Innovation Process

Introduction & Overview

Pre-requisites for this course

Fundamentals of Entrepreneurship

Aims of this course

- Most problems in the world are defined as **"wicked problems"** - hard to define and pin down.
- This module will build upon **design thinking process** by exploring the use of creative techniques/approaches, iteration, experimentation and reflection to provide novel solutions that impacts people and makes business sense.
- This module will also provide the knowledge required by the **entrepreneurs/technopreneurs** i.e., from customer discovery, to value proposition, competitive analysis, business model innovation, product development and financial resources required.
- This module aims to equip students with the ability to develop a business model for their ideas/innovations.

Course Learning outcomes, CLOs

- **At the end of this course, YOU should be able to:**

  - Present a **design prototype** using innovation process. (A2, PLO10)
  - Propose a **business model** using relevant tools. (C3, PLO2)

Mapping of CLOs with MOEs Domain

- CLO 1: Knowledge
- CLO 2: Communication Skills
- CLO 3: Social skills, teamwork & responsibility

Mapping of the Course Learning Outcomes to the Programme Learning Outcomes, Teaching Methods and Assessment : Please select the learning outcome Domain(LOD) for each PLO in the cells above it. E.g PLO1- Knowledge and Understanding, PLO2- Cognitive Skills, PLO3-Practical Skills

Course Learning Outcomes (CLO)	Programme Learning Outcomes (PLO)												Teaching Methods	Assessment
	Knowledge and Understanding,	Cognitive Skills,	Practical Skills,	Interpersonal Skill,	Communication skill,	Digital Skills,	Numeracy Skills,	Leadership, autonomy and responsibility,	Personal Skills,	Entrepreneurial Skills,	Ethics and professionalism			
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12		
CLO 1				✓									Tutorial	Group Assignment (Idea Generation)
CLO 2										✓			Project	Individual Assignment (Product Description, Market Identification and Idea Evaluation)
CLO 3					✓								Case Study	Individual Presentation

MQF and MOE Domains

MOE LO Domains		MQF LO Domains
Knowledge		Knowledge
Practical Skills		Practical Skills
Critical Thinking and Scientific Skills		Social Skills and Responsibilities
Communication Skills		Values, Attitudes and Professionalism
Social Skills, Teamwork and Responsibility		Communication, leadership and Team Skills
Values, Ethics, Moral and Professionalism		Problem Solving and Scientific Skills
Information Management and lifelong Learning Skills		Information Management and Lifelong Learning Skills
Managerial and Entrepreneurial Skills		Managerial and Entrepreneurial Skills
Leadership Skills		

Assessment Methods

- Group Reflection Journal (vlog) 30%
- Group Assignment (project) 70%

Student Learning Time (SLT)

- **Course Credit Value: 2**

- **Total Learning Hours: 80**
  - Lecture: 14 hours
  - Tutorial: 14 hours
  - Self Learning: 28 hours
  - Independent Learning Time: 56 hours

Outcomes Based Education (OBE)

- OBE is education based on producing particular educational outcomes that:
  - Focus on what students can actually do after they are taught
  - Expect all learners / students to successfully achieve particular (sometimes minimum) level of knowledge and abilities.

So…What is OBE?

