MGB 207[1]
Managing IT for Business Value
Summer 2012

Instructor(s)

Sunil Mithas, PhD Phone: (301) 366-3504 Cell Email: smithasteaching@gmail.com Website: http://terpconnect.umd.edu/~smithas/ Twitter: http://twitter.com/#!/ITisIMP Blog: http://sunilmithas.blogspot.com/	Ramanath Subramanyam, PhD Phone: (217) 714-4274 Email: ramanath.subramanyam@gmail.com Website: http://www.business.illinois.edu/facultyprofile/faculty_profile.aspx?ID=122 Twitter: http://twitter.com/#!/ramsubramanyam

Course Details

Location	Room: 1503 Bishop Ranch
Time	Class meets on June 22-23, July 6-7; July 20-21; Aug 3-4; Aug 17-18 Fridays 6-9 pm; Saturdays 1-4 pm
TA	Not applicable
Office Hours	Before/after the class

Course Facebook Page: http://www.facebook.com/#!/techmatters

Course Description

Information technology (IT) is fundamentally changing our society and the world of business. It is difficult to think of any business process or functional area that is unaffected by IT in contemporary firms. From our personal experience and what we witness taking place around us, it is easy to see how IT is changing our lives in many ways, including how we learn, work, play, communicate, and do business.

Why should all this matter to a business manager? From a strategic perspective, IT can create and sustain competitive advantage, if managed well. While there are some examples of leaders and managers having been able to use IT as a lever to transform their organizations for competitive success, many more have failed to successfully manage IT. Those who have used IT effectively have done well for themselves and for their firms, and those who have ignored or mismanaged IT have destroyed societal value and have led their firms toward failure or bankruptcy.

All conscientious managers, particularly those who are or aspire to be leaders, have a duty to manage resources, including IT resources, in their organizations in a responsible and thoughtful manner. Regardless of their current functional affiliation or career goals, their future success will critically depend on how they lead and manage IT-enabled strategic changes.

This course introduces some of the key issues in managing IT. It provides an overview of IT systems in contemporary firms and how they enable and support a firm's strategic and operational goals. By understanding how IT is shaping industry structure and the competitive

---

[1] Once finalized, any further changes to the syllabus will be announced in class or through email/Blackboard. The syllabus and related teaching materials draw on similar or related courses and do not document all citations and references to avoid clutter (please contact me if you need references).

environment and how to manage IT-related decision making, managers can craft superior strategies and use IT as a lever to innovate and transform to satisfy their internal and external customers.

Course Objectives

After taking this course, students should be able to:

1. propose and explain how to synchronize IT and business strategy and how to use IT as a lever for transformation
2. evaluate new technologies for their sustaining and disruptive potential as an incumbent, entrepreneur or investor
3. evaluate governance of IT, organization of IT function, outsourcing of business processes
4. articulate and assess the business value of IT and justify IT projects
5. explain how to manage IT infrastructure and applications to support strategy and business processes

Required Material

1. Book: Mithas, S. *Digital Intelligence: What Every Smart Manager Must Have for Success in an Information Age (ISBN-13: 978-0984989614; Amazon.com url link http://amzn.com/0984989617)* Finerplanet, North Potomac, 2012.

   The book is available on the on-line order form.

2. Coursepack: I will post instructions on how to order your coursepack and obtain other readings. Please read all the required cases and readings before coming to each class so that you can participate meaningfully in discussions and avoid losing on credit for class participation.

3. Free subscription to the daily newsletters issued by <u>any one of</u> CIO.com (www.cio.com), InformationWeek (www.informationweek.com) or Computerworld (www.computerworld.com). These are automatically delivered to your Inbox if you provide them your email address--it is easy to discontinue receiving emails from them if you want to do so after this course is over (hopefully you will want to continue receiving those to stay IT-smart).

4. Additional readings or links on Smartsite.

IT is continuously changing and even IT-Pros find it hard to keep with new technologies and buzzwords. If there is a term in the readings or class for which you would like a definition or some background, please refer to www.wikipedia.org or www.webopedia.com. Also feel free to take help from your classmates who have an IT background to get an intuitive understanding of the technical issues and do not hesitate to ask questions in the class.

Summary of Course Schedule, Topics and Deliverables

Note: CP means that the reading or case is part of your CoursePack; SS means that the reading is available on Smartsite.

