

# CS 801 Information Technology Management & Policy

Bentley College Computer Information Systems Department

Spring 2014

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## Bill Schiano, Professor

Phone:	781-891-2555
E-Mail (preferred):	wschiano@bentley.edu
Office Hours:	Smith Technology Center 418 Mondays 3:30-4:30PM and by appointment

## Objectives

By the end of the term, each student will be able to examine the current and potential impact of information and information technology on all aspects of his or her position, firm, and industry systematically. Students will then be prepared to make strategic and tactical decisions informed by this knowledge.

## Catalog Description

This course explores the issues and approaches in managing the information systems function in organizations. It takes a senior management perspective in exploring the development and implementation of plans and policies to achieve efficient and effective information systems. The course addresses issues relating to defining the IT infrastructure and the systems that support the operational, administrative and strategic needs of the organization.

## Course Overview

The course will be an interactive discussion of actual business situations, provided by case studies. The discussion will be between all members of the class, not just each student individually with me. Since every voice is essential, attendance is expected of all students for all sessions. As a group, we benefit from the presence of practitioners as students.

There are three components to the course grade:

Class Participation	50%
Short Papers	25%
Final Exam	25%

## Class Participation

***Please note: the legalistic, petty policies outlined below do not reflect my preferred way of operating. Unfortunately, it is difficult to enforce policies that contain any measure of ambiguity.***

The course, particularly the cases, will involve interactive discussion. The weighting of the grade reflects the importance of student participation. There are two components to participation: quality and quantity. The quality of comments will be judged by relevance, clarity of thought and insight. As far as quantity, as a rule of thumb, I would expect to see your hand raised many times in each class and you should participate substantively at least once each class. If you feel you are having difficulty doing so, please let me know. You will receive feedback after the 7<sup>th</sup> session.

There is absolutely no substitute for class participation. Under no circumstances will extra credit be offered. No communication in any form outside of class discussion time counts in any way as class participation.

Because of the discussion structure of this course, it is essential that all students be prepared for each class. If you are unable to prepare, please let me know before class. If you do not tell me before class, and I call on you during class and it is clear you have not prepared the case/material, a full point will be deducted from your class participation grade, i.e. if you had a 3.7 for class participation, it would become a 2.7.

## Attendance

Given the importance of class participation, attendance is essential. If work or other obligations prevent you from attending class, please let me know ahead of time if possible. **There is no "make-up" work if you miss a class.** You should prepare the material, and get notes from a classmate. Missing more than one or two classes will inevitably have a negative impact on your class participation grade. The extent of the impact will depend on your participation in the sessions for which you are present.

## Papers

There will be several short papers required during the semester. Some of the papers may call for research. Bentley College offers a number of valuable sources of research information beyond the publicly accessible WWW. Baker Library offers access to databases of articles including ProQuest, EBSCO, Lexis/Nexis, Gartner Group, and Forrester Research. These sources will be of use for any topic. Depending on your topic, you may also find other sources of interest, particularly for financial and market information.

You should not expect to find what you are looking for immediately. Research involves refining your topic and search terms iteratively. Also visit the physical library to consult with a research librarian for guidance as needed. Feel free to contact me with questions as well.

My expectation for the quality of these papers will be the same as those of a memo you would hand to the CIO, CEO or client of your organization. That means the document should be well organized and written. As a rule of thumb, I will mark down any paper that contains more than one error per page. If you have difficulty writing, or English is not your first language, *plan time to go over your paper with a proofreader.* The Graduate School provides such support if you need it.

The work should be original, and all sources should be clearly cited. Plagiarism will result in an 'F' for the course, and recommendation of expulsion from the graduate school.

Please format each paper as a memo.

## Deadlines

No papers will be accepted late without prior approval.

## A Few Words on Grading

If you know yourself to be particularly nervous about grades, please try to treat this class an opportunity to grow beyond such anxiety. Graduate programs are about being challenged and learning, not grades. If you focus on preparing for class and learning, the grades will follow. Try to think about your own performance in class: was it the best you could do? Was it constructive? Insightful? Are you as active as your fellow students?

In your career, you will not get regular formal feedback. If you are lucky, your annual or semi-annual reviews will be related to your performance. Developing an ability to objectively assess your performance will be a useful skill.

Also keep in mind that effort is not perfectly correlated with grades in this course. While no academically honest student who has worked hard (more than 10 hours/week of preparation, carefully written papers and active participation in class) has ever failed the course, it is not uncommon for 4.0 students to do poorly in this course. This is not a course about memorization. Thinking on your feet and listening to your colleagues counts here, as it does in the workplace. Without work experience, you will be at a (surmountable) disadvantage in this course but also in a position to learn disproportionately more. Focus on what you are learning, not your grade. No matter how earnest your efforts inside and outside of class, you may not be able to perform at an outstanding level in this course. This is not a negative reflection on you.

## Academic Honesty

I chose an academic career because I enjoy teaching and learning from students. I have no interest in serving as a police officer. Such roles should be limited to primary education, if that. However, each semester I encounter lapses in academic honesty that I am obligated to address. In an effort to keep this from becoming an issue, I offer the following policy for CS801 which I assure you will be enforced.

This course has a **zero tolerance policy for academic dishonesty**. There is no room for such behavior in a graduate course, in the workplace or in civilized society. I am unwilling to discuss rationale or circumstances for lapses. All breaches of academic honesty will result in the same **penalty: an F** in the course, and **recommendation of expulsion** from the graduate program. If you are unclear about what constitutes academic dishonesty in a paper, consult your student handbook, or ask me. When in doubt, err in favor of citations.

Any student using materials or notes from a previous semester or discussing a case study with someone who has previously discussed the case in this or any other course, or any student with knowledge of others doing so but not reporting it, will receive an F in the course and recommendation of expulsion from the graduate program. **Please note, this is a more stringent standard than in most courses, but will be followed.**

## Readings

There is no required text for the course. We will be using a wide range of supplemental readings. The readings without hypertext links will be available in the Course Documents section on Blackboard.

There is a set of cases to purchase online at Harvard Business School Publishing at:  
<https://cb.hbsp.harvard.edu/cbmp/access/23397919>.

*Please note that each student is required to purchase all cases; "sharing" cases is a violation of HBS copyright.*

## Recommended Texts

- Brian Fugere, Chelsea Hardaway, and Jon Warshawsky, *Why Business People Speak Like Idiots: A Bullfighter's Guide*, Free Press, 2005, ISBN-10: 0743269098, ISBN-13: 978-0743269094

If you do not have any training or background in finance, or your knowledge is rusty, I would recommend reading:

- Karen Berman, Joe Knight, and John Case, Financial Intelligence, Revised Edition: A Manager's Guide to Knowing What the Numbers Really Mean, Harvard Business School Press, 2013. ISBN 978-1422144114.

