

# Development of New Products and Services GBAT9126

## Course Overview Semester 1 2015

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# Semester 1 2015 course schedule

w/c Monday

<b>Week 1</b>	2 March	Unit 1 Introduction
<b>Week 2</b>	9 March	Unit 2 The Innovation and NPD process
<b>Week 3</b>	16 March	Unit 3 Phase 1: Organisational strategy and NPD
<b>Week 4</b>	23 March	Unit 4 Phase 2: Idea generation
<b>Week 5</b>	30 March	Unit 5 Phase 2: Setting priorities for development
<b>Mid-term recess: Friday 3 April*– Sunday 12 April</b>		
<b>Week 6</b>	13 April	Unit 6 Phase 3: Concept definition
<b>Week 7</b>	20 April	Unit 7 Phase 4: Product development and feasibility assessment
<b>Week 8</b>	27 April	Unit 8 Phase 5: Preparation for launch
<b>Week 9</b>	4 May	Unit 9 Phase 6: Post-launch monitoring
<b>Week 10</b>	11 May	Unit 10 Organising the NPD effort
<b>Week 11</b>	18 May	Unit 11 Reducing lead times
<b>Week 12</b>	25 May	Unit 12 Challenges to new products and services
<b>Week 13</b>	1 June	Team feedback exchange for oral presentation
<b>Week 14</b>	8 June**	Examination week – Independent reflective learning and review (oral presentation) assessment due

\* 3 April is Good Friday

\*\* 8 June is the Queen's Birthday public holiday (except WA)

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# Course staff

## Course Coordinator

Each course has a Course Coordinator who is responsible for the academic leadership and overall academic integrity of the course. The Course Coordinator selects content and sets assessment tasks, and takes responsibility for specific academic and administrative issues related to the course when it is being offered. Course Coordinators oversee Class Facilitators and ensure that the ongoing standard of facilitation in the course is consistent with the quality requirements of the program.



The Course Coordinator is:

Craig Tapper  
BA MCom UNSW, MBA UTS

email: [craig.tapper@unsw.edu.au](mailto:craig.tapper@unsw.edu.au)

Craig (SFFinsia, FAICD, CPM) is the Executive Director of Tapper Consulting Pty Limited, and has consulted to major companies and government departments for more than 20 years. Prior to consulting, Craig spent more than 20 years in middle and senior management positions in major industrial, retail and public-sector organisations. This included appointments at senior level in Australia and the UK. He also has more than 15 years' experience on company boards.

Craig began his academic teaching career in 1991 and as a part of that, Craig has been an adjunct faculty member of UNSW Business School since 1996. As well as teaching for the Australian Graduate School of Management (AGSM) on the MBT and MBA programs in Australia and Hong Kong, he has lectured in a range of postgraduate programs in the areas of strategy, marketing and management at the Australian National University, RMIT, the University of Sydney, and the University of Technology Sydney. Craig is a Visiting Professor on the International Management Program of IESEG, Lille, one of France's leading business schools. He has also authored and facilitated at postgraduate level for the Financial Services Institute of Australasia and has consulted to some of Australia's largest companies and government departments, as well as for global firms in Malaysia, Singapore, Japan, Dubai and Thailand.

# Class Facilitator

The role of your Class Facilitator is to support the learning process by encouraging interaction amongst participants, providing direction in understanding the course content, assessing participant progress through the course and providing feedback on work submitted. MBT Class Facilitators comprise academics and industry practitioners with relevant backgrounds.

You will be notified of your Class Facilitator's name and contact details in your class confirmation email sent by MBT Student Services. Details will also be available in the gallery section of your online class for face-to-face and distance classes.

# Course authors

This course was written by the Course Coordinator, Craig Tapper.

## Acknowledgements

Richard Connell BSc, MBA (NYU), IMP, PhD (UNSW)

Richard wrote earlier versions of this course and taught new product and service development at UNSW's School of Marketing for 10 years before moving to UNSW@ADFA's School of Business. Prior to entering academia, Richard spent 20 years in the management consulting industry, working in the Middle East, Europe and the Asia-Pacific region.

We acknowledge the valuable contribution by Garrett Upstill BSc (Hons), MSc, BA (Melbourne) and MSc (Econ) (London), who acted as the academic reviewer in the development of this course. Garret currently teaches technology management and strategic management in the master's course in the School of Business at UNSW Canberra.

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# Course information

## Aims

This course is best undertaken towards the end of your MBT studies. The more you have studied and reflected on the range of management issues and concerns addressed in other MBT courses, the more value you will derive from this critical study of how best to manage an organisation's efforts in the area of new product and service development.

This course is designed to provide you with an awareness of the issues involved in new product and service development, and an understanding of selected processes, practices and protocols available for dealing with them.

In general, in this course we will refer to new product development (NPD) as a term that incorporates the development of:

- new tangible goods-based products; e.g. a new breakfast cereal, confectionery, vehicle, refrigerator, computer, aircraft, and
- new services-based products; e.g. a new investment fund, software application, insurances, medical procedures, home care services, expert advice, learning and development, security, protection of people and assets.

