Foundations of Innovation

Curriculum for Spring 2023 Columbia Business School Instructor: Professor Melanie Brucks mb4598@gsb.columbia.edu

TA: TBD

Course Description

The ability to innovate plays a pivotal role in the growth and success of many areas of business. In this course, we tackle the challenge of <u>bringing to market elegant and efficient solutions to important customer needs</u>. This challenge is relevant whether you work for a startup or a large company, whether you sell products or services, or whether your customers are individual consumers or companies. Throughout the course, we will provide methodologies, strategies, and tools (such as <u>design thinking</u> and <u>iterative prototyping</u>) structured around the basic steps of the innovation process:

- 1. Problem Identification
- 2. Idea Generation
- 3. Design
- 4. Prototyping and Testing
- 5. Launch

<u>This class focuses on customer-centric innovation.</u> The tools we cover come from the world of corporate innovation but can be applicable to entrepreneurs. After all, at the end of the day, you will be dealing with customers regardless of your company's size.

Objectives

- 1. Strengthen your individual and collaborative capabilities to <u>identify customer needs</u> using a multimethod approach, including both qualitative and quantitative data analysis.
- 2. Provide a framework to help you to <u>construct sound concept hypotheses</u> and a <u>develop a prototype</u> that allows for meaningful feedback in a real-world environment.
- 3. Help you translate broadly defined opportunities into actionable innovation possibilities and recommendations for client organizations.

Project

In this class, you will actively learn about the innovation process by developing a new product/service! A set of projects will be offered by companies on the first day. You will select your project (and form teams of 4 to 6 students) based on company presentations. Alternatively, you can do your own project. Representatives from the company will attend your final presentations at the end of the course.

Grading

Class Participation (25%, note that this includes group work; I require in-person participation)

Case/Reading Questions (Individual) (25%)

Project Assignments (Group) (15%)

Final Project (Group) (35%, including peer evaluation)

Outline

Week 1: Introduction (Jan 27)

Class overview and introduction to project

Bugaboo Case

Individual Assignment Due Today: Read about company projects; Bugaboo case answers *Group Assignment Due:* submit your group names (at least 5 members, no more than 6)

Week 2: Underlying Need Identification Pt. 1 (Feb 3)

Observation

Blue Ocean & Market Segmentation

Interview Techniques

Meet with your company

Individual Assignment Due Today: Reading questions for: "Marketing Malpractice: The Cause and the Cure" and "Blue Ocean Strategy"

Week 3: Underlying Need Identification Pt. 2 (Feb 10)

Discussion of observation; discussion of interviewing

Design Thinking Guest Speaker

Empathy maps

Individual Assignment Due Today: Observation Assignment; Empathy maps

Week 4: Ideation Pt. 1 (Mar 3)

Flexit Case

Ideation Strategies

Individual Assignment Due Today: Reading questions and idea generation exercise

Group Assignment Due Today: Photo of group empathy map

Week 5: Ideation Pt. 2 (Mar 24)

Ideation Templates

Individual Assignment Due Today: Reading questions for "Finding your Innovation Sweet Spot" Group Assignment Due 3/28: Submit at least 6 ideas, submit the matrix

Week 6: Idea Evaluation (Mar 31)

Individual and group idea evaluation

Positioning Statement

Individual Assignment Due Today: Idea evaluation questions

Week 7: Prototyping and Validation

Fisher Price

Prototyping Workshop

Optional: Columbia MakerSpace

Week 8: Solution Design (Apr 7)

Concept Testing

Problem Validation & Library Resources Speaker (20 minutes)

Group Assignment Due Today: Submit positioning statement

Individual Assignment Due Today: Reading questions for the VerTerra Case

Week 9: Design

VerTerra Case

Nontraditional marketing

Week 10: Professor Feedback

Meet with Prof Bucks and with Librarian

Week 11: Launch (April 21)

HEAD vs LEAD Case

Group work on presentations

Week 12: Final Presentations (April 28)

Presentation to clients

Group Assignment Due Today: slide deck

List of Readings

Week 1:

- Levay, Jonathan, and Olivier Toubia (2008), "Bugaboo International," Columbia CaseWorks.
- Yohn, Densie L. (2019), "Why Great Innovation Needs Great Marketing," Harvard Business Review.

Week 2:

- Christensen, Clayton M., Scott Cook, and Taddy Hall (2005), "Marketing Malpractice: The Cause and the Cure," Harvard Business Review.
- Kim, W. Chan, and Renée Mauborgne (2004), "Blue Ocean Strategy," Harvard Business Review.

Week 3:

• Kolko, John (2015), "Design Thinking Comes of Age," Harvard Business Review.

Week 4:

• Toubia, Didier, Elie Ofek and Olivier Toubia (2021), "Taking Innovation HEAD On: Disruptions Originating at the High End of the Market," Columbia CaseWorks.

Week 5:

• Toubia, Olivier and Melanie Brucks (2021) "FlexIt," Columbia CaseWorks.

Week 6:

- https://hbr.org/2014/11/sometimes-the-best-ideas-come-from-outside-your-industry
- Grant, Adam "The Daily Show's Secret to Creativity" (2018), https://podcasts.apple.com/us/podcast/creative-burstiness-at-the-daily-show/id1346314086?i=1000405268582&mt=2
- https://insight.kellogg.northwestern.edu/article/boost-creativity-brainstorm-embarrassment

Week 7:

• Goldenberg, Jacob, Roni Horowitz, Amnon Levav, and David Mazursky (2003), "Finding your Innovation Sweet Spot," Harvard Business Review.

Week 8:

- https://www.gsb.stanford.edu/insights/why-your-best-idea-may-be-your-second-favorite
- https://www.fastcompany.com/3057239/why-managers-squash-great-creative-ideas-and-bet-on-bad-ones

Week 10:

• Toubia, Olivier, "Columbia Business School Case: VerTerra."