

PEPPERDINE UNIVERSITY
THE GEORGE L. GRAZIADIO
SCHOOL OF BUSINESS AND MANAGEMENT

MBFE 654.44

INFORMATION AND PROCESS SYSTEMS

DR. JOHN G MOONEY

SUMMER, 2005

THURSDAYS 6-10PM

IRVINE GRADUATE CAMPUS

INFORMATION and PROCESS SYSTEMS: MBFE 654 Summer 2005

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Course Syllabus and Schedule

Background

Over the past 40 years, advances in Information Technology (IT) have allowed business organizations to develop increasingly sophisticated “Information and Process Systems” that now provide real-time information and process support. IT systems make it possible for organizations to exploit new business opportunities in markets anywhere in the world, while drawing upon resources located elsewhere. For example, using contemporary IT, Dell achieves real-time global production of built-to-order, customized products using just-in-time delivered materials and sub-components. Today, almost every business process is enabled by, and often dependent upon, information and communications technologies. IT has moved beyond the automation of back office functions, into the foreground of business strategy and process. In many industries, *effective use of IT* plays a critical role in competitive success and survival.

However, effective use of IT is fraught with risks and challenges. Over 50% of IT implementations in business contexts fail to deliver their anticipated benefits. Consequently, a firm’s ability to successfully *identify and implement* value-adding IT initiatives has become a key competitive differentiator. The technical aspects of managing information technology are, and will remain, a perennial challenge for organizations, and the consequences of mismanagement will be increasingly serious. However, as important as the technical issues are, the crucial issues, and those most relevant for the students in the MBA program, are not technical but managerial. The pervasiveness of IT within business organizations, and their strategic and operational dependency upon IT *places the PRIMARY responsibility for managing IT resources with business executives*, and not with IT professionals as has been the tradition. Consequently, “*IT is so crucial to business that all business executives have no choice but to understand it.*”

Course description

This course is focused on the key business and management issues surrounding the acquisition and use of information technology resources in business organizations. Irrespective of your area of specialization, IT will play a fundamental role in your business and social life. As the core course in IT for the FEMBA program, my goal is to help you develop informed insights about *the management of IT acquisition, deployment and use of information and IT resources in business contexts.*

Four main themes are emphasized in this course, recognizing the supply and demand sides of the management of IT resources:

- i) Understanding information and communications technologies, their evolution, and the current market for IT resources and services;
- ii) Understanding how managers can gain competitive advantage by using information technology to enable new value-enhancing strategies and business models;
- iii) Understanding how managers can use information technology to redesign product and service offerings, business and organization processes, and organization and industry structures;
- iv) Understanding how managers should manage their information technology resources and capabilities to support and enable (ii) and (iii).

Our objective is that by the end of this course, we will have developed a subtle but sophisticated understanding of the links between information technology, business strategy and process, and organization and management dynamics. We will use a combination of reading, reflecting, critical analysis, writing, discussion, listening, and project work to achieve the learning objectives. The Course Schedule below describes the content of the course organized by individual class sessions. For each class session, we will use the assigned readings and cases to launch our classroom discussions. These readings and cases have been carefully selected and organized. “Older” readings and cases should not be viewed as “out-of-date” or obsolete: these are included in the reading packet because they offer interesting or unique insights that remain highly relevant to today’s business and technological contexts.

Class participation

You should read and reflect upon each assigned reading and case, and come to class prepared to engage in informed discussion about their content and implications. Informed discussion is central to the success of the class. Please be prepared to participate fully in the class discussion. One of the primary advantages of being in a high quality MBA program is that you get to participate in interactive discussions with other bright people from different backgrounds and experience. Good class participation is that which contributes to the learning experience of the class as a whole. This includes asking interesting and relevant questions, sharing personal insights and experiences, offering constructive alternative points of view, and providing courteous and professional feedback to other people’s opinions.

