



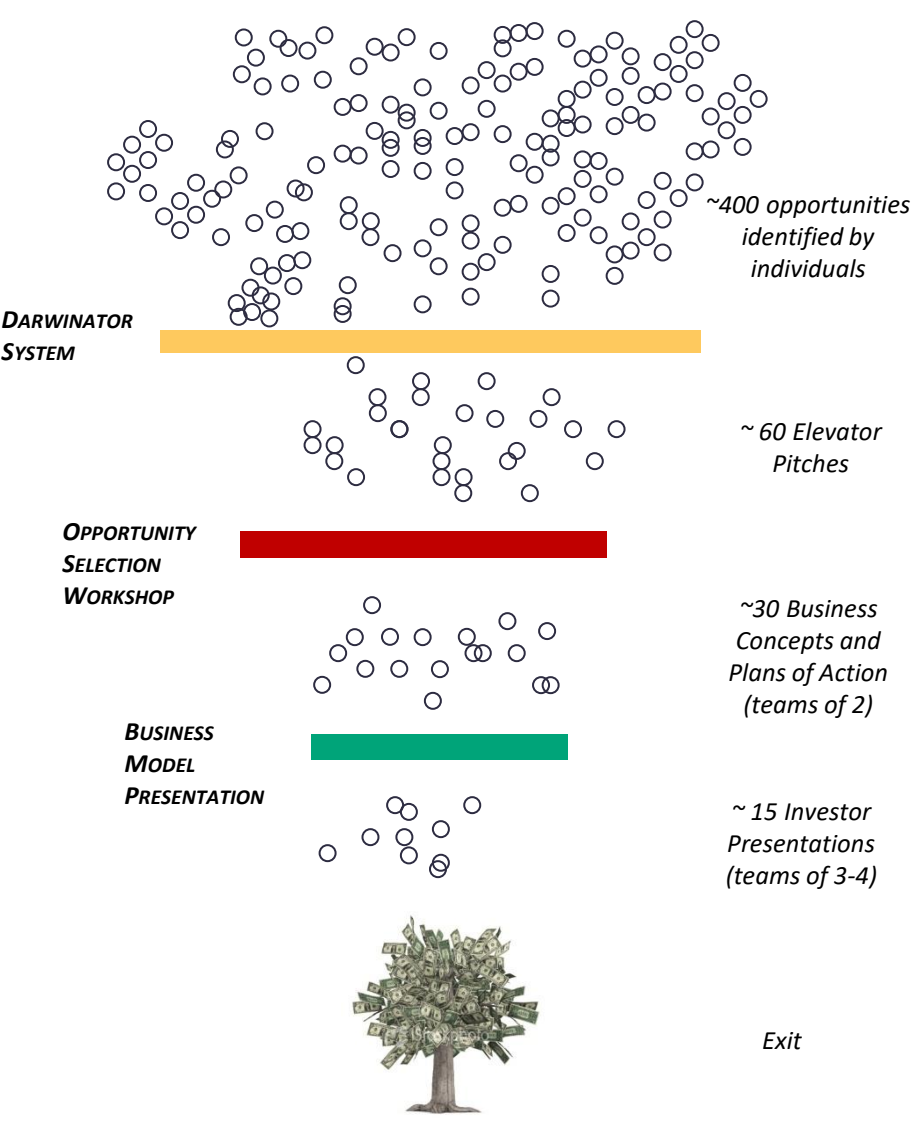
# OIDD614 Spring 2021: Brief Syllabus

Please refer to Canvas Modules for due dates and details

Prof. Serguei Netessine

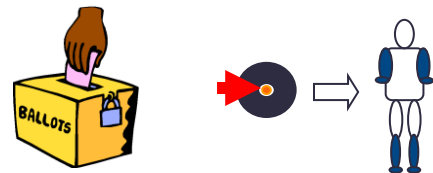
# OID614: INNOVATION THROUGH IDENTIFYING NEW BUSINESS MODELS

## IDEA TOURNAMENT



## LEARNINGS

- Idea Generation
- Idea Selection
- Idea Presentation
- Product-market fit
- Business Model Generation
- Business Model Refinement
- Risk Prioritization
- Risk Mitigation Strategies
- Experiment Design



## TASK PRIORITIZATION

## BUSINESS MODEL ANALYSIS

better place



# COURSE INFORMATION

**PROFESSOR SERGUEI NETESSINE;**

[CONNECT ON LINKEDIN](#)

[FOLLOW ON TWITTER](#)

MY INVESTMENTS ON [CRUNCHBASE](#) AND [ANGELLIST](#)

**ASSISTANT LECTURER: [TAYLOR CAPUTO](#)**

## COURSE STRUCTURE

OID614 is an experimental workshop that combines three novel approaches to Innovation/Entrepreneurship: *Business Model Innovation*, *Idea Tournaments* and *Lean Startup*. Business Model Innovation is a novel technique to identify entrepreneurial opportunities via innovating the business models in existing competitive industries. Idea Tournaments is a process that leverages the wisdom of the crowd for entrepreneurial opportunity generation, selection and refinement. Lean startup philosophy prioritizes tasks to limit entrepreneurial risk. Taken together, these approaches are in contrast to the conventional serendipitous, solitary process of entrepreneurship and instead provide a systematic risk-limiting pathway to realizing entrepreneurial outcomes.

