

ENGG4061

Innovation & Entrepreneurship

EIE Lecture Theatre 2
1-3 Fridays



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Course Outline

- ◆ 'Master Class' – some intensive lectures then largely practice- and team-based
- ◆ Understanding and practicing innovation
- ◆ Systematic, not accidental innovation
- ◆ Text: Bessant and Tidd, *Innovation and Entrepreneurship*, Wiley, 2007 + Tidd, Bessant and Pavitt, *Managing Innovation*, Wiley, 2005
- ◆ Website - <http://www.eng.usyd.edu.au/current-students/InnoManage/ENGG4061/index.shtml>
- ◆ Team formation

Assessment

1. Profile of an innovation (individual) – Week 3
2. Case Studies of an innovation (group), Weeks 5-8
3. Mid-term quiz, (individual) Week 9
4. Analysis of an innovative start-up company (group) - Week 11
5. Final 'exam' project - due Week 13

Core Components of Innovation

- ◆ Generating new ideas
 - ◆ Selecting the 'best' (fit with strategy and capability)
 - ◆ Effective implementation
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- A faint silhouette of a person in a starting crouch on a track is visible in the background, positioned behind the text.

Keys to Understanding Innovation

- ◆ *What* are we trying to manage?
- ◆ *How* to create the conditions to make it happen?
- ◆ *What, why* and *when* of generating strategic advantage through innovative activity
- ◆ Innovation is a moving target – hence requires a dynamic capability

Definitions of Innovation

- ◆ New products, new processes
- ◆ Innovation is the process of turning ideas into reality
- ◆ New ways to create value for your customers
- ◆ The core organisational process of renewal
- ◆ The creative process whereby economic value is extracted from knowledge
- ◆ Learning the rules, so you know how to break them

Types of Innovation – 4 Ps

- ◆ Product – goods or services or both
- ◆ Process – how ‘they’ are created and delivered
- ◆ Position – changes in the context eg coffee, juice
- ◆ Paradigm – changes in the mental model eg low-cost airlines, Enron’s commodity perspective on pipelines

Necessary Supporting Requirements for Effective Innovation

- ◆ Clear strategic leadership and direction
- ◆ An innovative organisation
- ◆ Proactive linkages across boundaries inside and outside the organisation
- ◆ A real commitment to learning

Innovation Advantages

Mechanism

- ◆ Novelty in product/service
- ◆ Novelty in process
- ◆ Complexity
- ◆ IP ownership
- ◆ New basis of competition
- ◆ Timing
- ◆ Platform
- ◆ Rewrite rules
- ◆ Reconfigure parts

Advantage

- ◆ No competition - *Walkman*
- ◆ Can't be matched – *Internet banking*
- ◆ Beyond copying – *Rolls Royce aero engines*
- ◆ Licence control - *Viagra*
- ◆ Your rules, not others – *Honda*
- ◆ First mover – *Amazon*
- ◆ Fast follower – *Palm Pilot*
- ◆ Others build on your product – *Intel*
- ◆ Destroy competitive basis - *DVD*
- ◆ Systemic advantages - *Benneton*

Discontinuous Innovation

- ◆ New markets
- ◆ New technologies
- ◆ Maturing/dying industries
- ◆ Demography-driven market shifts
- ◆ Shifts in regulation
- ◆ Value shifts eg smoking
- ◆ Unthinkable
- ◆ Opportunities for new business models