INNOVATE USING DESIGN THINKING

Format:	Fall A-term course, meets once a week
Professor:	Gita Johar, Meyer Feldberg Professor of Business
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Office Hours:	By appointment.

Introduction

Innovation is about seeking creative solutions to challenging problems. In the world of business, creativity is not only about being novel and original, but also about being useful to the end-user. Does the solution solve a user problem effectively and efficiently? Does it address a customer need? Does it do a job for the consumer, a job that needs to be done? In this course, we will learn about the process and tools of design thinking that can help us to understand and define consumer problems, generate ideas to solve these problems, develop concepts and prototype solutions, and experiment and tweak these solutions.

What is design thinking? In the words of Tim Brown of IDEO: "Put simply, [design thinking] is a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity." More concretely, design thinking usually refers to:

1. A <u>human-centered</u> approach to solving problems, and
2. Using an <u>iterative</u> process to arriving at a better solution.

Human-centered refers to focusing on *real* people's (usually customer's) needs and problems—as opposed to focusing on the problems of a demographic group or a segment. We will use methods such as observation and depth-interviews with real, individual consumers and develop products/services based on the insights we generate on the basis of interactions with these consumers. This emphasis on observation and interaction rather than surveys recognizes that we don't usually know what would solve our challenges and disappointments, and are therefore at a loss to articulate it.

An iterative process refers to the notion that a solution need not be complete and elegant. Rather, design thinking focuses on building somewhat rough product prototypes that are based on deep

customer understanding of "jobs to be done." These prototypes are tested soon and often and constantly evolve. Experimentation plays a big role in testing and refining potential solutions.

So, to summarize, *design thinking is a creative and systematic approach for solving problems by relying on human-centered and iterative processes*.

Course objectives and approach

The course will illuminate how Design Thinking can enhance innovation activities in terms of market impact, value creation, and speed.

 The course objectives are:
1. To provide you with a strong conceptual as well as practical understanding of design thinking.
2. To enable you to reliably come up with creative solutions to challenging problems.

More specifically, the course aims to:
1. Strengthen your individual and collaborative capabilities to identify customer needs using indirect and qualitative research, create sound concept hypotheses, and develop a prototype that allows for meaningful feedback in a real-world environment.
2. Help you translate broadly defined opportunities into actionable innovation possibilities and recommendations for client organizations.

The course will use a combination of lectures (including guest lectures), videos, readings, and assignments. The project will give you an opportunity to come up with a creative solution to problems or challenges in a particular consumer context (tbd).

Connection with the Marketing Core Course

This course builds on the concepts of market segmentation, targeting, positioning, new product development, and advertising.

Method of Evaluation

Diverse teams of four will be created by the instructors keeping in mind the usefulness of interdisciplinary perspectives in design thinking.

Class participation/preparedness (individual):	20 points
Assignments (individual and group):	80 points
I. Depth interview and insights (pairs)	20 points
II. Design Brief Project template (group)	10 points

| III. Final project submission (group) | 30 points |
| IV. Final project pitch presentation (group) | 20 points |

Evaluation and Assignments Details

Your class participation / class preparedness grade will be based on:

- **Attending class and being on time**- Much of the learning will occur in the course of the discussions and assignments in class, and regular attendance is required in order to receive credit for class participation. **Excused absences must be cleared through the office of student affairs (OSA), who will then inform me of the excused absence.** In general, reasons for excused absences include health problems, personal emergencies, and religious observance (not interviews).

- **Being prepared for class** - Class preparedness will be assessed based on your comments in class as well as on your feedback to other students. Reading the required readings and cases for each session, and completing required assignments, is the best way to prepare for class discussion. Evaluation of class participation is based upon the quality (not the quantity) of your comments, as reflected by their relevance, insightfulness, and coherence. Attendance is a necessary but not sufficient condition for participation. If you do not actively participate in class discussions, and in your team work each day, you will receive a low participation grade even if you attend every class.