As a class, we will follow these techniques and jointly start one or more new ventures. We will use scientific principles to generate about 1000 new business opportunities and through a variety of selection mechanisms, we will filter and develop these opportunities until two dozens or fewer outstanding business concepts remain. Students who have entrepreneurial passions will be encouraged to take these concepts forward with a team of classmates in Q4. The plan is illustrated on the preceding page.

Alumni of this course have gone on to develop multiple successful businesses and have realized significant financial gains from the ideas generated and developed during this course.

## WARNING

Alumni describe this course as a twisted combination of American Idol, The Apprentice and The Survivor. Outside of reality television, this is highly unusual. It is also totally and completely voluntary and optional class.

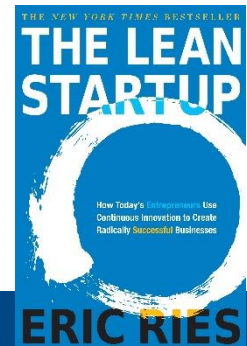
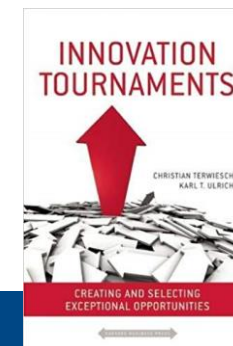
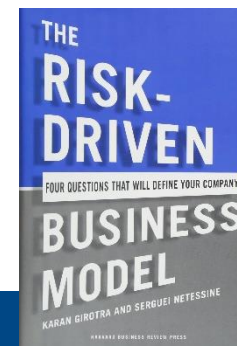
The techniques, tools and approaches followed in the course are all derived from recent and ongoing research. Like with any alpha product, the course structure and exercises *will* change during the course as our knowledge of what works in entrepreneurship and innovation develops. First session will give a good overview of the approach used.

## COURSE WORK

The context of searching and refining an entrepreneurial idea provides many rich problems with which to develop the tools and methods in the course. Thus, all work for this course is focused on real problems related to advancing the business concepts we will generate. Each exercise will help us refine and help take our business concept to the next stage. There is no "make work" or "make believe" exercises for this course. Of course, real work is often much more demanding than make-work, thus participants should budget for workload from the course.

## PANDEMIC AND HYBRID FORMAT

**Expect changes, expect technology glitches, expect uncertainty.**



# COURSE POLICIES

## COURSE ATTENDANCE, SECTIONS AND DEADLINES

This course has a very challenging logistical structure even without pandemic with many deadlines for idea submission/evaluation/pitching. Therefore:

- You must attend section for which you have been enrolled. Zoom links will be section-specific too.
- Always use your Penn Zoom/Penn Email accounts. This is the only way for me to identify you and assign you to the right virtual discussion groups.
- Attendance of the first session is mandatory for those on the wait list.
- Deadlines have no grace periods. Please consider possible technology failures and other force majeure and submit assignments in advance. You will lose points for the activities submitted late or not submitted at all, there is no partial credit. Please note all deadlines listed on canvas.
- Since all sessions will be recorded, we do not take attendance. However, as will be evident, some sessions are best experienced synchronously.

## RESPECTING INTELLECTUAL PROPERTY AND ETHICAL BEHAVIOR

The ideas generated and shared are assumed to be the property of those who submit them. [The originator may enter any mutually agreed contract with other team members.](#) Of course, basic ethical behavior is assumed.

These ideas should not be shared outside of the class without the permission of the originator.

No idea should be replicated within the class.

In the event of a breach of these rules, disciplinary action under the rules prescribed by Wharton student policies may be initiated.

I have not seen any breach of the above expectations; Nevertheless, given no judicial precedence with respect to a course like ours; I cannot guarantee that, if these expectations are breached, there will be totally water-tight legal protection.

## TEAM FORMATION

The course starts with individual work, we re-organize in teams of two midway during the class and then again in teams of four.

This process is designed to identify the most promising opportunities and to re-allocate our resources to these opportunities.

If your idea is not eliminated, you will be responsible for finding new members of your team. Put differently, you are now given the right to integrate more team members to work on your idea. If your idea is eliminated you will need to pair up with a surviving project/team.

**Learning Objective:** I understand that some of you may not be able to find your ideal team mates and partners. However, I think the ability to recruit talent after your idea has been granted more resources, and the ability to become a productive and useful part of a new startup team are all necessary skills for any aspiring entrepreneur. Further, new ventures tend to have very high turnover. So these situations are very common in practice. This team formation exercise will give a small flavor of these situations.

## GRADING

The primary gain from the course is learning a systematic, risk-limiting technique for entrepreneurship and grading has no place in a course like this.

Nevertheless, the administration requires to have a grading scheme. There will be no exam or final report and only basic effort put into the class simulations (and not results) will be evaluated by me, by TA and by your peers. My goal is to help each one of you identify real business opportunities. If you are taking this course, do not think about grades. On Canvas you will be able to see exact points assigned for each activity in class. Please check these points in advance.