## Schedule

Session	Date Mondays 19:30-21:50	Topic and Assignments
1	January 27	<p><b>It in Organizations</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• M. Porter, "The Five Competitive Forces that Shape Strategy," <i>Harvard Business Review</i>, January 2008. Available in ProQuest Research Library at <a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=28000138&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=28000138&amp;site=ehost-live</a>. Note: If you are off campus, you will need to log in to the database manually via the Baker Library page (<a href="http://library.bentley.edu/">http://library.bentley.edu/</a>) using your network username and password, and then search for the article by author and/or title.</li> <li>• D. F. Feeny and L. P. Willcocks, "Core IS Capabilities for Exploiting Information Technology," <i>Sloan Management Review</i> (39:3), 1998, pp. 9-21. (On ProQuest at <a href="http://proquest.umi.com/pqdweb?did=28785013&amp;sid=1&amp;Fmt=2&amp;clientId=5258&amp;RQT=309&amp;VName=PQD">http://proquest.umi.com/pqdweb?did=28785013&amp;sid=1&amp;Fmt=2&amp;clientId=5258&amp;RQT=309&amp;VName=PQD</a>) Note: If you are off campus, you will need to log in to the database manually via the Baker Library page (<a href="http://library.bentley.edu/">http://library.bentley.edu/</a>) using your network username and password, and then search for the article by author and/or title.</li> </ul> <p>Case: <i>Mrs. Fields, Inc.</i></p> <p>Preparation questions:</p> <ol style="list-style-type: none"> <li>1. Describe and evaluate the management control systems at Mrs. Fields.</li> <li>2. What is the information technology architecture at Mrs. Fields? Hardware? Network? Software?</li> <li>3. What is the role of IT at Mrs. Fields?</li> <li>4. Evaluate the impact IT has on Mrs. Fields.</li> <li>5. How would modern technology change the situation at Mrs. Fields?</li> </ol> <p><b>Please also submit a current resume to <a href="mailto:wschiano@bentley.edu">wschiano@bentley.edu</a> by Thursday January 30 at noon. You are welcome to disguise any information you choose. If you would like feedback on your resume, please indicate so in your e-mail.</b></p>
2	February 3	<p><b>IT and Competition</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• R. Rosenzweig, "Misunderstanding the Nature of Company Performance: The Halo Effect and Other Business Delusions," <i>California Management Review</i>, Summer 2007. (<a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=25996994&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=25996994&amp;site=ehost-live</a>)</li> <li>• D. Collis and M. Rukstad, "Can You Say What Your Strategy Is?" <i>Harvard Business Review</i>, April 2008. Available in ProQuest Research Library at</li> </ul>

		<p><a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=31372942&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=31372942&amp;site=ehost-live</a>.</p> <ul style="list-style-type: none"> <li>• M. Johnson et al, "Reinventing Your Business Model," <i>Harvard Business Review</i>, December 2008. (<a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=35386627&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=35386627&amp;site=ehost-live</a>)</li> </ul> <p>Case: <i>Taco Bell</i></p> <p>Preparation questions:</p> <ul style="list-style-type: none"> <li>• Describe the process of change throughout Taco Bell (organizational, control-related and cultural). Were the changes helpful, harmful or essential to Taco Bell's success?</li> <li>• Evaluate the role of information technology at Taco Bell and its relative importance to Taco Bell's operations and strategy.</li> <li>• Why was Taco Bell able to sustain such and astonishing rate of change?</li> <li>• Could other firms emulate Taco Bell?</li> <li>• What should John Martin do to keep Taco Bell moving forward?</li> </ul>
3	February 10	<p><b>Developing an Electronic Business</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• D. Ready, L. Hill, and R. Thomas, "Building a Game-Changing Talent Strategy," <i>Harvard Business Review</i>, Jan/Feb 2014, Vol. 92 Issue 1. Available on Business Source Premier at <a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=93302814&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=93302814&amp;site=ehost-live</a>.</li> <li>• Weill, Peter, and Stephanie L. Woerner. "Optimizing Your Digital Business Model." <i>MIT Sloan Management Review</i> 54.3 (2013). Available in ProQuest Research Library at <a href="http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/1323892551?accountid=8576">http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/1323892551?accountid=8576</a>.</li> </ul> <p>Case: <i>Staples.com</i></p> <p>Preparation questions:</p> <ol style="list-style-type: none"> <li>1. Do you agree with Staples.com's growth strategy?</li> <li>2. Should Staples expand into the SOHO services market?</li> <li>3. What should Staples' pricing strategy be?</li> <li>4. If you were Kelly Mahoney, would you take this job?</li> </ol> <p><b>Paper 1 due by Wednesday February 19 at noon. Please submit the paper via the assignment link on Blackboard.</b></p>

4	February 14  <b>NOTE: THIS IS A FRIDAY</b>	<p><b>Software Development</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>Alan MacCormack, "Product-Development Practices That Work: How Internet Companies Build Software," <i>Sloan Management Review</i>, Winter2001, Vol. 42 Issue 2, p75-84 Available on EBSCO at <a href="http://search.epnet.com/login.aspx?direct=true&amp;db=buh&amp;an=17704997">http://search.epnet.com/login.aspx?direct=true&amp;db=buh&amp;an=17704997</a></li> </ul> <p>Case: <i>Microsoft Office 2007</i></p>
5	February 17	<p><b>Software Platforms</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>A. Gawer and M. Cusumano, "How Companies Become Platform Leaders," MIT Sloan Management Review, Winter 2008. Available in ProQuest Research Library at <a href="http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/224966345?accountid=8576">http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/224966345?accountid=8576</a>.</li> <li>Swanson, E. B. "The Managers Guide to IT Innovation Waves." <i>MIT Sloan Management Review</i>, 53.2 (2012): 75-83. Available in ProQuest Research Library at <a href="http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/914415964?accountid=8576">http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/914415964?accountid=8576</a>.</li> </ul> <p>Case: <i>Microsoft Servers &amp; Tools</i></p> <p>Preparation Questions:</p> <ul style="list-style-type: none"> <li>Tba</li> </ul>
6	February 24	<p><b>Globalization</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>Amir Sharif, "Professional Services Organizations and the Role of Consulting in the New Economy," <i>Information Systems Management</i>, Spring2002, Vol. 19 Issue 2, p19, 12p. (In EBSCO at <a href="http://web.ebscohost.com/ehost/detail?vid=1&amp;hid=104&amp;sid=06f33f4b-e5da-4d5c-a17b-08e197e7ff7e%40sessionmgr102">http://web.ebscohost.com/ehost/detail?vid=1&amp;hid=104&amp;sid=06f33f4b-e5da-4d5c-a17b-08e197e7ff7e%40sessionmgr102</a>)</li> <li>Lafley, A. G., et al. "Bringing Science to the Art of Strategy," <i>Harvard Business Review</i> 90.9 (2012). Available on Business Source Premier at <a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=79184316&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=79184316&amp;site=ehost-live</a>.</li> <li>Craig Le Clair, "The 10 Dimensions Of Business Agility," Forrester, 9 September 2013. On Blackboard.</li> </ul> <p>Case: <i>Infosys' Relationship Scorecard: Measuring Transformational Partnerships</i></p> <p>Preparation Questions:</p> <ol style="list-style-type: none"> <li>What makes Infosys successful?</li> <li>What is driving the move toward the relationship scorecard?</li> <li>Will the RSC succeed or fail? Why?</li> </ol>

		<p>4. Create a plan of action to achieve transformational partnerships at Infosys.</p> <p><b>Paper 2 due by Thursday March 6 at noon. Please submit the paper via the assignment link on Blackboard.</b></p>
7	March 3	<p><b>Managing Turnarounds</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• Molinsky, Andrew L., et al. "3 SKILLS Every 21<sup>st</sup> Century Manager Needs," <i>Harvard Business Review</i>, 90.1/2 (2012). Available on Business Source Premier at <a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=69949242&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=69949242&amp;site=ehost-live</a>.</li> <li>• R. Burgelman and R. Siegel, "Cutting the Strategy Diamond in High-Technology Ventures," <i>California Management Review</i>, Spring 2008. (<a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=32129034&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=32129034&amp;site=ehost-live</a>)</li> </ul> <p>Case: <i>Turnaround at EDS: The Jordan Rules</i></p> <p>Preparation questions:</p> <ol style="list-style-type: none"> <li>1. What drove the need to hire turnaround specialist Dick Brown?</li> <li>2. Evaluate Brown's tenure as CEO.</li> <li>3. Evaluate EDS's super bowl commercial (<a href="http://www.youtube.com/watch?v=JWymXNPuU7g">http://www.youtube.com/watch?v=JWymXNPuU7g</a>). Was it worth the money?</li> <li>4. What were the early warning signs that Brown's turnaround had problems?</li> </ol> <p><b>Mid-semester course evaluation (in class)</b></p>
<b>Spring Break – No class March 10</b>		
8	March 17	<p><b>Information Technology Operations</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• Gordon, Steven R., and Monideepa Tarafdar. "The IT Audit that Boosts Innovation." <i>MIT Sloan Management Review</i>, 51.4 (2010): 39-47. Available in ProQuest Research Library at <a href="http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/633071930?accountid=8576">http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/633071930?accountid=8576</a>.</li> </ul> <p>Case: <i>Enabling Business Strategy with IT at the World Bank</i></p> <p>Preparation questions:</p> <ol style="list-style-type: none"> <li>1. What is the role of IT at World Bank?</li> <li>2. How has that role changed over time?</li> <li>3. How is the role of IT likely to change in the future?</li> <li>4. What issues are members of the management committee likely to raise?</li> </ol>
9	March 24	<p><b>Negotiating with Vendors</b></p> <p>Read: none.</p> <p>Case: <i>General Dynamics and Computer Sciences Corporation: Outsourcing the IS Function</i> (to be ordered separately during the semester)</p>

