STRATEGIES FOR A NETWORKED ECONOMY

MIS 381N (Unique 03740) Spring 2012

T Th 11:00 a.m. - 12:30 p.m. (GSB 3.104)

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Course Overview and Learning Objectives

Information Technologies have the potential to change the landscape of global competition, increase differentiation, change industry structure, make markets more efficient, and alter a firm's boundaries. 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, value creation and competitive advantage.

More than $2 trillion is invested in IT each year on a worldwide basis, which is over 50% of all capital expenditures. 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 investments. 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. However, large-scale failures in IT investments are common even in otherwise successful organizations. Thus it is imperative that managers avoid common pitfalls in IT investment decisions as well as IT systems implementation.

This course focuses on how to foster strategic transformation and innovation in business models, processes, products/services and value networks by leveraging the Internet and related technologies such as Web 2.0 and social media. There has been a sea change in the world of business in recent times. Customers are now co-producers, while organizations are striving to take advantage of emerging technologies to fundamentally transform both internal operations

and external relationships in an attempt to stay competitive and profitable. Perhaps the most fundamental change that the Internet has ushered is the availability of vast amounts of data regarding customers, suppliers and other business partners. The ability to extract meaningful patterns and intelligence from this data for better business decisions is the new frontier of competitive advantage.

This course is designed to get students acquainted with the Internet technologies that are vital to business innovation and corporate transformation. Students will be exposed to concepts and applications of Web 2.0 (such as prediction markets) and will learn how to deal with complex and large volumes of data to derive insights into customer and business partner behavior. Students will also learn frameworks and analytical tools to understand the economic and strategic implications of IT, best practices and transformation dynamics enabled by IT initiatives. The course will address many issues that are of interest to managers including (a) understanding IT contributions to competitiveness; (b) evaluating the strategic implications of IT and the Internet; (c) developing frameworks for electronic business, and (d) exploring emerging IT-driven business practices (e.g., online customer relationship management). The course will also focus on quantifying various types of risk in IT investments, identifying tangible and intangible costs and benefits of investing in customer facing IT systems, and developing ways to manage large, risky IT initiatives. Students will gain valuable hands-on experience in dealing with financial models and tools to assess, justify and manage investments in strategic IT and business process changes.

Course Material

Textbooks

1. "Networks, Crowds, and Markets: Reasoning About a Highly Connected World"
   David Easley, Jon Kleinberg
   Publisher: Cambridge University Press (July 19, 2010)
   ISBN-10: 0521195330
   ISBN-13: 978-0521195331

2. "Analyzing Social Media Networks with NodeXL: Insights from a Connected World"
   by Derek Hansen, Ben Shneiderman and Marc A. Smith
   Publisher: Morgan Kaufmann; 1 edition (September 10, 2010)
   ISBN-10: 0123822297, ISBN-13: 978-0123822291

Readings packet (available at IT Copy & Printing, 512 W Martin Luther King Jr, Austin, TX 78701, Tel: 512-476-6662)

Articles

1. Mohanbir Sawhney, Robert C. Wolcott, Inigo Arroniz, "12 Different Ways for Companies to Innovate" HBS SMR207-PDF-ENG
2. M. Porter, "Strategy and the Internet" (HBS, Product # R0103D)
3. M. Porter and V. Millar, "How Information Gives you Competitive Advantage" (HBS, Product # 85415)
4. "Recognizing Lock-In: How to Leverage Switching Costs," HBS # 2576BC-PDF-ENG
5. Dixit and Pindyck, "The Options Approach to Capital Investment" HBS Product # 95303.
6. R.G. Fichman, M. Keil and A. Tiwana, "Beyond Valuation: Options Thinking in IT Project Management," California Management Review, HBS # CMR 304 February 2005.
7. Andrew P. McAfee, "Shattering the Myths About Enterprise 2.0," HBS W0911A-PDF-ENG
8. Thomas R. Eisenmann, Geoffrey Parker, Marshall W. Van Alstyne, "Strategies for Two-Sided Markets," HBS R0610F-PDF-ENG
9. Mani D. et al., "Successfully Governing Business Process Outsourcing Relationships," Management Information Systems Quarterly Executive, 2006

Cases

1. Cemex: Global Growth Through Superior Information Capabilities: HBS # IMD134-PDF-ENG
2. "B&K Distributors: Calculating Return on Investment for a Web-based Customer Portal," KEL149
3. "ROI for a Customer Relationship Management Initiative at GST," HBS KEL232-PDF-ENG
4. "Air France Internet Marketing: Optimizing Google, Yahoo! MSN, and Kayak Sponsored Search," HBS KEL 319
5. "Prediction Markets at Google," HBS 607088-PDF-ENG
6. "RFID at the Metro Group" HBS 606053-PDF-ENG
7. "PayPal Merchant Services," HBS 806188-PDF-ENG
8. "Outsourcing at Office Supply Inc.," HBS KEL308-PDF-ENG
9. "Supply Chain Outsourcing at DB Toys," KEL256-PDF-ENG