# 1. THE FAIRY TALES OF ENTREPRENEURSHIP (1/21)

## REQUIRED READING:

1. Course Outline.
2. Complete pre-semester survey (by 1/20, 9AM).

## FUN READING:

1. Read as many posts as possible on my blog, [RenaissanceInnovator.com](http://RenaissanceInnovator.com)

## PROJECT ASSIGNMENT (COMPLETED INDIVIDUALLY BEFORE START OF THIS CLASS 9AM, 1/21):

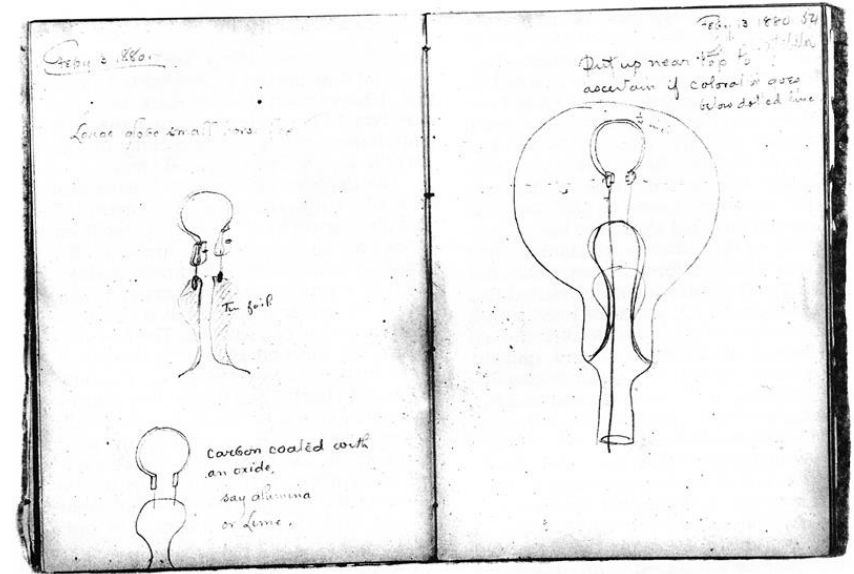
1. Read course policies.
2. Add blogs [RenaissanceInnovator.com](http://RenaissanceInnovator.com), [techcrunch.com](http://techcrunch.com), [springwise.com](http://springwise.com), [venturebeat.com](http://venturebeat.com) to your favorite RSS reader
3. Start thinking of some new business ideas. For purposes of the course and for your future entrepreneurial career, the most valuable businesses are those that:
  - Do not involve any novel technology or new product design.
  - Require relatively limited capital investment and a few weeks of effort to get to a validated business concept.
  - Serve markets that include 25-35 years-old professionals, and not some hard to access niche market. Our course methodology will mostly allow us to test such ideas



# 2. OPPORTUNITY GENERATION I: PRODUCTS AND SERVICES (1/26)

## FUN READING:

1. "[Where the best and worst ideas come from?](#)", MIT Sloan Management Review Interview. Contains synopsis of research on idea generation. Full paper available via [SSRN](#)
2. "[Good Ideas and How to Generate Them?](#)", Chapter 2 from book "Why Not?: How to use everyday Ingenuity to solve problems Big and Small" by Barry Nalebuff and Ian Ayres. [Buy book at Amazon](#).
3. "[Could anyone have thought up Hotmail?](#)" Book Excerpt from "The nudist on the late shift" by Po Bronson. [Buy book at Amazon](#).



Sketch from one of Thomas Edison's lab notebooks.

## PROJECT ASSIGNMENT:

1. Based on techniques learned in class today, generate **\*at least\*** ten opportunities for a new business. An opportunity is a novel match between a customer need and a solution to that need. The novelty arises from identifying latent needs, new solutions or superior ways of “delivering” the solution to the need. For purposes of the course and for your future entrepreneurial career, the most valuable businesses are those that:
  - Do not involve any novel technology or new product design.
  - Require relatively limited capital investment and a few weeks of effort to get to a validated business concept.
  - Serve markets that include 25-35 year-old professionals, and not some hard to access niche market.Our course methodology will mostly allow us to test such ideas
2. For each of the opportunities, generate a descriptive title and an exciting 50 word description. The description should identify the novel element– the need, solution or delivery mechanism and make a strong pitch for the business opportunity. Save titles and description. You will be required to enter them into a web-based system in a few days.
3. You should have received an email invitation to our web-based high throughput idea screening system, the Darwinator. Reply to the invitation and setup your account. Familiarize yourself with the interface.



