

Block Week/Format:	January 17 th – 21 st , 2023
Professors:	Gita Johar, Meyer Feldberg Professor of Business
Teaching Assistant:	Byung Cheol Lee, BLee21@gsb.columbia.edu
Room:	Geffen 540
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Office Hours:	By appointment.

Note: The class is experiential and interactive with a lot of team work during class time.

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 human-centered approach to solving problems, and
2. Using an iterative 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. & Chattopadhyay, 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 1: EXPLORE

Day/ Session	Topic	In-Class Assignments	Pre-class Readings	Post-class Assignment
Tuesday: Explore 1 10-11:15	<i>Get to know your team</i> Why Design Thinking and The Design Process <i>Introduction to the subject of design thinking</i>		Reclaim your Creative Confidence Why Design Thinking Works	
MORNING BREAK: 10:15 TO 10:30				
Tuesday: Explore 2 11:30-12:45	Project Presentation by Client Interview Client, Secondary research <i>Scoping the project and deciding on target. For whom are we designing? How will we know if we have succeeded or failed?</i>		Client's Design Challenge	
Tuesday: Explore 3 12:45-1:00	Design Brief	Team: Fill in Design Brief		Submit filled-in design brief on Canvas by Wednesday at 9pm (group)
LUNCH: 1:00 TO 2:00				
Tuesday: Explore 4 2:00 -3:30	Qualitative Research: Prof. Bob Morais <i>Challenges and tips on observation and ethnographic interviewing.</i>		Stories that Deliver Business Insights Empathy on the Edge Case Studies of Applied Ethnography	
AFTERNOON BREAK: 3:30 TO 3:45				
Tuesday Explore 5 3:45-4:15	Introduction to Journey Maps, Empathy Maps		Get Better Customer Insights	

<p>Tuesday Explore 6 4:15 Onwards</p>	<p>Interviews</p>	<p>Pairs of students: Complete 4 interviews of at least 20 minutes each.</p> <p>Create a profile of each interviewee and note the key themes in the interview. See examples on Canvas. Then, write a brief summary of all interviews your pair did, and note your initial insights.</p>	<p>Submit at least four profiles and one brief summary by 9am on Wednesday on Canvas (in pairs). Bring printouts to class on Wednesday to put up on your inspiration wall.</p>
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DAY 2: EXPLORE, REFRAME AND GENERATE

Wednesday: Explore and Reframe 1 10 to 11:30	Identifying Insights <i>Great Lakes Case, Mind Maps</i>	Work in new teams for this case	Great Lakes Case	
MORNING BREAK: 11:30 TO 11:45				
Wednesday: Explore and Reframe 2 11:45 to 1:00	Insight Tools <i>Introduction to Personas, Jobs to be Done, Finalizing insights</i>	Build mind maps, personas	Know your Customers’ “Jobs to be Done”	
LUNCH BREAK: 1:00 TO 2:00				
Wednesday: Explore and Reframe 3 2:00 to 3:30	Design Criteria <i>Developing design criteria, How Might We Questions</i>	Team: Complete HMW statements		
AFTERNOON BREAK: 3:30 to 3:45				
Wednesday: Generate 4 3:45 to 5:15	Ideation <i>Brainstorming, Trigger Questions, Attribute-Dependency Template</i>		Re-Framing Opportunities: Design Thinking in Action	
Wednesday: Generate 5 5:15 Onwards	Ideation <i>Brainstorming</i>	Each team generates ~40 ideas, selects most promising 10 by mapping back to design criteria and insights	Finding your Innovation Sweet Spot	

DAY 3: GENERATE AND PROTOTYPE

Thursday: Generate and Prototype 1 10 to 11:30	Concept Development <i>Create concepts from selected ideas</i>			
MORNING BREAK: 11:30 TO 11:45				
Thursday: Generate and Prototype 2 11:45 to 1:00	Attribute Value Maps <i>Create attribute-value maps for your concepts</i>	Team: Select 3 concepts Refine concepts		
LUNCH BREAK: 1:00 TO 2:00				
Thursday: Generate and Prototype 3 2:00 to 3:30	Prototypes: experiential, 2D prototypes Digital prototyping tools <i>Create one or two prototypes</i>	Build prototypes	Prototyping is the Short Hand of Innovation	
AFTERNOON BREAK: 3:30 TO 3:45				
Thursday: Generate and Prototype 4: 3:45 to 4:15	Prototype test set-up <i>Scenes-props-roles</i>		What Design Thinking is Doing for the San Francisco Opera	
Thursday: Generate and Prototype 5 4:15 Onwards	<i>Test 2 or 3 prototypes with other teams. Refine prototypes</i>	Create and test final prototypes with other teams		

DAY 4: TESTING PROTOTYPES USING EXPERIMENTS

Friday: Prototype Testing 1 10 to 11:30	Evaluation Research Techniques: Prof. Bob Morais <i>How to frame questions and learn from evaluation research.</i>			
MORNING BREAK: 11:30 TO 11:45				
Friday: Prototype Testing 2 11:45 to 1:00	Evaluate prototypes <i>Test critical assumptions and get feedback</i>	Test at least two prototypes with individuals in your target market. Conduct at least two tests per prototype.		
LUNCH: 1:00 TO 2:00				
Friday: Prototype Testing 3 2:00 to 3:30	Guest: Case Study of Design Thinking			
AFTERNOON BREAK: 3:30 TO 3:45				
Friday: Prototype Testing 4 3:45 to 4:15	Integrate Feedback <i>Iterate on Prototype</i> Positioning Statement and Final Pitch format <i>Start putting together final pitch outline</i>			
Friday: Prototype Testing 5 4:15 Onwards	Final Pitch <i>Work on Positioning Statement while making final updates to final prototypes</i>			

DAY 5: PRESENTATIONS AND DESIGN THINKING IN PRACTICE

Saturday: Putting it all Together 1 10 to 11:30	frog Design Case: Explore the entire process of design and development with a focus on meeting end users' needs.		frog Design Case	
MORNING BREAK: 11:30 TO 11:45				
Saturday: Putting it all Together 2 11:45 to 1:00	Final Pitches <i>Students prepare final pitch including final prototypes</i>	Finalize pitch		
LUNCH BREAK: 1:00 TO 2:00				
Saturday: Putting it all Together 3 2:00 to 3:30	Presentations by Teams and Client Feedback	Each team presents for five minutes		Submit presentation slides and photos of your "Inspiration Wall" on Canvas
AFTERNOON BREAK: 3:30 TO 3:45				
Saturday: Putting it all Together 4 3:45 to 4:45	Reflections on Design Thinking			Complete post-course reflection on Canvas Quizzes and course evaluations

Note: Your final assignment (detailed slide deck) is due by 9am on February 4th and your peer review (assigning points to team mates) is due before midnight on February 6th.

Instructor Bios

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 school's inaugural Vice Dean for Diversity, Equity and Inclusion from 2019 to 2021, Faculty Director of Online Initiatives from 2014 to 2017, Senior Vice Dean from 2011 to 2014, and as the inaugural Vice Dean for Research from 2010 to 2011. Dr. Johar served as co-editor of the premier academic journal on consumer behavior, the *Journal of Consumer Research* from July 2014 to December 2017 and co-edited a 2021 Special Issue of the *Journal of Marketing* on Better Marketing for a Better World. She is currently President of the Society for Consumer Psychology, and an associate editor of the *Journal of Consumer Psychology* and the *Journal of Marketing*. Dr. Johar's expertise lies in consumer psychology, focusing on consumer identity, beliefs, and persuasion as they relate to branding, advertising, and media. Her current research is focused on combating misinformation and false beliefs.