In addition to participating verbally in class, we will use the class on-line discussion forum to enable on-line class participation before, during, and after class sessions. You can also contribute to the shared learning experience by offering pointers to additional articles or resources that add to the collective knowledge and learning of the group. Activities that distract other students or the instructor, disrupt the flow/quality of discussion, or in other ways reduce the effectiveness of classroom learning will be considered “negative participation.” *Included within this is the use of laptops in class for purposes other than taking notes.*

Written critiques (critical analyses)

You are also required to submit six (6) 2-page written critiques of the assigned readings. These should be a critical analysis of and reflection upon the business and management implications of the issues discussed in the readings. **The critiques should NOT be summaries of the readings nor simply a criticism of the writing style.** You may choose to open your critiques with a short (4-6 line) summary paragraph that identifies the main issues covered by the readings. You may choose to write your critiques on the assigned readings of any six of sessions 4 to Session 14. HOWEVER, the critique of a session's readings must be submitted at the BEGINNING of that session's class, **AND you must submit at least three critiques by the end of Session 8.** Critiques should be no more than 2-pages, 10 or 12 point font, 1" margins all round, printed, and stapled. Why printed? Because an important part of the learning process will be the feedback and comments that I provide on your critiques. Consequently, electronic submissions will only be accepted if you cannot attend class. In this case, the critique should be emailed to me prior to the beginning of class. Critiques must be prepared individually, although you are encouraged to discuss the issues in your study group. Again, critiques of the assigned readings for a particular topic are due at the beginning of the class session for which the readings have been assigned. You may choose to submit up to 8 critiques, and have your best six count toward your grade. More information is available in the "Guide to Writing Critical Analyses" available in the course eRoom under "Assignments."

Group Project 1: Technology Analysis and Business Case

You will also undertake two group projects for this course. Each group will be assigned to undertake a Technology Analysis and Business Case for an assigned category of IT. Your goal in this assignment is to provide an analysis of the rationale and justification for the adoption of the assigned technology within a business/organization setting. Your analysis should also include a management overview of the chosen technology. Your analysis must be submitted as a web resource (multimedia document with web links to supporting content) PLUS a 20 minute presentation to be delivered at the start of the session for which that technology has been assigned. ***Please note that your grade for the first project will be based BOTH on the web resource and the in-class presentation.*** Your web resource and presentation will be linked from the course eRoom section for that session, thereby creating a rich web-based resource on the adoption on a range of major information technologies used in business today for the entire class.

You could view the web-resource as an on-line white paper that provides advice to other managers who are thinking about adopting the particular technology. Your web resource will contain links to vendors, on-line articles, commentaries, and white papers, **plus** your own ORIGINAL analysis that adds value to the linked resources. The web resource and your presentation should be posted to the eRoom before the start of the class session at which you present. For both the web-resource and the presentation, you may be as creative and innovative as you wish. However, be sure to emphasize content over style. I am far more interested in high quality analysis and content that is presented in a simple but professional style. Please do not use innovations and creativity in style to disguise for poor content. Direct your efforts at knowledge creation, and leave style to the graphic designers! More information is available in the "Justification and Acquisition project guidelines" available in the course eRoom under "Assignments." Please note that peer evaluations of contribution to the group project effort will be conducted.

University and School Policies

GSBM students are expected to respect personal honor and the rights and property of others at all times. The University policies on conduct can be found in the current GSBM catalog available online at <http://bschool.pepperdine.edu/academic/catalog/GScatalog03.pdf>. Note that the University expects from all its students and employees the highest standard of moral and ethical behavior in harmony with its Christian philosophy and purposes. Improper conduct for which students will be subject to discipline includes dishonesty in any form, plagiarism, and behavior that is disruptive of the classroom environment.

Policy on Disabilities

Pepperdine University is committed to complying with all mandates set forth in Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Students with disabilities requesting accommodation should contact the University's Disability Services Office (DSO) before their academic program begins. Upon verification of the students disability, the DSO will work with each student on a case-by-case basis to determine appropriate accommodations. Inquiries should be directed to Lauren Breeding, director of disability services, at 310.506.6500. For further information, visit the DSO Web site at: <http://www.pepperdine.edu/disabilityservices/>.

Course Policies

Since class discussion forms such a central part of the learning process, attendance and participation in class is expected. Students who cannot attend a class session should notify me by email in advance and submit a critique of that session's readings. For your first class absence, the critique may count toward your requirement of 6 critiques. For second and subsequent absences, you must submit an extra critique to compensate for class absence. At the end of the course, your 6 highest scoring critiques will count toward your grade.

While in class, you are expected to be considerate of others in the classroom. The sound on your laptop and cell phone should be turned off during class sessions. Remember that laptops may only be used for note taking. Using laptops during class for web surfing, email and other non-class related activities is distracting for me, and consequently disruptive to the classroom environment. Let me know if there is a critical situation for which you need to keep in touch with the outside world during a particular class session.