- **Your conduct and behavior in class** – Out of respect for the other students in your class, it is important for you to focus your full attention on the class for the entire class period. Most students observe proper decorum, but it takes only one person's behavior to distract the entire class. Columbia Business School students have complained to the school about students who use class time for other purposes or act in a distracting manner. Class will be conducted using the same rules of decorum that would apply in a business meeting. Please engage fully with your team and work collaboratively on the design challenge during the week, both in and out of the design studio.

- **Your contribution to the team project** – Each team member is expected to fully contribute to all aspects of the group project. Your contribution will be evaluated by your team members and you will also be required to evaluate other team members' contributions. On the last day of class, you will allocate 100 points between your team members based on their contributions to your project. This evaluation will be used as input to your class participation grade and will also be used to weight your grade on the team project.

Details on other assignments will be presented in class. You will work on an innovation project for a client and create a pitch based on a design thinking process that we will follow in class. The pitch deck is the final group deliverable.

Required Cases and Reading

- [Design Thinking at Great Lakes: The Search for Growth](#)" (UVA-S-0248)

- [frog design](#) (HBS 5-119-040)

- [Re-Framing Opportunities: Design Thinking in Action](#) (HBS ROT206-PDF-ENG)

- [Reclaim your Creative Confidence](#) (HBS R1212K-PDF-ENG)

- [Why Design Thinking Works](#) (HBS R1805D-PDF-ENG)

- [Stories that Deliver Business Insight](#) (HBS SMR475-PDF-ENG)

- [Empathy on the Edge](#) (HBS ROT254-PDF-ENG)

- [Know your Customers' "Jobs to be Done"](#) (HBS R1609D-PDF-ENG)

- [Finding Your Innovation Sweet Spot](#) (HBS R0303J-PDF-ENG)

- [Prototyping is the Short Hand of Innovation](#) (from The Art of Innovation by Tom Kelley)

- [What Design Thinking is Doing for the San Francisco Opera](#) (HBS H02XCM-PDF-ENG)

- [Get Better Customer Insights](#)

Recommended Books

Jeanne Liedtka and Tim Ogilvie, Designing for Growth: A Design Thinking ToolKit for Managers (New York: Columbia University Press, 2011).

Jeanne Liedtka,Tim Ogilvie, and Rachel Brozenske,The Designing for Growth Field Book: A Step-by- Step Project Guide (New York: Columbia University Press, 2014).

Drew Boyd and Jacob Goldenberg, Inside the Box: A Proven System of Creativity for Breakthrough Results (New York: Simon and Shuster, 2014).

Additional Readings

Belk, R., Fischer, E., & Kozinets, R. V. (2013). *Qualitative consumer and marketing research*. Thousand Oaks, CA: Sage.

Cayla, J., & Arnould, E. (2013). Ethnographic stories for market learning. *Journal of Marketing*, *77*(4), 1-16.

McQuarrie, E. F. (2015). *The market research toolbox: a concise guide for beginners*. Sage Publications.

Burroughs, J. & Dahl, D. & Moreau, P. & Chattopadhayay, A. & Gorn, G. (2011). Facilitating and Rewarding Creativity During New Product Development, *Journal of Marketing,* (75), 53-67.

Dym, C. L., Agogino, A. M., Eris, O., Frey, D. D., & Leifer, L. J. (2005). Engineering design thinking, teaching, and learning. *Journal of engineering education*, *94*(1), 103-120.

Faraji-Rad, Ali, Shiri Melumad and Gita V. Johar (2017), "Consumer Desire for Control as a Barrier to New Product Adoption," *Journal of Consumer Psychology*, 27 (3), 347-354.

Faraji-Rad Ali, Shiri Melumad, and Gita V. Johar (2016), "When New Products should Make Customers Feel in Control," *Harvard Business Review*.

Goldenberg Jacob, David Mazursky, and Sorin Solomon (1999), "Toward Identifying the Inventive Templates of New Products: A Channeled Ideation Approach," *Journal of Marketing Research*, 36 (May), p. 200-210.

Goldenberg Jacob and David Mazursky (1999), "The Voice of the Product: Templates of New Product Emergence," *Innovation and Creativity Management*, September Vol. 8, 3, 157-164.

Goldenberg, Jacob et al., (1999), "Creative Sparks," *Science*.