It’s

NOT

What we want to teach,

It’s

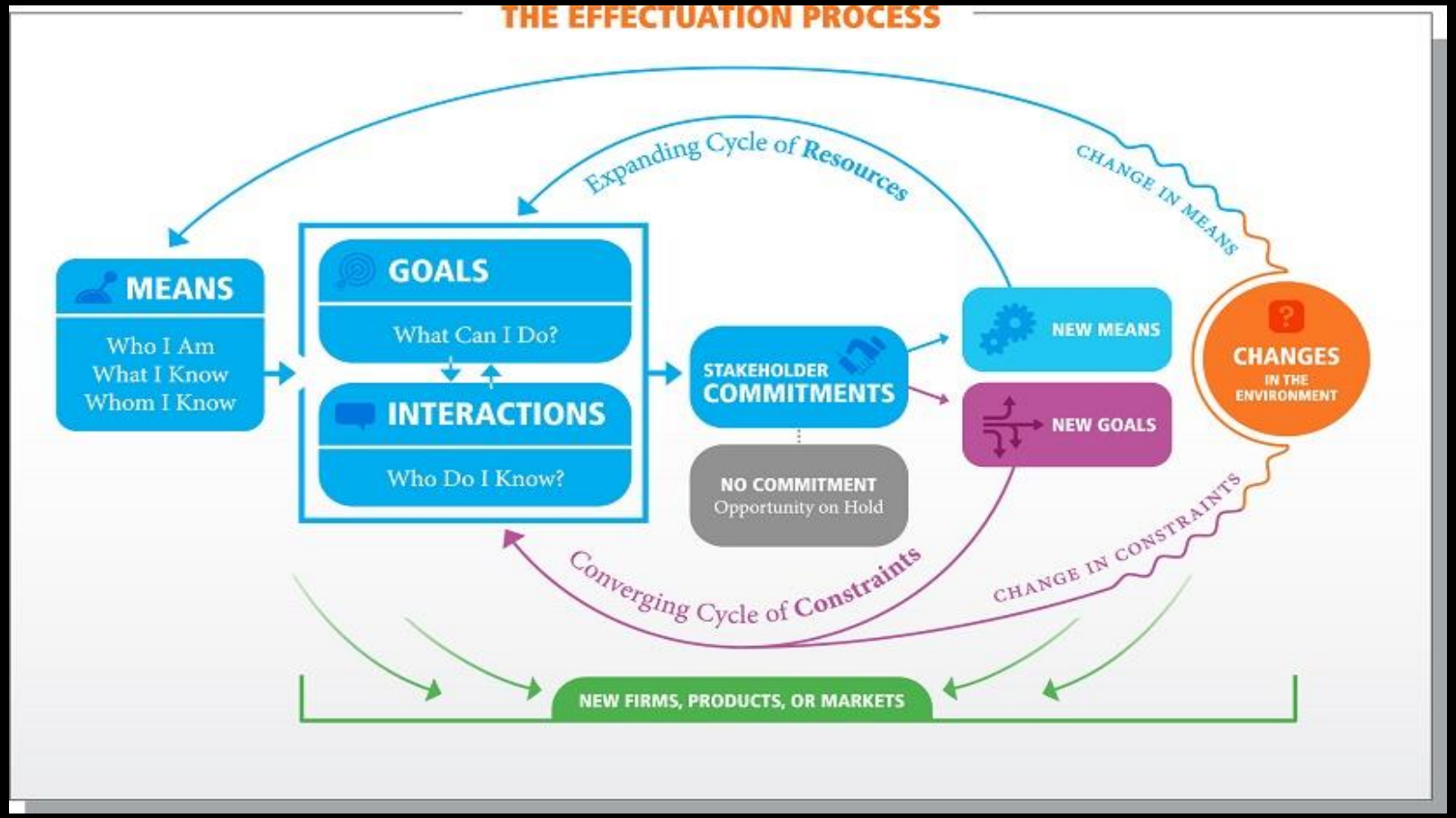
What You should learn

Course Content Outline

- Recap on effectuation & Design Thinking
- Brainstorming – Generate ideas integration IT elements in the solutions
- Prototyping – Types and testing
- Keep iterating
- Market segmentation
- Market access
- Product strategy
- Business model
- Financial strategy

