ICT Summit 2009: Linking Research into Teaching and Business

Professor John Yearwood
Director, Centre for Informatics & Applied Optimization
Overview

• The landscape of research industry collaboration in Australia
  • Industry Linkages, CRCs, Direct relationship
• Industry research collaboration at UB
• Industry research & research training examples
  • Internet Commerce Security Laboratory
• Professional Practice Degree & IBM
The landscape of research industry collaboration in Australia

- Australia ranked 16th out of 28 OECD countries for university-industry research collaboration in 1997 and had fallen 10 places to be last out of 26 countries (Carr)
- Only one-third of Australian firms successfully introduced an innovation in 2006-07, same level for at least a decade.
- World's best today, Germany, - over half the firms are successful innovators
Linking Research into Teaching and Business

Industry Ready Graduates
Example: Industry research collaboration at UB

- Research with large Australian Energy company
- Produced Optimization Technology – significant savings
- Researchers, doctoral student and dedicated industry researcher
- Industry researcher onsite, UB researcher with client for a period
Example: Internet Commerce Security Laboratory (ICSL)

- Collaborative partnership with IBM Global Technology Services, Westpac Banking Corporation, Victorian State Government
- Other partners: Australian Federal Police
- Established to carry out research into internet commerce fraud of benefit to the Banks
- Key focus of research is research training
- Key aspect is having Westpac and IBM staff onsite
Internet Commerce Security Laboratory (ICSL)

- Aim: to produce ongoing capability to address internet fraud, internet security and identity management for financial sector

- PhD & Masters research students research topics in priority areas, plus: work on short term problems in laboratory one day each week

- Aim: to produce highly skilled, industry-ready ICT personnel who will benefit financial sector
Professional Practice Degree & IBM

- UB Degree: Bachelor of Information Technology – Professional Practice
- Innovative course developed with IBM
- In years 2 & 3: university study (75%) is combined with practical IBM experience (25%)
- “Earn As You Learn” includes units on industry awareness and industry application
- Successful students also employed for first half of fourth year = total of 1 year work experience by graduation
Summary

- Key elements of success have been:
  - Clear problem
  - Embedding
    - Clear involvement of Business in research program via dedicated industry staff
    - Research as well as research training element
    - Clear opportunities for the research outcomes and the research graduates
    - The right environment to support research
  - Understanding interest in research outcomes
Thank You