Assignments must be submitted on time, and should be original work. **Please remember that failing to provide citations for the words or ideas of another is plagiarism, and contravenes University and School policies.** Citations must be provided for direct quotes and paraphrasing. All project submissions must be accompanied by a declaration, signed by all group members, that the work being submitted is their own original work and that all non-original work has been cited appropriately. This "Declaration of Original Work" is available in the course eRoom under "Assignments."

Critiques on particular topics are due at the start of the class for that topic. If for some reason you cannot make this deadline, you have the option of doing another critique. Group projects are due at the start of class that your group presents. Please manage your group roles and responsibilities to ensure that the group submission is ready by the deadline. The best way for me to ensure fairness to all students is to adhere strictly to these policies.

If you wish to receive preliminary feedback on papers or projects prior to submission, please email your draft to me, or bring it to class.

I am excited about this course, and I look forward to facilitating you through your learning process over the next 14 weeks. I wish us both every success!

POLICIES ON CONDUCT ARE CLEARLY STATED IN THE ACADEMIC CATALOGUE AND CAN BE VIEWED ONLINE AT:

<http://bschool.pepperdine.edu/academic/catalog/GScatalog03.pdf>

POLICY ON DISABILITIES

Pepperdine University is committed to complying with all mandates set forth in Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Students with disabilities requesting accommodation should contact the University's Disability Services Office (DSO) before their academic program begins. Upon verification of the student's disability, the DSO will work with each student on a case-by-case basis to determine appropriate accommodations. Inquiries should be directed to **Lauren Breeding**, director of disability services, at **310.506.6500**. For further information, visit the DSO Web site at: <http://www.pepperdine.edu/disabilityservices/>.

Course Schedule

Session 1 (5/5):

Information and Process Systems: Introduction & Course Overview

Assigned Readings:

- The course syllabus available in the course eRoom under “Course Info”
- Blake Ives *et al.*, “What Every Business Student Needs to Know About Information Systems,” Communications of the AIS, December 2002 available in the course eRoom under “Course Materials”
- Diana Farrell, “The Real New Economy,” Harvard Business Review, October 2003 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=10986240&db=buh&tg=AN>
- Andal-Ancion *et al.*, “The Digital Transformation of Traditional Business,” MIT Sloan Management Review, Summer 2003 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=10272033&db=buh&tg=AN>

Session 2 (5/12): Competition, Strategy, and Information Technology

Assigned Readings:

- Michael E. Porter, “Strategy and the Internet” Harvard Business Review (March 2001) available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=4147416&db=buh&tg=AN>
- C.K. Prahalad and M.S. Krishnan, “The Dynamic Synchronization of Strategy and IT, MIT Sloan Management Review (Summer 2002, Vol. 43, No. 4) available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=7109715&db=buh&tg=AN>

Case Study: Enterprise IT at Cisco,
Harvard Business School Case 9-605-015 available via www.study.net

Session 3 (5/19):

The “T” of IT: Current and Emerging Computing and Communications Technologies

Technology Focus: Exciting emerging technologies (each student should identify a candidate technology that has interesting implications for their firm, industry or functional area).

Assigned Reading:

- The Economist Survey on Information Technology: “Make it simple” October 28th 2004 available at <http://www.economist.com/surveys/showsurvey.cfm?issue=20041030>
- Heather Smith and Benn Konsynski, “Grid Computing,” Sloan Management Review, Fall 2004 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=14829687&db=buh&tg=AN>

- Jeanne Ross, “Creating a Strategic IT Architecture: Learning in Stages,” MIS Quarterly Executive, March 2003 available in the eRoom under “Course Materials”

Case Study: UPS: Business Transformation through IT,
MIT Sloan Center for Information Systems Research Case #331 available in the
eRoom under “Course Materials”

Additional On-line Resources:

- The PC Webopedia <http://www.pcwebopedia.com/> encyclopedia of IT terms with links to other related online resources
- The Tech Encyclopedia <http://www.techweb.com/encyclopedia/>
- The “How Stuff Works” website <http://www.howstuffworks.com/>

Session 4 (5/26): Managing Data and Information Resources

Technology Focus: Business intelligence; Business portals; Data mining

Assigned Readings:

