

BSM903 INNOVATION AND ENTREPRENEURSHIP

Number of Aston Credits: 10

Number of ECTS Credits: 5

Staff Member Responsible for the Module:

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Pre-requisites for the Module:

None

Mode of Attendance

On and Off 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)

This module is about how knowledge – both new and old – leads to enhanced wealth creation through innovation and entrepreneurship. Innovation is understood here as the process through which knowledge and creativity lead to product or service change, generally with some technological component. Entrepreneurship is the process through which knowledge and creativity shape new ways of delivering these products and services, either through a new organisation (i.e. start-up) or through the re-vitalisation or reformation of an existing enterprise. In both, the fundamental process is the creative exploitation of knowledge.

The module aims to give students an appreciation of the diversity of views on the key processes — innovation and entrepreneurship — through which knowledge is translated into wealth. An inter-disciplinary approach is adopted drawing on managerial, strategic and technological literatures and making extensive use of case-study and statistical evidence from the research literature.

Skills development focuses on extending students' capabilities in evidence-based strategy formulation. Summaries of recent research materials will be provided – the evidence base – along with a review of the strategic implications. Sessions will then focus on developing students' ability to apply these general strategic lessons to specific business situations.

Knowledge and Understanding

- Give students a general understanding of the processes of innovation and entrepreneurship.
- Through case studies to highlight the more practical aspects of both processes

Cognitive and Analytical Skills

- Provide theoretical and empirical reference points for students' participating in or encountering innovation and entrepreneurship processes
- Enable students to evaluate the extent of innovation and enterprise in a given venture
- Analyse and draw relevant inferences from empirical case studies of innovation and entrepreneurship.

Key (transferable) Skills

- Express core concepts and interpret case studies concisely and coherently.
- Identify innovation and entrepreneurial processes and their potential.









Effectively evaluate and use the evidence base as part of a strategy formulation process.

Subject Specific Skills

- Analyse the key success factors in a specific innovation or entrepreneurship process.
- Demonstrate a good grasp of both key concepts and a capacity for clear analysis under pressure.

Module Content:

Week 1 Innovation and Entrepreneurship

Innovation can be viewed as the process through which knowledge is assembled, codified and exploited as new products and processes. It is also increasingly seen as a network activity rather than something firms do alone. Conceptual perspectives on the innovation process are reviewed.

Week 2 Technological Change and Diffusion

Small firms are often seen as a key player in the market for really new products. In view of ample resources possessed by large corporations, this comes as a surprise. We will look at a range of factors that hinder the creation of a market for really new products by large-scale corporations.

Week 3 Creating Competitive Advantage through Innovation

A key outcome of investing in innovation is the creation of really new products. However, history shows that pioneering firms do not always turn out to be successful players. We consider a set of competitive advantages and tools that can be deployed by pioneering firms.

Week 4 Drivers of Entrepreneurial Venture Formation and Growth

How important are knowledge and innovation in the entrepreneurial venture? Do other factors play a more important role in shaping venture success?

Week 5 Financing the Entrepreneurial Venture

Finance is a key constraint on any new business, particularly one where the capital requirements are high and the venture risky. What types of finance are appropriate to an entrepreneurial venture? Is there a high-tech pecking order? How important is venture capital?









Week 6 Corporate Venturing

Many firms have turned to corporate venturing as a way of promoting innovation and spurring growth. However, these attempts have generally met with only temporary success. What makes for successful corporate venturing?

Week 7 Controlling IP in the Technology-based Venture

Proprietary knowledge can provide the basis for the competitive advantage of the entrepreneurial venture. How do such firms manage and protect their intellectual property? How useful is the patent system for such companies?

Week 8 Promoting Creativity and Sustaining Innovation

The focus here is on sustaining innovation within organisations and particularly technology-based ventures. How do we develop and maintain creativity?

Week 9 Revision

Week 10 Examination

International and Corporate Connections:

The module will draw widely on the international academic and case-study literatures. Company case studies and illustrations will form a key part of the module and students will be encouraged to discuss and analyse this company specific material.