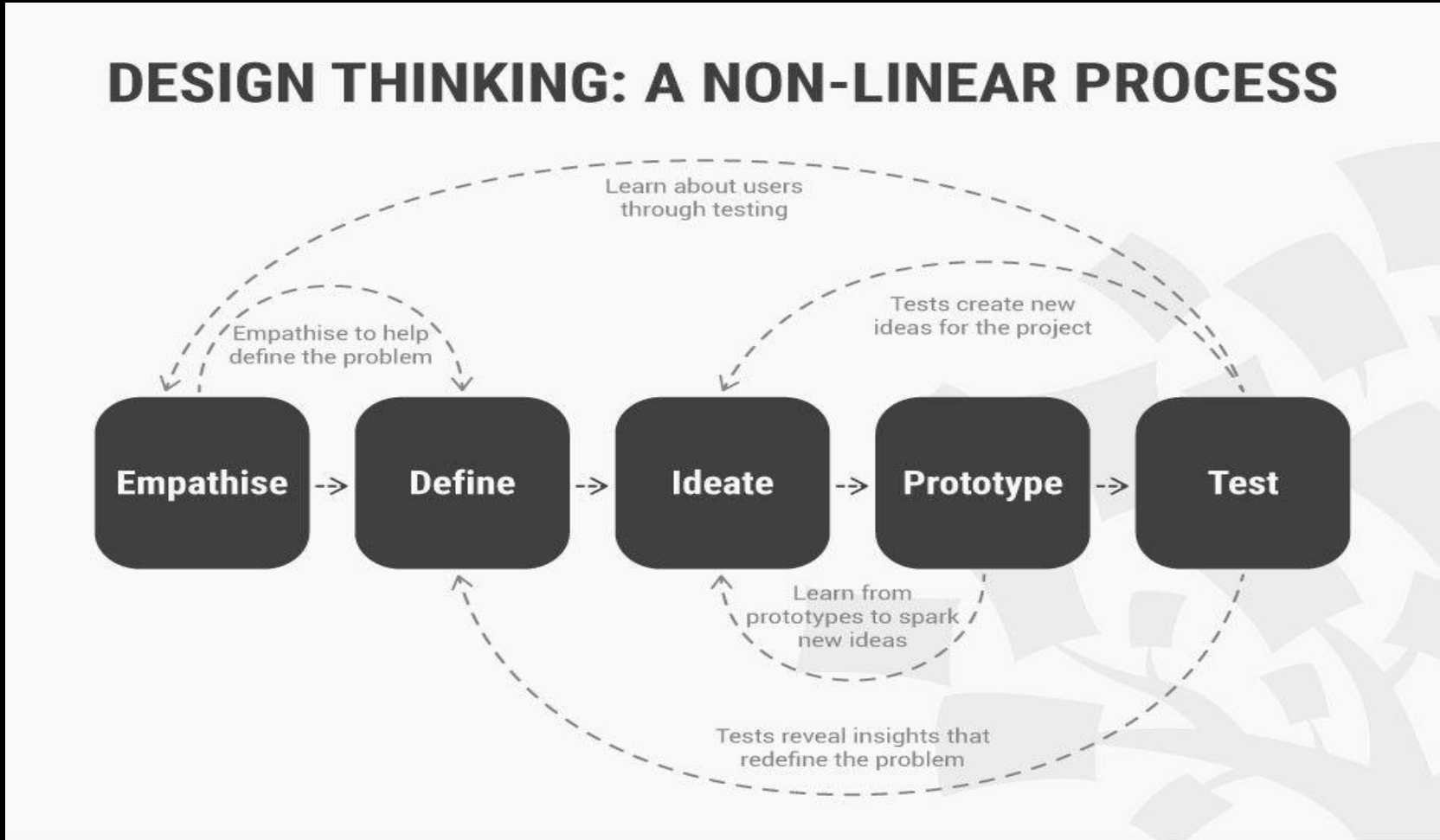
Recap - Effectuation & Design Thinking

- Effectuation – the nature of entrepreneurs, recognition of opportunities and successful exploitation of valuable opportunities.
- It provides useful design principles for transforming environment into future in the face of ambiguous goals.