# 3. OPPORTUNITY GENERATION II: BUSINESS MODELS (1/29)

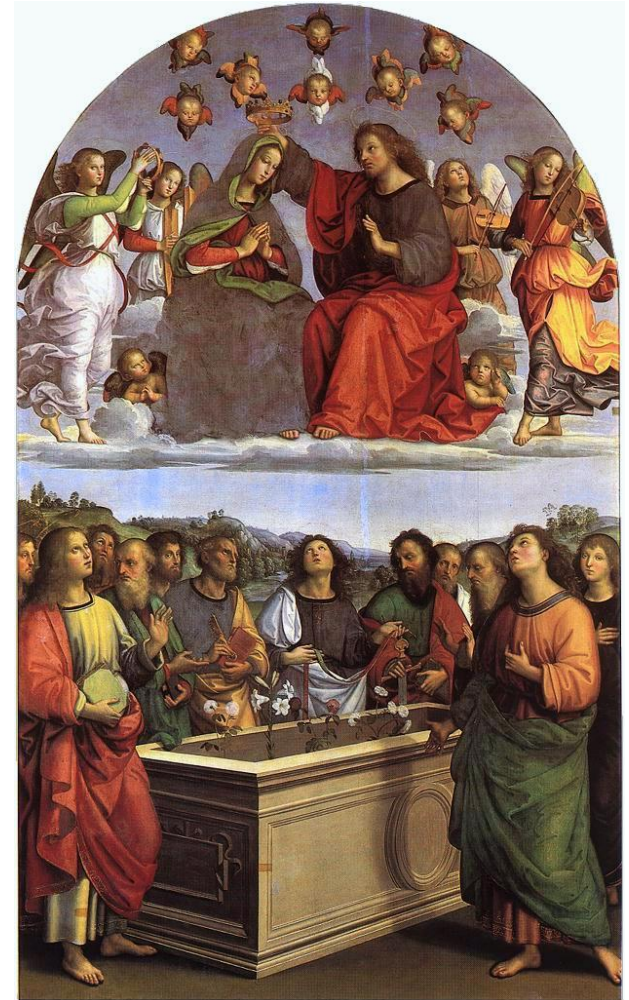
## FUN READING:

1. [“How to build risk into your business model”](#), Karan Girotra and Serguei Netessine, May 2011, *Harvard Business Review*.
2. [“Four paths to business model innovation”](#) Karan Girotra and Serguei Netessine, July-August 2014, *Harvard Business Review*.

## PROJECT ASSIGNMENT:

1. Based on techniques learned in class today, generate *\*at least\** 10 opportunities for a new business. For purposes of the course and for your future entrepreneurial career, the most valuable businesses are those that:
  - Do not involve any novel technology or new product design.
  - Require relatively limited capital investment and a few weeks of effort to get to a validated business concept.
  - Serve markets that include 25–35-year-old professionals, and not some hard to access niche market.Our course methodology will mostly allow us to test such ideas
2. For each of the opportunities, generate a descriptive title and an exciting 50 word description. The description should identify the novel element—the need, solution or delivery mechanism and make a strong pitch for the business opportunity. Save titles and description.

You have now generated over 20 opportunities, submit them through Canvas **by 1/30 midnight**. Now select the best 5 of these (more if you want) and submit them to the Darwinator **by 1/30 midnight**. Over the weekend, visit the Darwinator again and vote on *\*at least\** 100 different opportunities (or 20 times number of ideas submitted). You are encouraged to vote on as many opportunities as possible **by 2/1 midnight**.



The [Coronation of the Virgin](#) 1502-3, by Raphael

# 4. OPPORTUNITY EVALUATION (2/2)

## FUN READING:

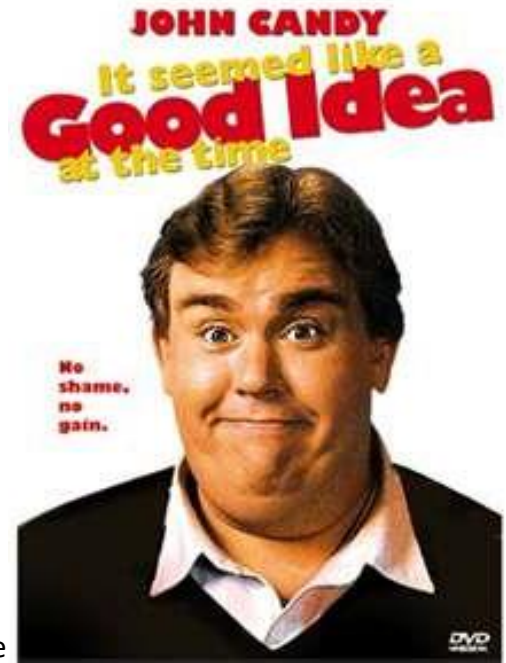
1. Kornish, L. and K. Ulrich. 2014. [The Importance of the Raw Idea in Innovation: Testing the Sow's Ear Hypothesis](#). Journal of Marketing Research.
2. [Surowiecki, J. 2005. The Wisdom of Crowds.](#)

## PROJECT ASSIGNMENT (COMPLETED INDIVIDUALLY):

1. Consider the Darwinator data for the opportunities you identified. You can access this data by logging back into the Darwinator. Based on that data, your own beliefs and passions, and any additional investigation you have done, select one opportunity to pitch to the group in class. THIS OPPORTUNITY MUST NOT BE ONE THAT SOME OTHER CLASSMATE HAS IDENTIFIED, UNLESS YOU OBTAIN PERMISSION FROM A CLASSMATE TO USE THEIRS. You are free to choose an entirely new opportunity that was not identified by any other classmate.
2. Prepare a 60-second pitch and a single slide for one opportunity. (The nice thing about a 60-second pitch is that you can practice it 30 times in just 30 minutes. Please do!). Use the presentation to convince your classmates that there is a legitimate, untapped, profitable business opportunity. Typically, at this stage you need not make a business case, but you just need to excite the class about the opportunity and your capabilities. A pitch could be direct advertisement of the product/service to the class. Record this presentation on video and host it on youtube or vimeo.