Grading

Your course grade will be based on the following:

Item	Date due	Weight
Individual assignments	2/2, 2/28, 4/3, 4/24	28%
Group assignment	Presentation on 5/3	12%
Midterm	3/1	25%
Take home final	Handed out May 4, due May 11 by 11:59 p.m.	25%
Class participation		10%

Class participation: 10%

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

Individual Assignments (28%)

There will be 4 individual assignments during the course. The schedule of assignments is as follows:

1. "Cemex: Global Growth Through Superior Information Capabilities": 2/2
2. "ROI for a Customer Relationship Management Initiative at GST": 2/28
3. "PayPal Merchant Services": 4/3
4. "Supply Chain Outsourcing at DB Toys": 4/24

Group assignment (12%)

Students will work in groups of **<u>three to four</u>** on the case "Air France Internet Marketing: Optimizing Google, Yahoo! MSN, and Kayak Sponsored Search," and present their analysis and recommendations on 5/3 in class.

Course Agenda

Date	Topic	Readings
1/17	Introduction	"12 Different Ways for Companies to Innovate" (Readings packet)
1/19	IT enabled business innovation	**"**12 Different Ways for Companies to Innovate**"** (Readings packet)
1/24	Operational excellence through IT	"IT enabled transformation" by Barua and Konana (to be posted on Blackboard)
1/26	Operational excellence through IT , strategic impacts	M. Porter, "Strategy and the Internet" (HBS, Product # R0103D)
1/31	Strategic impacts of IT	M. Porter and V. Millar, "How Information Gives you Competitive Advantage" (HBS, Product # 85415)
2/2	**Case discussion**	**Assignment #1 due by the beginning of class: "Cemex: Global Growth Through Superior Information Capabilities"**
2/7	Lock-in and switching costs	"Recognizing Lock-In: How to Leverage Switching Costs," HBS # 2576BC-PDF-ENG
2/9	Business value of IT	"B&K Distributors: Calculating Return on Investment for a Web-based Customer Portal," KEL149
2/14	Business value of IT	Dixit and Pindyck, "The Options Approach to Capital Investment" HBS Product # 95303.
2/16	Business value of IT	R.G. Fichman, M. Keil and A. Tiwana, "Beyond Valuation: Options Thinking in IT Project Management," California Management Review, HBS # CMR 304, Feb. 2005.
2/21	Business Value of IT	"RFID at the Metro Group"
2/23	Web 2.0 and applications	1. "Networks, Crowds, and Markets": Chapter 3 (Strong and Weak Ties) 2. "Networks, Crowds, and Markets": Chapter 13 (The Structure of the Web)
2/28	**Case discussion**	**Assignment #2 due: "ROI for a Customer Relationship Management Initiative at GST"**

3/1	**Midterm**	
3/6	Enterprise 2.0	Andrew P. McAfee, "Shattering the Myths About Enterprise 2.0," HBS W0911A-PDF-ENG
3/8	Intro to network analysis tools: NodeXL	"Analyzing Social Media Networks with NodeXL": Chapters 4, 5, 6, 7
3/20	Enterprise 2.0: Prediction markets	"Prediction Markets at Google," HBS 607088-PDF-ENG
3/22	Two sided networks	Thomas R. Eisenmann, Geoffrey Parker, Marshall W. Van Alstyne, "Strategies for Two-Sided Markets," HBS R0610F-PDF-ENG
3/27	Two sided markets (continued)	Thomas R. Eisenmann, Geoffrey Parker, Marshall W. Van Alstyne, "Strategies for Two-Sided Markets," HBS R0610F-PDF-ENG
3/29	Social media networks	"Networks, Crowds, and Markets": Chapter 4 (Networks in Their Surrounding Contexts)
4/3	**Case discussion**	**Assignment #3 due: "PayPal Merchant Services"**
4/5	Social media networks	"Analyzing Social Media Networks with NodeXL": Chapters 14, 15.
4/10	Online advertising	"Networks, Crowds, and Markets": Chapter 15 (Sponsored Search Markets)
4/12	IT and Business Process Outsourcing	Mani D. et al., "Successfully Governing Business Process Outsourcing Relationships," *Management Information Systems Quarterly Executive*, 2006
4/17	IT and Business Process Outsourcing	"Outsourcing at Office Supply Inc.," HBS KEL308-PDF-ENG
4/19	Outsourcing negotiation game	Posted on Blackboard
4/24	**Case discussion**	**Assignment #4 due: "Supply Chain Outsourcing at DB Toys"**
4/26	Data Mining and Business Intelligence	Annotated slides (to be posted on Blackboard)
5/1	Data Mining and Business Intelligence	Annotated slides (to be posted on Blackboard)

5/3	**Presentations: Air France case study**	
5/4	**Take home final handed out**	
5/11	**Take home final due by 11:59 p.m.**	