- Robert Houghton *et al*, “Vigilant Information Systems for Managing Enterprises in Dynamic Supply Chains: Real-time Dashboards at Western Digital” MIS Quarterly Executive, March 2004 available in the eRoom.
- Gary Loveman, “Diamonds in the Datamine,” Harvard Business Review, May 2003 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=9721850&db=buh&tg=AN>

Case Study: Business Intelligence Software at SYSCO,
Harvard Business School Case 9-604-080 available via www.study.net

Session 5 (6/2): Supporting Knowledge Management & Knowledge Work

Technology Focus: Knowledge Management Systems (KMS); Knowledge Worker Support;

Assigned Readings:

- Thomas H. Davenport & John Glaser, “Just-In-Time Delivery Comes to Knowledge Management” Harvard Business Review (July 2002) available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=6899237&db=buh&tg=AN>
- Ferguson *et al.*, Evolving From Information to Insight, MIT Sloan Management Review, Winter 2005 available at <http://lib.pepperdine.edu/login?url=http://80-proquest.umi.com.lib.pepperdine.edu/pqdweb?index=0&did=813908241&SrchMode=1&sid=1&Fmt=6&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1114711165&clientId=1686>

Case Study: “Managing Knowledge and Learning at NASA and JPL,” HBS Case 9-603-062099 available via www.study.net

Session 6 (6/9): IT, Organization and Management Processes

**** Proposal for final group project due at start of class ****

Technology Focus: Enterprise Resource Planning (ERP) Systems; Virtual Team Support;

Assigned Readings:

- Sumantra Ghoshal and Lynda Gratton, “Integrating the Enterprise,” MIT Sloan Management Review, Fall 2002 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=7679232&db=buh&tg=AN>
- Majchrzak et al., “Can Absence Make a Team Grow Stronger,” Harvard Business Review, May 2004 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=12933343&db=buh&tg=AN>
- Arvind Malhotra and Ann Majchrzak, “Virtual Workspace Technologies,” MIT Sloan Management Review, Winter 2005 available at <http://lib.pepperdine.edu/login?url=http://80-proquest.umi.com.lib.pepperdine.edu/pqdweb?index=0&did=813908151&SrchMode=1&sid=1&Fmt=6&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1114711344&clientId=1686>

Case Study: “No Excuses Management” Harvard Business Review (July-August, 1990) available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=9008131627&db=buh&tg=AN>

Session 7 (6/16): IT, Supply Chain & Business Processes

Technology Focus: Supply Chain Management (SCM) Systems; eProcurement systems; RFID-based logistics

Assigned Reading:

- Ken Kraemer and Jason Dedrick, “Dell Computer: Using eCommerce to support the Virtual Company” available at http://www.crito.uci.edu/GIT/publications/pdf/dell_ecom_case_6-13-01.pdf
- Hau Lee, “The Triple-A Supply Chain,” Harvard Business Review, October 2004 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=14599946&db=buh&tg=AN>

Case Study: Ford Motor Company: Supply Chain Strategy, Harvard Business School Case 9-699-198 available via www.study.net

Session 8 (6/23): IT and Customer Facing Processes

Technology Focus: Customer Relationship Management (CRM) Systems

Assigned Reading:

- Dale Goodhue *et al.*, “Realizing Benefits through CRM: Hitting the Right Target in the Right Way,” MISQ Executive, June 2002 available in the course eRoom
- Rigby and Ledingham, “CRM Done Right,” Harvard Business Review, November 2004 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=14874833&db=buh&tg=AN>

Case Study: Moore Medical Corporation, Harvard Business School Case 9-601-142 available via www.study.net

***Optional (recommended) extra session (6/29 at 6:30pm):
Alumni “IT Community of Interest” event on Supply Chain Management***

Session 9 (6/30): Justification and Evaluation of IT Systems

Technology Focus: The 5 most exciting emerging technologies for enabling business OR Any interesting IT initiative that does not fit with the other sessions!

Assigned Reading:

- Jeanne W. Ross and Cynthia M. Beath, “Beyond the Business Case: New Approaches to IT Investment” MIT Sloan Management Review (Winter 2002) available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=5982680&db=buh&tg=AN>
- Rajiv Kohli & Sarv Devaraj, “Realizing the Business Value of Information Technology Investments: An Organizational Process”, MIS Quarterly Executive, March 2004 available in the eRoom under “Course Materials”.

