Managing innovation is more than a technical problem. Innovation is a social, cultural, political, and strategic process. Successful innovators need to manage the process of innovation, organize to sustain innovative behaviors, use power and influence to implement innovations, and then strategically position and time these innovations to maximize the benefits to society and the organization. This course will help students identify the important issues managers should attend to when innovating, and provide them with to address those issues. We will examine all stages of the innovation process – initiating and sustaining innovation in a firm, implementation of innovations within a firm, and implementation in a competitive industry – to discover together the challenges, opportunities and strategies for managing those processes.

This course uses readings, case analyses, written assignments, in-class exercises and discussion to facilitate student learning. The goal is to both expose them to new theories and practical action, as well as encourage critical thinking about the subject.

Required Texts


Reading packet of articles and cases.
## Overview of Topics

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Topic 1: Introduction


**Questions**

How do you think of people who are innovators? What are they like? Name 3 of the most innovative people you know and why they are innovative.

What makes a better innovation? What determines whether an innovation has a large impact on society? On a firm’s operations? On the innovating firm’s profits?

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Topic 2: Managing Creativity and Innovation

Chapters 1 and 2, *How Breakthroughs Happen*


“The History of the Zipper” Robert Freidel.


Begin reading Cialdini, *Influence*. It is a very interesting book we will discuss later.

**Questions**

Explain two ways that you are limited in your creativity, and three things you could do to address these weaknesses.

What was revolutionary about the innovation of mass production created at the Ford Motor Company? Why was it revolutionary? What is your standard for determining what is a revolutionary innovation, and why use that standard?

Henry Ford was credited as the inventor of mass production at Ford. What did Henry Ford do as an individual that was necessary for the innovation of mass production, i.e., if he hadn’t done it the innovation would not have occurred at Ford? Why? What, if anything, are actions that were ascribed to Ford not his, or not necessary to innovation?
Topic 3: Creative Pre-Conditions: Bridging Existing Worlds

Chapters 3 and 4, How Breakthroughs Happen


Hargadon & Hounshell. Ford Motor Company (B): Barriers to change. UC Davis Business Case.

Questions
What happened to Ford Motor Company in the 1920’s?

How did Henry Ford’s management style influence the change process from 1921-1927?

How did the technology at Ford Motor Company influence the change process?

Are small worlds the ultimate fate of all successful innovations? Is this bad? Why and why not?

Topic 4: Creative Post-Conditions: Building New Worlds

Chapter 5, How Breakthroughs Happen


Questions
What was a great innovation that failed to catch on? Using the readings, explain why it failed, and what you could have done differently to help make it succeed. Ideally, you should choose an innovation that you are personally familiar with either as a participant or a close observer.

Topic 5: Designing Process: Technology Brokering Strategies

Chapter 6-9, How Breakthroughs Happen

Questions
Consider either yourself or a firm in which you have worked. Using the readings, pick which of the strategies is the explicit strategy of yourself or the firm towards innovation either now or as a future goal. Now consider the social worlds and social processes of yourself or the organization –
how or how not are they supportive of that strategy? Is there anything to be done to improve your network position or social interaction routines in pursuit of the innovation strategy?

**Topic 6: Designing Your Venture: Design of Innovating Organizations**

“Top ten IT failures”.


**Questions**

Consider some emerging technology or innovation – one that is developed enough to begin implementing but is still not widely accepted. Ideally it should be one that you have worked with personally.

What characteristic of the technology as it is now represented in an actual product (features, components, dependencies with other technologies, the way it makes people work with it, its location in the value chain, financial characteristics, etc.) will make it difficult to implement? Which features will make it easier to implement? What suggestions would you make to improve its chances of a successful implementation of the technology by changing come characteristic of the product or its presentation? (Note: Do not focus on what is outside the technology in the product (budgets for implementation, team members, etc. Instead, focus on the characteristics of the product that is the embodiment of that technology).

**Topic 7: Power and Influence for Organizing Innovation**

Cialdini, *Influence* (entire book; get started early on this book as it will be very useful).


**Questions**

Consider an innovation that was the object of a power struggle – it was either killed by someone or group or was implemented over the struggles by a group to stop it. Pick one you are familiar with in your firm or work experience – it does not have to be “hard” technology but could be quite broad – processes, people to acquire/discard, develop new capabilities for a new market, etc.
What were the main sources of power for those that opposed it? For those that supported it?

