

Innovation management (EM023M20)

Program	PGE
Module / ECTS / Path / Specialisation	Module :Innovation management : 5 ECTS. <ul style="list-style-type: none">• Visitants
Discipline	Management
Year	2019
Semester	B
Open for visitors	yes (5 ECTS)
Available places	45

Coordinator

Mingfeng TANG

Lecturers

Instructor	Population	Email
Mingfeng TANG		

Course format

Working language :	English
Volume of contact hours :	27 h
Workload to be expected by the student :	108 h

Course track

Track : Attendance

"Attendance" track :

Attendance at lecture / tutorial classes and intermediate / final exams is mandatory. As evaluation of in class work constitutes an essential element of grading, any absence will be penalized and is taken into account for grading purposes (see academic rules and regulations).

"Autonomous" track :

Attendance at intermediate / final exams is mandatory, but students are free to attend lecture / tutorial classes.

For all Master programs and all other programs realized in the form of dual internships (apprentissage), attendance at lecture / tutorial classes and intermediate / final exams is entirely mandatory. Therefore, only the "Attendance" track can be selected.

Contribution of the course to the educational objectives of the programme

How the course contributes to the programme :

Description

We know that innovation influences the competitiveness of an organization. Those organizations that are consistently successful at managing innovation outperform their peers in terms of growth and financial performance. However, managing innovation is not easy or automatic. Successful innovation management is much more than managing a single aspect, such as creativity, research and development or product development. This course uses an integrated approach, which deals with the interactions between changes in strategy, technology, business model and organization. It will provide students with 1) strong evidence-based approach to the understanding and practice of managing innovation, drawing upon real world research projects; 2) real illustrations and case examples of innovation in action, in manufacturing and services, private and public sectors. The course is also designed to train students to have innovation spirit in mind, help them understand innovation process and how to manage innovation. After learning the course, the student will be able to recognize the frontier theories about innovation management, develop analytical skills on firm innovation management, demonstrate practical knowledge about how to create an innovative organization and how to develop an innovation strategy in an organization.

Educational organisation

In class

Lectures

Seminars

Presentations

In groups

Case studies/texts

Oral presentations

Interaction

Discussions / debates

Assignments

Specific projects / case studies

Readings

Learning outcomes

Upon completion of this course, students should be able to :

- **Identify** the core content of innovation management
- **Explain** the process of innovation management
- **Use** the learned theories to discover innovation phenomenon
- **Demonstrate** a capability of analyzing firm innovation management issues
- **Generate** new ideas to build up an innovative organization and innovation networking
- **Argue** an innovation strategy to build up the dynamic capabilities of firms

Outline

Session 1 Innovation - What it is and why it matters Description A general introduction about innovation: What is innovation; a process view of innovation; exploring different aspects of innovation; why innovation matters? Students will learn the core meaning of innovation and the analytical framework of innovation management.

Session 2 Building the innovative organization and developing an innovation strategy Description The field of organizational behavior is widely discussed. And in formulating and executing their innovation strategies, organizations cannot ignore the national systems of innovation and international value chains in which they are embedded. Students will learn how to build appropriate and innovative organization structure and what key factors are to build such an organization. Students will be also taught that how to develop an innovation strategy/a business model to build up or remain the dynamic capabilities of firms.

Session 3 Source of innovation and innovation networks Description

There are many ways in which the innovation process can be triggered and there is a need for multiple approaches to the problem of searching for them. Students will learn skills to recognize the rich variety of sources and configure search mechanisms which balance the “exploit” and “explore” domains.

Session 4 Innovation and Entrepreneurship Description

This session will explain the relation between innovation and entrepreneurship and then focus on technology-based business incubators which assist entrepreneurs in growing their start-ups. Every student is required to collect information about to create a start-up in their home countries and discuss in class what challenges entrepreneurs face when they create their own business. The students will understand the importance of entrepreneurship in promoting innovation and learn practical skills how to create start-ups in specific countries.

Session 5 China's Innovation Strategy Description

This session will show how China's innovation strategy evolves over time (from Chairman Zedong Mao's period to President Jinping Xi's period) and what characterizes China's current innovation strategy for building an innovation-driven society. The students will be guided to discuss whether China's current innovation strategy will be an appropriate one for China to build an innovation-driven society by 2020 and become the world's leading science power by 2050.

Prerequisites

Key concepts to understand :

Not necessary. However, If students have learned a course related to management, that would be better to understand this course.

Teaching material

Documents in all formats

- Newspaper articles
- Case studies

Software

- Office Pack (Word, Excel, PowerPoint, Access)

Additional electronic platforms

- Slideshows
- Videos
- Other

Recommended reading

Major works :

Read the case study “Tencent: The WeChat red envelope initiative”, prepare the following questions for in-class presentation and discussion:

- What special characteristics of WeChat Red Envelope made it attractive to users?
- What are the key factors contributing to the success of WeChat Red Envelope?
- What are the major challenges to the growth of WeChat Red Envelope?
- How can WeChat capitalize on the Red Envelope to further grow its business?