## STUFF TO HAND IN A DAY BEFORE CLASS (BY 6PM 2/3):

1. Submit a link to a video hosted on youtube or vimeo. In this video use a single slide (1 page graphic) describing your opportunity. Make sure your graphic is an attractive and appealing. It will be your main advertisement medium. The Appendix of this outline contains some resources to help you make good business presentations.

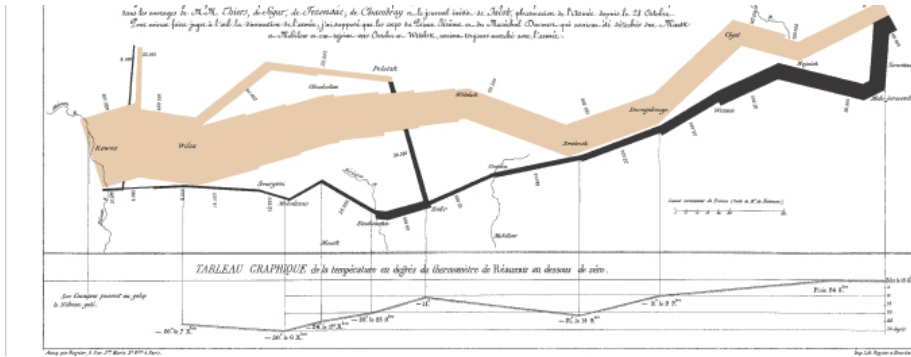




# 5. OPPORTUNITY PITCHES (2/4)

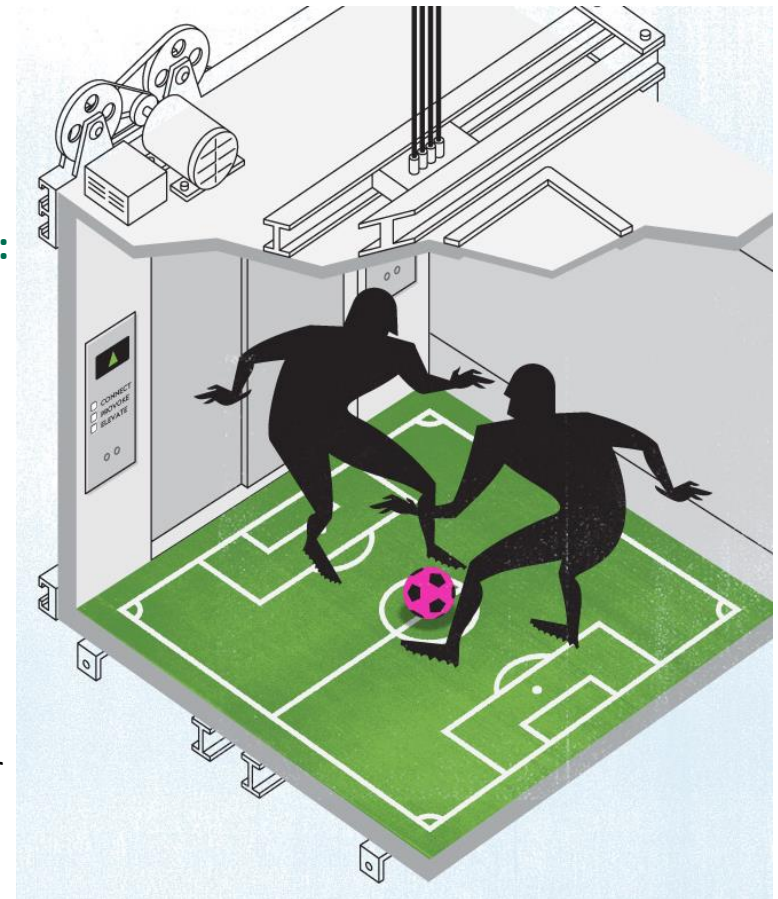
## FUN READING:

1. Wikipedia article on Edward R. Tufte: [http://en.wikipedia.org/wiki/Edward\\_Tufte](http://en.wikipedia.org/wiki/Edward_Tufte)



## PROJECT ASSIGNMENT (COMPLETED INDIVIDUALLY BY MIDNIGHT, 2/7):

1. You will receive Qualtrics survey with links to all videos in your section. Click on each link and watch the videos. Then evaluate all videos by responding to the survey. The 30 opportunity-entrepreneurs that receive the most votes will be selected for further development.
2. If you are one of these 30 entrepreneurs, you are *\*required\** to partner with another student registered for this section of the class. If your idea did not make it, you need to partner with someone whose idea makes it to the next round.
3. The working unit from now on is the team and not the idea, thus you and your team-mate are free to pursue any idea whatsoever for the next stage, even a completely new one.