What did the opposition have to gain from stopping it or lose from the innovation? What did the supporters have to gain or lose? Why did one group prevail over the other? Could you suggest ways the loser could have become the winner either by using untapped sources of power or more strategic uses of existing resources?

**Topic 8: First vs. Second Mover Strategies**


**Questions**

Find mention of three new products that have been invented recently in the popular press or that you know of. These should be three distinct products, and products for an established market. (A good source is inventor conventions, conventions of consumer products, mentions of “hot” new products in lifestyle magazines, etc.) Describe each briefly and then analyze whether this product is better introduced as a first mover, or whether you should wait and enter with a product as a second mover. Support your decision with theory from the readings and facts about each market and product.

**Topic 9: Competitive Innovation: Disruptions and Opportunities**


**Questions**

One of the classic questions of business and economics is when do the outside firms displace the established firms through bringing innovations to market (what the political economist Schumpeter termed “creative destruction”). The readings for today suggest conditions under which innovating organization will displace the existing organizations. Consider all of the other theories you have learned about innovation, power, influence, network structure, social worlds, etc. Find at least two examples in theories we discussed earlier that are different than those today: either describe different conditions where an innovating firm might succeed, or that contradict today’s readings. Describe the differences, and then give an explanation for why they are different. (Some possibilities: Is one just an extension of another theory? Are they contradictory because they assume a different model of innovation or implementation? Does one
theory consider additional factors important to innovation?). As a manager, what can you learn or take away from these comparisons?

### Topic 10: Final Class Presentations

Final group project papers are due at the beginning of class.

#### Course Requirements

**Written Analyses (300 points):** There are assigned readings for every class and a set of questions to answer about those readings. Students are expected to come prepared to class to discuss the readings, including analyze critically any case materials. In addition, you will turn in four (4) short written papers answering the questions for that day. The first paper will be turned in on the 2nd topic and will be graded pass/fail as a trial run. The other 3 papers will be worth 75 points each and you can choose which weeks to do those papers.

The papers should be no more than 750 words in length. Do not exceed the word limit. This limit will require you to communicate directly and sharpen your writing. It is harder to write briefly than at length, so a single draft is unlikely to be successful. There is a required format for all papers described in the syllabus – follow it carefully. Also, be particularly scrupulous in citing all sources. In the day of the Internet, this is often overlooked, but it is still plagiarism and will be treated as such.

Assignments are due at the beginning of the class in which we discuss that topic. If for some reason you know you are going to be absent (even if it is excused), you must turn in the paper before the class. It would be unfair for anyone to have the benefit of class discussion before writing their paper.

Late papers will not be accepted, with the exception of absences that are both unforeseeable and excused (see policy below). For those emergency situations the grading will be determined on a case-by-case basis. Note that technical difficulties in printing do not constitute an excuse.

Note that while it is possible to do all these papers in the last four classes, it is not recommended. You should instead focus on your group final project at that time.

When writing, analyze or argue: do not repeat facts. Tell the audience something they don’t know even after they have done the readings. Either take a position about what should be done (i.e., “SmithCo should not merge with another company because it will conflict with their corporate strategy of stable growth”) or give insightful analysis about the issue (“The power in this industry lies in the hands of the suppliers because they are concentrated and their products are not substitutable”). In all cases, use facts to support your analysis and arguments.

**Class Participation (100 points):** The class discussion is an important chance to learn, so participation is taken seriously. In class you can learn from your fellow students and practice the verbal skills of communication and dialogue.
If you are absent from a class without an excuse (see policy below), your participation grade for the day will be zero. You need to participate actively. If you attend every class but are not engaged, your grade will be a “C”. An “A” or a “B” will be earned by activity in the classroom.

Given that there are unexpected and uncontrollable events in everyone’s life, one class can be missed without any penalty to your grade (except the final group presentations).

I will cold call (ask you to speak even if you have not volunteered). BE PREPARED FOR DISCUSSION EVERY CLASS.

Listen to what other students are saying and respond to them directly.

Be civil, courteous, and professional at all times. Disagreement is helpful when discussing a complex issue, but keep the conflict at a professional, not personal, level.

Pay attention to the discussion. Part of participation is making an active audience for others.

Participation grades will be reduced for unprofessional comments, lack of attention, or ignoring your fellow students’ comments.

