

**Corporate Entrepreneurship
Management 485
August 2014**

Class Times: August 18-22 2:00 pm – 5:30 pm

Classroom: tbd

Lecturer: George Abe (george.abe@anderson.ucla.edu)

Office: Anderson D418

Office Hours: Arranged individually, also just before and after class.

Messages: 310-206-3082

Course Objective

The course objective is to familiarize students with basic problems and tools required for entrepreneurship within a corporate environment. This course is intended to be of interest to those working in a corporate setting who want an introduction to corporate entrepreneurship issues as well as those who want to start a business outside a corporate context. Students will become familiar with terminology, issues and solutions unique to the topic. Students will be better equipped to assess the feasibility of a business concept and communicate the concept to potential investors, employees and business partners.

Heretofore, corporate management has tackled the problem of innovation by pursuing internal research and development, then dispersing that research into internal business units for delivery to the market. Internal managers had been given responsibility to develop new businesses based upon internal R&D. Thus we hear terms, such as "intrapreneur" to describe these corporate managers given that responsibility. However, with the reduction of corporate research in the US and abroad and the continuing need for large companies to innovate, this policy has given way to other forms of corporate innovation.

This 2-unit course takes a look at various ways large companies continue to innovate by taking various entrepreneurial tacks. Among these are the traditional internal R&D, "Open Innovation", corporate venture capital, spinoffs and joint ventures. This course is heavily case oriented with examples of successful and not so successful attempts at these various modalities.

Classroom Matters

Students will be organized into study groups of ~5. Study groups will submit written assignments and final presentations. Each student will be submit a peer review of the other members of the study group. The evaluation will be a consideration in the class participation component of the grade.

There will be cold-calling for case discussions. It is important you attend each class, be prepared to discuss each case and accept questioning about your solutions to case issues. You will be evaluated on your knowledge of the case, your judgment regarding the central issue of the case, your poise and verbal presentation.

Cases (written in study groups)

Each study group will submit several business cases for evaluation. Cases are designed to be challenging with some requiring detailed computation. Each case will be roughly 3 pages. Writing skills will be an important factor in the grading. That means we expect clarity, brevity, a train of thought and proper grammar. It is also expected that students conduct independent research, when answering case questions. Not all the "answers" will be provided in class. Furthermore, there will be questions regarding the cases in the final exam.

Course Website

[TBD](#)

Required Readings:

- 4 Models of Corporate Entrepreneurship
- Meeting_the_Challenge_of_Corporate_Entrepreneurship
- Models of Innovation: Startups and Mature Corporations
- Nortel to NetActive
- Intel Corporate Venturing
- Corporate Venture Capital Vignettes

Grades

Classroom attendance and participation, including group peer review	25%
Group Cases	25%
Final Exam	50%

Schedule
<p>Session 1: Corporate Entrepreneurship Overview</p> <p>Review of basic entrepreneurship topics. Entrepreneurial process, misconceptions.</p> <p>Issues of creating new businesses within established companies. Modalities of corporate entrepreneurship (business unit, spinoff, joint venture, ...), with pros and cons of each. Business Development.</p> <p>Review of the history of Eastman Kodak and digital photography.</p> <p>Review of Infonet Network Services</p> <p>Profile the internal entrepreneur and how to be effective in a large organization. What is the role of the corporate sponsor in supporting the internal entrepreneur. How can the firm be organized to be more conducive to intrapreneurship.</p> <p><u>Due Today:</u></p> <ul style="list-style-type: none"> • Dow Chemical IMD-145 • Infonet Network Services
<p>Session 2: Research Commercialization and Licensing</p> <p>Licensing, material transfers, option agreements, sponsored research, university startups. Emerging technologies. University experience and statistics. The role of business development.</p> <p>What's the relationship between HQ and foreign subsidiaries to be conducive to innovation.</p> <p>What are key steps in implementing an "Open Innovation" strategy.</p> <p><u>Due Today:</u></p> <ul style="list-style-type: none"> • 3M Taiwan • BP CTO

Session 3: Corporate Spinoffs

Structuring a corporate spinoff, emphasizing human relations, operations, financial and intellectual property issues.

Due Today:

- LAB International
- Vertex Semi

Session 4: Corporate Venture Capital

Corporate VC firms and strategic investing. The pros and cons of strategic investing, from the point of view of both the investor and the investee.

Due Today:

- PlaceWare: Issues in Structuring a Xerox Technology Spinout

Session 5: FINAL EXAM

Lectures, cases, course text, course reader and other readings assigned from time to time are fair game. Open book, open note, 2 hours. In addition, as part of the final exam, there will be a take home case to be submitted by Monday of the following week.

Due Today:

- SAIF 2004

Due Today:

- Course evaluation and peer review

UCLA Anderson School of Management – Executive MBA Program
MGMT 478-9: Deals: Strategy & Structure
Course Syllabus

Last revised: 7/12/13

Course Overview and Objectives:

Deals: Strategy & Structure will provide a comparative overview of the investment processes of private equity and venture capital transactions, focusing on the key issues and steps by which investments are sourced, diligenced and contracted. In addition, to provide a well rounded perspective of a deal from both the perspectives of the investor and the entrepreneur/seller, the PE transaction will focus on the investment process from the investor's perspective, whereas the VC transaction will be more oriented toward the perspective of a company/entrepreneur seeking capital. Each portion of the course would be taught through a combination of lectures and through one case study each of a VC and a PE investment transaction.