# 6. CUSTOMER DISCOVERY (2/9)

## FUN READING:

1. Practical tips on [Customer Discovery Interviews](#).
2. Personas and the [Customer Discovery Handbook](#).
3. [How to run a user interview](#).
4. [Customer discovery in the time of COVID-19 virus](#).



### PERSONA HYPOTHESIS

Who is my customer?



### PROBLEM HYPOTHESIS

What matters to them?



### VALUE HYPOTHESIS

Will my proposition win?



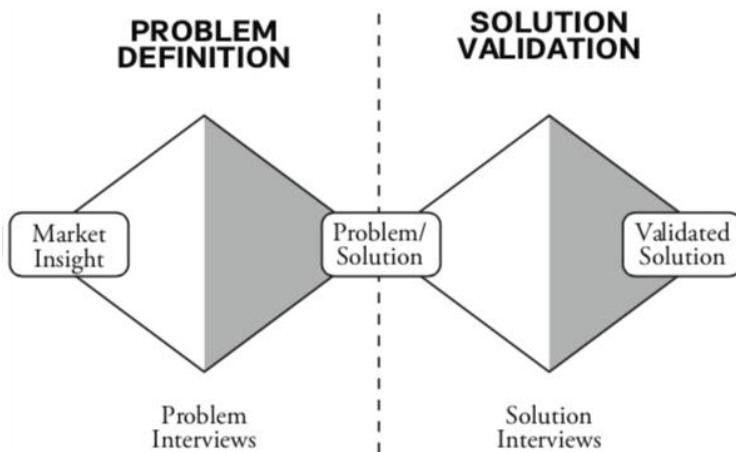
### USABILITY HYPOTHESIS

Is my interface usable?



### GROWTH HYPOTHESIS

How do I amplify my proposition?



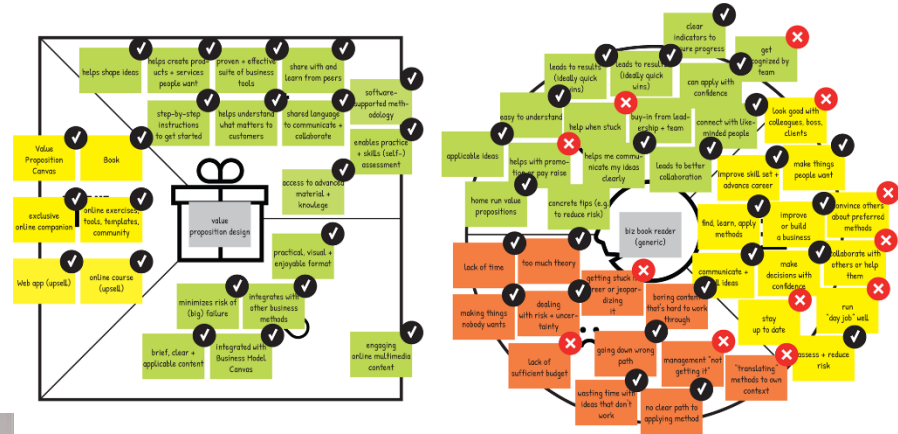
## STUFF TO HAND IN BY 9AM, 2/11

For your concept company, carefully conduct several customer discovery interviews using modified questionnaire. Fill out the questionnaire for a few customers and submit them through Canvas.

## 7. PRODUCT-MARKET FIT (2/11)

## FUN READING:

1. Osterwalder et al. Value Proposition Design.
2. Christiansen, C. Jobs to be done theory of innovation



## STUFF TO HAND IN BY 9 AM, 2/16

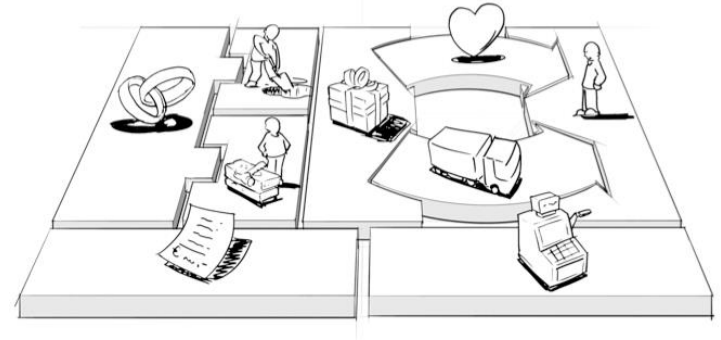
For your concept company, carefully analyze value proposition and map it out with your team. Refine product-market fit based on feedback from your peers. Submit Value Proposition in pdf format through Canvas.



# 8. WORKSHOP: CONCEPT PITCHES (2/16)

## STUFF TO HAND IN BY MONDAY 6PM, 2/15:

Prepare a 120-second pitch for your opportunity. You should enhance your original presentation by discussing value proposition and product-market fit that you expect. You can refer to customer discovery interviews to tell the story. Record this presentation on video and host it on youtube or vimeo.