Mtg	In-class Topics	Required Reading (s)	Case (s)	Deliverables
	Module 1: Synchronize IT and Strategy			
1	▪ **Course Introduction** ▪ Why IT Matters	▪ "Introduction" of "Digital Intelligence"		Pre-Course Note due at the beginning of the class, Please bring a hard copy of your resume and your name card
2	▪ How to synchronize IT and strategy	▪ Chapter 1 of "Digital Intelligence" ▪ Adams, R., and Stewart, C.S. "Digital strategy undid New York Times CEO, available at http://online.wsj.com/article/SB10001424052970203733304577102761392392078.html?KEYWORDS=Digital+strategy," in: Wall Street Journal (17-18 Dec 2011), Washington, DC, 2011, p. B3 (CP)	Cemex IMD 134 (CP)	
3	▪ How to understand and manage IT-enabled transformations ▪ How to evaluate and manage new technologies	▪ Chapter 2 of "Digital Intelligence" ▪ The Economist "Technological change: The last Kodak moment? (14 Jan 2012), available at http://www.economist.com/node/21542796," in: *The Economist*, 2012 (CP) ▪	Barnes & Noble (SS)	Share and Tell
	Module 2: Govern IT			
4	▪ How to govern IT, organize IT dept. and allocate IT expenditures to synchronize IT strategy with IT implementation	▪ Chapter 3 of "Digital Intelligence"	J&J (SS)	Finalize group project topic Share and Tell
5	▪ How to justify and value IT projects	▪ Chapter 4 of "Digital Intelligence" ▪ Fleming, Q.W., and Koppelman, J.M. "What's Your Project's Real Price Tag?," Harvard Business Reivew (September) 2003, pp 20-21	Whirlpool 9-202-017 (CP)	A hard copy of a one-page outline of your term paper idea in class (post on SS also) Share and Tell
6	▪ How to think about outsourcing and offshoring issues ▪ Contract Design for better Governance	▪ Chapter 5 of "Digital Intelligence"	Bharti 9-107-003 (CP)	Share and Tell Vendor Selection Role Playing Game
	Module 3: Manage IT			
7	▪ Overview and trends in IT evolution; Managing Legacy Systems and considerations in the upgrade decision	▪ Chapter 6 of "Digital Intelligence" ▪ The Economist "Beyond the PC (Special report: Personal Technology; Oct 8, 2011), available at http://www.economist.com/node/21531109," in: *The Economist*, 2011 (CP)	Zara 9-604-081 (CP)	Share and Tell
8	▪ Managing IT Projects and enterprise systems in functional areas	▪ Chapter 7 of "Digital Intelligence" ▪ Nelson, R.R. "IT project management: Infamous failures, classic mistakes, and best practices," *MIS Quarterly Executive* (6:2) 2007, pp 67-78 (SS) ▪ "Retiring Life Cycle Dinosaurs: Systems Development" www.adaptivesd.com/articles/Dinosaurs.pdf	Cisco ERP 9-699-022 (CP)	Share and Tell
9	▪ Student Presentations			Group Project Presentations
10	▪ Conclusion and Wrap-up Smart leaders use IT to change business and the world for better. Will you?	▪ "Conclusion" Chapter of "Digital Intelligence" ▪ Murphy, C. "Chief of the year, http://informationweek.us/news/global-cio/interviews/232200549," in: *InformationWeek (12 Dec 2011)*, 2011, pp. 21-31 (CP)		Brief discussion of term papers by students if time permits Final term paper

