

BSM932 MANAGEMENT OF INNOVATION

Academic Year 2012/13

Number of Aston Credits: 15

Number of ECTS Credits: 7.5

Staff Member Responsible for the Module:

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Pre-requisites for the module:

None

Mode of Attendance:

On Campus

Module Objectives and Learning Outcomes:

'Innovation is Job One.' (Business Week, April 12, 2004)

'The modern world is swept by change. New technologies emerge constantly, new markets are opening up. There are new competitors but also great new opportunities. ... Our success depends on how well we exploit our most valuable assets: our knowledge, skills, and creativity. These are the key to designing high-value goods and services and advanced business practices. They are at the heart of a modern, knowledge driven economy.' (Tony Blair, the forward for Department of Trade Industry report Our Competitive Future: Building the Knowledge Driven Economy 1998)

Innovation is seen as central to the activities of all organisations, whether manufacturing or service firms, creating competitive advantages. The module emphasises the two contradictory natures of innovation process – continuity with existing elements and radical change – and looks into the sources of creativity and the processes of translating creative

ideas into commercial products at the organisational level. The module aims to develop an ability of students to critically examine theories and models and form their own views and solutions through case studies. Upon successful completion of this module, students are expected to:

1. Gain an understanding of the processes of innovation and industry dynamics;
2. Understand what innovation-based strategies are available and how they work;
3. Understand the sources of creativity, the external and internal factors influencing innovation, and the tools and practices designed to encourage innovation;
4. Understand the similarities and differences between manufacturing and service firms in innovation management;
5. Appreciate the diversity of views and form each student's own views and solutions through application of theories, models, and concepts to concrete situations

Module Content:

Week 1: Introduction: Key Themes and Concepts

- > What do we actually mean by the term 'innovation'?
- > How is innovation measured?
- > How do sectors vary in their ways innovation is made?
- > How is the process of innovation characterised and how has the view of the process changed in the last 50 years?

Week 2: Models of Technological Progress and Diffusion

- > Can we identify patterns in the evolution of a technology or technological sector?
- > Why are incumbent firms in mature industries often unable to cope with discontinuous changes and move into new sectors?

Week 3: Creating Competitive Advantage through Innovation

- > How can first-to-market entrants maximise the advantage?
- > How can firms decide the direction of innovation activity?

Week 4: Promoting Creativity in Organisations: Structure, Culture and Communication

- > Why is 'boundary-spanning' important to innovation?
- > What organisational structures and cultures promote creativity?



- Week 5: Collaboration, Cooperation, and Networks**
- > How can strategic alliances be best managed?
 - > What are effective procedures to generate, screen, and learn inputs from users?
- Week 6: Guiding Innovation from Concept to Market**
- > What are best practices for organisational processes of knowledge creation and learning?
- Week 7: Innovation in Services**
- > How do innovations in service sectors differ from innovations in manufacturing?
- Week 8: The Impact of Location**
- > How a firm's innovative capacity is influenced by the characteristics of the nation and region in which it resides?
- Week 9: Revision**
- Week 10: Examination**

Corporate Connections:

The series of case studies examined during the student presentations provide an excellent opportunity for students to explore the links between theory and practice in this field. A range of cases will be examined to explore different aspects of innovation including issues of organisational culture, structure and networking behaviour. In addition, students are encouraged to participate openly in the course to reflect on theory in the context of their own organisations or organisations in which they have recently worked. This provides a rich and varied source of knowledge for us to build upon.

International Dimensions:

Materials discussed in the lectures and questions for the group presentations cover firms in a wide range of geographical areas across the globe including the US, the UK, and other advanced economies where innovation efforts of firms are currently concentrated and widely studied.

Contribution of Research:

As shown in the reading list above, the module is underpinned by up-to-date research as well as studies widely regarded as classics in innovation studies, an interdisciplinary area



of academic research consisting of strategic management, economics, and economic geography.

Ethics, Responsibility & Sustainability:

In this module, students will look into drivers of corporate innovation, strategic shifts, and new markets, learn skills to help identify market opportunities, and understand the tools, concepts, and frameworks used by companies currently pursuing long-term sustained success.

Method of Teaching:

Each of the eight weekly sessions incorporates a formal lecture, two to four group presentations (from week 5 to week 8), and a plenary discussion. The group presentations are seen as an important mechanism for reinforcing the links between theory and practice in the management of innovation. The final lecture (week 9) of the module will be employed as a revision session for the exam (week 10).

Method of Assessment and Feedback:

The assessment is divided into the following two components as:

- 1) A formal group presentation on an allocated case (30% of final mark).
- > Group presentations take place each week, between weeks 5 and 8 (inclusive). Syndicate groups will be a maximum of 6 people where possible.
 - > Each student enrolled in the module will be assigned to a syndicate group by the postgraduate programme office located in MB222.
 - > In the second week, syndicate groups have the opportunity to select a week in which they make a presentation (and by a draw if there is greater demand for a particular week).
 - > To promote equity in the preparation time for the presentations, the case questions will be issued 2 weeks prior to the group presentation (e.g. a case is given in Week 4 for a Week 6 presentation).
 - > More detailed guidelines for the presentation will be issued, however, as an initial guide the presentations should last no longer than 15 minutes.
 - > Each presentation will be followed by a Q/A session where a presenting group has a chance to respond to questions from other students and the module leader.
 - > The aim of the Q/A session is to facilitate exchange of ideas between a presenting group and the audience (i.e., other students). Accordingly, a presenting group will not

be penalised in its assessment even if the group cannot answer questions posed by the audience. The assessment criterion used in the Q/A session is how well a presenting group reinforces and develops the key messages of the presentation through responses to questions from the audience.