Moreau, P. & Dahl, D., (2009) "Constraints and Consumer Creativity," *Tools for Innovation, 2009,* Arthur M. Markman and Kristin L. Wood, (Eds.)

COURSE OUTLINE

Day/ Session	Topic	In-Class Assignments	Pre-class Readings	Post-class Assignment
Session 1	Why Design Thinking and The Design Process Project Presentation by the Client	Scoping the project and deciding on the target. For whom are we designing? How will we know if we have succeeded or failed? Fill in Design Brief	Reclaim your Creative Confidence Why Design Thinking Works	Complete Design Brief and submit on Canvas before session 2.
Session 2	How to Generate Customer Insights from Observation and Interviews: Guest Speaker Introduction to Journey Maps, Empathy Maps	Create interview scripts	Stories that Deliver Business Insights Empathy on the Edge Get Better Customer Insights	Pairs of students: Complete 4 interviews of at least 30 minutes each. Create profile of each interviewee along with key themes in the interview. Note your initial insights from all the interviews. Submit profiles and insights on Canvas before session 3.
Session 3	Identifying Insights: Great Lakes Case	Apply mind maps techniques to generate	Know your Customers' "Jobs to be	Generate at least three insights in

	Introduction to Mind Maps, Personas, Jobs to be Done	insights for your team project	[Done"](#) [Great Lakes Case](#)	your team
Session 4	Design Criteria Ideation: Trigger Questions and Brainstorming Concept Development, Concept Statements, Attribute Value Maps	Develop design criteria, How Might We Questions	[Re-Framing Opportunities: Design Thinking in Action](#) [Finding your Innovation Sweet Spot](#)	Complete How Might We Questions and Generate ~40 ideas per team Select most promising 10 referring to design criteria
Session 5	How to Test Concepts and Prototypes with Target Customers: Guest Lecture Positioning Statement Prototyping: Visit to Maker Space (Mudd Building) for Prototyping with Tools	Select 2 to 3 ideas and create prototypes	[Prototyping is the Short Hand of Innovation](#) [What Prototyping is Doing for the San Franciso Opera](#)	Complete and test prototypes before next session. Prepare presentation.
Session 6	frog Design Case: Guest Speaker Explore the entire process of design and development with a focus on meeting end users' needs. Student Presentations to Client		[frog Design Case](#)	

Instructor Bio

Dr. Gita V. Johar, Meyer Feldberg Professor of Business, Columbia Business School

Gita V. Johar (PhD NYU 1993; MBA Indian Institute of Management Calcutta 1985) has been on the faculty of Columbia Business School since 1992 and is currently the Meyer Feldberg Professor of Business. She served as the Vice Dean for Diversity, Equity and Inclusion from 2019 to 2021. She served as the school's Faculty Director of Online Initiatives from 2014 to 2017, Senior Vice Dean from 2011 to 2014, Vice Dean for Research from 2010 to 2011, Director of the Columbia Business School Behavioral Lab from 2006 to 2011, and on Columbia University's Institutional Review Board from 2002 to 2005. Professor Johar also served as the Faculty Director of the Design Your Innovation Blueprint Executive Education program and as Chair of the Faculty Steering Committee for the Columbia University Global Centers | South Asia in Mumbai. She served as the co-editor of the premier academic journal on consumer behavior, the *Journal of Consumer Research* from July 2014 to December 2017 and is currently an associate editor at the *Journal of Marketing* and served as guest editor of a special issue of the journal on "Better Marketing for a Better World." Professor Johar's expertise lies in consumer psychology, focusing on how consumers react to marketing efforts, especially advertising, promotions and sponsorship. She also examines the influence of consumer identity, self-control and perceptions of control on decision making and consumption and studies how to nurture creativity. She has published several influential articles in these areas of research in premier journals. Professor Johar has also published cases on consumer adoptions of new products as well as on marketing and advertising planning. She teaches the core Marketing course and Global Immersion courses in emerging markets such as India and Myanmar, as well as courses on Innovation, Research Methods, and Consumer Behavior to MBA, Executive MBA and PhD students.