Course Assignments and Grading

25% Group Evaluation
25% Group Project: See Appendix A for details. Finalize topic by 4th session. PPT to be delivered in the 9th session.
75% Individual Evaluation
5% Pre-Course Note - **Due at the beginning of class 1:** Please submit a **one page note** (Times New Roman, 11 font, single spaced) describing your current impressions of the role of IT in an organization's success or failure. In this note, tell me briefly about you including something interesting, what organization you currently work for and in what role, what IT and related tools (e.g., ERP, CRM etc) you are familiar with and use at work, any salient examples of IT related success or failure that you have personally experienced or read about and going forward what IT related interventions can make you or your organization happier and more successful.
10% Share and Tell--Due in Sessions 3-8: Make a brief presentation (max 3 minutes, no Powerpoint) on a topic that relates to one of the course themes. This could be (1) a recent case study based on your research at CIO.com, CIOInsight.com, Computerworld.com, InformationWeek.com etc, (2) some item currently in news (from New York Times, Wall Street Journal, The Economist etc), (3) an item on which you have relevant IT or managerial experience, (4) any idea relevant to this course from a book or article that you read recently, (5) some new App or YouTube video that relates to course themes broadly interpreted. Please give the instructor a hard copy of the supporting material in class **before** your presentation. You must articulate how your topic relates to one of the course themes. Please post the url source on Facebook http://www.facebook.com/#!/techmatters (or Smartsite if you use any sensitive or proprietary material not fit for posting on Facebook) before your presentation -- this will help your classmates to learn more on that topic.
10% Pop quizzes: Instructor will administer on-line and/or in-class quizzes to assess the extent to which you are reading and understanding the materials in required readings and lectures carefully.
20% Class Participation including Case Discussions: The quality, frequency, consistency and appropriateness of your contributions to class discussions and any other course activity will determine your overall grade for class participation. See Appendix B for further details.
30% Term Paper: Outline due in the 5th session and a hard copy of your final term paper due toward the end of the course. See Appendix C for details.

Notes:

1. The final letter grades will be based on the distribution of course points at the end of the semester and instructor's overall assessment of your performance relative to your classmates. I use relative grading hence absolute marks, percentages or letters are not important. I will specifically look for use of concepts used in this course and discussed in class to grade your assignments. Note also that grades on individual summative assignments (e.g., class participation and term paper) usually have much larger variance than those on formative and group assignments.

2. All team members will receive the same grade on group assignments unless a peer evaluation indicates that one or two group members did not contribute their fair share. If someone is not contributing their fair share, try to resolve the issue through documentation of responsibility, persuasion, emails, warning. If nothing works then alert me in advance so that I can help in time.

3. Late assignments will not be accepted (you can always submit early) and may attract one letter grade penalty per day. If you have any concerns or questions about any grades then bring that to my attention in a timely manner and within 3 business days of that grading so that I can address that while the grading is still fresh in my (or TA's) mind.

4. You are required to turn in a hard copy of all your assignments in class (power-point presentation handouts with references/urls, outlines, term paper, any home work) and also submit them through SmartSite. Identify yourself or your group clearly in all files and assignments (**filenames must be self-explanatory and something like LNameFName_Topic.doc or GRPNO_BriefResearchTopic.ppt**). **PLEASE DO NOT EMAIL ANY ASSIGNMENTS TO INSTRUCTOR UNLESS SPECIFICALLY REQUESTED.**

Case Discussion Questions

Here are some case questions to guide your case analyses – these are merely illustrative, you are expected to evaluate a case situation holistically and respond to it based on what you are learning in this course and other courses.   You take away from case discussions as much as you put in through your prior preparation, assigned readings, discussions with class mates, careful listening and reflections on cases before, during and after the class. See Appendix B of the syllabus for further details on how to prepare for case discussions.

Case	Case Questions
Cemex	▪ How has IT enabled Cemex's strategy through its evolution? What complementary actions have contributed to success of IT implementations? ▪ Evaluate attractiveness of Cemex's industry structure in 1984 and how Cemex tried to shape it using information technology and other complementary actions. ▪ How will you evaluate CxNetworks success? What should Cemex do with CxNetworks-- what options does it have, which one would you recommend and why? ▪ What lessons from Cemex apply to your company or a company that you know of? What lessons don't generalize beyond Cemex?
Barnes & Noble	• Please advise Mr Lynch on an action plan to revive Barnes & Noble's fortunes--discuss the options that you considered, their pros and cons and how you arrived at your recommendation. • How did Borders and Barnes & Noble view e-books--sustaining or disruptive? How did their view shape their strategies and actions? • What lessons, if any did can they learn from the music and movie-rental industry? • What are the key triggers in an industry transformation and what is the role of senior leaders including board members in anticipating and managing change? • If time permits: how will you compete in this space if you were managing Redbox (or pick some other player)? • What will be your recommendations for other digital goods industries (e.g., Newspaper, Photography, magazines)?
J&J	• What do you make of "Road to One Billion" initiative? Is it a good idea? • How would you advise CIO to implement her vision? How should J&J define and identify revenue enhancing projects? • Who should be held accountable for realizing revenue benefits and who should be responsible for measuring and tracking the revenue value of IT: operating company or corporate IT? • To what extent and for what types of IT projects, corporate IT should provide oversight at the time of project prioritization, approval and subsequent tracking of the value realization? • How should J&J decide its overall IT budget and how it should be funded by and allocated to operating companies to align incentives? Do you agree John Chambers of Cisco who once remarked that "IT can have unlimited budget, as long as one of the functions or business teams is willing to allocate the money." If there is no upper limit, then should there be some minimum IT spending level that each organization must have? • How would you characterize J&J's IT governance before 2006? Can you prepare governance arrangement matrix for 2006 and how it is evolving since then? • Can you comment on the appropriateness of IT governance and structure in your organization and suggest a better governance/structure than the current one?
Whirlpool Europe	▪ Please see the detailed directions and excel sheets for this case on Smartsite in "Course Documents" for the relevant session--you can do this case by yourself or by working with any classmate of your choice. **Please bring a hard copy of your answers to questions to class.**

