

Course MGT543 Global Innovation Module 1, 2023-2024

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Office Hours: 15:30-17:20 on Fridays

Lectures: Tuesdays and Fridays, 13:30-15:20

Venue: PHBS Building, Room xxx

Course Website: cms.phbs.pku.edu.cn

1. Course Description

This course discusses how to make innovation happen in an organization.

Innovation is an umbrella term that refers to new things that organizations offer (to their customers or constituents) or new ways of carrying out the activities of the organization. Innovation requires *creativity* (producing the ideas that enable people to break out of old ways of doing things and find new ones) but also processes (the systematic activities that enable people to turn ideas into real artefacts or processes) --- as Thomas Edison famously remarked, "innovation is 1% inspiration and 99% transpiration".

The course will have two parts: 6 sessions will guide you through a (simplified and abbreviated) *innovation journey*, where you will produce an idea, test it with potential customers, produce a (non functional, partial) prototype and present it in a "dragon's den". This what entrepreneurs do. As these session require preparation (homeworks), they will be spread out somewhat (interspersed with the organizational context sessions) to give enough time. In the session table below, these 6 sessions are marked in yellow.

The other 12 sessions will show you how an innovation is embedded in a larger organizational context where multiple innovation projects must co-exist (in an environment of scarce resources), and where knowledge and capacity is distributed among multiple constituents (in the organization or even outside). This complex organizational

environment is required to be able to produce many innovations of different types over time.

Prerequisites: None.

2. Learning Outcomes

2.1. Learning Goals

Five learning goals will be assessed.

- 1. Effective communication
- 2. Understanding types of innovation
- 3. Understanding the roles of creativity and processes
- 4. A global perspective of innovation for different markets with spread out inputs
- 5. Critical thinking and problem solving

2.2 Assessment/Grading Details

Grading with a total score of 100 points has three parts.

(1) A term essay (35 points). Identify an innovation in the educational offering of PHBS to students with a management major or minor. Describe the innovation, its value to whom (hopefully you!), draw a user journey (i.e. the student or user experience), and speculate which parts of the PHBS organization might have to contribute what activity in making this innovation a reality. 2,000 words maximum.

(2) A group assignment (35 points). Presentation of your prototype and business case in a "dragon's den".

(3) Attendance and participation (30 points). Punctual and full attendance is required. The only exception is sick leave with official hospital proof. In addition, I will make notes after each class about active participation, and contributing to the class will attract extra points.

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information on plagiarism, please refer to PHBS Student Handbook.

3. Topics, Teaching and Assessment Schedule

Reading materials will be available for downloading on the course web site.

Classes will take place from 13:30-15:20 unless otherwise stated (Oct 25 and Nov 1).

	Title	Topic & Pedagogy	Readings
1 Sept 5	What is innovation	Definitions, structure of innovation, course design Case: Hudsucker film	Loch, C. H., Kavadias, S. Managing new product development: An evolutionary framework. Chapter 1 in: Loch, C. H., Kavadias, S. (editors): Handbook of New Product Development and Management, Elsevier 2007, 1-26. [Figure 1.6 will be used to summarize the class content.]
2 Sept 8	Idea creation and Creativity	The creative process: diversity of inputs and openness improve quality. Case: Exercise	Brown, T. 2008. Design Thinking. Harvard Business Review, June, 1-10.
3 Sept 12	Innovation helps or even makes strategy	Innovation does not only "provide a payoff (ROI)" but changes the way the organization competes Case: Zara and Marks&Spencer	Markides, C. C. 1999. A dynamic view of strategy. Sloan Management Review, Spring, 55-63. Kim, W. C., Mauborgne, K. 1997: Value Innovation. Harvard Business Review, January-February, 103- 112.
4 Sept 15	Idea Selection	Group work to compare, combine, improve and select ideas, final choice 1-2 ideas. Concepting Workshop	Homework for this session: Every individual comes to class with 2-5 ideas for a consumer product that you would like to be developed. Reading: Ulrich, K., Eppinger, S. D. 1995, The art of eliciting customer needs. Excerpt from Chapter 3 in : Product Design and Development, 41-42.
5 Sept 19	Innovation Portfolios I	The innovation portfolio is the collection of projects with budgets that the organization undertakes to become more competitive.	 Homework for this session: Read your job descriptions Readings: Gluck, F. W., & Foster, R. N. (1975). Managing technological change: A box of cigars for Brad. Harvard Business Review, 53(5), 139-150. Cooper, R. G., Sommer, A. F. 2022. Value based strategy-reward-win portfolio management for

