innovative approaches. You must create an interest in the audience, and at the end they must feel they have learnt something. Your marks would depend on this.
- **Finally, there would be questions in the Exams based on these presentations**

### Topics for the Presentation

<table>
<thead>
<tr>
<th>Group</th>
<th>Topic</th>
<th>Basic Reference (This is only the starting point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>TCP / IP and VoIP</td>
<td>Laudon &amp; Laudon Ch7</td>
</tr>
<tr>
<td>2.</td>
<td>Firewalls</td>
<td>Laudon &amp; Laudon Ch8</td>
</tr>
<tr>
<td>3.</td>
<td>Viruses and protection mechanisms</td>
<td>Laudon &amp; Laudon Ch8</td>
</tr>
<tr>
<td>4.</td>
<td>Digital Certificates and Signatures</td>
<td>Laudon &amp; Laudon Ch8</td>
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<tr>
<td>5.</td>
<td>Electronic Payment Mechanisms</td>
<td>Laudon &amp; Laudon Ch10</td>
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<td>Web Services</td>
<td>Laudon &amp; Laudon Ch.5</td>
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<tr>
<td>7.</td>
<td>Business Intelligence: Data Warehousing &amp; Data Mining</td>
<td>Laudon &amp; Laudon Ch.6; Effy Ch. 11</td>
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<tr>
<td>8.</td>
<td>SaaS and Cloud Computing</td>
<td>Turban &amp; Volonino Ch. 2</td>
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<tr>
<td>9.</td>
<td>Web-Enabled Business</td>
<td>Effy, Ch. 8</td>
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<tr>
<td>10.</td>
<td>Decision Support and Expert Systems</td>
<td>Effy, Ch. 10</td>
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</table>

- There may be more groups depending upon the number of registrations (Will be intimated later)

**LIST OF LITERATURE (COMPULSORY)**

**Basic Text:**


Chapters 1, 2, 3, 9, 10, 12, 13, 14, 15 (Each Student is advised to get a copy of this text book)

**Other Compulsory Readings:**

- Effy Oz, Management Information Systems, 6th edition, Cengage Learning Chapters 12, 13, 14
- Brady Joseph A & Monk Ellen F., Advanced Cases in Management, Course Technology, Thomson Learning Inc., Chapter Case 1 & 2

**Cases & articles Compulsory Readings:**


• Ali Farhoomand, Minyi Huang (2009), *Does IT Payoff? Strategies of Two Banking Giants*, Harvard Business Publishing/ Asia Case Research Centre


**LIST OF LITERATURE (OPTIONAL)**


• Turban Efraim & Volonino, *Information Technology for Management*, 7th /latest edition, John Wiley and Sons


THE CASES TO BE USED ARE AS FOLLOWS:

Cases to be bought from the Copyright holder:


Articles to be bought from the Copyright holder:


Case from the Laudon & Laudon Book

- *Morgan Stanley’s Return on System Noninvestment*, Laudon & Laudon Ch. 1
- *Mobile Customer Services at Deutsche Lufthansa*, International Case Study, Laudon & Laudon