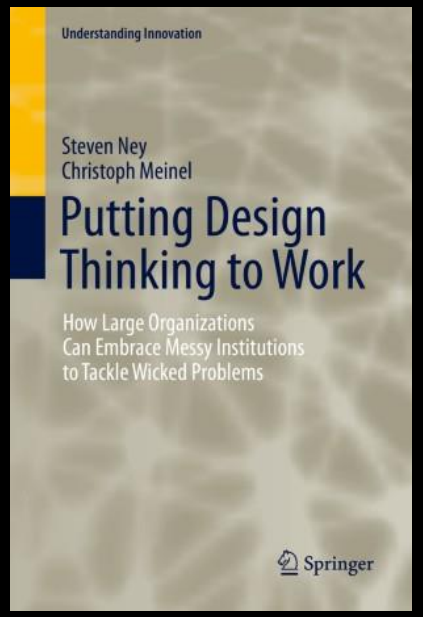


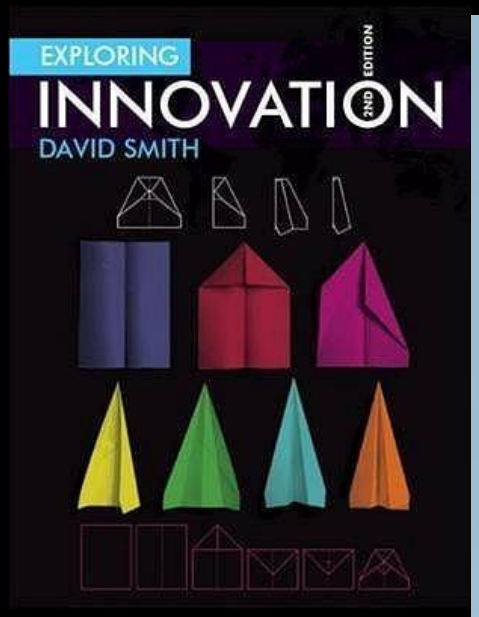
Design Thinking

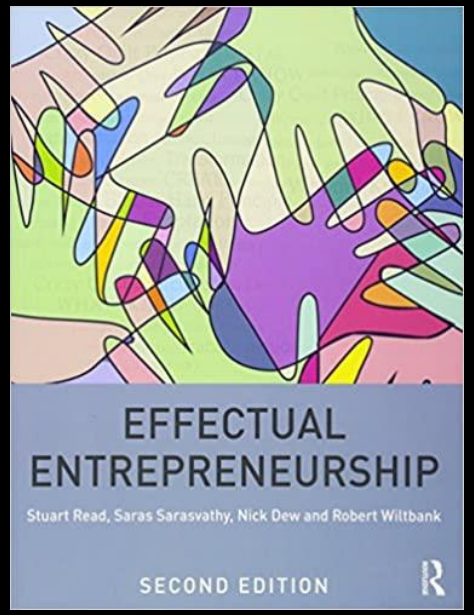
- An iterative process to understand the user, challenge assumption, and redefine problems in an attempt to identify alternative strategies and solutions, as well as work through ambiguity and uncertainty to innovate