Course Objectives:

By the end of the course, the student will be expected to have an understanding of the following:

- Process and key steps in a PE and VC investment transaction
- Investment / investor screening and selection criteria
- Due diligence process and key areas of focus and deal/investment risk
- Valuation framework and related considerations
- Overview of investment contracts and key terms and provisions

Note: Given the limited class-time of the block-course format, this course will not dive deeply into any one of the particular topics listed above, but endeavor to provide a more introductory and general overview.

Course Dates and Location:

- **Dates:** September 9-13 (5 sessions)
- **Time:** 6:30 to 10pm
- **Location:** [TBD]

Assignments & Grading:

Assignments:

- **Case write-ups**
Students will be assigned case write-ups on the two in-class cases (Hertz and Walnut) involving a private equity and a venture capital transaction. Students will be expected to analyze case material and provide a written analysis of the case study questions (to be provided) at or prior to the start of the class session on which the case will be discussed (**Walnut due 9/12 and Hertz Due 9/13**). The assignments are to be completed individually. More detail on the assignments will be provided prior to or at the first class session.
- **Reading**
 - **Cases:** Walnut, Hertz and Infrasource (See reader and course website for case discussion questions. Write-ups are required only for the Hertz and Walnut cases.)
 - **Additional readings:** See course binder and website

Grading:

- Class participation: 20%
- Private equity case (Hertz) write-up: 40%
- VC case (Walnut) write-up: 40s%

Course Sessions:

Session 1 (Sep 9) – Lecture -Private Equity Deal

Private equity investment process and key considerations (with focus on the investor's perspective):

- Overview of the PE investment lifecycle (from deal origination to due diligence/acquisition, portfolio oversight and exit)
- Deal sourcing and investment screening criteria
- Due diligence
 - Process
 - Key diligence categories (business/operations, financial, legal, etc.)
 - Typical issues/risks and strategies for mitigation
- Valuation issues and negotiation
- Transaction structuring
- Transaction documents and key terms/provisions
- Other transaction considerations
- Careers in PE (time permitting)

Session 2 (Sep 10): Lecture- Venture Capital Deal

Venture Capital investment process and key considerations (focus on the entrepreneur's perspective):

- Preparation for the capital raising process (business plan development)
- Targeting venture capital investors
- Meeting VCs and building relationships
- VC investment criteria / screening
- Due diligence
- Term sheets – key terms and considerations for the entrepreneur
- Term sheet – negotiating strategies
- Closing the deal – term sheet to funding
- Life as a VC portfolio company
- Key takeaways for entrepreneurs seeking to raise venture capital

Session 3 (Sep 11): PE/VC Lecture Wrap-Up and Q/A; Free work time

- *Wrap-up of any remaining topics on previous PE/VC lectures; open Q&A*
- *Remainder of time to be used as in-class work time for case write-ups (due at start of class on Thurs and Fri)*

Session 4 (Sep 12): Venture Capital Case Discussion - Walnut

- *In class case discussion.* **Write-up for Walnut case to be submitted prior to start of class.**

Session 5 (Sep 13): Private Equity Case Discussions – Hertz and Infrastone

- *In class case discussions.* **Write-up for Hertz case to be submitted prior to start of class.**

Course Instructors:

Jeff Scheinrock

Professional Career:

- Lecturer at UCLA Anderson
- Founder of Scheinrock Advisory Group, Inc
- Past General Partner and Chief Investment Officer of \$1.2 B Fund of Funds
- Past CEO and CFO of several Venture backed companies
- Past Vice Chairman of Finance and Strategic Planning for Packard Bell NEC
- Past Partner at Arthur Young and Company

Education:

- University of Southern California-BS Business Administration

Jason Lee

Professional Career:

- Oaktree Capital Management, Senior Vice President (PE Group)
- The Edge Corporation, Founder & President (financial training services)
- Ascend International, Founding Partner (strategic consulting)
- Intersphere, Co-Founder (business translation services)
- Youbet [Nasdaq: UBET], Director of International Business Development & Corporate Strategy
- Amerix Group, Inc., Chief Financial Officer
- JP Morgan, TMT M&A/Corporate Finance, Analyst

Education:

- UC Berkeley - BS, Business Administration
- UCLA Anderson School – MBA

UCLA Anderson School
Mgmt 478

UCLA Anderson

Leadership --Thinking on Your Feet

Syllabus

Instructor

Dr. Iris Firstenberg

Contact info: ifirsten@ucla.edu or iris.firstenberg@anderson.ucla.edu

Introduction

The goal of this class is to emerge with thinking skills that will give you the agility and readiness to respond to novel and complex situations. This includes situations of intense time pressure, as well as complex and ambiguous ongoing problems, that require a fresh and novel approach.

We will discuss key principles and strategies for more effective thinking, based on the latest research in Cognitive Psychology and Neuroscience. We will work on skills that develop flexibility of thinking at all levels of an organization – the individual, teams, and the enterprise as a whole.

Reading

Required Text:

Rubinstein, M. and Firstenberg, I. The Minding Organization.
John Wiley and Sons, 1999.

Articles available to you on CCLE

Final Paper: A Report to the Executive Board

Imagine that you are writing a report to the Executive Board of your company. The purpose of the report is to help improve the organization's ability as it plans for an uncertain future. Choose any 7 concepts, from the lectures and the reading, and explain how they can be applied in the context of your workplace.

