### Key points and case recommendations for each of the elements of the Pentathlon

<table>
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<tr>
<th>Element of the Pentathlon</th>
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| 1. Ideas: managing creativity and knowledge    | • Use lecture to introduce creativity theory  
• A creativity exercise helps create interest and demonstrate key issues  
• Show and discuss videos on innovation and ethnographic market research                          | Marketing Research at P&G (503-121-1)  
Innovation at 3M Corp. (A) (9-699-012)  
Bang & Olufsen: Design Driven Innovation (9-607-016)                                         | • Proctor and Gamble is a world-leading FMCG manufacturer with a long tradition of market research  
• Good case to show the role of market research in product innovation  
• Case can be used to show the need for new approaches such as ethnographic market research  
• 3M is legendary for its approach to innovation and a range of products that includes the ubiquitous Post-It  
• Describes the use of lead-user technique for generating novel product concepts  
• Can be used to stimulate discussions on the ‘voice of the customer’  
• World famous manufacturer of audio systems  
• Discusses how to generate insights that will excite customers  
• Focuses on the role of the creative designer in product development |
| 2. Prioritization: selecting and managing the portfolio | • Can be a dry topic – concentrate on the principles rather than details  
• Lecture on the financial evaluation tools (eg. NPV, IRR, etc.) and how they must be enhanced to include risk  
• A group exercise to construct a “scoring system” is ideal | Head: Skiboots Division (305-301-0)  
Vertex Pharmaceuticals: R&D Portfolio Management (A) (9-604-101)  
AXA (Chapter 3, Goffin and Mitchell, 2005)  
Britannia (Chapter 6, Goffin and Mitchell, 2005)                                                | • Brand new case that we have not yet taught but it looks very promising  
• Includes a spreadsheet exercise  
• Describes how a pharmaceutical company makes its portfolio management choices  
• Covers financial, risk assessment mechanisms, and criteria for the medical and scientific merit of drug developments  
• This case may be introduced quite early in the session as a means of establishing that project selection involves more than prioritizing projects in terms of value  
• We find it helpful to present the case in verbal, or better, in written form up to the point when the Madhouse generated a large number of ideas for Catherine Whelan to sift through and select. The class is asked to consider what problems this gives her and how she might best overcome them  
• This case provides a contrast to AXA because in the first instance innovation was targeted on a small sector and ideas were expected to come from a small group of people  
• Tight control by the Board was appropriate: they were consciously going through a learning process  
• As the innovation process became better-established, the selection task to a sub-committee  
• Shows how a ‘data driven’ company recognized the need for a scoring system that added broader considerations |
| 3. Implementation (new product development – NPD, etc.) | • Basic project management knowledge must be assumed  
• Lecture should focus on the specific issues with innovation projects - fuzzy front ends, Stage Gate and cross-functional teams  
• Have students apply the concepts of risk assessment to a case study  
• Simulations greatly enhance the understanding of NPD | New Product Development at Schwan Food Company: Innovation through Communication (504-011-I)  
Bosch Power Tools (A) (IMD-3-0570)  
Wingspanbank.com (A) (9-600-035)                                                              | • Case discusses the US company Schwan’s introduction of a pizza that can be prepared in a microwave  
• Case can be used to discuss what the key features of the new product and to apply the Kano Model (which is also covered in Chapter 4)  
• Describes the Bosch do-it-yourself power sanding device product development  
• Very good decision case which can work well with groups of students role-playing different departments. Always well received by students  
• The Pentathlon Framework can be used to analyze Bosch’s approach to innovation  
• Service sector case and so particularly useful  
• Includes a very good description of how to build a cross-functional team  
• Good case discussions around the decision of whether to release the new service                                                               |
### Key points and case recommendations for each of the elements of the Pentathlon (continued)

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| 4. Developing an innovation strategy | • Lecture should cover S-curves and disruptive technology and visualisation aids such as Kano and road-mapping  
• Useful class exercise is to draw a product-technology roadmap for a small company | Domino Printing Sciences (A): Technology Development or Acquisition? (602-031-1)  
Monsanto’s March into Biotechnology (A) (9-690-009)  
BMW’s Innovation Strategies (303-190-1) | • One of our own cases  
• Describes how technology maturity forced the company into diversification and the issues faced in acquiring a new technology  
• Case involves a key decision: which company to acquire? |
| 5. People, organization and innovation | • Lecture should cover key concepts (eg. cultural web and Michael Tushman’s work)  
• Cultural web provides a good exercise (eg. applied to IDEO video) | Creating a Culture of Innovation at AXA Ireland (to be confirmed)  
Herman Miller (A): Innovation by Design (9-602-023)  
Siemens Premium-on-Top: Measuring Knowledge Management with a Bonus System for Fostering Innovation (902-012-1)  
Innovation and Renovation: The Nespresso Story (IMD-5-0543) | • Describes AXA’s journey to innovation from 2000-2006 and the key challenges in innovation  
• Brand new case that we will be submitting to ecch soon (preliminary copies available from the authors)  
• Looks at the culture of a furniture manufacturing company and the role of a new CEO  
• Discusses the German high-tech giant’s approach to knowledge management  
• Raises interesting issues about reward and recognition  
• Focuses on the development of the well-known Nespresso range of coffee products  
• Looks at the entrepreneurial spirit that was required to drive successful product innovations |

This table accompanies the article “Cases and the challenge of teaching innovation management” by Keith Goffin and Rick Mitchell that appeared in ECCHO issue 36, Autumn 2006, www.ecch.com/ECCHO36


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