Course Syllabus

Innovation – OIDD 614
Professor David Robertson
Spring 2017

Overview

The goal of this course is to teach you the tools and techniques you need to create innovative products, services, and business models. We will do this through a mixture of lecture, cases, course assignments, and in-class exercises. Over the span of this course we will go from idea to reality - we will start with about 1000 rough ideas and, through a variety of structured techniques, refine them into a dozen finished concepts. The purpose of this exercise is not to create profitable business concepts (although that is a regular result of the process), but to give you a "live case" example of an innovation process that we can use to explore how to boost innovation in your company.

Required Materials

Many of the required readings are from *Innovation Tournaments* (by Terwiesch and Ulrich, Harvard Business Press, 2009). The course will also use many of the innovation techniques from the iPad app *Innovation Technique Cards* (by David Robertson). We will also use the case of LEGO to discuss innovation management, and will refer to some of the chapters in *Brick by Brick* (by Robertson)

Announcements:

Session topics and assignments may be adjusted during the semester, and new information may be added on a weekly basis. However, the overall plan for the course and project work will stay largely the same.

There is no final exam. Instead, during our last class we will hear your presentations of your innovation concepts.

History of the class

This course has been taught at Wharton for over a decade now, and has spawned many companies. Some of the products and services invented in the class are now in the market, and some of the teams formed in the class went on to develop other products and services using the techniques they learned in the class. Some of the companies are:

- Officedrop.com
- Docasap.com
- Terrapass.com
- Warbyparker.com

- Balubandar.com
- Smatchy.com
- AdhereTech.com
- DagneDover.com
- Digipuppets.com
- Senvol.com

In the case of Officedrop, Warbyparker and DagneDover, the ideas are different than the ideas presented in the course, but the teams used many of the ideas they learned in this course.

Course Plan and Assignments:

Note: the assignments listed for this course are not final and will almost certainly change as we get closer to the beginning of the course. But they should give you a good understanding of the types of exercises and assignments that you'll be asked to do during the course.

Session 1: Course Introduction and Opportunity Generation

- What is innovation?
- Overview of the course
- Opportunity generation techniques

Session 2: Opportunity Pitches and Field Research

- Form opportunity teams
- Understand how to elicit and document user needs

Session 3: The Innovation Process

- What is the process of innovation and how does it work?

Session 4: Experimentation and Testing

- How to test your ideas

Session 5: Innovation Management

- How to boost innovation in a business unit or company

Session 6: Final pitches and closing

- What to do after 614
- A final brainstorm

Course Policies

The policies below are intended to be fair and clear. Please send me an email if you have any concerns or questions.

Principles:

- Grading serves two pedagogical functions: students are much more likely to complete the readings, preparation questions, and project work if this work is graded. Students who prepare better, learn better.
- Grading provides an opportunity for us to provide you some feedback so you can reflect on what you did well and what you could have done better. Learning from this feedback is an important part of the course.

Make-Up Work

All deadlines are final and there is no way to make up missed work. This rule may seem inflexible, but it actually benefits all of us. While I hope you will complete everything on time, you are much better off strategically choosing to miss a date and cut your losses than trying to do something later. It only ends up creating a snowball effect. Please do not ask about making up missed work. The only exceptions are school closures, natural disasters, hospitalization or other serious medical emergencies documented by your physician or Penn health services, and advance notice of religious holiday observation. This is reflective of real innovation constraints - missing a market window (for example, not submitting an RFP on time) has significant penalties.

Attendance

- Attendance is a key part of the class experience. We all face various trade-offs in life, including the costs and benefits of attending this class. Although I appreciate your desire to be polite, you do not need to tell me in advance if you will miss class.
- Please do not ask me if it is ok if you miss class or leave class early. Both attending and missing class carry opportunity costs. Missing class is not "ok" in any absolute sense. However, attending class should probably not be as important to you as, for example, attending your wedding.
- Please do not ask me how to deal with your in-class responsibilities during an absence (e.g., forming a project team or giving a presentation). These tasks are your responsibility.

Adding the Class After the First Day

We meet in the same time and place on just six occasions. Much of the graded work for the course is delivered in the first week. If you miss the first week, you have missed a lot. If you add the class after the first session, you will receive no credit for missed work.

Intellectual Property

- Ideas submitted to Darwinator are assumed to be the property of the submitter. Students are expected to be respectful of the intellectual property of their classmates. Unless derived from sponsored research or other significant university-funded activities, the intellectual property created in this course is assumed to belong to the students who created it.
- Unless you draw up a mutually-agreed contract stating otherwise, ideas presented during the final class session are assumed to be the joint equally-shared property of the team members presenting them.