		<p>Please prepare the appropriate case for your team with the following questions in mind:</p> <ol style="list-style-type: none"> <li>1. As a member of General Dynamics' management, why would you want to outsource?</li> <li>2. What perspective as a member of the CSC management would you bring to the outsourcing negotiation?</li> <li>3. What are the key issues that should be addressed in an outsourcing agreement?</li> </ol> <p><b>Note: This is a negotiation exercise and will require small group negotiations outside of class.</b></p>
10	March 31	<p><b>Mergers and Acquisition</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• C. Christensen et al, "Innovation Killers: How Financial Tools Destroy Your Capacity to Do New Things," <i>Harvard Business Review</i>, January 2008. on EBSCO at <a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=28000282&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=28000282&amp;site=ehost-live</a>.</li> </ul> <p>Case: <i>Unity Bank: Realizing Value from an M&amp;A Integration</i></p> <p>Preparation Questions:</p> <ol style="list-style-type: none"> <li>1. Was this a good acquisition for Unity? Why or why not?</li> <li>2. Which enterprise client should be maintained in North America? Why?</li> </ol>
11	April 7	<p><b>General Dynamics Debrief</b></p> <p><b>Paper 3 due by Thursday April 17 at noon. Please submit the paper via the assignment link on Blackboard.</b></p>
12	April 14	<p><b>Change and Leadership</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• Garvin, David A. "How Google Sold Its Engineers On Management." <i>Harvard Business Review</i>, 91.12 (2013): 74-82. Available on Business Source Premier at <a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=92545712&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=92545712&amp;site=ehost-live</a>.</li> <li>• Rao, Jay, and Joseph Weintraub. "How Innovative is Your Company's Culture?" <i>MIT Sloan Management Review</i> 54.3 (2013). Available in ProQuest Research Library at <a href="http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/1323892290?accountid=8576">http://ezp.bentley.edu/login?url=http://search.proquest.com.ezp.bentley.edu/docview/1323892290?accountid=8576</a>.</li> </ul> <p>Case: <i>Leaders Who Make a Difference: Sam Palmisano's Smarter IBM: Day 1 (note: this is a multimedia case – view the videos as prompted in the case)</i></p> <p>Preparation Questions:</p> <ol style="list-style-type: none"> <li>1. How would you describe the change in strategy at IBM?</li> <li>2. What is a "jam" and why did IBM undertake a "values jam?"</li> <li>3. How is IBM improving profitability?</li> </ol>

13	April 21	<p><b>Organizational Structure</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• Groysberg, Boris, L. Kevin Kelly, and Bryan MacDonald. "The New Path To The C-Suite. (Cover Story)." <i>Harvard Business Review</i>, 89.3 (2011): 60-68. Read only introduction and Chief Information Officer section. Available on Business Source Premier at <a href="http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=58557026&amp;site=ehost-live">http://search.ebscohost.com/login.aspx?direct=true&amp;db=buh&amp;AN=58557026&amp;site=ehost-live</a>.</li> <li>• Richard Hunter, "How the CIO Can Influence Enterprise Strategy," Gartner, 23 December 2013. Available through the Bentley Library site.</li> <li>• Peter Weill, Stephanie L. Woerner, "How CIOs Allocate Their Time," MIT Sloan School of Management Center for Information Systems Research (CISR), Research briefing VIII-1A, March 2008. Available on the web for free at <a href="http://mitsloan.mit.edu/cisr/briefings.php">http://mitsloan.mit.edu/cisr/briefings.php</a>. (free registration required)</li> <li>• Peter Weill and Richard Woodham, "Don't Just Lead, Govern: Implementing Effective IT Governance," MIT Sloan School of Management Center for Information Systems Research (CISR), Working Paper No. 326, April 2002. Available on the web for free at <a href="http://mitsloan.mit.edu/cisr/papers.php">http://mitsloan.mit.edu/cisr/papers.php</a>. (free registration required)</li> </ul> <p>Case: <i>Pfizer's Virtual CIO (Abridged)</i></p> <p>Preparation Questions:</p> <ul style="list-style-type: none"> <li>• Is the virtual CIO a good idea? Why or why not?</li> <li>• How would you evaluate the ITLT?</li> </ul> <p><b>Paper 4 due by Thursday May 1 at noon. Please submit the paper via the assignment link on Blackboard.</b></p>
14	April 28	<p><b>Bringing it all Together/Leadership</b></p> <p>Read:</p> <ul style="list-style-type: none"> <li>• The Concours Group, "Service-Centric IT," 2004. (on Blackboard)</li> </ul> <p>Case: <i>UCB (A): Managing Information for Globalization and Innovation</i></p> <p>Preparation Questions:</p> <ul style="list-style-type: none"> <li>• How do you assess the current state of IT at UCB? What looks good? Where are the potential problems?</li> <li>• What advice would you give Vincent Damien and Edouard Crossier?</li> <li>• What advice would you give George Jacobs?</li> </ul>
15	May 5	<b>FINAL EXAM</b>

# GRA6834 Business Development and Innovation Management

*Espen Andersen, BI Norwegian Business School, August-December 2013*

This course is modeled on the Harvard Business School course *Building and sustaining a successful enterprise*, a very popular, 29-session elective course built around disruptive innovation theory and a string of cases from high-profile, technical industries<sup>1</sup>. The aim is to teach students how to think about innovation and competition from a managerial perspective. GRA6834 started as an experiment in whether a full-fledged HBS-based case course can be fitted into a Norwegian M.Sc. program. This worked well, and the course is now offered in two versions:

- *Regular*, running every Wednesday 1100-1345 from August 21 to November 6, with some exceptions due to scheduling conflicts.
- *Intensive*, running primarily on Tuesdays and Thursdays 0800-1045 from October 15 to November 21, with some exceptions due to scheduling conflicts. This course is primarily meant for students doing internships in companies early in the semester, but is, of course, open for any M.Sc. student.

The course has five modules, each with theory and cases to match:

1. *Theory building*, which focuses on how to build theory – and how to recognize good theory when you see it – and introduces the theory of disruptive innovation as the core construct behind the course.
2. *Disruption*, which uses disruption and other theories of technology evolution, modularity and commoditization to teach students how to respond to business environmental changes.
3. *Managing innovation killers and hidden barriers to new growth businesses* looks at the various stumbling blocks, internal and external, that often stops innovations from making it from idea to marketplace.
4. *Creating a growth business* focuses on tools managers can use, such as jobs-based segmentation, business model analysis, and planning tools.
5. *Creating a growth organization* brings it all together, focusing on the context of the existing corporation and what managers can do to make innovation happen.

Since this course only has 24 sessions (i.e., two sessions per day,) it has been somewhat shortened and simplified from the HBS course, and the content slightly modified, primarily by making use of a few Norwegian cases and guest lecturers.

## Core literature

- Christensen, C. M. and M. Raynor (2003). *The Innovator's Solution: Creating and Sustaining Successful Growth*. Boston, MA, Harvard Business School Press. (this is the main book of the course).
- (Recommended) Arthur, W. Brian. 2009. *The nature of technology: what it is and how it evolves*. London : Allen Lane (selected chapters)

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<sup>1</sup> See Shih, W. (2010): *Building and Sustaining a Successful Enterprise: Course overview note for instructors* (HBS 5-610-099) for a complete description of this course.