Case	Case Questions
Bharti Airtel	▪ What must Bharti do well to succeed in the Indian mobile phone market? What are Bharti's core competencies? ▪ Do you think Bharti should enter the outsourcing arrangement outlined by Gupta? What are the pros and cons of such agreements? How do the different outsourcing agreements work toward building these core competencies? ▪ As a Bharti manager, what major concerns would you have about entering an outsourcing agreement with IBM? With Ericsson, Nokia, or Siemens? How would you structure the agreements to address your concerns and capture any advantages you have identified? What governance mechanism would you design for the agreements? ▪ As a manager at IBM or Nokia, what concerns would you have about entering an agreement with Bharti? How would you structure the agreement and the governance mechanisms? ▪ What are the implications of global trends in outsourcing for competitiveness of nations and firms? What about impact on jobs and salaries in developed economies? What should individual workers in developed economies do to safeguard their continued employability?
Zara	▪ How would you advise Salgado to proceed on the issue of upgrading the POS terminals? Should he upgrade to a modern operating system? Should the POS application be re-written to include any additional functionality? If so, what functionality? How will you justify the cost of this additional functionality? ▪ What is Zara's business model? How does it differ from a more conventional fashion company? ▪ What benefits does Inditex/Zara get from its IT infrastructure? How difficult would it be for a competitor to acquire these same benefits? ▪ What current or potential weaknesses (if any) do you see in Zara's IT Strategy, IT Governance or IT infrastructure? ▪ What are the most important aspects of Zara's approach to IT? Are these approaches applicable and appropriate anywhere? If not, where would they NOT work well?
Cisco ERP Implementation	▪ At the start of the case, Cisco's information systems are failing, yet no one steps forward to lead the effort to replace them? Why is this? Why were no managers eager to take on this project? ▪ Cisco was highly successful with its ERP effort? What accounts for this success? What were the most important things that Cisco did correctly? ▪ Did Cisco do anything wrong on this project? If so, what? ▪ We often hear that senior management commitment is important for projects like Cisco's ERP implementation, but senior management commitment to do what? What can top managers do to maximize chances of success here? ▪ Cisco went live with ERP in a big-bang fashion, which is inherently risky? How did Cisco mitigate this risk? ▪ Was Cisco smart or lucky with its ERP implementation?

Course Policies

Name Card

PLEASE <u>PLACE YOUR NAME CARD IN FRONT OF YOU IN **EACH CLASS**</u> SO THAT I CAN CONNECT YOUR NAME WITH YOUR FACE; this will ensure that you get full credit for your class participation.

Communication

As much as possible, I will restrict my announcements and other communications to course website so please check course website frequently for updated postings and course related communications. If you have an urgent course related need or question, call me over my cellphone.

If you have any appropriate and course-related question that is less urgent but can not wait till our next class meeting, please email me but first check syllabus to ensure that you are not asking something that is already mentioned in the syllabus. Please mention your cell phone number in the message and <u>MGB207 IN THE SUBJECT LINE</u> of your email. If the question pertains to your groupwork, please copy all your team mates so that I can reply to all. If the question is of general interest to the class, I will either post my reply on Smartsite or wait till we meet in class so that all of us are on same page. In general, I prefer that you use discussion board or class meetings for raising questions that are of interest to everyone.

