

Management Information Systems

Mexico City EMBA Program

Spring 2012

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Course Objectives

Information technology (IT) has the potential to change the landscape of global competition, increase productivity, change industry structure, make markets more efficient, and alter a firm's boundary and competitive position. While IT can provide competitive advantage, it has, in many cases, become a strategic necessity. It is no wonder that more than \$2 trillion is invested in IT each year on a worldwide basis, which is over 50% of all capital expenditures. Given the level of investments and the importance of IT, it is imperative that forward-thinking managers understand the process of using information and evaluating, assimilating, and managing IT within products, services and all value activities of a firm for operational efficiency, and business partner and strategic values. Managers need to be able to articulate the impact of IT products and services at the firm, industry and economy levels, so that investments are meaningful and productive.

However, the bursting of stock market bubble, decline in IT investments, increase in well-publicized bankruptcies, and the significant gap between the promise and the perceived benefits of IT have led skeptics to question the economic contribution of IT. The skepticism is not bad in itself, since it raises numerous questions involving how IT can provide cost leadership, differentiation and/or strategic benefits. The true benefits of IT can be realized only when organizations exploit certain characteristics of IT, and align business processes, incentives and partner (e.g., customers and suppliers) readiness with IT capabilities.

This course is designed to provide students frameworks and analytical tools to understand the economic and strategic implications of IT, transformation dynamics, and risks and pitfalls of IT decisions. The course will address many issues that are of interest to all managers including (a) identifying the characteristics of IT innovation and their implications on firm IT adoption; (b) understanding IT and the Internet contributions to economic growth; (c) evaluating the strategic implications of IT; (d) developing a framework for electronic business transformation; (e) exploring emerging IT-driven business practices (e.g., supply chain management, customer relationship

management, and enterprise resource planning); and (c) developing frameworks for IT investment justification.

Course Themes

Theme I: Firm and industry transformation enabled by IT

Theme II: Strategy & economics of IT -- IT as a driver of strategies, the fit between technology and business strategies, IT-induced changes in firm boundaries, leveraging IT for cost and value leadership, IT and switching costs, integrating into business partners' value networks, IT enabled new business models, etc.

Theme III: Justifying IT decisions: ROI, risk assessment, options approach to IT investments

Theme IV: Leveraging customer knowledge in a digital world

Theme V: IT Project Management (A A Capote)

Theme VI: Enterprise Integration Thru IT applications & Tools (AAC)

Theme VII: IT Industry Structure and Segments (AAC)

Required Books

Analyzing Social Media Networks with NodeXL: Insights from a Connected World

by Derek Hansen, Ben Shneiderman and Marc A. Smith

Publisher: Morgan Kaufmann

September 10, 2010)

ISBN-10: 0123822297

ISBN-13: 978-0123822291

Data Mining for Business Intelligence: Concepts, Techniques, and Applications in Microsoft Office Excel with XLMiner

by Galit Shmueli, Nitin R. Patel, Peter C. Bruce

Publisher: Wiley;

October 26, 2010

ISBN-10: 0470526823

ISBN-13: 978-0470526828

Other Required Course Material

1. Readings packet
2. Management Information Systems, K.C. Laudon and Jane P. Laudon, Pearson-Prentice Hall (Chapters 1,11,14 and15)
3. Additional material will be posted on the Blackboard

Grading

80% of your course grade will be based on the Professor Barua's section, while the remaining 20% will be assigned by Prof. A. Capote.

ITEM (Barua's section)	Date (month/day)	Weight in the final grade
1 Group Project (case competition)	April 28	15%
2 Individual Case Write-ups	Feb 12, 25	25%
Take home final exam	April 29 (handed out)	30%
Course/class participation		10%

Capote's Section		
Group Project Case Presentation		70%
Class Discussions		20%
Course/class participation		10%

A grade of X (incomplete) is very uncommon and will be given only for unusual circumstances (e.g., documented medical emergencies for you or your immediate family members). You are required to provide sufficient evidence of the problem and notify me as soon as it occurs. **NOTE:** A student receiving an incomplete grade in the course is required to complete such work by the end of the next academic session.

Class Participation

In this class much of the learning is dependent on the accessing the combined knowledge and experience of the group. It is everyone's job to keep the discussion productive and moving forward. In evaluating your class participation grade, I take the following into consideration:

- useful arguments expressed coherently and succinctly
- good analysis supported by case facts or your own experience
- relevance to previous contributions, i.e. ability to listen and build on what others say

- constructive disagreement
- regard, respect and acknowledgment of others' contributions
- readiness to contribute to class discussions

Case Reports

Several cases will be discussed during the semester. For Professor Barua's section, you are individually responsible for 2 case study write-ups, about 4 pages each, 12 font size, single spaced, due at the beginning of class on the day of the case discussion. Late submissions will not be accepted. The objective of these assignments is to help you prepare for the case discussion, and to maximize the value of the case discussion for the entire class. A set of questions for each case will be handed out in class two weeks in advance. Your write-up should address the questions based on the facts discussed in the case, and your own research through other sources. Case write-ups will be evaluated on the accuracy and details of facts, analysis and clarity of arguments.