- (Recommended) Shapiro, Carl, Hal R. Varian. 1999. *Information rules: a strategic guide to the network economy*. Boston, Mass. : Harvard Business School Press (selected chapters)

Cases and articles as described under each session. The case package (including individual access to the *Back Bay Battery* exercise can be purchased by student at this link: zzx)

## Evaluation

- 50% of the grade is based on a group term paper, to be defined by the students themselves. The term paper, to be written in groups of two or three, with deadline December 6, should document a company or organization that faces a situation demanding innovation - disruptive or not - and make use of the theories and concepts learned in the course. (More details will follow during the course.)
- 50% of the grade is based on in-class participation and assignments. Students are expected to have prepared the cases and articles for each class and be ready to discuss them, including introducing the case and making recommendations to their fellow students. Assignments include an on-line simulation and various other, shorter exercises.

The course will be taught according to the case method, with participation in class an integrated part of the course. The discussion will be in English, and proficiency in this language is assumed, and no accommodation will be given for poor English skills.

## Syllabus

The syllabus is divided into “sessions”, numbered 1 to 24, each about 80 minutes long. For the regular course, there will be two sessions per week, on Wednesdays. For the intensive course there will be four sessions per week – two on Tuesdays, two on Thursdays.

### Session 1 and 2: Theory building

This session will start with an introduction and an overview of the course, a short case meant to introduce the case method (as well as the issue of disruptive innovations), then a discussion of what theory is and how we can recognize good and bad theory.

Case:

- Kaull, S. and E. Andersen, *Catatech – the question of electronic commerce*. This is a short case we will discuss – partly for content, partly for practicing case discussions.

Readings:

- Christensen, C. M. and P. R. Carlisle (2009). "Course Research, Using the Case Method to Build and Teach Management Theory." *Academy of Management Learning and Education* 8(2): 240-251.
- Collins, J. (2005). "Level 5 Leadership: The Triumph of Humility and Fierce Resolve." *Harvard Business Review* 83(7/8): 136-146.
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- (Reference, this is a classic book which every aspiring intellectual should read): Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. Chicago, IL, The University of Chicago Press. (The [Wikipedia article](http://en.wikipedia.org/wiki/The_Structure_of_Scientific_Revolutions) ([http://en.wikipedia.org/wiki/The\\_Structure\\_of\\_Scientific\\_Revolutions](http://en.wikipedia.org/wiki/The_Structure_of_Scientific_Revolutions)) is pretty good summary.)

#### Study questions:

- How dangerous is eHerramientas to Catatech? What should Marisa do about it? What strategy should the company adopt?
- What is the difference between descriptive and prescriptive theory, and how do you recognize what kind of theory is which?
- What is the difference between descriptive and prescriptive theory building?
- At what stage of theory development is the Collins article?
- Why did it take the US Navy so long to adopt the constant-adjustment techniques for gunfire? What does that tell you about how you get innovations adopted in your own setting?

### Session 3: Disruption theory (Hambrecht)

#### Readings:

- Chapter 2 in Christensen & Raynor
- Case: Clayton M. Christensen and Tara Donovan, “Disruptive IPOs? W. R. Hambrecht + Company,” HBS Case No. 610-065. (in case pack)

#### Study questions:

- On a three-dimensional map of innovation – sustaining, low-end disruption and new-market disruption – where would you locate the alternatives that Hambrecht and his team are considering? Which of these would you recommend that WRH pursue, and why?
- If you were running Goldman Sachs, when, if ever, would you begin worrying about Hambrecht? When it became time to worry, what would you do?
- Consider the history of the financial services industry. What disruptions already have occurred? Aside from those in the WRH case, are any other disruptions underway at present?

### Session 4: Disruption theory (USX)

#### Readings:

- Clayton Christensen, “Continuous Casting Investments at USX Corporation”, HBS Case No. 697-020 (in pack)

#### Study questions:

- The main story about the integrated steel mills versus the mini-mills is given in Christensen & Raynor’s book. This case adds more detail – how does it change your view of what happened?
- What changes in organization, production processes and structure does the introduction of continuous casting require of USX? Of Nucor?

### Session 5: Disruption Theory (Nypro)

Readings:

- Clayton M. Christensen and Stephen Kaufman, *Assessing Your Organizations Capabilities: “Resources, Processes and Priorities,”* HBS Case No. 607-014 (in pack)
- Mintzberg, Henry and James Waters, “Of Strategies, Deliberate and Emergent,” *Strategic Management Journal* (6), 1985, pp. 257-272
- Clayton M. Christensen, “Managing Innovation at Nypro (A),” HBS Case No. 696-061 (in pack). The B case will be handed out during the class.

Study questions:

- What is the process employed at Nypro to identify and standardize upon important innovations?
- Can you make any generalizations about what sorts of innovations are likely to thrive within Nypro’s “internal marketplace” for technologies? What sorts of innovations are likely to languish?
- How should Lankton roll out the Novaplast technology?

## **Session 6: New market disruption (Sonosite)**

Readings:

- Chapter 4 in Christensen & Raynor
- Clayton M. Christensen and Jeremy B. Dann, “Sonosite: A View Inside “ , HBS Case No. 602-056 (in pack)
- Jeffrey R. Immelt, Vijay Govindarajan, Chris Trimble, “How GE Is Disrupting Itself “ , *Harvard Business Review*, October 2009

Study questions:

- Where should Sonosite market its portable ultrasound scanner?
- If you were a competitor to Sonosite, offering a traditional ultrasound scanner, what would you do?

## **Session 7: Interdependence and Modularity (MP3)**

Chapter 5 in Christensen & Raynor

- Willy Shih, “MP3 Portable Audio Players and the Recorded Music Industry,” HBS Case No. 608-119 (in pack)
  - Espen Andersen: Digital music and Norwegian artists, [press release as posted on blog](http://appliedabstractions.com/2010/10/06/record-companies-lose-artists-gain/). (http://appliedabstractions.com/2010/10/06/record-companies-lose-artists-gain/)

Study questions:

- How would you frame the disruption here? What do you think is the performance metric, and how would you classify some of the improvements to music delivery systems over the years?
- Can you explain why some parts of the market appear to have become commoditized, while companies like Apple have been able to earn rich profits?

- Were the major record labels guilty of over-serving consumers? What might they have done differently?
- What advice would you give to Amazon.com as they ramp up their online music store?

## Session 8: Commoditization (Business schools)

### Readings

- Chapter 6 in Christensen & Raynor
- Willy Shih and Matthew Noble, "Driving Towards a Disruption?" HBS Case No. 612-101 (in pack)
- Quelch, J. (2005). "A New Agenda for Business Schools." *Chronicle of Higher Education* (December 2).
  - (Not mandatory, contains data about some of the institutions described in Christensen & Eyring's book) Auguste, B. G., A. Cota, et al. (2010). [Winning by degrees: the strategies of highly productive higher-education institutions](http://mckinseysociety.com/winning-by-degrees/), (<http://mckinseysociety.com/winning-by-degrees/>) McKinsey & Company.
- (Reference - very influential book on the education industry) Christensen, C. M., M. B. Horn, et al. (2008). *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns*. New York, NY, McGraw Hill.
- (Reference, this is a rather long book with more detail, essentially a case study of Harvard vs. BYU Idaho) Christensen, C. M. and H. J. Eyring (2011). *The Innovative University: Changing the DNA of Higher Education from the Inside Out*, Jossey-Bass.

### Study questions:

- Which technologies can commoditize business education, and how?
- In what way, if any, does this evolution represent a threat to the Harvard University - and how should the school react to it?
- In what way, if any, does this evolution represent a threat to a less well known university, for instance University of Connecticut - and how should the university react to it?
- In what way, if any, does this evolution represent a threat to BI Norwegian Business School - and how should the school react to it?

## Session 9: Commoditization (HP Merced)

### Readings:

- Clayton M. Christensen and Matthew C. Verlinden, "Hewlett-Packard's Merced Decision" HBS Case No. 699-011 (in pack)

### Study questions:

- Does the market need the Merced chip?

- Who will benefit the most from the introduction of the Merced chip in the markets served by ESG? Who will benefit least, and why?
- What should Jim Davis recommend?