Laptop and Audio/Video Policy

Please give your 100% attention to what is happening in class and make your own notes of what we discuss. PLEASE BRING YOUR LAPTOP TO CLASS BUT use it only to participate in an in-class activity assigned by the instructor. Please do not record or relay any audio or video of class proceedings without instructor's prior written permission —this is to create a safe learning environment for everyone including you.

Copyright

My lectures and course materials, including power point presentations, tests, outlines, and similar materials, are protected by copyright. You may take notes and make copies of course materials for your own use. You may not and may not allow others to reproduce or distribute lecture notes and course materials publicly whether or not a fee is charged without my express written consent. Persons who publicly distribute or display or help others publicly distribute or display copies or modified copies of an instructor's course materials may be considered in violation of the University Code of Student Conduct.

Your Suggestions

Administration will request you to provide comments regarding various aspects of the course toward the conclusion of the course, but those comments come too late to make any mid-course corrections. Hence, please discuss with me any ideas that can potentially improve your learning experience during the semester. Because the instructor also has responsibility for learning experience of the entire class and to ensure that course objectives are met and course rigor is maintained, it may not be feasible to accept all suggestions. Even if your suggestions are not accepted, they can still help us to design other courses or activities in future so feel free to suggest from your side.

Academic Integrity, Code of Conduct and Referencing Sources

You are expected to conduct yourself according to the University of California's standards of ethical conduct for students, in particular, the sections on academic conduct and integrity. Details may be obtained from the GSM Associate Dean or the Office of Judicial Affairs.

Special Needs and Accommodations

Any student in this course who has a documented disability that may prevent him or her from fully demonstrating his or her abilities should contact me within 3 days of start of the classes to discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Attendance, Religious Observances

Please let me know in advance by email if situations beyond your control or religious observances are likely to make it impossible for you to attend a class, or turn in an assignment in time. This also applies if you have to come late or leave early some days for some pressing reason. I use class attendance and participation as an important consideration in determining your overall grade. You should discuss with me how you will make up for a lost class to avoid adverse effect on your grades. This may require you to do a compensatory exercise to partially make up for your attendance. At a minimum, you should submit a case write-up for the class you miss (by email) before that class and bring a hard copy to the next class.

Appendix A: Group Project

The purpose of this assignment is to help you apply some of the course concepts, develop an in-depth understanding of a topic that interests you, hone your entrepreneurial, research and presentation skills and share your knowledge with your classmates. You will do this assignment in teams. I will provide more details in our first meeting or on the SmartSite closer to the date of our first meeting regarding teams. In general, your team must have students with diverse backgrounds and complementary skills and you should try to work with some students with whom you have not worked before.

Step 1: Choose a Topic for the Group Project

Please choose a topic to identify an entrepreneurship opportunity that involves some IT-enabled innovation or transformation in business models, products and services. Be creative, yet realistic and pick something that is currently relevant or has significant future potential. To get you started, here is a list of topics that you may consider (or use this list to generate more creative topics or variations):

- Education (U21, Khan Academy)
- Cloud-based services
- Geo-tagging or geo-location enabled applications (e.g., Yelp, FourSquare, Gowalla)
- Internet television (e.g., Hulu)
- Advertising (e.g., iAds, AdMob)
- Time-based flash sales (e.g., Gilt)
- Social buying (e.g., GroupOn, LivingSocial)
- Telemedicine and Telehealth (e.g., American Healthcare Limited)
- Publishing (Huffington Post)

Once you have selected your topic(s), please email to me in the body of the message copying everyone on your group--in this email I want to see a discussion of which topics were suggested by individual team members and how you prioritized and selected the top 2-3 topics.

I will assign a topic to the first team that claims it after ensuring fit with the goals and needs of this course to maximize our collective learning. I may ask you to consider more topics if you fail to identify an interesting topic in the first place--so my suggestion is that team members should challenge each other to come up with the most exciting topic that your team is capable of executing.

Step 2: Do Research and Analysis

After your topic is approved, you should develop an outline and create an equitable division of labor. I will be happy to provide feedback on your outline through email and in class.