Paper is due (1 hard copy): TBD

Schedule – Each segment is two hours

Segment 1

Content

Leadership and Thinking on Your Feet
Creating Opportunity

Relevant Reading

- Chapter 1 and 8 text

Segment 2

Content

Chaos and Order
Mental Biases

Relevant Reading

- Chapter 5 text
- Rao, H. and Sutton, R. “The Ergonomics of Innovation.” McKinsey Quarterly, 2008 (4).
- Evans, P. and Wolf, B. “Collaboration Rules.” HBR, July-Aug., 2005
- Garvin, D. and Roberto, M. “What You Don’t Know About Making Decisions.” HBR, Sept. 2001

Segment 3

Content

Bringing the Future to the Present

Relevant Reading

- Chapter 7 text
- Gavetti, G. and Rivkin, J. “How Strategists Really Think.” HBR, April 2005.
- Ghyczy, T. “The Fruitful Flaws of Strategy Metaphors.” HBR, Sept. 2003.
- Brown, T. and Wyatt, J. “Design Thinking for Social Innovation.” Stanford Social Innovation Review, Winter 2010.
- Kim, W. and Mauborgne, R. “Blue Ocean Strategy.” HBR, October 2004.

Segment 4

Content

Conquering Uncertainty and Complexity

Relevant Reading

- Chapters 2 and 3 of text
 - McGrath, R. “Failing By Design.” HBR, April 2011
 - Bonabeau, E. and Meyer, C. “Swarm Intelligence.” HBR, May 2001.
-

Segment 5

Content

Optimizing brain function

Relevant Reading

- Gilkey, R. and Kilts, C. “Cognitive Fitness.” HBR, Nov 2007
 - Medina, J. “The Science of Thinking Smarter.” HBR, May 2008.
-

Segment 6

Content

Perception and Memory

Relevant Reading

- Chapter 4 of text
 - Koriath, A., Goldsmith, M., and Parisky, A. “Toward a Psychology of Memory Accuracy.” Annual Review of Psychology, 51:481-537, 2000.
-

Segment 7**Content**

Memory (continued)

Relevant Reading

- Chapter 6 of text
 - Breen, B. "What's Your Intuition?" Fast Company, December 2007
 - Schacter, D., Chiao, J., and Mitchell, J. "The Seven Sins of Memory." Ann. NY Acad. Sci. 1001:226-239, 2003.
-

Segment 8**Content**

Stress and Crisis Situations

Relevant Reading

- Chapter 9 of text
 - Augustine, N. "Managing the Crisis You Tried to Prevent" HBR, Dec 1995
 - Johnson, S. "Emotions and the Brain: Fear." Discover, March 2003
 - Coutu, D. "How Resilience Works." HBR, May 2002
 - Seligman, M. "Building Resilience." HBR, April 2011
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MANAGEMENT XXX (Course Number TBD)

Entrepreneurial Technology Commercialization and Innovation Management

EMBA Block Elective, August 2014

August 18-22, 9 AM – 12:30 PM

Room TBD, Anderson Complex

Instructors: Visiting Assistant Professor Nathan M. Wilson, Ph.D., M.B.A.
Professor Alfred E. Osborne, Jr., Ph.D.

Office and Office Hours: By arrangement

Teaching Assistant: TBD

E-mail: nathan.wilson@anderson.ucla.edu, aosborne@anderson.ucla.edu

Messages: Valerie Myers, (310) 206-3011, vmyers@anderson.ucla.edu

First Class meets : August 18, 2014, Room TBD

Course Description

Intense global competition and the accelerating speed of technology advancement require technology-driven corporations of all sizes to continually innovate. The ability of a firm to successfully commercialize novel technology requires business leaders to identify potential sustaining and disruptive technology of strategic fit to the corporation and to cultivate appropriate strategies to nurture the technology at various stages of its development.

This course examines potential sources of innovation, introduces strategic management theory relevant to technology commercialization, and discusses representative applications from the perspective of an entrepreneur in the fields of computer software, computer hardware, medical devices, and cloud services. While several cases draw from entrepreneurial efforts of larger corporations, the majority of the cases will focus on early stage ventures. The course highlights the relative strength and weaknesses of traditional business models and recently popular approaches such as the lean-startup depending on the capital needs, regulatory structure, and competitive landscape of an industry.

The key learning objectives of this course include: understanding the potential sources of innovation, familiarity with the technical and ethical considerations of licensing federally funded university-owned intellectual property, the ability to differentiate between sustaining and disruptive innovation and manage accordingly, the strategic impacts of government regulations on innovation, and the strategic impact of ubiquitous computing platforms on certain industries.

Entrepreneurial Technology Commercialization and Innovation Management

Course Schedule at a Glance

Date	Session Description
August 18	<p>Overview of Entrepreneurial Technology Commercialization and Innovation</p> <ul style="list-style-type: none"> • HBSP: <i>The Discipline of Innovation</i> • HBSP: <i>Innovation Killers: How Financial Tools Destroy Your Capacity to Do New Things</i> • HBSP: <i>E-Ink</i> • HBSP: <i>E-Ink 2005</i> • HBSP: <i>E-Ink 2008</i>
August 19	<p>“Potential” Innovation</p> <ul style="list-style-type: none"> • Example: University Technology Transfer • HBSP: <i>U.S. Universities and Technology Transfer</i> • HBSP: <i>Syndexa and Technology Transfer at Harvard University</i> (GROUP ASSIGNMENT)
August 20	<p>“Disruptive” Innovation</p> <ul style="list-style-type: none"> • Example industries: Computer software and computer hardware • HBSP: <i>Disruptive Technologies: Catching the Wave</i> • HBSP: <i>Business Model Analysis for Entrepreneurs</i> • HBSP: <i>Hewlett-Packard: The Flight of the Kittyhawk (A)</i> • HBSP: <i>MySQL Open Source Database</i> (GROUP ASSIGNMENT)
August 21	<p>“Regulated” Innovation</p> <ul style="list-style-type: none"> • Example industry: Medical devices • HBSP: <i>U.S. Food and Drug Administration</i> • HBSP: <i>Guidant: Radiation Therapy</i> (GROUP ASSIGNMENT)
August 22	<p>“Big Bang” Disruption</p> <ul style="list-style-type: none"> • Example industry: Cloud services • HBSP: <i>Big Bang Disruption</i> • HBSP: <i>Hypothesis-Driven Entrepreneurship: The Lean Startup</i> • HBSP: <i>Why the Lean Start-Up Changes Everything</i> • HBSP: <i>Dropbox: It Just Works</i> (GROUP ASSIGNMENT)
August 27	<p><i>Final Individual Case Write-Up (due by 11:59 PM)</i></p> <ul style="list-style-type: none"> • HBSP: <i>EndoNav</i> (INDIVIDUAL ASSIGNMENT)