## Session 10: Modularity and outsourcing (ASUSTeK)

### Readings:

- Chapter 5 in Christensen & Raynor
- Willy Shih, Howard Yu, and Hung Chang Chiu, "Transforming ASUSTeK: Breaking from the Past," HBS Case No. 610-041

### Study questions:

- Think about the conventional wisdom on outsourcing, and how that theory is constructed. What are the motivations of companies who outsource?
- What was ASUSTeK's motivation to move up the value chain? How serious a threat do they represent to HP or Dell?
- What kind of challenges will Jonney Shih face as he tries to build ASUSTeK's global branded business?

## Session 11: Managing the strategy development process

### Readings:

- Chapter 8 in Christensen & Raynor
- Robert A. Burgelman, "Intel Corporation's Internal Ecology of Strategy Making," Stanford Graduate School of Business, HBS Case Order No.: SM-95 (in pack)
- (recommended) Robert H. Hayes, "Strategic Planning – Forward in Reverse?" *Harvard Business Review*, November-December, 1983, HBS Order No. 85607
- (recommended) Henry Mintzberg and James Waters, "Of Strategies, Deliberate and Emergent," *Strategic Management Journal*, Vol. 6, p. 257 (1985)
- (recommended) Richard T. Pascale, "Perspectives on Strategy: The Real Story Behind Honda's Success," *California Management Review*, Vol. 26, p. 47 (Spring 1984)

### Study Questions:

1. Why did Intel's market share in DRAMs decrease during the 1970s? What could Intel have done about it?
2. How does the shared production facilities ("fabs") and focus on "margin per wafer start" influence Intel's product strategy?
3. The decision to move from DRAMs to microchip production seems easy with hindsight. Why did the company continue to produce DRAMs for so long?
4. What is the role of customers in Intel's strategy making process?

- Intel is currently (2013) struggling to gain market share in smartphones and other mobile devices (see, for instance, <http://www.abqjournal.com/242271/biz/intel-launches-fullcourt-press-into-mobile.html>). To what extent is this problem a result of their product history and organization?

## Session 12: What is a business model? (Pandora)

### Readings:

- Willy Shih and Halle Tecco, "Pandora Radio: Fire Unprofitable Customers?", HBS Case No. 607-140
- Chapter 9 in Christensen & Raynor
- Clayton M. Christensen and Mark W. Johnson, "What are business models, and how are they built?", HBS Case No. 610-019

### More theoretical readings for the especially interested:

- Katz, M. L. and C. Shapiro (1994). "Systems competition and network effects." *Journal of Economic Perspectives* 8(2): 93-115.

### Study Questions:

- Map out the key elements of Pandora's business model. As you apply theory to your analysis of where this company is today, ask yourself what are the key indicators that tell Westergren whether his model is working or not.
- Should Westergren and Kennedy follow the advice of the junior partner?
- Given the current state of the company, should Westergren and Kennedy want funding from the VC that they just visited?
- How did they get into the situation that they did? Among the possible options for their high usage customers, which would you pursue and why?

## Session 13: Collaboration strategies and open innovation: Technology transfer

Session 13 and 14 will be taught by Asst. Professor Alessandra Luzzi, newly hired at BI and with deep knowledge of innovation and intellectual property.



### Readings:

- Susanne Acklin: Licensing of APOEP1.B Peptide Technology. Ivey School of Business Case 905N16
- Mark G. Edwards, Fiona Murray and Robert Yu (2003). "Value creation and sharing among universities, biotechnology and pharma," *Nature Biotechnology*, Volume 21, number 6, pp. 618-624

### Study questions:

- What are the major factors which a university technology transfer office should take into account in the operation of their unit?
- With the information given, establish the net present value for the proposed "Ownership Deal" with NEWCO 1 and the "Milestone Deal" with NEWCO 2.
- Identify the key risk elements for each deal.
- Assess the two alternatives presented in the case. Which alternative would you recommend? Why?

## Session 14: Collaboration strategies and open innovation: Open source software

(Taught by Alessandra Luzzi.)

Readings:

- Scott Wilson and Ajit Kambil (2008) "Open Source: Salvation or Suicide?" *Harvard Business Review*, April, pp. 33-37.
- Chesbrough, H. W. and M. M. Appleyard (2007). "Open Innovation and Strategy." *California Management Review* 50(1): 57-76. (good on business models of open source and community-based development)

Study questions:

1. Is open source a threat or an opportunity for KMS?
2. Should Marty open its hit product's source code? Why or why not?
3. What alternative strategies does she have?

## Session 15/16: Innovation and business development in consulting (Eden McCallum)

Session 15 will be a discussion of the Eden McCallum case. Session 16 will be taught by [Tor Jakob Ramsøy](#), Senior Partner, McKinsey & Company.



Readings:

- Heidi K. Gardner and Robert G. Eccles: "Eden McCallum: A Network-Based Consulting Firm (A)", HBS Case No. 410-056
- Christensen, C. M., D. Wang and D. v. Bever (2013). "Consulting on the Cusp of Disruption." *Harvard Business Review* 91(10): 106-150.
- (recommended) Hansen, M., N. Nohria, et al. (1999). "What is your strategy for managing knowledge?" *Harvard Business Review* (March-April): 106-116. (Seminal article on documentation vs. personalization-based knowledge management – though has new technology such as search engines and Wikipedia changed the logic?)
- (recommended) *The Economist*, June 2nd, 2011: [Advice for consultants](http://www.economist.com/node/18774614) (<http://www.economist.com/node/18774614>) (quick read for another perspective on the consulting business)

Study questions:

- How does Eden McCallum's business model compare to a traditional strategy consulting company such as McKinsey, Bain or BCG? What kind of projects can they take on which the traditional consulting companies cannot - and vice versa?
- Why would you as a young person at the start of your career join an established consulting firm? What if you were older and had more career experience?
- Is McKinsey's business model (and, by the way, map it out as with the Pandora case) sustainable? Why or why not?
- Should Eden and McCallum cut personnel? Why or why not, and what are the implications of that decision?

## Session 17: Discovery-driven planning/Innovation blowback (Mahindra & Mahindra)

### Readings:

- Stephan Thomke and Briana Doerr Luthrea: “Innovation at Mahindra & Mahindra (A), HBS Case no. 609-205. The B and C cases will be distributed in class.
- Chapter 9 in Christensen & Raynor
- John Seely Brown and John Hagel III (2005): [Innovation Blowback: Disruptive management practices from Asia](http://www.mckinsey.com/insights/innovation/innovation_blowback_disruptive_management_practices_from_asia). *McKinsey Quarterly*, February.  
([http://www.mckinsey.com/insights/innovation/innovation\\_blowback\\_disruptive\\_management\\_practices\\_from\\_asia](http://www.mckinsey.com/insights/innovation/innovation_blowback_disruptive_management_practices_from_asia))
- Anand G. Mahindra, Thomas A. Stewart and Anand P. Raman (2008): Finding a Higher Gear: An interview with Anand G. Mahindra. *Harvard Business Review*, July-August

### Study Questions:

1. How does the development of the Sactor differ from how product development typically is done in a Western technology company?
2. What do you think of the Sactor’s chances in the Indian market – which product attributes do you think will be the most important?

## Session 18: Who are the best customers for your product? (Dollar General)

### Readings:

- Willy Shih, Stephen Kaufman and Rebecca McKillan: “Dollar General (A), HBS Case No. 607-140 (in pack)
- Clayton M. Christensen, Scott Cook and Taddy Hall, “Marketing Malpractice: The Cause and the Cure”, *Harvard Business Review*, December, 2005

### Study Questions:

1. Can you suggest what job(s) Dollar General is doing for its customers?
2. Who do you think Dollar General’s real competitors are?
3. Looking at Exhibits 4 and 12, can you estimate the internal rate of return on opening a new store if the construction cost is \$500K and that a typical store generates \$100K EBITDA in the first year and \$250K in subsequent years?
4. Do you think Wal-Mart can respond to DG’s every-day low pricing?
5. How would you rank DG’s potential expansion options?