You may want to look at the following readings to organize your thoughts:

- Sahlman, W.A. "How to write a great business plan," *Harvard Business Reivew* (July-Aug) 1997, pp 98-108

- Johnson, M.W., Christensen, C.M., and Kagermann, H. "Reinventing your business model," *Harvard Business Review* (December) 2008

Ask yourself the following questions:

1. What is the value proposition and the nature of innovation in the business model, product or service? How is it unique, innovative or disruptive?
2. What is the role of IT in enabling the value proposition?
3. How will you generate revenues and profits?
4. How sustainable is the innovation and will it have a disruptive effect on the industry?

Step 3: Develop a PowerPoint Presentation

Each team will prepare a ~12-15 minutes PowerPoint presentation (instructor will provide more specific guidelines later depending on the final class size and number of groups). **At least 24 hours before your team's presentation,** post your PowerPoint on Smartsite under a forum in Discussion Board that instructor will create for group projects. Your PPT must contain slide(s) listing all the references/ resources/back up materials that you used for your research towards the end. Try to make slides self-explanatory and focus on key issues in class. Make sure that slides or handouts are readable if printed.

YOU ARE REQUIRED TO TURN IN A PAPER COPY OF YOUR POWERPOINT PRESENTATION ON THE DAY OF THE PRESENTATION TO THE INSTRUCTOR. The project will be graded by instructor and/or TA using following criteria:[2]
- soundness of idea: novelty of ideas and realism of execution (implementation plan, and some back of the envelope calculations for financials)
- managerial relevance: how well you have addressed the business and strategic issues including use of course concepts and what you are learning in other courses
- quality of the presentation: originality and creativity of your work, readability and self-explanatory nature of slides, appropriate mix of content and white space, appropriate use of multimedia/ video, use of tables/charts/graphs, quality of written/oral communication, completeness and diversity of references etc
- ability to do critical analysis and prioritize/ present the most important issues within the space/time limit

If anything is not clear on this assignment, please bring your questions to class so that all of us are on the same page with respect to what we discuss and decide.

---

[2] If logistics permit, instructor will arrange to seek peer feedback from other students and use that feedback to arrive at the final grade for this assignment (students: please use the criteria above to judge others' work if your inputs are solicited by the instructor).

Appendix B: Preparing for Class Participation and Case Discussions

A. Class Participation

I expect <u>everyone</u> to come to class after reading all the assigned articles and cases and contribute to the discussions by offering your unique perspectives and reacting to that of others in a thoughtful manner. I frequently cold call so make sure that you have something to say if I ask you to summarize an article or case in your words or to respond to someone else's summary, question or comment.

A proactive and positive attitude towards class participation is expected and will be a factor in grading. While frequency and consistency of contributions are important, you should try to surface and prioritize issues not previously raised, offer persuasive arguments, extend the discussion and ask thoughtful questions. Questions need not be directed to the instructor all the time- be willing to ask, clarify and respond to your classmates' questions. Asking trivial questions or clarifications does not count for class participation, so invest some time to think carefully and then speak. Class participation may also involve some work outside or inside the class to reinforce learning of course concepts.

Besides in-class contributions, you can also contribute comments on Course **Facebook page or Twitter** on topics discussed in the class or to provide links to other relevant readings, news stories or magazine articles. Just posting a link or a news story is usually not enough—we will learn more if you also provide <u>your value added and thoughtful comments</u> discussing how that posting is relevant to course themes.

Please avoid private conversations, whispering or murmuring of any kind and use of electronic gadgets (such as laptop, blackberry etc) during the class that shows your distraction or has the potential to distract others. Such distracting activities can have significantly adverse effect on your class participation and overall grade.

B. Case Discussions

Identify the key issues or problems in the case and make recommendations to the management of the company. This may require reading a case at least 2-3 times. While I may provide some questions to guide your analysis and recommendations, do not limit yourself to these questions only. You should apply not only frameworks and insights from this course but also bring to bear your entire toolkit to analyze a case including what you are learning in other courses.

What you learn from cases depends on how well you did your homework before you come to the class. Each case is like a little experiment where you commit yourself to some action based on what you read in the case. If you do it seriously then each such experiment will add to your cumulative knowledge and make you a better manager by helping you to identify key issues more quickly, frame them and propose smarter solutions.