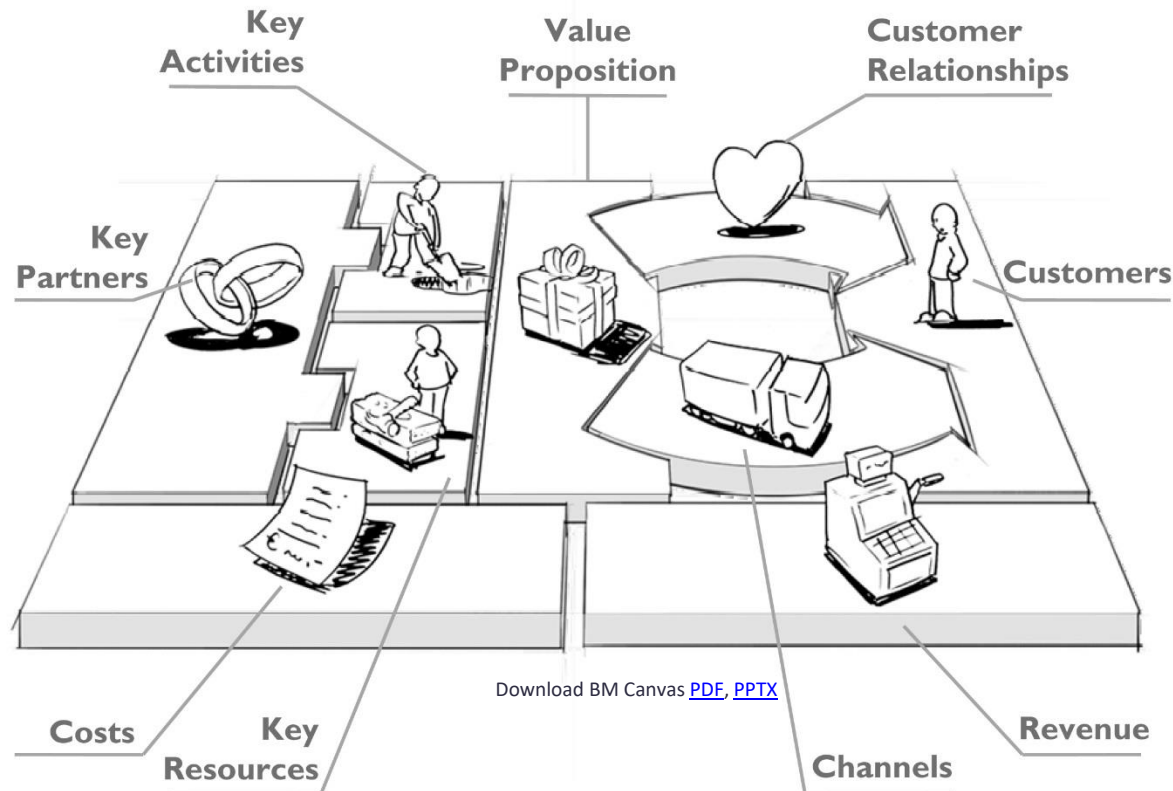
## PROJECT ASSIGNMENT (DUE BY MIDNIGHT, 2/16)

1. You will receive Qualtrics survey with links to all videos in your section. Click on each link and watch the videos. Then evaluate all videos by responding to the survey. The 15 opportunity-entrepreneurs that receive the most votes will be selected for further development.
2. If you are one of these 15 entrepreneurs, you are *\*required\** to partner with another student registered for this section of the class. You will need to find a partner right after the pitches.
3. If your idea did not make it, you need to partner with someone whose idea makes it to the next round. The working unit from now on is the team of four, so you and your team-mates are free to pursue any idea whatsoever for the next stage, even a completely new one.

# 9. PUTTING MEAT AROUND THE IDEA (2/18)

## FUN READING:

1. Osterwalder and Pigneur. [Business Model Generation](#).
2. [Unit Economics: A “Must Have” at All Stages of a Startup](#).
3. [Should startups care about profitability?](#)



## STUFF TO HAND IN BY 9AM, 2/23

Along with your partner develop your idea further by dreaming up a full business. Use the canvas to articulate your dreamed up business! Think about monetization strategy and KPIs that you would track, including unit economics and customer acquisition strategy. For your concept company, carefully analyze its business model and map it out with your team. Use feedback from other teams to improve your business model. Submit result through Canvas in PDF format.





# 10. VENTURE RISK MANAGEMENT (2/23)

## FUN READING:

1. Vanity Fair article on Segway. [14-segway-vanityfair.pdf](#)
2. [“Why the Lean Startup Changes Everything”](#), Steve Blank, May 2013, Harvard Business Review. Available only in course-pack for copyright reasons