There will be a case competition on the last day of class, where student groups (4-5 students per group, you are responsible for forming your own groups) will present their analysis of the "Air France Internet Marketing" case. Each presentation should last no longer than 20 minutes and should use PowerPoint slides. A certificate will be awarded to each member of the winning and runner-up teams.

The three cases are:

1. Feb 12: "Cemex: Global Growth Through Superior Information Capabilities" (individual work)
2. Feb 25: "ROI for a Customer Relationship Management Initiative at GST" (individual work)
3. April 28: "Air France Internet Marketing" (Group work: Case competition)

Guidelines for Case Class Presentations (Capote's Section)

- A. Start by reading case very carefully, including necessary complementary information and data.
- B. Understand a complete picture of corresponding Market Place.
- C. Study Competitive Players and influence on case context.
- D. Develop a Complete Financials Analysis
- E. Address questions posted with its answers fully supported.
- F. Add your own conclusions as a wrap-up.

Course Agenda

Date/time	Topic	Readings
Jan 6, 7	Introduction to Information Technology Management: Strategic and economic perspectives Overview of IT impacts	<ul style="list-style-type: none"> • A. Barua and P. Konana, Chapter 1 (“IT-Enabled Transformation”) in the readings packet. • Porter, “Strategy and the Internet” (in the readings packet) • Millar and Porter, “How information gives you competitive advantage” readings packet
Feb 12	IT ROI Assessment IT Options Managing large IT Case Study: “Cemex” (readings packet, case study section)	<ul style="list-style-type: none"> • “B&K Distributors” • “RFID at the Metro Group” • Dixit and Pindyck, “The Options Approach to Capital Investment” HBS Product # 95303. • R.G. Fichman, M. Keil and A. Tiwana, “Beyond Valuation: Options Thinking in IT Project Management,” California Management Review, February 2005. • Cemex case report due on the Blackboard by the beginning of class
February 24, 25	Enterprise 2.0, social media Case study “ROI for a Customer Relationship Management Initiative at GST”	<ul style="list-style-type: none"> • “Shattering the Myths About Enterprise 2.0” • “Prediction Markets at Google” HBS 607088-PDF-ENG • “Analyzing Social Media Networks with NodeXL: Insights from a Connected World” • Case study write-up due electronically (on the Blackboard) by the beginning of class on Feb 25.

April 28	Case competition: “Air France Internet Marketing”	<ul style="list-style-type: none"> • Student groups (4-5 students per group) will present their analysis of the case in class. Submit an Excel file + PowerPoint file on the Blackboard by the beginning of class. • Data Mining for Business Intelligence
April 29	Take home final exam worth 30% of final grade	

Following please find A A Capote’s Section...

Date / Time	Topic	Readings
March 10 Part I 12:30 – 14:00	IT Project Management Building and Managing Information Systems <ul style="list-style-type: none"> • Organization Redesign with Information Systems. • Understanding the Business Value of Systems and Managing Change. • Managing International Information Systems <u>Class Discussion</u> “The IBM Company internal re-invention”	<ul style="list-style-type: none"> • Chapter 14 & 15 Managing Information Systems, K.C. Laudon and Jane P. Laudon Pearson – Prentice Hall • IBM Corporation Annual Reports 2002-2003-2004 • Saving Big Blue: Leaderships Lessons and turnaround tactics of IBM’s Lou Gerstner Robert Slater Mc Grow Hill, 1999
March 10 Part II 15:00 – 17:30	Enterprise Integration thru IT Applications and Tools. <ul style="list-style-type: none"> • Business Process Integration • Enterprise Systems • Supply Change Mgmt Systems • CRM • Enterprise Integration Trends • Management Opportunities, Challenges and Solutions. <u>Case Assignment</u> “IBM’s Decade of Transformation: Turnaround to Growth”, Download at: www.hbsp.harvard.edu (9-805-130)	<ul style="list-style-type: none"> • Laudon & Laudon Chapter 11 • Necessary Information to complement case-study information.
March 24 Part I 12:30 – 14:00 Part II 15:00 – 17:30	<ul style="list-style-type: none"> • Case, Presentation and Discussion • Mexico’s IT Industry Structure & Segments Wrap-Up Discussion & Executive Dialog	