Contribution of Research:

This module builds strongly on recent research material which forms the evidence base for effective strategy formulation. Students will be encouraged to read relevant research papers and develop an evaluative and critical approach.

Method of Teaching:

Teaching will adopt both lectures and case study exercises. In each week, key concepts and empirical evidence will be introduced in lectures, providing an opportunity of considering their strategic implications. Derived concepts will be applied and tested in case-study exercises. Guided reading and case study discussion will contribute both to the overall knowledge and understanding objectives and more specifically to the assessment.









Method of Assessment and Feedback:

Assessment will be by 2-hour open book examination and will comprise two elements:

- (a) Part A based on a case-study distributed prior to the examination, students will be asked to apply aspects of the course material to a specific business situation. This will test individual students' understanding of the course materials and their ability to apply it to practical situations.
- (b) Part B will be two shorter questions in which students will be expected to demonstrate an understanding of the key concepts involved in different elements of the module. This will test students' broader understanding of the course materials.

Generic feedback 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:

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Lectures	8
Case-Analysis	16
Guided Reading	24
Revision Session	3
Non-contact and Indirect	
Case Paper	20
Examination Preparation	26
Examination	3
Total	100









Essential Reading:

Week 1 Innovation and Entrepreneurship

Pre-session Reading:

- 1. Study Notes for Week 1 Part 1 and Part 2 (included in the resource pack).
- McGregor, J. (2009) 'There is no more normal', BusinessWeek, March 23 & 30, 30–34.
 (Have a look at a box 'A History of Big Ideas' in pages 32-33. How many of them do you know?)

Post-session Reading, in case you would like to further an understanding of the open innovation model:

3. Chesbrough, H. (2007) 'Why companies should have open business models', *MIT Sloan Management Review* 48(2), 22–28.

Week 2 Technological Change and Diffusion

Pre-session Reading:

 Chapter 4 'Innovation and industrial evolution' (pp. 79–91) from Utterback, J. M. (1994) *Mastering the Dynamics of Innovation*, Boston, MA: Harvard Business School Press.

Post-session Reading, in case you would like to further an understanding of the following topics:

- (a) On Christensen's innovator's dilemma (i.e. why large corporations often fail by being locked in to the demand of their existing customers):
- 2. Bower, J. L. and Christensen, C. M. (1995) 'Disruptive technologies: catching the wave', *Harvard Business Review* 73(1), 43–53.
- (b) How firms can manage the risk of 'false negatives' in innovation management under technical and market uncertainty:
- 3. Chesbrough, H. (2004) 'Managing open innovation', *Research-Technology Management*, 47(1), 23–26.

Week 3 Creating Competitive Advantage through Innovation

Pre-session Reading:

- 1. Lieberman, M. B. and Montgomery, D. B. (1988) 'First-mover advantages', *Strategic Management Journal* 9, 41–58.
- 2. Case study of Apple Inc's iPhone.









Post-session Reading, in case you are not familiar with key strategy models/concepts such as Porter's five-force and value chain models and the concepts of core competencies/rigidities:

3. Chapter 6 'Defining the organization's strategic direction' (pp. 103–125) from Schilling, M. A. (2008) *Strategic Management of Technological Innovation*, 2nd ed., New York, NY: McGraw-Hill.

Week 4 Drivers of Entrepreneurial Venture Formation and Growth

Pre-session Reading:

- 1. Study Note for Week 4 Part 1 (included in the resource pack)
- 2. Case studies of Noldus and Digicash (included in the resource pack).

Post-session Reading:

3. Study Note for Week 4 Part 2 (included in the resource pack).

Week 5 Financing the Entrepreneurial Venture

Pre-session Reading:

- 1. Study Note for Week 5 (included in the resource pack).
- 2. Case studies of Biocote and Micropathology (included in the resource pack).