**Final Group Project (150 points):** The final group project will be a chance for you to design an innovation project. Each group will develop a plan to apply an existing technology or process to an existing market or business. Innovations should be complete and ready to implement the next day, not speculative or simply plans for developing innovations later.

The first part of the project will be a written analysis of 8-10 pages that explains your innovation, the likely impact of the innovation, and any challenges in development and implementation and your plan for overcoming those challenges (75 points). The second part of the project will be a presentation and in-class exercise on the final class day (75 points).

Your grade will also depend on your individual effort within the group. Each member of the group will be asked to evaluate every other group member anonymously on the last day of class on the following dimensions: attendance at group meetings, effort, meeting deadlines, and quality of work. If any student receives unsatisfactory ratings from the rest of their group, their grade will be marked down accordingly.

**Grading Conversions:** Grades will be on percentage scale of A+ (98% and above), A (93% and above), A- (90% and above)….failing (64% and below).

**Class Policies**

**Absences**
Attendance is necessary for participation, and participation is critical to your learning, so the class participation for any missed class is zero. There is no way to make-up participation, as it requires being in class. Please attend all classes.

Given that there are extenuating circumstances in life, a student is allowed one (1) absence without penalty, with the exception of the final group project presentations. There will be no excused absences other than those defined by University policy. Absences that will not be excused include (but are not limited to) work schedules, business trips, interviews, airline or other travel delays due to anything other than severe and unpredictable conditions, and non-emergency events such as weddings, anniversaries, family vacations, etc.
Late Class Assignments
Papers are due at the beginning of class. Case paper analyses cannot be accepted late because a student would have the advantage of class discussion in doing their analysis. The final group project will also not be accepted late because there will be class discussion of those projects the final day of class as well that require the paper to be finished.

If you have a foreseeable excused absence, any excused late papers must still be prepared BEFORE the class discussion of those topics to be turned in for a grade. In the rare cases where you have an excused and unforeseen absence, you will be required to do an independent, makeup assignment of equal difficulty.

Late Final Group Projects and Missing the Final Class Day
Any final group project turned in late will be immediately marked down. This will be dealt with on a case-by-case basis, but at the very least, any late project will be marked down a full letter grade.

If anyone misses the discussion and presentation of final group projects, that person will receive a zero for that portion of the grade if it is an unexcused absence. In the rare case it is an excused absence, then the student will have to schedule a make-up time for a presentation to the instructor.

Collaboration, Helping, Cheating, and Dishonesty
One of the goals of this course is to encourage students to communicate with each other, and to help each other learn. Learning management is a process of communication, debate, and argument, not a set of isolated exercises to be performed in private. The limitation to collaboration and helping, however, is when a student is no longer carrying the burden of learning. Some students are particularly adept at using the guise of collaboration and helping as a means to merely exploit others, and not do their own work. You may discuss case analyses, but you cannot copy from another’s analyses, or use their written analyses as a basis for your own paper. This subverts the meaning of education, and the potential value it has for improving our minds and our community discussions.

Academic honesty is very important. The instructor will energetically investigate any failure to follow the academic honesty standards of the University.

Particularly important is the issue of misrepresentation or plagiarism. In the era of Internet information it takes discipline to document one’s sources for written work. Students are reminded that they must be particularly scrupulous in this regard.

Written Assignment Requirements and Format
Papers are turned in as hardcopy; no emails.

Use a 12-point font, DOUBLE SPACED, 1" margins all around. Always have page numbers. Staple papers only; no binding, folders, clips, or anything other than plain paper that will weigh down the instructor even further than usual.

Always put your name on the front page. A title sheet is only necessary for the final paper (which will not count towards the page limits).

DO NOT put your social security number on your paper or any other information that is confidential. Your papers are not treated as confidential information, so protect yourself.
Do not exceed state lengths; beyond those lengths will not be graded. Exhibits (graphs, tables, pictures, etc.) are not counted against the page length (within reason).

Exhibits, or any numerical analyses, should always have a clear title explaining the exhibit, and footnotes stating clearly any assumptions or additional data created for the exhibit. If the reader cannot replicate your exhibit from the notes, then it is not sufficient.

Any cited references or other material that is not the author’s should be clearly cited in a bibliography that follows a widely accepted format. The bibliography does not count towards page limits.

Accommodations for Students with Disabilities
There will be accommodations made for students with disabilities, in accord with university guidelines.