## Session 19: Defending against disruption (Schibsted)

In this lecture, we will investigate how companies defend themselves against disruption. The main case will be Schibsted, a Norwegian media company which has successfully managed the transition from paper to digital media.

### Readings:

- Bharat Anand and Sophie Hood: *Schibsted*, HBS Case No. 707-474
- Graham, P. (2009): [Post-medium publishing](#). Essay.
- Andersen, E. and Ø. Fjeldstad (2003). "Understanding inter-firm relations in mediation industries with special reference to the Nordic Mobile Communication Industry." *Industrial Marketing Management* 32 | : 397-408.
- (optional) Wolf, G. (2009) [Why Craigslist is such a mess](#), *Wired Magazine*, 17.09
- (optional) v.d.Berg, R. (2008): [How the 'Net works: an introduction to peering and transit](#), *Ars Technica*

### Further reading (for the specially interested):

- Shirky, C. (2009). [Here comes everybody](#).
- Weinberger, D. (2012) [Too Big to Know: Rethinking Knowledge Now That the Facts Aren't the Facts, Experts Are Everywhere, and the Smartest Person in the Room Is the Room](#)

### Study questions:

1. What is the ownership structure of Schibsted – and what are the implications of it - for the strategic outlook?
2. Visit Google News – is this type of service a threat to Schibsted? Why or why not?
3. How does Google's business model differ from Schibsted's?
4. Compare craigslist.com with finn.no, blocket.se and leboncoin.fr – how are they alike, how are they different, and what does this imply for Schibsted's competitive strategy?
5. What implications does the last statement – about the cathedral or stock market approach – have for Schibsted's future?

## Session 20: Leading operations (Fabritek)

This session is an experiment – I have long wanted to teach the Fabritek case (in my opinion one of the best cases ever produced at the Harvard Business School) to a group of younger students to see what conclusions you can draw from it. Read and analyze this carefully – it is a little like a detective story...

### Readings:

- Hammond, Jan: *Fabritek, 1992*, HBS case no 9-698-014 (Preparation tip: Read the footnote of exhibit 2 carefully!)

### Study questions:

- What are the possible causes of the high reject rate?
- Assume that Arthur Moreno performs his (man-paced) operations at 167 percent of standard,

- if Arthur Moreno takes his full allowances, what percent bonus will he earn?
- If Arthur Moreno takes *no* allowances, what percent bonus will he earn?
- What cycle time would the million operation have to have in order for Moreno to operate at 167 percent of standard?
- What should Stewart Baker do?
- As president of Fabritek, what would be your short-term and long-term concerns about this situation? What would you do?

## **Session 21/22: Back Bay Batteries - a simulation**

I am teaching an executive education class (<http://tversover.com/2013/07/04/strategisk-forretningsutvikling-og-innovasjon-2/>) in the south of France this week – hence, we will run the class virtually, where the main exercise will be running and an online simulation from Harvard Business School called *Back Bay Batteries*. This simulation will allow you to use what you have learned in the course so far - as well as most of the main book.

Readings:

- Preparation material for Back Bay Batteries

## **Session 23/24: Presenting term papers/Wrap-up**

For this session, please prepare a presentation on your term paper – with at most three slides: One presenting the company you are writing about, one slide on why this company is interesting (tie it to the theories and concepts of the course), and one slide on the practicalities of writing the paper – whom you have talked to, what has turned out to be easy to research and write about, what has turned out to be difficult.

We will also discuss the results of the Back Bay Battery simulation – and reflect on the course in total.

Study Questions:

- What are your key take-aways from this course?
- How will it change you as a future manager, strategist and/or entrepreneur?

# GRA6834 Business Development and Innovation Management

*Espen Andersen, BI Norwegian Business School, August-December 2013*

This course is modeled on the Harvard Business School course *Building and sustaining a successful enterprise*, a very popular, 29-session elective course built around disruptive innovation theory and a string of cases from high-profile, technical industries<sup>2</sup>. The aim is to teach students how to think about innovation and competition from a managerial perspective. GRA6834 started as an experiment in whether a full-fledged HBS-based case course can be fitted into a Norwegian M.Sc. program. This worked well, and the course is now offered in two versions:

- *Regular*, running every Wednesday 1100-1345 from August 21 to November 6, with some exceptions due to scheduling conflicts.
- *Intensive*, running primarily on Tuesdays and Thursdays 0800-1045 from October 15 to November 21, with some exceptions due to scheduling conflicts. This course is primarily meant for students doing internships in companies early in the semester, but is, of course, open for any M.Sc. student.

The course has five modules, each with theory and cases to match:

6. *Theory building*, which focuses on how to build theory – and how to recognize good theory when you see it – and introduces the theory of disruptive innovation as the core construct behind the course.
7. *Disruption*, which uses disruption and other theories of technology evolution, modularity and commoditization to teach students how to respond to business environmental changes.
8. *Managing innovation killers and hidden barriers to new growth businesses* looks at the various stumbling blocks, internal and external, that often stops innovations from making it from idea to marketplace.
9. *Creating a growth business* focuses on tools managers can use, such as jobs-based segmentation, business model analysis, and planning tools.
10. *Creating a growth organization* brings it all together, focusing on the context of the existing corporation and what managers can do to make innovation happen.

Since this course only has 24 sessions (i.e., two sessions per day,) it has been somewhat shortened and simplified from the HBS course, and the content slightly modified, primarily by making use of a few Norwegian cases and guest lecturers.

## Core literature

- Christensen, C. M. and M. Raynor (2003). *The Innovator's Solution: Creating and Sustaining Successful Growth*. Boston, MA, Harvard Business School Press. (this is the main book of the course).
- (Recommended) Arthur, W. Brian. 2009. *The nature of technology: what it is and how it evolves*. London : Allen Lane (selected chapters)

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<sup>2</sup> See Shih, W. (2010): *Building and Sustaining a Successful Enterprise: Course overview note for instructors* (HBS 5-610-099) for a complete description of this course.

- (Recommended) Shapiro, Carl, Hal R. Varian. 1999. *Information rules: a strategic guide to the network economy*. Boston, Mass. : Harvard Business School Press (selected chapters)

Cases and articles as described under each session. The case package (including individual access to the *Back Bay Battery* exercise can be purchased by student at this link: zzx)

## Evaluation

- 50% of the grade is based on a group term paper, to be defined by the students themselves. The term paper, to be written in groups of two or three, with deadline December 6, should document a company or organization that faces a situation demanding innovation - disruptive or not - and make use of the theories and concepts learned in the course. (More details will follow during the course.)
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- Kaull, S. and E. Andersen, *Catatech – the question of electronic commerce*. This is a short case we will discuss – partly for content, partly for practicing case discussions.

Readings:

- Christensen, C. M. and P. R. Carlisle (2009). "Course Research, Using the Case Method to Build and Teach Management Theory." *Academy of Management Learning and Education* 8(2): 240-251.
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- (Reference, this is a classic book which every aspiring intellectual should read): Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. Chicago, IL, The University of Chicago Press. (The [Wikipedia article](http://en.wikipedia.org/wiki/The_Structure_of_Scientific_Revolutions) ([http://en.wikipedia.org/wiki/The\\_Structure\\_of\\_Scientific\\_Revolutions](http://en.wikipedia.org/wiki/The_Structure_of_Scientific_Revolutions)) is pretty good summary.)

Study questions:

- How dangerous is eHerramientas to Catatech? What should Marisa do about it? What strategy should the company adopt?
- What is the difference between descriptive and prescriptive theory, and how do you recognize what kind of theory is which?
- What is the difference between descriptive and prescriptive theory building?
- At what stage of theory development is the Collins article?
- Why did it take the US Navy so long to adopt the constant-adjustment techniques for gunfire? What does that tell you about how you get innovations adopted in your own setting?