Successful NPD is increasingly viewed as an interdisciplinary (multi-functional or cross-functional) process. It requires inputs throughout the process, from the finance, production, operational, HR and engineering functions, as well as the more traditional involvement of marketing and R&D. As such, in this course you will be expected to draw on perspectives of a wide range of frames of reference.

The effectiveness and value that an organisation gains from its investments in NPD also depends heavily on the discipline and use of processes to generate NPD opportunities, screen them for their value and applicability to the organisation, and manage the stages of development to optimise success and return on NPD investment.

The course is primarily structured around a generic six-phase NPD process. Of course, a standard process doesn't work uniformly well in all settings and the generic process that you will study will need to be adapted for particular industries, contexts and organisations.

## Structure

Unit 1, *Introduction*, examines various kinds of new products (goods and services) and how they differ. It describes the importance of new product development as a crucial outcome of innovation and creativity and how this generates value for national economies, industries, markets and organisations. It also places NPD in the strategic context of the organisation

and considers how important the innovation and reinvention of business models, products and practices are to ongoing strategic success. The Unit also highlights the importance of ethics and sustainable management practices in NPD success.

Unit 2, *The innovation and NPD process*. In this Unit, we examine the relationship between NPD and organisational growth. We consider the strategic importance of new product development at different points in an industry's lifecycle, rates of innovation and technology adoption, innovation as a technological competence and the role of open innovation. The Unit also provides an overview of a generic NPD process and discusses why it is important to have such a process in place.

Unit 3, *Phase 1: Organisational strategy and NPD*. In this Unit, we look in more depth at how new products and services are related to organisation-wide and strategic business unit (or SBU) strategic management. This need to consider 'What strategic role do we allocate to new product development?' constitutes Phase 1 of an effective NPD process. We discuss the concept of disruptive innovation and how new product development can revolutionise an industry, how an NPD plan relates to organisational strategy, and we consider technology and other resourcing requirements to ensure effective NPD results, as well as issues related to NPD Portfolio management.

Unit 4, *Phase 2: Idea generation*. Here, we start by understanding the basic principles of how creativity works, the science associated with creativity and the best-practice methodologies that stimulate and capture creative insights from key stakeholders. Processes such as Design Thinking, Open Innovation, crowdsourcing and effective Research & Development (R&D) Management are canvassed. We examine analytical techniques and other approaches to stimulating and identifying NPD ideas and opportunities. This idea generation process constitutes the first part of Phase 2 of our model NPD process.

Unit 5, *Phase 2: Setting priorities for development*. In this Unit, we continue our look at Phase 2 of the NPD process. We focus on how we can examine the ideas that have been generated for possible new products (goods and services) and set priorities for development. We look at Stage Gates and other decision-making models of screening and ranking ideas – reducing the number of ideas that progress from one stage to the next for further investment. We also consider what organisational processes can best support this phase of an effective NPD process.

Unit 6, *Phase 3: Concept definition*. In this phase, the NPD opportunities move from an initial 'idea' to a more detailed 'concept'. As the concept is developed, the product development team and senior management pass through 'decision gates' where they ask themselves whether the development is worth pursuing further. This phase typically results in a product development proposal and the product may undergo some preliminary testing.



Unit 7, *Phase 4: Product development and feasibility assessment*. This phase concerns evaluating the feasibility of the new product in much greater depth. The business case for further investment is made based on testing the product in the market, the distribution channels and in the organisation's production and operational environment. Activities may include the development of prototypes or bench samples and some product-use testing may occur. However, these activities are not indicated for all new products and services. At this stage an 'advanced development proposal' is typically produced.

Unit 8, *Phase 5: Preparation for launch*. This phase relies on developing and effectively implementing plans to introduce (launch) the product into the market. As well as developing the detailed plans for marketing and supporting the product to maximise its acceptance in the market and channels, some additional market testing may be required, often involving technology enabled research and testing tools to maximise the potential for success. This phase concludes with implementation of the launch strategy as the product enters the marketplace.

Unit 9, *Phase 6: Post-launch monitoring*. As soon as the new product or service is launched, the iterative strategy review and refinement processes begin. In this Unit we examine typical launch problems and how contingency plans can be deployed. We look at how demand can be forecast and influenced. The Unit will canvass the use of technology to support product management, devices and techniques for forecasting and tracking products in the market. It is also important at this point in the process to capture the knowledge and learning gained so far.

Unit 10 *Organising the NPD effort*. Having looked at the overall NPD process, we now examine how organisations can be structured to facilitate and empower NPD project success. We discuss the importance of teamwork and project management skills.

Unit 11, *Reducing lead times*. The speed with which NPD processes function is often a critical strategic issue. This Unit looks at how we can evaluate how well the NPD process is functioning, and how both speed to market and efficiency might be improved.

Unit 12, *Challenges to new products and services*. In this Unit, we examine challenges such as public-policy issues, product liability and environmental issues in NPD. We consider the importance of sustainability, social responsibility and ethics as key influences in effective NPD practices and processes and how to engage with stakeholders in ways that ensure sustainable outcomes.