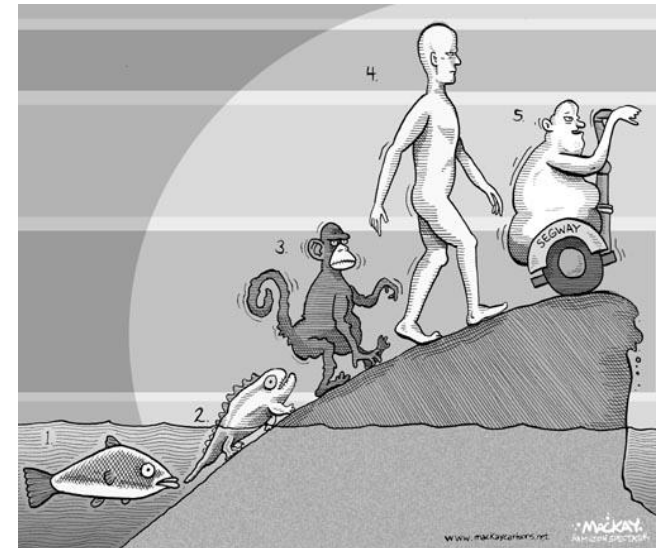
*Everybody has a plan  
until they are punched  
in the face.*

Mike Tyson



## STUFF TO HAND IN BY 9AM, 2/25

Using Business Model Canvas, prioritize risks in your business model and devise risk-mitigation strategies for top three risks. Ask your peers for feedback. Revise accordingly. For every risk-mitigating strategy fill out Experimental card with KPI and description of the experiment, submit through Canvas.



# 11. SCIENTIFIC EXPERIMENTATION (2/25)

## FUN READING:

1. Better Place: the Electric Vehicle Renaissance. INSEAD case study.
2. [The surprising power of online experiments.](#) HBR article.



## FINAL PROJECT WORK

Design a sequence of experiments with specific steps for conducting them. Prepare a 240 second presentation for your opportunity. You should enhance your original presentation by discussing business model, risks, and above all your experiments. Record this presentation on video and host it on youtube or vimeo.

## STUFF TO HAND IN BY 3/1, NOON.

A link to your video on youtube or vimeo. Your presentation should include proposed money usage, highlight your team's capabilities and explain value proposition/business model.



## 12. INVESTOR PITCHES (3/2)



### FUN READING:

1. [How to pitch your company.](#)
2. [Talking to investor](#)
3. [How to present to investors](#)

### PROJECT ASSIGNMENT (DUE BY 3/1 8PM):

1. You will receive Qualtrics survey with links to all videos in your section. Click on each link and watch the videos. Then evaluate all videos by responding to the survey.
2. Treat this presentation as an investment pitch: the goal of this presentation (as opposed to other pitches in this course) is to raise money from your classmates.
3. At the end of class today, we will use simulated investments market: each person will be given \$10,000 that you will be able to invest any way you like. After the class, you will find out which investment pitches collected the most capital.



<u>Class Sessions</u>	<u>Mode</u>	<u>Assignments due</u>	<u>Due Date</u>
Pre-Work	Virtual/Async	Pre-Semester Survey	Wed. 1/20 9am
Class 1: Thurs. 1/21 The Myths of Entrepreneurship	Hybrid	Read Course Policies & Grading	Thurs. 1/21 9am
Class 2: Tues. 1/26 Opportunity Generation I, Products & Services	Hybrid	Listen to a Podcast	Tues. 1/26 9am
Class 3: Thurs. 1/29: Opportunity Generation II, Business Models	Hybrid	Drawinator Submissions	Below
Individual Darwinator Submissions <b>NOTE IMPORTANT DEADLINES</b>	Virtual/Async	Opportunity Generation 20 ideas	Sat. 1/30 11:59pm
		Darwinator Submit 5 Ideas	Sat. 1/30 11:59pm
		Darwinator Rate 50 Ideas	Mon. 2/1 11:59pm
Class 4: Tues. 2/2: Opportunity Evaluation	Hybrid	Makerbot Case	Tues. 2/2 9am
Class 5: Thurs. 2/4: Opportunity Pitches <b>NOTE IMPORTANT DEADLINES</b>	Virtual/Async	Submit Opportunity Pitch Video	Wed. 2/3 6pm
		Rate Opportunity Pitches	Sun. 2/7 11:59pm
Class 6: Tues. 2/9 Customer Discovery & Unit Economics	Hybrid	Team of 2 Formation	Tues. 2/9 9am
Class 7: Thurs. 2/11 Product - Market Fit	Hybrid	Customer Discovery	Thurs. 2/11 9am
Class 8: Tues. 2/16: Concept Pitches <b>NOTE IMPORTANT DEADLINES</b>	Virtual/Async	Submit Concept Pitch Video	Mon. 2/15 6pm
		Value Proposition Canvas	Tues. 2/16 9am
		Rate Concept Pitches	Tues. 2/16 11:59pm
Class 9: Thurs. 2/18 Putting Meat Around the Idea	Virtual/Async	Team of 4 Formation	Thurs. 2/18 9am
Class 10: Tues. 2/23 Venture Risk Management	Hybrid	Business Model Canvas	Tues. 2/23 9am
Class 11: Thurs. 2/25 Scientific Experimentation	Hybrid	Risk Mitigation Strategies	Thurs. 2/25 9am
		Art & Innovation	Thurs. 2/25 9am
Class 12: Tues. 3/2: Investor Pitches <b>NOTE IMPORTANT DEADLINES</b>	Hybrid	Submit Investor Pitch Video	Mon. 3/1 12pm
		Rate Investor Pitches	Mon. 3/1 8pm
Post-Work	Virtual/Async	Skill Building Module	Thurs. 3/11 11:59pm