Classroom Matters

Class attendance and participation are critical to providing a rich learning environment for your colleagues and critical for understanding the material presented. Students are expected to read assigned material **BEFORE** each class, and come to class prepared to have an intellectual conversation about the week's material. The instructor may rely on cold-calling and other techniques to foster a vibrant class discussion. Please note that the quality of participation matters much more than the quantity of participation. That is, high-quality participation means much more than merely talking a lot, it involves being articulate and focused in your comments or questions. However, the idea of a classroom environment is to be a "protected space" where students feel comfortable asking questions or expressing reasoned opinions. Any student disrespecting or belittling their fellow classmate's genuine learning efforts in class will have their class participation grade significantly adversely impacted.

Class attendance will be taken by the TA during every class. Students are expected to attend the entire lecture, and arriving late, leaving early, and missing class may impact your class participation score.

Required Course Materials

Course Pack: <https://cb.hbsp.harvard.edu/cbmp/access/XXXXXXXXX>

Additional required materials may be provided as class handouts and/or online.

Recommended Supplemental Materials

Many excellent resources on entrepreneurship and technology commercialization exist including the following manuscripts, websites, and technology transfer case studies:

Books

- Clayton Christiansen (1997). *The Innovators Dilemma*. HBS Press.
- Geoffrey Moore (2003). *Crossing the Chasm* revised edition. NY: HarperCollins.
- James Swanson, Michael Bair (2003). *Engineering Your Startup*. 2nd edition. Belmont: Professional Publications.
- John Mullins (2008). *The New Business Road Test*. London: Prentice-Hall.

Web Sites

<http://www.eventuring.org> (Kauffman foundation's guide for entrepreneurs)

www.pwcmoneytree.com (Venture capital investment activity)

www.startup.wsj.com (Wall Street Journal center for entrepreneurs)

<http://money.cnn.com/smbusiness> (CNN Money small business center)

www.sba.gov (Small Business Administration)

<http://www.uspto.gov> (Patent & Trademark Office)

<http://techcrunch.com> (blog about technology start-ups)

www.startupbiz.com (Business plans & forms)

<http://stvp.stanford.edu> (Stanford Technology Venture Partners)

<http://steveblank.com> (blog by entrepreneurial instructor)

<http://www.kauffman.org/Section.aspx?id=Entrepreneurship> (Kauffman foundation on entrepreneurship)

Technology Transfer Cases

An important collection of technology transfer cases from universities can be found in the annual publication of the AUTM (a nonprofit association with membership from more than 3,600 intellectual property managers in universities, business and not-for-profit organizations) whose mission is to advance the field of technology transfer and commercialize academic research for society. The Better World Project Reports can be found at <http://www.betterworldproject.org>.

Course Requirements

Note Professor Wilson and Professor Osborne exclusively reserve the right to make case-by-case exceptions to the grading policies below. Students should understand that approved exceptions are EXTREMELY RARE and nearly all such requests will be denied by the instructors. Students must request exceptions to the policies below in writing (e.g. email), and should understand that WRITTEN APPROVAL from the instructor must be explicitly obtained or the request should be considered denied.

Course Grade

You will receive an individual grade in this course based on your performance throughout the course. The grade will be determined as follows:

Class Participation	25%
Group Assignments*	50%
Final Case Write-Up	25%
TOTAL	100%

**NOTE: Is anticipated that all team members will receive the same grade for the group assignments, due diligence report, and final presentation. However, individual students may have their grade lowered due to lack of contribution to the effort as determined by the professor based on observation and peer-review team feedback.*

Grading Criteria

Academic Integrity

All students must familiarize themselves with the academic integrity policies of UCLA as detailed on the Office of the Dean of Students website: <http://www.studentgroups.ucla.edu/dos/students/integrity/>

In particular, I would like to emphasize the following excerpt from the “Student Guide of Academic Integrity” PDF found on the Dean’s website:

Plagiarism - the presentation of another’s words or ideas as if they were one’s own, including but not limited to:

- *Submitting, as your own, through purchase or otherwise, part of or an entire work produced verbatim by someone else*

- *Paraphrasing ideas, data, or writing without properly acknowledging the source*

Students must fully cite all materials (text, figures, etc.) utilized in creating deliverables for this course. Any and all violations of the universities policies will be referred to the Dean of Students. Ignorance of the rules is no excuse!

Class Participation (25% of final grade)

Evaluation is based upon each student's active, enthusiastic and voluntary involvement in class and case discussions. This is evidenced by preparation prior to class and thoughtful, relevant, and appropriate questions and comments during class. Each student will be evaluated individually. Class participation will be graded on a relative distribution.

Important Note: Since a significant part of learning takes place during class sessions, attendance, active case preparation and class participation are all expected. Per Anderson policy, if you miss more than one class session you will not receive credit for this course.

Group Assignments (50% of final grade)

You will work in teams of four or five students to do all of the case write-ups for this class. Teams will be assigned the first day of the week. There are four (4) graded case write-ups due during the block week.