Case Study : Zara: IT for Fast Fashion,
Harvard Business School Case, 9-604-081 099 available via www.study.net

Session 10 (7/7): Outsourcing of IT and Business Processes

Technology Focus: IT Outsourcing; IT-enabled business process outsourcing; Utility/ On-Demand Computing

Assigned Reading:

- Jane Linder, "Transformational Outsourcing," MIT Sloan Management Review, Winter 2004 available at <http://lib.pepperdine.edu/login?url=http://80-proquest.umi.com.lib.pepperdine.edu/pqdweb?index=0&did=530716851&SrchMode=1&sid=4&Fmt=6&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1114712377&clientId=1686>
- Rottman and Lacity, "Twenty Practices for Offshore Sourcing," MIS Quarterly Executive, September 2004 available in the eRoom under course materials.
- Sara Cullen *et al.*, "Managing Outsourcing: the Lifecycle Imperative," MIS Quarterly Executive, March 2005 available in the eRoom under course materials.

Case Study: To be distributed in class

Session 11 (7/14): Implementation and Use of IT Systems

Technology Focus: None: time will be allocated for final project discussions

Assigned Reading:

- M. Lynne Markus & Robert I. Benjamin, "The Magic Bullet Theory in IT-Enabled Transformation" MIT Sloan Management Review (Winter 1997) available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=9706091955&db=buh&tg=AN>
- Carol Brown and Iris Vessey, "Managing the Next Wave of Enterprise Systems: Leveraging Lessons from ERP," MISQ Executive, March 2003 available in the course eRoom.

Case Study: The ITC eChoupal Initiative,
Harvard Business School Case, 9-604-016099 available via www.study.net

Session 12 (7/21): Security, Privacy and Ethics in the Information Economy

Technology Focus: None- final project presentations I

Assigned Reading:

- Austin and Darby, "The Myth of Secure Computing," Harvard Business Review available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=9944272&db=buh&tg=AN>
- Jeff Smith, "Information Privacy and its management," MIS Quarterly Executive, December 2004 available in the eRoom.
- Jeff Smith, "But what *IS* the 'right thing': ethics and information systems in the corporate domain" MIS Quarterly Executive, June 2004 available in the eRoom.

Case Study: To be distributed in class

Session 13 (7/28): Governance of IT Resources & Activities

Technology Focus: None- final project presentations II

Assigned Reading:

- Jeanne Ross & Peter Weill, “Six Decisions Your IT People Shouldn’t Make,” Harvard Business Review, November 2002 available at <http://lib.pepperdine.edu/login?url=http://80-search.epnet.com.lib.pepperdine.edu/direct.asp?an=7720817&db=buh&tg=AN>
- Peter Weill & Jeanne Ross, “A Matrixed Approach to Designing IT Governance” SMR Winter 2005 available at <http://lib.pepperdine.edu/login?url=http://80-proquest.umi.com.lib.pepperdine.edu/pqdweb?index=0&did=813908171&SrchMode=1&sid=3&Fmt=6&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1114710195&clientId=1686>

Case Study: Pfizer’s Virtual CIO,
Harvard Business School Case, 9-305-018 available via www.study.net

Session 14 (8/4): Final examination

About the Instructor

Dr. John Mooney is an Associate Professor of Information Systems at the [Graziadio School of Business and Management](#), Pepperdine University where he teaches the core “Information and Process Systems” class. He is also a Research Associate at the [Center for Research on Information Technology and Organizations](#) at the University of California Irvine. Dr. Mooney’s current research interests include the management of information technology resources and services, eBusiness transformation, and IT outsourcing.

Dr. Mooney holds a B.Sc. in Computer Science and a Masters in Management Science both from UCD, and a Ph.D. in Information Systems from UC Irvine. He is a member of the editorial boards of [MISQ Executive](#), the [Communications of the AIS](#), the [eService Journal](#) and the [Journal of Strategic Information Systems](#). He is Vice-President of Chapters and Affiliated Organizations for the [Association for Information Systems](#), was on the Executive Committee of the [International Conference on Information Systems](#) from 2001-2004, and was Co-Chair the ICIS Doctoral Consortium in December 2003. He consults to senior management on eBusiness, information management, and IT management. Former consulting and executive education clients include [AIB](#), [Bank of Ireland](#), [IDA Ireland](#), KPMG, PriceWaterhouseCoopers, and Southern California Edison. He is a current or former member of the Boards of Directors or Advisers of [RealExPayments](#) (which he co-founded), [Orbism](#), the Educational Multimedia Group, and [eWare](#).