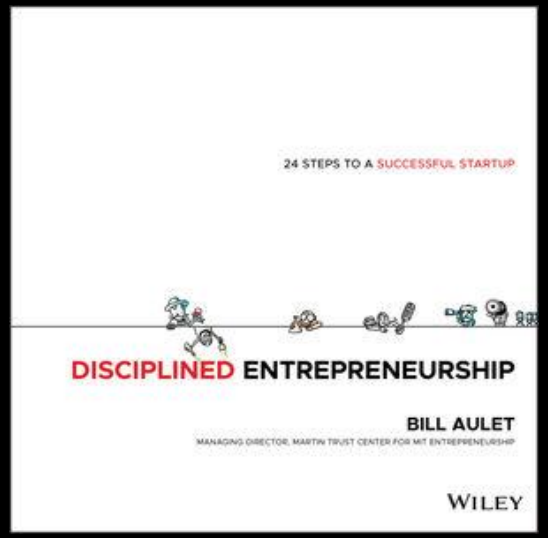


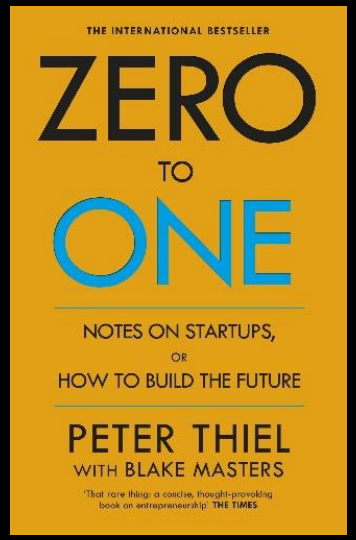
Reading list

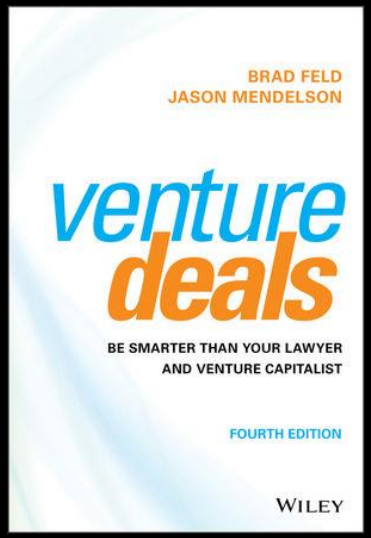


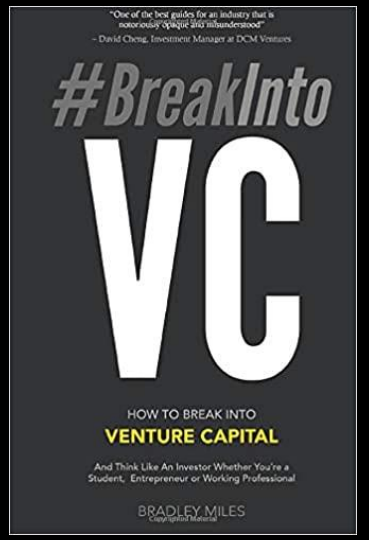






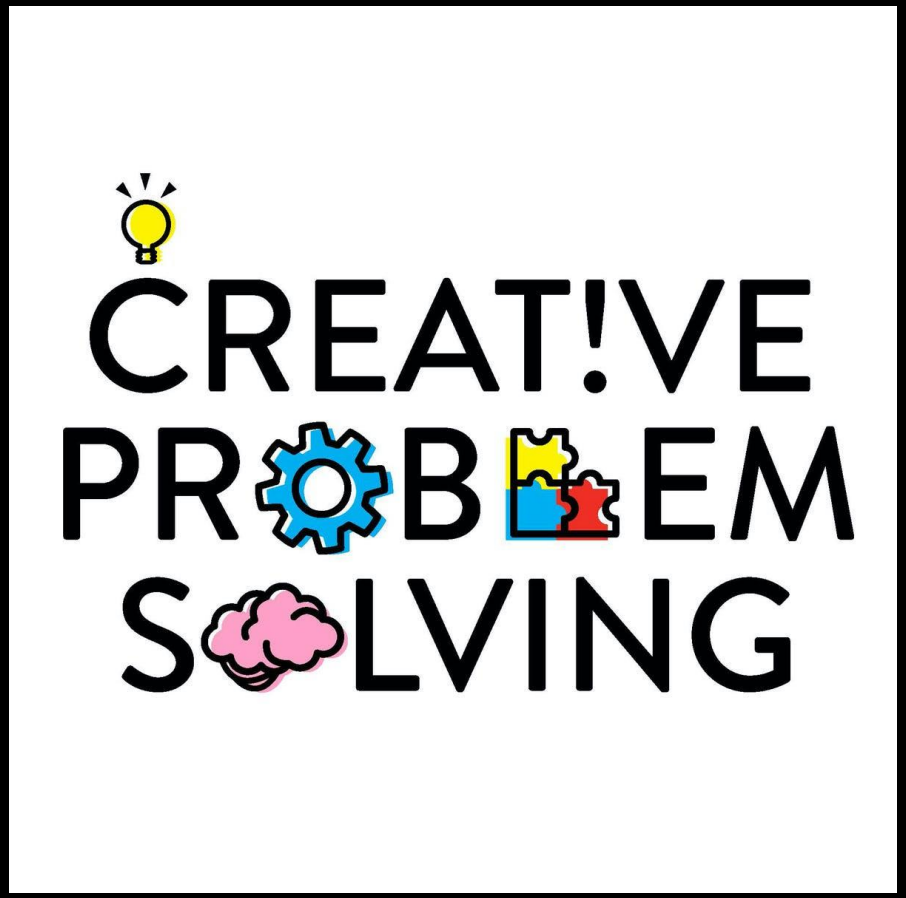






What we will cover next

Idea Generation for Creative Problem Solving



What are **Project Requirements?**

Project Grouping *(6-7 pax)*

- By 2050 we will need to reconcile the growing food demands of an ever-increasing global population with an expanding global middle class and rapidly shifting, more intense climate change. In this volatile environment, a future that includes a resilient food system needs four building blocks:
  - Efficient agricultural production that takes advantage of innovative technologies and practices
  - Tailored trade and investment approaches
  - Well-functioning domestic markets
  - Strategic reserves of food and water

- Get more recommendations on creating a well-fed planet into the future in "From liability to opportunity: How to build food security and nourish growth":

  - Source to be referred: http://www.mckinsey.com/insights/Food_Agriculture/From_liability_to_opportunity_How_to_build_food_security_and_nourish_growth

Tasks - Group Activities

(Begin to blog it once the online forum is ready)

- Food mapping for each group – *infographic*
- Mapping in relation to geographical location – *within infographic*
- What are the 3 favourite food and why?
- What are the 3 popular food during cultural festivals?
- What are the 3 food that dislike and why?