Be prepared for cold calls to open the case discussion, provide a quick summary of the major issues in the case, react to a previous comment or to summarize a case discussion towards the end. If you have a particularly salient example related to case issues, speak up. <u>If you have any private information or special expertise on the case because you worked with that company or in that industry then let the instructor know in advance by email so that your expertise can be used appropriately without depriving your classmates of their learning opportunities.</u>

<u>To participate in case discussions, you should prepare a one-page write-up for each case using the following outline</u> (feel free to adapt depending on particular case):

Key Issues in the Case:
- Identify key issues and prioritize them

Analysis:
- Analyze the case situation using assigned readings for the session or prior sessions in this course, and any other analytical frameworks or approaches that you learnt elsewhere--if none appears suitable then propose one. You may use Porter's value chain, five forces, SWOT and other analytical approaches-THEY ARE NOT ALWAYS APPROPRIATE SO BE SELECTIVE IN WHAT YOU USE. While you need to know how to use these tools, ultimately what matters is your ability to crystallize 2-3 key insights that you generate from the application of tools to guide your thinking.
- Do not believe the case numbers on their face, be willing to do your own calculations using data in exhibits/case making some reasonable assumptions. Be willing to surface and question the assumptions and mental models of the protagonists in the case, are they considering full range of options before them or they are just scratching the surface.

Alternatives and Evaluation of Alternatives:
- What key strategic alternatives might the organization pursue to address the issues it is facing? What are the pros and cons of each of the alternatives? What makes some alternatives more favorable than others? Discuss the firm's current strategy for value creation and value capture and how your recommendations support or modify that strategy, thinking through implementation issues?

Recommendations
- Make specific and actionable recommendations so that you can compare what you recommend with what your classmates might recommend- if you are vague then you can not evaluate how well you did and you will also not be able to challenge your classmates (and consultants later in life) to be specific.
- Don't focus only on IT related issues--what strategy, people or business process related issues should also be addressed to make your plan work? What are the limitations, risks, or inhibitors to your recommendation, and how would you manage them?

Lessons
- What are 3-4 lessons learned from this case that generalize to other situations, companies and industries? What underlying framework can help you deal with similar issues in future?

This outline can help you to document your learning when we discuss the case in class: what you left out in your analysis, what you learnt from others, the strengths and weaknesses in your logic, whether you misunderstood any case fact, how you can avoid such mistakes and become better at framing or evaluating case situations and likely solutions to become a more effective manager and leader.

Although I do not require written case analysis if you are present in class, but if you cannot make it to class then you must turn in a written case analysis by email before that class to partially make up for your absence.

Appendix C: Individual Term Paper

This assignment provides you an opportunity to put to use and demonstrate your thought leadership on a topic that relates to the major themes of the course.

Step 1: Pick a topic that is narrow enough to allow you to do some creative, original and meaningful work--avoid summarizing, repeating or copying and pasting from other places with very little value addition or original thinking by you. Work on something where you have a competitive advantage and something that will help you in your current or future job or to launch a new venture: think of a project where you can leverage your background, current or previous company experience or if you are thinking of changing jobs then researching the new industry or company in detail. While I will give you feedback on your topic and outline, ultimately you are responsible for your choice of topic and its execution so be thoughtful in generating options and considering their attractiveness and feasibility upfront. Topics that demonstrate some risk-taking and originality with action-orientation will be graded more favorably.

  I am listing below some topics to help you generate your ideas:
1. Critical analysis of a Dow Jones 30, Fortune 500 or Global 500 company's IT strategies, IT governance, IT expenditures or how it is using emerging technologies creatively or ignoring them at its peril. Here are the urls for these lists:
    i. http://money.cnn.com/data/dow30/
    ii. http://money.cnn.com/magazines/fortune/fortune500/2011/industries/
    iii. http://money.cnn.com/magazines/fortune/global500/2011/

       Alternatively, you can focus on your own firm's IT strategies, IT governance, IT expenditures or how it is using emerging technologies creatively or ignoring them at its peril.

2. Business plan or an entrepreneurship idea that leverages IT
3. Innovative use of IT by a firm to transform some activity, business function or service to improve revenues, reduce costs, spur innovation etc, and lessons for other firms
4. Synchronization (or lack thereof) between IT strategy and competitive/functional strategies of an organization
5. IT governance in an organization and how it can be improved, outsourcing/ offshoring experience of a firm and lessons learnt
6. Case study of a major IT implementation (e.g., ERP, CRM, Knowledge Management, Business Intelligence, etc.) you experienced, what went right/wrong, recommendations for future
7. Case studies or conceptual papers that illustrate or contradict anything that you leant in this course or any other course, those which contradict conventional wisdom are encouraged. You can think of some topical issues such as financial crises, carbon footprint, social change, climate change and how IT relates to some of these areas.