2. Read the case study “Technology uncorked: Crowdsourcing for ideas”, prepare the following questions for in-class presentation and discussion:

- Was Vashist right to put the solar tracker project on hold?
- Analyze TU’s business model, with an emphasis on the current revenue streams and monetization points.
- Analyze the value proposition offered by TU. Why should Indian engineering college students choose to participate in the ideation workshops?
- Evaluate the strengths and weaknesses of TU’s current innovation efforts, using the concept of the innovation value chain.
- What are Vashist’s options? Evaluate the advantages and disadvantages of scaling up the current business model in relation to moving the business online.
- If Vashist moves the business model online, what challenges should she be ready to face?

3. Read the case “Patient room of the future: user-oriented innovation” and prepare the following questions for in-class presentation and discussion:

- Why was the PProF consortium started?
- Why is PProF organized into a large and small consortium, and how are they managed overall? Did Van Hecke understand his role from the start?
- What are “brainwave” sessions and how important are they to the creative process at PProF?
- How is PProF instrumental to the commercial success of its small consortium members? Can this change in the future?
- Why have PProF rooms not achieved large-scale adoption and how could this change?
- What are the next steps PProF should undertake to continue this growth? What resources should its members tap into?

4. Read the case “A pathway for Scotiabank’s innovation: Leveraging Fintech partnerships ” and prepare the following questions for in-class presentation and discussion:

- What challenges is Scotiabank facing in the blockchain sector? What are the implications for the bank’s blockchain partnership strategy?
- What are the success factors in the Scotiabank-Kabbage partnership?
- Under what conditions is the same model applicable? When will the Scotiabank-Kabbage model not work?
- Under what circumstance should Scotiabank seek Fintech partnerships?
- Identify a sector (e.g., international payments, blockchain, lending, or wealth management) and a geographic market where a Fintech partnership would create value for Scotiabank, and explain why.
- Based on your answer to question 4, what recommendation would you make to Scotiabank’s executives for a three-year plan, choice of partner, reason for the partnership, and suggested procedure (i.e., what partnership model to follow)?
- What challenges is Scotiabank facing in the blockchain sector? What are the implications for the bank’s blockchain partnership strategy?

5. Read the case “Munchiez food truck: entrepreneurship, strategic decision making, and sustainability” and prepare the following questions for in-class presentation and discussion:

- Conduct a SWOT analysis of Munchiez that includes Porter’s Five Forces.
- At what stage of the organizational life cycle is Munchiez? What are some typical issues that arise during this stage?
- What strategies should Munchiez use going forward?
- What structural recommendations do you have for Munchiez’s management to enhance the transfer of knowledge from semester to semester?

6. Read the case “Chery automobile: Chinese firms catching up” and prepare the following questions for in-class presentation and discussion:

- What are the top auto exporters in the Chinese automobile industry private companies instead of state companies?
- What strategies are more appropriate for Chinese private firms (and those from other emerging markets)? How should they develop their absorptive capacity and technological capability?
- How do you understand corporate catch-up? Define catching up based on your understanding of the Chery

case. What factors do you think play important roles in a firm's catch-up process?

- Why is open innovation important for firms trying to catch up? Has Chery applied open innovation in its catch-up process?

- How do you interpret the impact of an entrepreneur on a firm trying to catch up? In Chery's case, how did the CEO, Tongyao Yin, accelerate Chery's catch-up development? To what extent do you think his experience (before joining Chery) has an influence on his judgement and decision making in choosing and applying catch-up strategies?

- Should firms trying to catch up be entrepreneurial? Based on Chery's case, what are the characteristics of an entrepreneurial firm trying to catch up?

Further reading :