# Learning outcomes

When you have completed this course you should be able to:

- explain the relationship between new product (goods and service) development and organisational strategy
- outline a best-practice approach to new product development from idea selection to post-launch monitoring and control
- evaluate and improve an organisation's new product development process
- discuss the importance of sustainability, corporate social responsibility and ethics in new product development and management processes
- explain the impact and importance of technology in the new product development process
- develop recommendations to reduce lead times for new product development
- recognise the organisational structures and management practices that contribute to successful new product development in different circumstances
- outline the key principles of effective project management that are needed for new product development success.
- communicate and convey reasoned arguments effectively in written documents and online forums.

# Skills you will need

There are no pre-requisites for this course.

Please refer to the *AGSM Learning Guide* (available in Moodle) for information you will find very useful in pursuing your studies.

# Resources

## Recommended reading

Ahmed P and Shepherd C, 2010, *Innovation Management: Context, Strategies, Systems and Processes*, Pearson Education, Harlow

Cagan J and Vogel C M, 2002, *Creating Breakthrough Products: Innovation from Product Planning to Program Approval*, Prentice Hall, Upper Saddle River

Crawford M and Di Benedetto A, 2011, *New Products Management*, 10th edn, McGraw-Hill, NY

Kahn K, Kay S, Slotegraaf R & Urban S, 2013, *The PDMA Handbook of New Product Development*, 3rd edn, John Wiley & Sons, Hoboken

Sanders, G, 2012, *Developing New Products and Services: Learning, Differentiation and Innovation*, Business Expert Press, New York

Trott P, 2012, *Innovation Management and New Product Development*, 5th edn, 2012, Pearson Education, Harlow

Ulrich K T and Eppinger S D, 2011, *Product Design and Development*, 5th edn, McGraw-Hill Irwin

## Journals

*International Journal of Innovation Management*

*Research Technology Management*

*The Journal of Product Innovation Management*

*MIT Sloan Management Review*

## Relationship to other courses in the MBT program

This course is best taken in the latter part of your MBT program, as you will benefit from solid knowledge and expertise in other areas of the management of business and technology. It will be particularly beneficial if you have some basic marketing knowledge before undertaking this course.

If you have previously successfully completed GBAT9101 *Project Management*, GBAT9114 *Principles of Marketing* or GBAT9120 *Accounting: A User Perspective*, these courses will assist in the later Units of this course.

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# Assessment

There are two assignments and an oral presentation for GBAT9126 *Development of New Products and Services*. There is no examination.

Note that all assessments must be received by 9.30am Sydney time on the due dates.

Participation	<b>Throughout the semester</b>	10%
Assignment 1	<b>Wednesday 15 April 2015</b> (Week 6)	25%
Assignment 2	<b>Wednesday 13 May 2015</b> (Week 10)	35%
Oral presentation	<b>Wednesday 3 June 2015</b> (Week 13)	30%

Extensions to assignment deadlines will be granted only in exceptional circumstances, and where adequate supporting documentation can be provided. Please note that work commitments **do not** constitute grounds for an extension. Your Class Facilitator may approve an extension of up to two days, after which requests must be made through the special consideration process. For details about this process, see:

<https://student.unsw.edu.au/special-consideration>

In the case of late lodgement without an approved extension, 10% of the assignment weighting will be deducted **for each day late**.

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# Continual course improvement

MBT courses are revised each time they run, with updated course overviews and assessment tasks. All courses are reviewed and revised every three years and significant course updates are carried out in line with industry developments, and also when new editions of prescribed textbooks are published.

The MBT surveys students via the UNSW CATEI system each time a course is offered. The data collected provides anonymous feedback from students on the quality of course content and materials, class facilitation, student support services and the MBT Program in general. This student feedback is taken into account in all course revisions.

The UNSW Business School also monitors the quality of students' learning experiences in all its programs. A random selection of completed assessment tasks may be used for quality-assurance purposes. This information will be aggregated and used:

- to determine the extent to which program learning goals are being achieved for accreditation of UNSW Business School programs
- to improve the quality of UNSW Business School programs.

All material used will be treated as confidential and these processes will have no bearing on course grades.

## Student evaluations from the last presentation of the course

The course was last run in Semester 1 2014 and the student feedback was very strongly positive. However, there were the following suggested improvements:

- As had been mentioned in previous semesters, students are very keen to see even more illustrations and case studies highlighting the use of new product development processes and practices in organisations so that the 'best practice' frameworks taught in the course were easier to relate to.
- Specifically, students requested some more examples of smaller organisations and their NPD processes, plus some more examples of NPD practice in the services sectors and industries.

# Coordinator's response

Based on this feedback, the following key changes were made:

- More cases studies and more recent illustrations of new product development have been sourced from the media and academic sources and these will be incorporated into the facilitation strategies used to teach in Semester 1.
- Once again these cases will also be offered as the basis for students to undertake their first assignment, which asks students to reflect on applications of concepts to their own organisation.