

Information Technology Investment Risks & Returns

MIS 373 (03685) Spring 2010

T Th 2:00 – 3:30 p.m. UTC 1.146

Professor : Dr. Anitesh Barua

E-mail : anitesh.barua@mcombs.utexas.edu,
anitesh@yahoo.com

Telephone : 512-471-7895

Office : CBA 5.232

Hours : M, W 3:30 – 4:45 p.m. or by appointment

Course Objectives

IT investments in the modern enterprise are characterized by high levels of innovation and transformation as well as risk in organizational, technological, value chain and regulatory elements. Thus the twin challenges faced by any IT organization today involve maximizing value while managing the risky nature of investments in new IT innovations. While the business press as well as academic literature tout plenty of IT-enabled success stories, they are also replete with colossal failures of mismanaged IT projects as well as lack of alignment between IT and business strategies. Given that IT investments constitute a large fraction of all capital investments in any economy today, a forward thinking manager must be equipped to handle such investment decisions as well as management of the actual project to ensure success.

This course is designed to provide:

- (i) an in-depth treatment of how value is created or destroyed through the leadership role and focus of the IT group, and how such value can be measured
- (ii) an operational framework to assess IT risk qualitatively and quantitatively
- (iii) skills to make investment decisions based on tradeoffs between risk and returns in new IT innovations

Students will gain deep insights into strategic IT investment and governance decisions, and managing IT projects from the initial buy-in through keeping the project on track to user training and acceptance. Such knowledge and skills will be valuable in IT and business consulting as well as IT management careers in user organizations.

Required Course Material

1. Readings packet available at **IT Copy & Printing** (512 West Martin Luther King, Austin. Tel: 512-476-6662)
2. Additional material will be posted on the Blackboard

Grading

Your course grade will be based on the following point distribution:

ITEM	Date (month/day)	Weight
1 Group Project	4/27, 4/29	20%
3 Individual Case Write-ups	2/18, 4/1, 4/15	24%
Midterm	3/09	24%
Final exam	5/06	24%
Course/class participation		8%

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. You are individually responsible for 3 case study write-ups, which will be 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. The three cases are:

1. Feb 18 : “Teradata Data Mart Consolidation” (individual)
2. April 1 : “The San Diego City Schools: Enterprise Resource Planning Return on Investment” (individual)
3. April 15 : “Unity Bank: Realizing Value from an M&A Integration” (individual)

Group Project

In this course, you will do a real-world group project on a topic related to IT investment value and risk. I have set up projects with companies in Austin that require student groups to analyze IT management problems in a consulting capacity, research best practices, interview IT and business managers, collect and analyze data, and make recommendations for managerial action. Projects involve the extent of integration of IT and business processes in organizations and the financial value of high-availability IT systems in dynamic business environments.

As an alternative to a company sponsored project, student groups can also choose to do a project on an IT topic of current interest. For example, what is the financial value of enterprise mobility? A group focusing on such a topic will perform research on the enablers or drivers as well as inhibitors of enterprise mobility, and relate mobile access to data and corporate applications to financial benefits resulting from higher efficiency, productivity, and customer responsiveness.

Each group will have 8 students with backgrounds in IT as well as functional areas. Groups will meet the instructor and the TA regularly outside class hours, and will make two short interim presentations to provide status update and a final presentation (15 minutes) to communicate their analysis and findings/recommendations.

Course Agenda

Date	Topic	Readings
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Jan 19	Introduction to risk & returns in IT investments	.
Jan 21	Setting up the IT organization to innovate and manage risk	<ul style="list-style-type: none"> • Robert Gold, “Building the IT Organization Balanced Scorecard”
Jan 26	Alignment between business strategies and IT	<ul style="list-style-type: none"> • Robert Gold “Enabling the Strategy-Focused IT Organization” • Serena Frank, “IT Transformations Spur Enterprisewide Strategic Alignment”
Jan 28	Group project introduction	
Feb 2	IT risk assessment	<ul style="list-style-type: none"> • Michael Parent, Blaize Horner Reich “Governing Information Technology Risk”
Feb 4	Return on IT investments	<ul style="list-style-type: none"> • Will be posted on the Blackboard
Feb 9	Return on IT investments	<ul style="list-style-type: none"> • Will be posted on the Blackboard
Feb 11	Options approach to managing IT risk	<ul style="list-style-type: none"> • Dixit and Pindyck, “The Options Approach to Capital Investment” HBS Product # 95303.
Feb 16	Options approach	<ul style="list-style-type: none"> • Will be posted on the Blackboard

Feb 18	“Teradata Data Mart Consolidation”	Case analysis (individual) due electronically by the beginning of class
Feb 23	IT Options	<ul style="list-style-type: none"> R.G. Fichman, M. Keil and A. Tiwana, “Beyond Valuation: Options Thinking in IT Project Management,” California Management Review, February 2005
Feb 25	Interim group project presentations	<ul style="list-style-type: none"> 5-10 minute project update by each group
March 2	Enterprise resource planning	<ul style="list-style-type: none"> PowerPoint slides
March 4	Midterm review	
March 9	MIDTERM	
March 11	Project consulting session	

March 23	Enterprise integration	<ul style="list-style-type: none"> • PowerPoint slides
March 25	Enterprise integration	<ul style="list-style-type: none"> • “Nestle’s ERP Odyssey”
March 30	M&A Integration	<ul style="list-style-type: none"> • Will be posted on the Blackboard
April 1	“The San Diego City Schools: Enterprise Resource Planning Return on Investment”	<ul style="list-style-type: none"> • Case study report (individual) due by the beginning of class
April 6	M&A Integration	<ul style="list-style-type: none"> • Will be posted on the Blackboard
April 8	Interim group project presentations	<ul style="list-style-type: none"> • 5-10 min updates from each group

April 13	IT and Business Process Outsourcing	<ul style="list-style-type: none"> • Will be posted on the Blackboard
April 15	“Unity Bank: Realizing Value From an M&A Integration	<ul style="list-style-type: none"> • Case report (individual) due electronically by the beginning of class
April 20	Outsourcing governance	<ul style="list-style-type: none"> • “Infosys’ Relationship Scorecard: Transformational Partnerships”
April 22	“Outsourcing at Office Supply”	<ul style="list-style-type: none"> • Read the case, but no write-up is required
April 27	Group project presentations	<ul style="list-style-type: none"> • Prepare final report and PowerPoint presentation
April 29	Group project presentations	<ul style="list-style-type: none"> • Prepare final report and PowerPoint presentation
May 4	Final Exam Review	
May 6	Final exam	