		Case: An enterprise exercise	new products. <i>IEEE Engineering Management</i> <i>Review,</i> forthcoming DOI 10.1109/EMR.2023.3260319
6 Sept 22	Innovation Portfolios II	How to link the innovation portfolio with strategy: projects	Nagji, B., & Tuff, G. (2012). Managing your innovation portfolio. <i>Harvard Business Review</i> , 90(5), 66–74.
		need to address strategic change needs	Si, H., C. H. Loch, and S. Kavadias. 2023. A New Approach to Strategic Innovation. <i>Harvard Business Review</i> September/October, 120-129.
		Case: Ali Baba and Tiktok (Blog)	
7	Product Architecture	Modularity helps mass customization,	Ulrich, K. 1995. The role of product architecture in the manufacturing firm. <i>Research Policy</i> 24(3), 419-
Sept 26		platforms, and speed	440.
			Clark, K. B., Baldwin, C. 1997. Managing in an age of modularity. <i>Harvard Business Review</i> September-October.
			Loch, C. H. J. Mihm, A. Huchzermeier. Concurrent Engineering and Design Oscillations in Complex Engineering Projects. <i>Concurrent Engineering</i> <i>Research and Applications</i> 11(3), 2003, 187 – 200
8	Consumer	Story boards convert	Homework for this session: Perform a survey of at
U	Insighting	fact finding/ research	least 10 potential customers. (1) Identify their
Sept 27	(story boards)	into consumer needs	needs when using this product and (2) get their
		into a graphical	feedback to a customer oriented description of
		representation into the	feedback.
		consumer experience	
		when using the product.	
		Outcome: customer	for design thinking? <i>DEVSOLIAD</i>
		experience description.	
9	Prototyping	A prototype is a limited	Thomke, S. Learning by experimentation:
		model; you get	Prototyping and testing. Chapter 15 in: Loch, C.
Oct 10		feedback on aspects of	Product Development and Management, Elsevier
		performance; fidelity	2007, 401-420.
			Ulrich, K., Eppinger, S. 1995. Effective prototyping.
			Excerpts from Chapters 5 and 10 in: Product
			Design and Development, McGrawHill, 78-81, 218-
10	Innovation	Innovation is carried out	Cooper, R. G. (1983). A Process Model for
	processes	in projects, but many	Industrial New Product Development. IEEE
Oct 13		projects again represent	Iransactions on Engineering Management, 2(1), 2-
		processes. The projects	
		all types of innovation	Loch, C. H., Jiang, M., Si, H. 2023. How Multiple
			Project Processes Provide Flexibility for the Project
		Lecture and discussion	Manager. Conditionally accepted in <i>Project</i> Management Journal.
11	Business Case	The business case as the	Homework for this session: produce a prototype,
		argument and the story	with a definition of question to be tested (so the

Oct 24		about the success	prototype can be focused), test it with 10 customers and report the results
		product.	customers and report the results.
			Reading: Business Plan Lecture Notes
12 Oct 25	Radical innovation	Radical innovations require more iterative approaches than incremental innovation.	Sommer, S. C., C. H. Loch, and J. Dong. Managing Complexity and Unforeseeable Uncertainty in Startup Companies: an Empirical Study. <i>Organization Science</i> 20 (1), 2009, 118-133.
15:30- 17:20		Case: Circored	
13 Oct 27	Change innovation	Some innovations are not technically "new" but require users, or stakeholders, to agree. How to convince them?	Grall, M., Charue-Duboc, F., Chiambaretto, P. 2023. Project portfolio and strategic mandates coevolution of an innovation lab. The case of the Digital Factory of a french airline. Conditionally accepted, <i>Project Management Journal</i> 2023.
		Case: Air France (in reading)	
14 Oct 31	Dragon's Den: project presentations	6 minute presentation of prototype, lessons and Biz Case. Story creativity/ compelling	Homework for this session: Creation of a 1-page business case, and of a 6 minute presentation of product idea, user description and journey, and business case.
		power, quality of the presentation and evidence are judged.	No reading
15 Nov 1	Innovation and Learning	This session discusses an often overlooked mode of innovation, continuous	Loch, C. H., F. J. Sting, N. Bauer, H. Mauermann. How BMW Is Defusing the Demographic Time Bomb. <i>Harvard Business Review</i> , March 2010, 99- 104.
15:30- 17:20		improvement, and shows how innovation can produce learning.	Sting, F., C. H. Loch, D. Stempfhuber. Accelerating Projects by Encouraging Help. <i>MIT Sloan</i> <i>Management Review</i> 2015, Spring, 1-9.
			Backup Reading:
		Case: Jumeirah IT	Loch, C. H., Sommer, S., Jiang, M. 2023. Managing Unforeseeable Uncertainty Through Learning. Chapter 10 in: Davies, A., Lenfle, S., Loch, C. H., Midler, C. (Editors): <i>Handbook on Innovation and</i> <i>Project Management</i> , Edward Elgar, 201-218.
16	Organizational Structures	Projects happen in an organizational structure,	Allen, T. 2000. Organizing for Product Development. MIT Working Paper 4229-01.
Nov 3		which can help or hinder execution and collaboration across projects. Case: L'Oreal	Hertenstein, P. Williamson, P. J. 2018. The role of suppliers in enabling differing innovation strategies of competing multinationals from emerging and advanced economies: German and Chinese automotive firms compared.
17	Finance of	Innovation is only	Homework for this session: Analyse the P&L and
Nov 7	Innovation	partially captured in a company's P&L and	balance sheet of LSAB over the last 3 years. What happened to R&D, what happened to share prices?

		balance sheet. How is it taken into account?	Reading: Eli Amir, E., Lev, B. Sougiannis, T. 2003. Do financial analysts get intangibles? European Accounting Review,12:4, 635-659.
			Backup Reading:Gentry, R. J., Shen, W. 2013. The Impacts Of Performance Relative To Analyst Forecasts And Analyst Coverage On Firm R&D Intensity. <i>Strategic Management Journal</i> 34: 121– 130.
		Case: LSAB	
18	Performance	In contrast to VCs,	Loch, C.H., S. Kavadias, B. C. Yang. 2021. Making
	Measures and	multi-activity organ-	Strategy Execution Work With Cascading Trees.
Nov 10	Summary	izations get little value from standard R&D	Management and Business Review 1(1), Winter, 25-40.
		"return" measures "measure what you are trying to achieve".	Pennetier, C., Girotra, K., Mihm, J. 2019. R&D Spending: Dynamic or Persistent?. <i>Manufacturing</i> & Service Operations Management 21(3):636-657.
		The session will end	
		with a summary.	