Final Individual Case Write-Up (25% of final grade). DUE by 11:59 PM on August 27, 2014

Based on the knowledge gained in the course, you will have a take-home final individual case write-up due within five days of the end of the course. The papers should not exceed ten pages in length. The final papers will be graded on a relative distribution.

NOTE: There is no final exam for this class.

Class Schedule

Note: The specifics of the class sessions are subject to change based on the availability of speakers and course correction as deemed necessary by the professor throughout the course.

August 18: Overview of Entrepreneurial Technology Commercialization and Innovation

Objectives:	Discuss the sources of innovation and the challenges faced by modern corporations and the need to innovate.
	Discuss a specific example (E-Ink) of commercialization efforts for technology originally developed in a university setting. Explore the technical challenges, business model challenges, and strategic decisions that an entrepreneur can encounter.

Required Reading:

- HBSP: *The Discipline of Innovation*, PF Drucker.
- HBSP: *Innovation Killers: How Financial Tools Destroy Your Capacity to Do New Things*, CM Christensen, SP Kaufman, WC Shih.
- HBSP: *E Ink*, TM Amabile, S Archambault.
- HBSP: *E Ink 2005*, DB Yoffie, BJ Mack.
- HBSP: *E Ink 2008*, DB Yoffie, R Kim.

Assignment:

Read the E Ink case studies in chronologic order (i.e. E Ink, E Ink 2005, E Ink 2008). After you read each case study, take a few notes on each of the following questions (if applicable) based on the information given:

1. What beachhead market did E Ink identify in 1998? What risks and benefits did management see with this potential market at the time? Based on the additional facts given in the “E Ink 2005” case, which assumptions by management were correct and which were incorrect regarding the beachhead market?
2. What markets did E Ink try to enter? If the information is available in the case, mention the approximate time frame they entered the market, their success in the given market, noting if it changed over time.
3. Given that you now know the “future”, what strategic advice would your team have given E Ink management if they hired you as consultants at the end of the first case (i.e. 1999)?
4. What was the most important or interesting take-away your group gleaned from the E Ink story?

You do not need to do any independent research for this assignment, the information given in the trilogy is sufficient to answer all five the questions. This assignment will not be graded but please bring your notes to class to aid the discussion.

NOTE: In this class, we will define “market” as a group of current and/or potential customers having the willingness and ability to buy products (goods or services) to satisfy a particular class of wants or needs.

August 19: "Potential" Innovation

Objectives: Review the history of technology transfer efforts of universities in the United States. Discuss the Bayh-Dole Act and its impact on technology transfer. Discuss recent trends in commercialization of university technology. Highlight the common considerations for licensing university technology from an entrepreneur's perspective.

Study a detailed case of university technology transfer (Syndexa).

Required Reading:

- HBSP: *U.S. Universities and Technology Transfer*, RG Hamermesh, J Lerner, P Andrews.
- HBSP: *Syndexa and Technology Transfer at Harvard University*, RG Hamermesh, D Kiron.

Optional Reading:

- Better World Reports (click on "Read Featured Stories")
 - <http://www.betterworldproject.org/>
- UCLA Office of Intellectual Property website
 - <http://oip.ucla.edu/>

Assignment: Read the Syndexa case considering the following four questions:

1. What is your assessment of Dr. Gokhan Hotamisligil and his research?
 2. Why have the negotiations of these agreements been so time consuming and difficult?
 3. What are the goals and priorities of Gokhan Hotamisligil, Isaac Kohlberg, Barry Bloom (HSPH), and Teo Uysal (Syndexa)?
 4. Do you support or object to the agreements that are described at the end of the case?
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August 20: “Disruptive” Innovation

Objective(s): How do sustaining and disrupting innovation differ? What role do startups play in commercializing disruption innovation? What advantages do large corporations have to commercialize sustaining innovation? What unique challenges are faced when developing innovative computer hardware? What options to innovate exist for startup companies to compete against entrenched market leaders?

Reading:

- HBSP: *Disruptive Technologies: Catching the Wave*, Bower, Christensen.
- HBS: *Business Model Analysis for Entrepreneurs*, Eisenmann.
- HBSP: *Hewlett-Packard: The Flight of the Kittyhawk (A)*, CM Christensen.
- HBSP: *MySQL Open Source Database*, RA Burgelman et. al.

Optional Online Resources:

- Interview with Michael Porter
 - http://www.youtube.com/watch?v=mYF2_FBCvXw

Assignment: As a team, please answer the following questions on the MySQL case:

1. How successful is MySQL? Why?
 2. Identify different segments of the DBMS market. What differences exist between these segments, e.g. in customer needs and expectations?
 3. Analyze the DBMS industry in which MySQL operates. How attractive is it? Consider the different market segments you have identified in your analysis.
 4. What are the competitive advantages of MySQL and how sustainable are they? Quantify these advantages to the extent possible in the identified market segments.
 5. At the time of the case, what is the stated strategy of MySQL? What strategy is implied by the company's actions? How consistent are the strategic actions with the stated strategy?
 6. What are MySQL's strategic options beyond 2004? What option should MySQL choose?
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August 21: “Regulated” Innovation

Objective(s): The healthcare in the United States is a highly regulated industry, how does this affect innovation? What role does intellectual property play in medical innovation? How do the capital requirements for medical device and pharmaceutical start-ups differ from other popular industries (e.g. mobile software)? What roles do universities, start-ups, and large corporations play in the healthcare ecosystem?