### **Session 3: Disruption theory (Hambrecht)**

Readings:

- Chapter 2 in Christensen & Raynor
- Case: Clayton M. Christensen and Tara Donovan, “Disruptive IPOs? W. R. Hambrecht + Company,” HBS Case No. 610-065. (in case pack)

Study questions:

- On a three-dimensional map of innovation – sustaining, low-end disruption and new-market disruption – where would you locate the alternatives that Hambrecht and his team are considering? Which of these would you recommend that WRH pursue, and why?
- If you were running Goldman Sachs, when, if ever, would you begin worrying about Hambrecht? When it became time to worry, what would you do?
- Consider the history of the financial services industry. What disruptions already have occurred? Aside from those in the WRH case, are any other disruptions underway at present?

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- Clayton Christensen, “Continuous Casting Investments at USX Corporation”, HBS Case No. 697-020 (in pack)

Study questions:

- The main story about the integrated steel mills versus the mini-mills is given in Christensen & Raynor’s book. This case adds more detail – how does it change your view of what happened?
- What changes in organization, production processes and structure does the introduction of continuous casting require of USX? Of Nucor?

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- Mintzberg, Henry and James Waters, “Of Strategies, Deliberate and Emergent,” *Strategic Management Journal* (6), 1985, pp. 257-272
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#### Study questions:

- What is the process employed at Nypro to identify and standardize upon important innovations?
- Can you make any generalizations about what sorts of innovations are likely to thrive within Nypro’s “internal marketplace” for technologies? What sorts of innovations are likely to languish?
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- Chapter 4 in Christensen & Raynor
- Clayton M. Christensen and Jeremy B. Dann, “Sonosite: A View Inside “ , HBS Case No. 602-056 (in pack)
- Jeffrey R. Immelt, Vijay Govindarajan, Chris Trimble, “How GE Is Disrupting Itself “ , *Harvard Business Review*, October 2009

#### Study questions:

- Where should Sonosite market its portable ultrasound scanner?
- If you were a competitor to Sonosite, offering a traditional ultrasound scanner, what would you do?

### **Session 7: Interdependence and Modularity (MP3)**

#### Chapter 5 in Christensen & Raynor

- Willy Shih, “MP3 Portable Audio Players and the Recorded Music Industry,” HBS Case No. 608-119 (in pack)
  - Espen Andersen: Digital music and Norwegian artists, [press release as posted on blog](http://appliedabstractions.com/2010/10/06/record-companies-lose-artists-gain/). (http://appliedabstractions.com/2010/10/06/record-companies-lose-artists-gain/)

#### Study questions:

- How would you frame the disruption here? What do you think is the performance metric, and how would you classify some of the improvements to music delivery systems over the years?
- Can you explain why some parts of the market appear to have become commoditized, while companies like Apple have been able to earn rich profits?

- Were the major record labels guilty of over-serving consumers? What might they have done differently?
- What advice would you give to Amazon.com as they ramp up their online music store?

## Session 8: Commoditization (Business schools)

### Readings

- Chapter 6 in Christensen & Raynor
- Willy Shih and Matthew Noble, "Driving Towards a Disruption?" HBS Case No. 612-101 (in pack)
- Quelch, J. (2005). "A New Agenda for Business Schools." *Chronicle of Higher Education* (December 2).
  - (Not mandatory, contains data about some of the institutions described in Christensen & Eyring's book) Auguste, B. G., A. Cota, et al. (2010). [Winning by degrees: the strategies of highly productive higher-education institutions](http://mckinseysociety.com/winning-by-degrees/), (<http://mckinseysociety.com/winning-by-degrees/>) McKinsey & Company.
- (Reference - very influential book on the education industry) Christensen, C. M., M. B. Horn, et al. (2008). *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns*. New York, NY, McGraw Hill.
- (Reference, this is a rather long book with more detail, essentially a case study of Harvard vs. BYU Idaho) Christensen, C. M. and H. J. Eyring (2011). *The Innovative University: Changing the DNA of Higher Education from the Inside Out*, Jossey-Bass.

### Study questions:

- Which technologies can commoditize business education, and how?
- In what way, if any, does this evolution represent a threat to the Harvard University - and how should the school react to it?
- In what way, if any, does this evolution represent a threat to a less well known university, for instance University of Connecticut - and how should the university react to it?
- In what way, if any, does this evolution represent a threat to BI Norwegian Business School - and how should the school react to it?

## Session 9: Commoditization (HP Merced)

### Readings:

- Clayton M. Christensen and Matthew C. Verlinden, "Hewlett-Packard's Merced Decision" HBS Case No. 699-011 (in pack)

### Study questions:

- Does the market need the Merced chip?

- Who will benefit the most from the introduction of the Merced chip in the markets served by ESG? Who will benefit least, and why?
- What should Jim Davis recommend?

## Session 10: Modularity and outsourcing (ASUSTeK)

### Readings:

- Chapter 5 in Christensen & Raynor
- Willy Shih, Howard Yu, and Hung Chang Chiu, "Transforming ASUSTeK: Breaking from the Past," HBS Case No. 610-041

### Study questions:

- Think about the conventional wisdom on outsourcing, and how that theory is constructed. What are the motivations of companies who outsource?
- What was ASUSTeK's motivation to move up the value chain? How serious a threat do they represent to HP or Dell?
- What kind of challenges will Jonney Shih face as he tries to build ASUSTeK's global branded business?

## Session 11: Managing the strategy development process

### Readings:

- Chapter 8 in Christensen & Raynor
- Robert A. Burgelman, "Intel Corporation's Internal Ecology of Strategy Making," Stanford Graduate School of Business, HBS Case Order No.: SM-95 (in pack)
- (recommended) Robert H. Hayes, "Strategic Planning – Forward in Reverse?" *Harvard Business Review*, November-December, 1983, HBS Order No. 85607
- (recommended) Henry Mintzberg and James Waters, "Of Strategies, Deliberate and Emergent," *Strategic Management Journal*, Vol. 6, p. 257 (1985)
- (recommended) Richard T. Pascale, "Perspectives on Strategy: The Real Story Behind Honda's Success," *California Management Review*, Vol. 26, p. 47 (Spring 1984)

### Study Questions:

6. Why did Intel's market share in DRAMs decrease during the 1970s? What could Intel have done about it?
7. How does the shared production facilities ("fabs") and focus on "margin per wafer start" influence Intel's product strategy?
8. The decision to move from DRAMs to microchip production seems easy with hindsight. Why did the company continue to produce DRAMs for so long?
9. What is the role of customers in Intel's strategy making process?

10. Intel is currently (2013) struggling to gain market share in smartphones and other mobile devices (see, for instance, <http://www.abqjournal.com/242271/biz/intel-launches-fullcourt-press-into-mobile.html>). To what extent is this problem a result of their product history and organization?

## Session 12: What is a business model? (Pandora)

### Readings:

- Willy Shih and Halle Tecco, "Pandora Radio: Fire Unprofitable Customers?", HBS Case No. 607-140
- Chapter 9 in Christensen & Raynor
- Clayton M. Christensen and Mark W. Johnson, "What are business models, and how are they built?", HBS Case No. 610-019

### More theoretical readings for the especially interested:

- Katz, M. L. and C. Shapiro (1994). "Systems competition and network effects." *Journal of Economic Perspectives* 8(2): 93-115.

### Study Questions:

9. Map out the key elements of Pandora's business model. As you apply theory to your analysis of where this company is today, ask yourself what are the key indicators that tell Westergren whether his model is working or not.
10. Should Westergren and Kennedy follow the advice of the junior partner?
11. Given the current state of the company, should Westergren and Kennedy want funding from the VC that they just visited?
12. How did they get into the situation that they did? Among the possible options for their high usage customers, which would you pursue and why?

## Session 13: Collaboration strategies and open innovation: Technology transfer

Session 13 and 14 will be taught by Asst. Professor Alessandra Luzzi, newly hired at BI and with deep knowledge of innovation and intellectual property.



### Readings:

- Susanne Acklin: Licensing of APOEP1.B Peptide Technology. Ivey School of Business Case 905N16
- Mark G. Edwards, Fiona Murray and Robert Yu (2003). "Value creation and sharing among universities, biotechnology and pharma," *Nature Biotechnology*, Volume 21, number 6, pp. 618-624

### Study questions:

13. What are the major factors which a university technology transfer office should take into account in the operation of their unit?
14. With the information given, establish the net present value for the proposed "Ownership Deal" with NEWCO 1 and the "Milestone Deal" with NEWCO 2.
15. Identify the key risk elements for each deal.
16. Assess the two alternatives presented in the case. Which alternative would you recommend? Why?