Post-session Reading, in case you would like to further an understanding of financing of entrepreneurial firms:

3. Chapter 13 'Entrepreneurial finance' (pp. 423–434) from Timmons, J. A. and Spinelli, S. (2009) *New Venture Creation*, 8th edition, Boston, MA: McGraw-Hill/Irwin

Week 6 Corporate Venturing

Pre-session Reading:

1. Chesbrough, H. (2002) 'Graceful exits and missed opportunities: Xerox's management of its technology spin-off organizations', *Business History Review*, 76(4), 803–837.

Post-session Reading, in case you would like to further an understanding of the following topics:

- (a) How corporate ventures work differently from external venture capital, and what advantages and disadvantages they provide relative to VC:
- 2. Chesbrough, H. (2000) 'Designing corporate ventures in the shadow of private venture capital', *California Management Review*, 42(3), 31–49.









- (b) Why firms often sway in their corporate venturing from one course of action to another as evidenced in the case of Xerox (see the case study by Chesbrough) and how they can better manage it:
- 3. Burgelman, R. A. and Välikangas, L. (2005) 'Managing internal corporate venturing cycles', *MIT Sloan Management Review*, 46(4), 26–34.

Week 7 Controlling IP in the Technology-based Venture

Pre-session Reading:

- 1. Study Note for Week 7 (included in the resource pack).
- 2. Leleux, B., Haour, G. and Piguet, L. (2003) 'Generics', IMD, Lausanne. ECCH Ref. IMD-3-1101.

Post-session Reading, in case you would like to further an understanding of IP management from a small business perspective:

3. Kitching, J. and Blackburn, R. A. (2003) 'Innovation, intellectual property and informality: evidence from a study of small enterprise and some implications for policy', in Blackburn, R. A. (ed.) *Intellectual Property and Innovation Management in Small Firms*, London: Routledge, pp. 16–34.

Week 8 Promoting Creativity and Sustaining Innovation

Pre-session Reading:

1. Study Note for Week 8 (included in the resource pack).

Post-session Reading, in case you would like to see how innovation is fostered at another firm widely viewed as being innovative – P&G:

2. Chapter 9 'Innovation is a team sport' (pp. 221–252) from Lafley, A. G. and Charan, R. (2008) *The Game Changer*, London: Profile,

Further Reading (non mandatory):

In case you have difficulty in reading any of the essential reading above and seek for background reading at an undergraduate level in a single book format, the following textbook is useful:

Smith, D. (2009) Exploring Innovation, 2nd edition, McGraw-Hill, New York, NY.

Relevant chapters in the book are as follows:

Week 1: Chapter 1 Introduction

Chapter 2 Types of Innovation

Chapter 6 The Process of Innovation









Week 2: Chapter 3 Technological Change

Chapter 4 Theories of Innovation

Week 3: Chapter 8 Innovation Strategy

Week 4: Chapter 9 Technological Entrepreneurs

Week 5: Chapter 10 Funding InnovationWeek 7: Chapter 7 Intellectual PropertyWeek 8: Chapter 11 Managing Innovation

Other potentially useful books are:

Another textbook of innovation management but at a postgraduate level: Schilling, M. A. (2010) *Strategic Management of Technological Innovation*, 3rd edition, McGraw-Hill, New York, NY.

On science and the study of business:

Rosenzweig, P. (2007) The Halo Effect, Free Press, New York, NY.

To get a more in-depth understanding of the Open Innovation concept:

Chesbrough, H. (2003) *Open Innovation*, Harvard Business School Press, Boston, MA.

If you seek for more on financing of start-ups the following book has a few good chapters:

Timmons, J. A. and Spinelli, S. (2009) *New Venture Creation: Entrepreneurship for the 21st Century*, 8th edition, McGraw-Hill, New York, NY.

More on intellectual property from a small business viewpoint:

Blackburn, R.A. (2003) *Intellectual Property and Innovation Management in Small Firms*, Routledge, London.

If you are looking for an innovation management book written by consultants:

Davila, T., Epstein, M.J., and Shelton, R. (2006) *Making Innovation Work: How to Manage it, Measure it and Profit from it*, Wharton School Publishing, Upper Saddle River, NJ.