Required Readings:

- HBSP: *U.S. Food and Drug Administration*
- HBSP: *Guidant: Radiation Therapy*

Assignment: As a team, please answer the following questions about the Guidant case:

1. How attractive is the radiation therapy opportunity for Guidant?
2. As Howard considers her recommendation regarding Guidant’s entry into the radiation therapy business, what factors and perspectives does she need to take into account? What should she recommend?
3. The case describes Guidant’s pursuit of this opportunity to date. How is this similar to – and how is it different from – the way in which a start-up (like one of the ones Guidant is thinking about acquiring) would likely have pursued the opportunity? To the extent that Guidant’s pursue strikes you as different, are those differences appropriate to the different circumstances of a large company, or should Guidant be trying to emulate more closely what we would expect to see in a start-up?
4. What are the components of the value chain in the radiation therapy opportunity, and – assuming Guidant decides to enter the business – how should Howard think about assembling the elements required to be successful in this business?

August 22: “Big Bang” Disruption

Objective(s): What is the “big bang” theory of disruption? For what types of technology is it applicable? What recent entrepreneurial theories are most applicable to applications of potential big bang disruption like cloud services? How does the big bang theory guide strategic decisions at universities, start-ups, and large corporations?

Required Readings:

- HBS: *Big Bang Disruption*, Downes & Nunes
- HBS: *Dropbox: It Just Works*, Eisenmann, Pao, & Barley.
- HBS: *Hypothesis-Driven Entrepreneurship: The Lean Startup*, Eisenmann, Ries, and Dillard.
- HBS: *Why the Lean Start-Up Changes Everything*, SG Blank.

Assignment: As a team, please answer the following questions for the Dropbox case:

1. Dropbox is a late mover in a crowded space. What opportunity did Houston see? Specifically, what are the key elements of Dropbox’s current business model?
2. When he applied to Y Combinator (see Exhibit 2), what hypotheses did Houston hold about key elements of Dropbox’s business model? As of June 2010, which of these hypotheses have been confirmed, and which have been discarded?
3. Imagine that at the same time Dropbox was founded, Google decided to target the opportunity that Houston had identified. How would Google’s approach to pursuing “G-Drive” have differed from the approach that Dropbox’s team followed?

Final Individual Case Write-Up Due by 11:59 PM on August 27, 2014

Assignment: Read the *EndoNav* case. Based on the knowledge developed throughout this course, please do an individual case-write up (no more than 10 pages) answering the following questions about *EndoNav*:

1. What is the company’s central value proposition?
2. Does the company need to change its investor pitch? How so?
3. What skills and which individuals must EndoNav keep? What people should be eliminated from the plan?
4. What should the company’s key benchmarks be?
5. How should the company adjust its schedule for those milestones?
6. How much money does the company need?

UCLA Anderson School
Managerial Decision Making
EMBA Block Course August 18-22, 2014

Course Syllabus
****PRELIMINARY AND SUBJECT TO CHANGE****

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I. General Course Description

In a recent study (Rubin & Dierdorff, 2009), several thousand practicing managers were asked to rate how important various skills taught in MBA classes were to their current work. The highest rated skill was also among the least represented in the MBA curriculum: “managing decision making processes.” Moreover, most managers, when pressed, admit to having some difficulty managing decisions. Whether it is because they fear taking risks or making a “wrong” choice, feel overwhelmed by data and options, or have difficulty making tradeoffs, they find the process of making decisions challenging. The primary aim of the course is to make you a more skilled decision maker. In the process you will also learn to design smarter “choice architectures” for your customers and members of your organization that nudge them to make better decisions.

In this course we will examine how to structure decisions, how to think more clearly about chance processes, improve accuracy of judgments, and make better decisions in the face of risk and uncertainty. We will also examine how people handle conflicting objectives, allocation of resources, and outcomes that are distributed over time. By the end of the week you should have greater confidence in your own decision making process, and new insight into how you can help others improve their decision making.

At the heart of the course is an important distinction between normative, descriptive, and prescriptive perspectives on decision making. The *normative* perspective focuses on how rational people ought to behave and is the traditional perspective that you learn in economics classes. The *descriptive* perspective focuses on how we actually make judgments and decisions in practice, and draws on psychology and the new science of behavioral economics. Finally, the *prescriptive* perspective focuses on tools and procedures for improving our decision making. In this course we will examine all three perspectives, with special attention paid to examining the common pitfalls to which managers and consumers fall prey when making decisions, and how to overcome them.

II. Assignments & Grading Criteria

The course will be graded on the following three criteria:

- 1) Take-home Exam (33.3%).** The take-home exam is designed to test your mastery of the core content of the course. It is due at the beginning of the final class session. *Please note that the take-home exam is to be completed INDEPENDENTLY, without any assistance from others.*
- 2) Group project (33.3%).** Develop an idea for a new product, service, company policy or public policy that applies behavioral principles that you learned in class. Your idea should be in the spirit of a “nudge” that influences judgments and/or choices without completely eliminating freedom of choice. Stronger projects generally make use of multiple principles from class. Be sure to explain the behavioral principles underlying your idea, how and why it could improve the wellbeing of consumers and/or benefit the organization or society. Please work in groups of 4-5 people each. Each group will turn in a 5-6 page document describing their idea in some detail. This paper is due September 1. Projects will be evaluated on the following criteria:
 - A) Analysis (10 points).** Is the link between the course concepts, principles, frameworks, etc. and your problem or situation is logically sound? You will lose points for incorrectly or loosely applying course concepts. Loosely often means speculatively, i.e., merely presenting a plausible speculation of the form “it might be a framing problem” rather than a valid argument for why it is a framing problem. Is the link between concept and problem well supported or documented?
 - B) Solution (10 points).** Is your proposed solution or corrective procedure plausible and practical? Extra points will be awarded for creativity or for an especially effective/thorough solution to the identified problem.
 - C) Relevance (5 points).** To what extent do your analysis of the problem and your proposed solution make use of concepts from the course? Note that your analysis and solution scores may also be downgraded if you do not make a reasonable connection to class content.
 - D) Exposition (5 points).** How clear, complete, and compelling is your write-up? How much effort seems to have been invested?
- 3) Attendance & Participation (33.3%).** You will maximize your participation score if you attend every class session, actively participate in all exercises, and make substantive and constructive contributions to each class discussion.