## Session 14: Collaboration strategies and open innovation: Open source software

(Taught by Alessandra Luzzi.)

Readings:

- Scott Wilson and Ajit Kambil (2008) "Open Source: Salvation or Suicide?" *Harvard Business Review*, April, pp. 33-37.
- Chesbrough, H. W. and M. M. Appleyard (2007). "Open Innovation and Strategy." *California Management Review* 50(1): 57-76. (good on business models of open source and community-based development)

Study questions:

4. Is open source a threat or an opportunity for KMS?
5. Should Marty open its hit product's source code? Why or why not?
6. What alternative strategies does she have?

## Session 15/16: Innovation and business development in consulting (Eden McCallum)

Session 15 will be a discussion of the Eden McCallum case. Session 16 will be taught by [Tor Jakob Ramsøy](#), Senior Partner, McKinsey & Company.



Readings:

- Heidi K. Gardner and Robert G. Eccles: "Eden McCallum: A Network-Based Consulting Firm (A)", HBS Case No. 410-056
- Christensen, C. M., D. Wang and D. v. Bever (2013). "Consulting on the Cusp of Disruption." *Harvard Business Review* 91(10): 106-150.
- (recommended) Hansen, M., N. Nohria, et al. (1999). "What is your strategy for managing knowledge?" *Harvard Business Review* (March-April): 106-116. (Seminal article on documentation vs. personalization-based knowledge management – though has new technology such as search engines and Wikipedia changed the logic?)
- (recommended) *The Economist*, June 2nd, 2011: [Advice for consultants](http://www.economist.com/node/18774614) (<http://www.economist.com/node/18774614>) (quick read for another perspective on the consulting business)

Study questions:

- How does Eden McCallum's business model compare to a traditional strategy consulting company such as McKinsey, Bain or BCG? What kind of projects can they take on which the traditional consulting companies cannot - and vice versa?
- Why would you as a young person at the start of your career join an established consulting firm? What if you were older and had more career experience?
- Is McKinsey's business model (and, by the way, map it out as with the Pandora case) sustainable? Why or why not?
- Should Eden and McCallum cut personnel? Why or why not, and what are the implications of that decision?

## Session 17: Discovery-driven planning/Innovation blowback (Mahindra & Mahindra)

### Readings:

- Stephan Thomke and Briana Doerr Luthrea: “Innovation at Mahindra & Mahindra (A), HBS Case no. 609-205. The B and C cases will be distributed in class.
- Chapter 9 in Christensen & Raynor
- John Seely Brown and John Hagel III (2005): [Innovation Blowback: Disruptive management practices from Asia](http://www.mckinsey.com/insights/innovation/innovation_blowback_disruptive_management_practices_from_asia). *McKinsey Quarterly*, February.  
([http://www.mckinsey.com/insights/innovation/innovation\\_blowback\\_disruptive\\_management\\_practices\\_from\\_asia](http://www.mckinsey.com/insights/innovation/innovation_blowback_disruptive_management_practices_from_asia))
- Anand G. Mahindra, Thomas A. Stewart and Anand P. Raman (2008): Finding a Higher Gear: An interview with Anand G. Mahindra. *Harvard Business Review*, July-August

### Study Questions:

3. How does the development of the Sactor differ from how product development typically is done in a Western technology company?
4. What do you think of the Sactor’s chances in the Indian market – which product attributes do you think will be the most important?

## Session 18: Who are the best customers for your product? (Dollar General)

### Readings:

- Willy Shih, Stephen Kaufman and Rebecca McKillan: “Dollar General (A), HBS Case No. 607-140 (in pack)
- Clayton M. Christensen, Scott Cook and Taddy Hall, “Marketing Malpractice: The Cause and the Cure”, *Harvard Business Review*, December, 2005

### Study Questions:

6. Can you suggest what job(s) Dollar General is doing for its customers?
7. Who do you think Dollar General’s real competitors are?
8. Looking at Exhibits 4 and 12, can you estimate the internal rate of return on opening a new store if the construction cost is \$500K and that a typical store generates \$100K EBITDA in the first year and \$250K in subsequent years?
9. Do you think Wal-Mart can respond to DG’s every-day low pricing?
10. How would you rank DG’s potential expansion options?

## Session 19: Defending against disruption (Schibsted)

In this lecture, we will investigate how companies defend themselves against disruption. The main case will be Schibsted, a Norwegian media company which has successfully managed the transition from paper to digital media.

### Readings:

- Bharat Anand and Sophie Hood: *Schibsted*, HBS Case No. 707-474
- Graham, P. (2009): [Post-medium publishing](#). Essay.
- Andersen, E. and Ø. Fjeldstad (2003). "Understanding inter-firm relations in mediation industries with special reference to the Nordic Mobile Communication Industry." *Industrial Marketing Management* 32 | : 397-408.
- (optional) Wolf, G. (2009) [Why Craigslist is such a mess](#), *Wired Magazine*, 17.09
- (optional) v.d.Berg, R. (2008): [How the 'Net works: an introduction to peering and transit](#), *Ars Technica*

### Further reading (for the specially interested):

- Shirky, C. (2009). [Here comes everybody](#).
- Weinberger, D. (2012) [Too Big to Know: Rethinking Knowledge Now That the Facts Aren't the Facts, Experts Are Everywhere, and the Smartest Person in the Room Is the Room](#)

### Study questions:

6. What is the ownership structure of Schibsted – and what are the implications of it - for the strategic outlook?
7. Visit Google News – is this type of service a threat to Schibsted? Why or why not?
8. How does Google's business model differ from Schibsted's?
9. Compare craigslist.com with finn.no, blocket.se and leboncoin.fr – how are they alike, how are they different, and what does this imply for Schibsted's competitive strategy?
10. What implications does the last statement – about the cathedral or stock market approach – have for Schibsted's future?

## Session 20: Leading operations (Fabritek)

This session is an experiment – I have long wanted to teach the Fabritek case (in my opinion one of the best cases ever produced at the Harvard Business School) to a group of younger students to see what conclusions you can draw from it. Read and analyze this carefully – it is a little like a detective story...

### Readings:

- Hammond, Jan: *Fabritek, 1992*, HBS case no 9-698-014 (Preparation tip: Read the footnote of exhibit 2 carefully!)

### Study questions:

- What are the possible causes of the high reject rate?
- Assume that Arthur Moreno performs his (man-paced) operations at 167 percent of standard,

- if Arthur Moreno takes his full allowances, what percent bonus will he earn?
- If Arthur Moreno takes *no* allowances, what percent bonus will he earn?
- What cycle time would the million operation have to have in order for Moreno to operate at 167 percent of standard?
- What should Stewart Baker do?
- As president of Fabritek, what would be your short-term and long-term concerns about this situation? What would you do?

## **Session 21/22: Back Bay Batteries - a simulation**

I am teaching an executive education class (<http://tversover.com/2013/07/04/strategisk-forretningsutvikling-og-innovasjon-2/>) in the south of France this week – hence, we will run the class virtually, where the main exercise will be running and an online simulation from Harvard Business School called *Back Bay Batteries*. This simulation will allow you to use what you have learned in the course so far - as well as most of the main book.

Readings:

- Preparation material for Back Bay Batteries

## **Session 23/24: Presenting term papers/Wrap-up**

For this session, please prepare a presentation on your term paper – with at most three slides: One presenting the company you are writing about, one slide on why this company is interesting (tie it to the theories and concepts of the course), and one slide on the practicalities of writing the paper – whom you have talked to, what has turned out to be easy to research and write about, what has turned out to be difficult.

We will also discuss the results of the Back Bay Battery simulation – and reflect on the course in total.

Study Questions:

- What are your key take-aways from this course?
- How will it change you as a future manager, strategist and/or entrepreneur?