This group presentation will test individual students' ability to apply theories, models, and concepts covered in the module to better understand a case, their competence in creative and analytical thinking, and their communication and team-working skills.

A feedback sheet of group presentation will be given to each group before Week 10.

2) A 2-hour examination (70% of final mark)

This will test individual students' understanding of the course materials and their competence in critical reasoning, problem solving and decision making.

Generic feedback on the performance of a written exam will be posted on to Blackboard after marks are confirmed at an exam board meeting. Individual feedback is available on request via email to those who are referred in an examination.

Learning Hours:

Contact hours	27
Class preparation	24
Directed learning/additional reading	32
Group work	24
Private study/exam preparation	40
Examination	3
Total	150

The following essential and recommended readings are subject to change. Students should not therefore purchase textbooks prior to commencing their course. If students wish to undertake background reading before starting the course, many of the chapters/readings are available in electronic form via on-line library catalogues and other resources.

Essential Reading

Week 1: Introduction: Key Themes and Concepts

Pre-session Reading:

McGregor, J. (2009) 'There is no more normal', *BusinessWeek*, No. 4124, March 23 & 30, 30–34.

Post-session Reading:

'Introduction' (pp. xvii–xxviii) from Henry Chesbrough (2003) *Open Innovation: The New Imperative for Creating and Profiting from Technology*, Boston, MA: Harvard Business School Press.

Further Reading if you would like to gain more in-depth understanding of the knowledge economy:

Chapter 2 'The origin and reality of the knowledge-based economy' (pp. 11–32) from Robert Huggins and Hiro Izushi (2007) *Competing for Knowledge: Creating, Connecting, and Growing*, London: Routledge.

Week 2: Models of Technological Progress and Diffusion

Post-session Reading:

Chapter 4 'Innovation and industrial evolution' (pp. 79–91) from James M. Utterback (1994) *Mastering the Dynamics of Innovation: How Companies Can Seize Opportunities in the Face of Technological Change*, Boston, MA: Harvard Business School Press.

Joseph L. Bower and Clayton M. Christensen (1995) 'Disruptive technologies: catching the wave', *Harvard Business Review*, 73(1), 43–53.

Week 3: Creating Competitive Advantage through Innovation

Post-session Reading:

Marvin B. Lieberman and David B. Montgomery (1988) 'First-mover advantages', *Strategic Management Journal*, 9, 41–58.

Further Reading if you would like to familiarise yourself with key concepts of strategic management:

Chapter 6 'Defining the organization's strategic direction' (pp. 113–125) from Melissa A. Schilling (2010) *Strategic Management of Technological Innovation*, 3rd edition. New York, NY: McGraw-Hill.

Further Reading if you would like to gain basic understanding of the blue ocean strategy:

Chapter 1 'Creating blue oceans' (pp. 3–22) from W. Chan Kim and Renée Mauborgne (2005) *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*, Boston, MA: Harvard Business School Press.

Week 4: Promoting Creativity in Organisations: Structure, Culture and Communication

Post-session Reading:

Chapter 9 'Innovation is a team sport' (pp. 221–252) from A. G. Lafley and Ram Charan (2008) *The Game Changer*, New York, NY: Crown Business.

Further Reading if you would like to gain understanding of how to manage social networks:

Rob Cross, Nitin Nohria and Andrew Parker (2002) 'Six myths about informal networks – and how to overcome them', *MIT Sloan Management Review*, 43(3), 67–75.

Week 5: Collaboration, Cooperation, and Networks

Post-session Readings:

Chapter 7 'Strategic alliances and networks' (pp. 218–240) from Paul Trott (2008) *Innovation Management and New Product Development*, 4th edition. Harlow: Financial Times Prentice Hall.

Stefan Thomke and Eric von Hippel (2002) 'Customers as innovators: a new way to create value', *Harvard Business Review*, 80(4), 74–81.

Further Reading if you would like to familiarise yourself with key techniques of market research:

Dennis Pitta and Frank Franzak (1997) 'Boundary spanning product development in consumer markets: learning organization insights', *Journal of Product and Brand Management*, 6(4), 235–249.

Week 6: Guiding Innovation from Concept to Market

Post-session Reading:

Chapter 3 'Theory of organizational knowledge creation' (pp. 62–83) from Ikujiro Nonaka and Hirotake Takeuchi (1995) *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*, New York, NY: Oxford University Press.

Further Reading if you would like to gain more in-depth understanding of learning organisation:

David A. Garvin (1993) 'Building a learning organization', *Harvard Business Review*, 71(4), 78–91.

Week 7: Innovation in Services

Post-session Reading:

Chapter 3 'Contrasting services with manufacturing' (pp. 72–93) from Keith Goffin and Rick Mitchell (2005) *Innovation Management: Strategy and Implementation Using the Pentathlon Framework*, Basingstoke: Palgrave.



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Week 8: The Impact of Location

Post-session Reading:

Michael E. Porter (1998) 'Clusters and the new economics of competition', *Harvard Business Review*, 76(6): 77–90.

Further Reading if you would like to gain more in-depth understanding of the topic:

'Introduction' (pp. 1–9) from AnnaLee Saxenian (1994) *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*, Boston, MA: Harvard University Press.

Further Reading (Non-Mandatory):

For those who seek for background reading in a single textbook, the following book is recommended:

Melissa A. Schilling (2010) *Strategic Management of Technological Innovation*, 3rd ed., New York: McGraw-Hill.

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For further information on any of the opportunities that Aston Business School offers, please contact:

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