III. Course overview

Each class session will cover one or two themes in the analysis of managerial decision making. In most cases we'll briefly review familiar normative models of rational behavior and spend more time exploring descriptive models of how managers tend to perform in practice. We'll also introduce several frameworks and tools for helping you to make better decisions in practice.

The pedagogy will entail a mix of reading, lectures, exercises, and case discussions. Lecture material will elaborate on these principles and facilitate deeper discussion of topics introduced in the readings. In addition, most sessions will include at least one hands-on exercise or case discussion in which these principles are applied. Although this is a course on "managerial" decision making, we'll draw our examples not only from the world of business, but also such diverse domains as sports, medicine, public policy, and law.

Course Text. I will draw several readings from Daniel Kahneman's best-selling book, *Thinking: Fast and Slow*. Kahneman is a winner of the 2002 Nobel Prize in Economics for his groundbreaking research with Amos Tversky on judgment and decision making. Several chapters from this book will be central to our discussion, but most are listed as optional supplemental readings. I'm asking you to purchase the entire book because it will save you money (selective chapter copyright permissions are expensive!).

Kahneman, D. (2011). *Thinking, Fast and Slow*. New York: Farrar, Straus & Giroux. [TF&S]

As you inspect the syllabus, you will see that **this is a demanding course** for an Anderson EMBA block course! If you enroll, you should be prepared to invest substantial time. It is imperative that you complete all of the readings. I strongly suggest that you read the TF&S text—if not, all of the reading material—before the first class session.

Day 1 Aug 18
Thinking About Decisions

In our first class session we will discuss why people find decision making difficult and how one ought to judge the quality of a decision. We will also talk about how to structure a decision and introduce the basic features of decision trees. We will use this framework to motivate the organization of the course. To provide some context for this discussion we will examine the case “John Brown,” which describes a wrenching medical decision.

In addition we will discuss misconceptions that many managers have about themselves and about the world around them. We’ll talk about the “positive illusions” that they tend to exhibit in assessing their own prospects: optimistic overconfidence, self-enhancement, the illusion of control, and planning fallacy. Next, we will discuss misconceptions that people have about chance events. For instance, we’ll look at how people tend to see patterns where none exist, and look at how their misplaced belief in the “law of small numbers” sometimes leads to the “gambler’s fallacy” and sometimes to belief in the “hot hand.”

Readings

Structuring Decisions

Wu, G. (1997). Decision Analysis. Harvard Business School Case #9-894-004

Introduction to Judgmental Biases

Kahneman, D. (2011). *Thinking, Fast & Slow* (TF&S) Chapter 1, 19, APPENDIX A

[OPTIONAL: TF&S introduction, Ch 2-5]

Positive Illusions

TF&S 23-24

Chance Illusions

TF&S 6-7

Case

Bell, D.E. (1981). “John Brown (A)”, Harvard Business School case #9-182-127.

Bell, D.E. (1981). “John Brown (B)”, Harvard Business School case #9-182-129

Day 2 (Aug 19) Judgment Under Uncertainty

Today we'll turn our attention to how managers make judgments under conditions of uncertainty. In the first part of class we will examine forecasting. We'll begin with the simple case of forecasting an outcome from a single variable (e.g., predicting sales Q1 2013 from sales Q1 2012). We'll contrast the normative model of regression with the descriptive account that people make predictions based on their subjective evaluation of data and fail to regress toward the mean. We'll next explore forecasts from multiple variables (e.g., predicting job performance based on an interview and MBA grades and an evaluation of past experience). We'll discuss common mistakes managers make, for instance giving too much weight to vivid and personal information such as an interview, and also the tendency to apply criteria in an inconsistent way. Next we'll see that intuitive judgment can be improved using a technique called "bootstrapping" in which the expert judge's predictions are replaced by a simple regression model of the judge. **Please bring a laptop computer with you to class.** It should have a program like MS Excel that allows you to complete simple multiple regression computations.

Next we'll explore how people judge the likelihood with which various events will occur. First, we'll review the properties of rational probability judgments. Next, we'll explore how judgmental heuristics can lead to errors in likelihood judgment. We'll then examine common mistakes that managers make when assessing probability—for instance the tendency to overestimate the probabilities of events that are described in greater detail, and the tendency to neglect base rates of success (e.g., the rate of success of new businesses in this industry), instead focusing on details of the case at hand (e.g., strengths of one's business plan). We'll also discuss methods of correcting these biases.

Readings

Forecasting Outcomes

TF&S Chapter 17-18, 20-21

Probabilistic reasoning

Hastie, R. & Dawes, R. M. (2001) Thinking Rationally about Uncertainty. Chapter 9 of *Rational Choice in an Uncertain World: The Psychology of Judgment and Decision Making*. Thousand Oaks, CA: Sage.

Judging probabilities

[OPTIONAL: TF&S, Chapters 8-12]

TF&S, Chapters 14-16

Day 3: (August 20)
Decision Under Risk & Uncertainty

Today we'll explore how managers make decisions under risk and uncertainty. We'll begin with a discussion of how managers perceive risk and how this contrasts with the way in which economists model risk. We'll then contrast the economic model of decision making under risk (expected utility theory) with the (Nobel prizewinning) behavioral account of decision making under risk called prospect theory. For instance, prospect theory helps explain why people tend to sometimes pay a premium to avoid risk (as when purchasing insurance) and other times pay a premium to seek risk (as when purchasing lottery tickets).