1. Ekaterina Albats, Irina Fiegenbaum, James A. Cunningham (2018). A micro level study of university industry collaborative lifecycle key performance indicators, *Journal of Technology Transfer*, Vol. 43, No. 2, p. 389-431.
2. Raphael Amit and Christoph Zott (2001). Value creation in E-business. *Strategic Management Journal* 22, pp. 493-520.
3. Carlos Aguirre-Bastos and Matthias K. Weber (2018). Foresight for shaping national innovation systems in developing economies, *Technological Forecasting and Social Change*, Vol. 128, p. 186-196.
4. Henry Chesbrough (2011). *Managing Innovation for the Future of Innovation*, Ivey Business Journal.
5. João J.M. Ferreira, Cristina I. Fernandes, Helena Alves, Mário L. Raposo (2015). Drivers of innovation strategies: Testing the Tidd and Bessant model, *Journal of Business Research*, Vol.68, pp.1395-1403.
6. Morten T. Hansen and Julian Birkinshaw (2017). The Innovation Value Chain. *Harvard Business Review* 85, no. 6, pp.121-134.
7. Kelsi G. Hobbs, Albert N. Link, John T. Scott (2017). Science and technology parks: an annotated and analytical literature review, *Journal of Technology Transfer*, Vol. 42, No. 4, p.957-976.
8. Michael G. Jacobides and Stephan Billinger (2006). Designing the boundaries of the firm: From 'Make, buy, or ally' to the dynamic benefits of vertical architecture. *Organization Science*, Vol. 17, No. 2, pp. 249-261.
9. Fernando A., Lopez and Antonio, Paez (2017). Spatial clustering of high-tech manufacturing and knowledge-intensive service firms in the Greater Toronto Area, *Canadian Geographer-Graphe Canadien*, Vol. 61, No. 2, p.240-252.
10. Bengt-Åke Lundvall (2016). National innovation systems and globalization. Book chapter in the book titled as *The Learning Economy and the Economics of Hope*. Anthem Press.
11. McAdam Maura and Debackere Koenraad (2017). Beyond 'triple helix' toward 'quadruple helix' models in regional innovation systems: implications for theory and practice, *R&D Management*, Volume 48, Issue 1, First published: 27 December 2017.
12. Jörg Musiolik, Jochen Markard, Marko Hekkert (2012). Networks and Network Resources in Technological Innovation System: Towards A Conceptual Framework for System Building. *Technological Forecasting & Social Change*, vol. 79, pp.1032-1048.
13. Kaja Primc and Tomaz Cater (2016). The influence of organizational life cycle on environmental proactivity and competitive advantage, *Organization & Environment* 29, no.2, pp.212-230.
14. David Romero and Arturo Molina (2011), "Collaborative networked organizations and customer communities: Value co-creation and co-innovation in the networking Era", *Production Planning & Control* 22, no. 5-6, pp.447-472.
15. Mingfeng Tang and Caroline Hussler (2011). Betting on Indigenous Innovation or relying on FDI: The Chinese Strategy for Catching-up, *Technology in Society*, vol.33, issues1-2, pp.23-35.
16. Vareska van de Vrande, Jeroen P.J. de Jong, Wim Vanhaverbeke, Maurice de Rochemontd (2009). Open innovation in SMEs: Trends, motives and management challenges, *Technovation*, vol.29, pp.423-437.
17. George Westerman and F.Warren McFarlan, Marco Iansiti (2006). Organization design and effectiveness over the innovation life cycle. *Organization Science*. Vol. 17, No.2, pp.230-238.
18. Chih-Wen Wua and Kun-Huang Huarng (2015). Global entrepreneurship and innovation in management. *Journal of Business Research*, vol. 68, pp.743-747.

Research works by EM Strasbourg :

Assessment

Intermediate evaluation / continuous assessment 1 :

oral / individual / English / weighting : 10%

additional information : Class attendance is expected and highly recommended. It accounts for 10% of the total grade. Students who have two absences without any reasons will lose the full attendance credit. 2% of total

points will be deducted for each absence.

Intermediate evaluation / continuous assessment 2 :

oral / individual / English / weighting : 20%

additional information : In-class discussion is based on either lectures or distributed reading materials. Students are required to read assigned case studies/articles for class discussion. The reading materials sometimes including questions about the cases will be sent to students' email addresses by the instructor. The students must read them carefully before the course starts. When reading the assigned cases or articles, students are required to think about the discussion questions attached by the end of the reading materials or given by the instructor and prepare for in-class discussion. Or when the instructor asks questions linking to the lecture, students are encouraged to answer the questions. The purpose of this discussion is to encourage students to explore their knowledge about innovation management in class and take active actions to apply their learned knowledge. If a student can answer the questions correctly four times, he or she can get the full 20% of the total grade. It is an individual grade.

Intermediate evaluation / continuous assessment 3 :

written + oral / in group / English / weighting : 30%

additional information : Students are required to make an oral presentation in class after reading the distributed case studies. Students must work in group (3≤members in each group ≤5) for the oral presentations. The size of group can be changed according to the number of students registered for this course. Every single student must participate in the presentation. The presentation slides in PPT format should be submitted to the instructor's mailbox (tang@swufe.edu.cn) by each group one day after their presentation. There will be a group grade of content and presentation skills. Each presentation should between 10 and 15 minutes, extra 3 -5 minutes for questions and answers. The presentation beyond this time frame will cause to cut off the grade.

Final assessment : last session

written / individual / English / weighting : 40%

additional information : A final exam is necessary. It will be held at the last day of the course. Books, lecture notes and computers will be not allowed in the exam.

Grounds for expulsion from classes

Such behaviors as...

arriving late, leaving early or unannounced leaving of the classroom during class time

disruptive eating or drinking in class

using smartphones and laptops for non class-related purposes

reading non class-related documents

chatting on non class-related issues

showing disrespect towards lecturers

... may lead to expulsion from classes.