Step 2: Submit a hard copy of your **one-page** outline in class by the due date- check course schedule in the syllabus and also post that on the Smartsite (I will create a forum for "individual term papers" under Discussion Board). **You must answer the following questions briefly in one paragraph, followed by a list of major titles under which you will organize your paper**:

1. Why do you want to study that topic, How does it relate to your past/current job or future assignments, How will your company or some organization benefit from the paper (will it increase revenues, save costs, improve business processes, customer service or profitability, help with innovation or sustainability etc)?
2. How did you assess its feasibility, have you done some preliminary research, will you be able to pull it off? What methods will you use to collect necessary data (interview, company sources, secondary sources etc)?
3. What do you expect to learn (some tentative hypotheses, conjectures, conclusions)? How does it relate to this course's themes (be specific), which course concepts or frameworks will you use, illustrate or amplify through this topic?
4. How will you organize your paper, provide a tentative list of some major headings that indicate the scope of the paper. I have provided a generic structure in Step 4 below- but you can deviate from that and be more specific.

Step 3: **Do your research.**
Do some primary research (e.g., interviews) if possible.

Also use elibrary resources for your research projects. Here are some other resources for information on the companies or industries you are interested in:

www.cio.com; www.computerworld.com; www.techweb.com; www.informationweek.com; www.business2.com; www.datamation.com; www.redherring.com, www.cioinsight.com

http://www.nytimes.com/; http://online.wsj.com/public/us; http://www.businessweek.com/; http://news.ft.com/home/us; http://money.cnn.com/magazines/fortune/; http://www.economist.com/index.html

Also look at Gartner, Forrester, McKinsey and IDC website/ reports

You should also keep an eye on sections in the print issues of newspapers and magazines that discuss IT related issues: "Marketplace" section of Wall Street Journal, "Business Day" section of the New York Times, "Information Technology" section of Business Week, "Science and Technology" section of Economist, IT -related articles in Financial Times, Fortune, etc.

Note: If you don't already, then subscribe at least to Wall Street Journal, Economist magazine and one local newspaper --these investments can enhance returns on your business education by keeping you informed and up-to-date.

Step 4: SUBMIT A HARDCOPY OF THE PAPER ON THE DUE DATE (see "**Summary of Course Schedule, Topics and Deliverables**" in the SYLLABUS) WITH A SOFT COPY SUBMISSION THROUGH DIGITAL DROP BOX.

Suggested Structure for Term Papers (please feel free to adapt)

Term papers should be approximately 10 pages of double-spaced text in length (one inch margins, Times New Roman 12-point font) excluding the Tables, references, and appendices

(No penalty for exceeding pages if additional content justifies exceeding length guidelines). An example format for the paper is given below; however, feel free to adapt it creatively.

- **Title and Executive Summary** (1 page)
- **Main Body** (Approximately 7 pages): his should include background details, analysis and findings regarding the issue under investigation.
- **Lessons/ Recommendations.** (Approximately 2 pages). This is the last major section of the paper which pulls everything together.
- **References**
- **Appendices.** You can put any extra material here that adds to the depth of your paper.

You have to express all ideas in your own words as far as possible. If you use any phrase or sentence exactly as it appears in the source material then you must use double quotes and clearly identify the source page. You must cite all the references and supporting materials so that I can distinguish between your original ideas and what you are borrowing from others. For additional details on why you must provide citations, refer to:

http://www.lib.umd.edu/guides/style_manuals.html

I may provide some additional directions closer to the due date.

The criteria for evaluating the term paper include the following:
- Originality, creativity, quality, diversity and depth of research on your topic (e.g., primary data collection through interviews and company documents to solve a real problem will receive more weight; papers based only on library research/secondary sources are fine if they come up with new insights or ideas)
- Framing and developing a point of view, specificity of arguments and a balanced perspective that examines pros and cons and the decision criteria leading to your final choice, soundness and clarity of logic/judgment and creativity in analysis and recommendations
- Incorporation and application of course material and course concepts
- Writing clarity, organization, conciseness, and grammar
- Use of Tables, Charts, Figures to convey and summarize key ideas
- Completeness, quality and diversity of references/sources