In most real-world situations, decision makers don't know the objective probability distribution over possible outcomes. Instead, they must incorporate their own knowledge and experience in forming impressions of what might occur. We will examine how managers' experiences, judgment, risk preferences, and assessed knowledge jointly influence their decisions under uncertainty. Sometimes people's experience is biased (e.g., I don't back up my hard drive because I've never experience a catastrophic crash); other times their judgment is biased (e.g., I don't fly during a terrorism alert because I overestimate the chances of a hijacking), other times they merely have a preference for risk-taking (e.g., I prefer to bet on long-shots rather than favorites at the racetrack) or a false sense of competence (e.g., I overinvest in company stock because I feel comparatively knowledgeable evaluating my own firm). By the end of today's session we'll bring elements from the first half of class together into a unified account of how managers make decisions under uncertainty, and how they can improve this process.

Readings

Prospect theory

TF&S Appendix B

[OPTIONAL: TF&S, Ch 25-30, 34]

Decisions from experience

Taleb, N. (2007). Prologue from *The Black Swan: The impact of the highly improbable*. New York: Random House

Responding to extreme events

Fox, C. R. (2002) The Impact of Extreme Events in Decisions Under Uncertainty: A Cognitive Perspective. Paper presented at Columbia University Conference on Extreme Events, Spring 2002.

Scenario Planning

Schoemaker, P.J.H. (1995). Scenario planning: A tool for strategic thinking. *Sloan Management Review*, 36, 25-40.

Day 4 (August 21)

Tradeoffs, Time & Bracketing

Many decisions are difficult because they entail tradeoffs between conflicting objectives. In this session we will begin with a discussion of how managers ought to resolve such tradeoffs, and the simplifying strategies that they use in practice (e.g., choose the first option that is above my minimum threshold rather than the optimal option). This will lead to a discussion of how searching for reasons to justify particular choices can bias people toward particular actions (e.g., I buy a particular item because it's on sale, not because it is necessarily the one that best suits my needs) or against acting at all (e.g., because I can't decide which brand is best I wait before I buy). We'll also examine how the "mental accounting" of outcomes in terms of losses and gains can influence the attractiveness of options. There is a lot of rich territory to cover in this class, and we will reinforce the material with a couple of brief in-class exercises.

Many decisions have consequences that are distributed over time (e.g. a cash flow stream) or tradeoffs between receiving smaller outcomes sooner (e.g., \$10,000 today) or larger outcomes later (e.g., \$11,000 in one year). The rational approach to such problems is to maximize the discounted expected utility of each outcome stream or rely on tools such as NPV and discounted cash flow. In practice, people tend to severely discount the future relative to the present. We will discuss some inconsistencies that people tend to exhibit and their applications on financial decisions.

Decisions are rarely made in isolation, and a single manager typically faces several similar choices over the course of a quarter or year. We sometimes treat each decision as if it were unique, and other times consider a portfolio of decisions simultaneously. In the final part of class we will examine how narrow versus broad "mental bracketing" of decisions influences choices for better or worse and factors that influence how managers "mentally partition" the set of available alternatives and how this can distort choices.

Readings

Mental Accounting & Choice Bracketing

TF&S Chapter 31

Thaler, R. H. (1999). Mental Accounting matters. *Journal of Behavioral Decision Making*, 12, 183-206.

[OPTIONAL: TF&S 32-33]

Choice Heuristics

Payne, J. W., Bettman, J. R. & Johnson, E.J. (1993). Contingencies in decision making. Chapter 2 in *The Adaptive Decision Maker*. Cambridge, UK: Cambridge University Press.

Choice over time

Loewenstein, G. & Thaler, R. H. (1989). Anomalies: Intertemporal Choice. *The Journal of Economic Perspectives*. 3(4), 181-193.

Day 5 (August 22)
De-biasing and Choice Architecture

In Day 5 we will examine how managers can de-bias judgment and decision making of their charges. We'll discuss how organizations can implement "cognitive repairs" by setting policies that anticipate and compensate for biases, "motivational repairs" using more effective incentive schemes, and how they can correct for systematic biases through organizational-level repairs. We'll also discuss some ways to use many of the concepts from class to create a choice architecture that "nudges" people to do what is in their best interests and/or the best interests of the firm or society. Along the way we'll review (from your HR/OB course) some basic principles of social influence that can also serve nudge better decision making. We'll also look at a vivid case study of organizational decision making gone wrong on Mt. Everest in 1996.

Readings

Intuition & expertise

TF&S Chapter 22

Debiasing

[OPTIONAL] Heath, C., Larrick, R. P., & Klayman, J. (1998). Cognitive repairs: How organizational practices can compensate for individual shortcomings. *Research in Organizational Behavior*, 20, 1-37.

Choice architecture

Thaler, R.H., Sunstein, C.R. & Balz, J.P. (2013). Choice Architecture. Chapter 25 (pp. 428-439) of E. Shafir (Ed.), *The Behavioral Foundations of Policy*. Princeton, NJ: Princeton University Press.

Johnson, E.J. et al (2012). Beyond nudges: Tools of a choice architecture. *Marketing Letters*, 23, 487-504.

[REVIEW FROM MGMT 409: Cialdini, R. (2001). Harnessing the science of persuasion. *Harvard Business Review* Reprint #R0109D]

Case:

Krakauer, J. (1996). True Everest: Into Thin Air. *Outside Magazine*.