
# ICT R&D Accelerator Launch

CRICOS provider 00111D

# Project Examplars – from ICT Academy

1. Most “demonstrator” research & development projects – develop one (or more) prototypes to explore ideas
2. Technology assessment – often develop several prototypes to assess possible technology, architecture options
3. Assessment – stress-testing, usability testing, metrics, process and tool assessment
4. Research - investigate possible technologies, competitor technologies, algorithms, new methods

# 1. Demonstrator

- Company developing software for consumer appliances needed to explore new human interfaces, specifically touch
- Didn't have in-house capability nor resource
  - 2 students, one user interface and architecture expert academic, 3 company mentors worked on summer project
  - Developed 3 examplars exploring different issues: touch input, device interaction, new user interface component toolkit
  - Company adopted two technology solutions and funded follow-on Masters project

# 2. Technology Assessment

- Company developing embedded system solution wanted to develop set of web interfaces for new product
- But which web technology to use??
  - Two student group + user interface expert academic worked on 10 week project developing several prototypes with several web toolkits
  - Compared & contrasted use of toolkits to develop prototypes: usability of UIs, complexity, tool support, scalability, …
  - Company chose one web toolkit for their next platform development. Company hired one of the students

# 3. Application Assessment

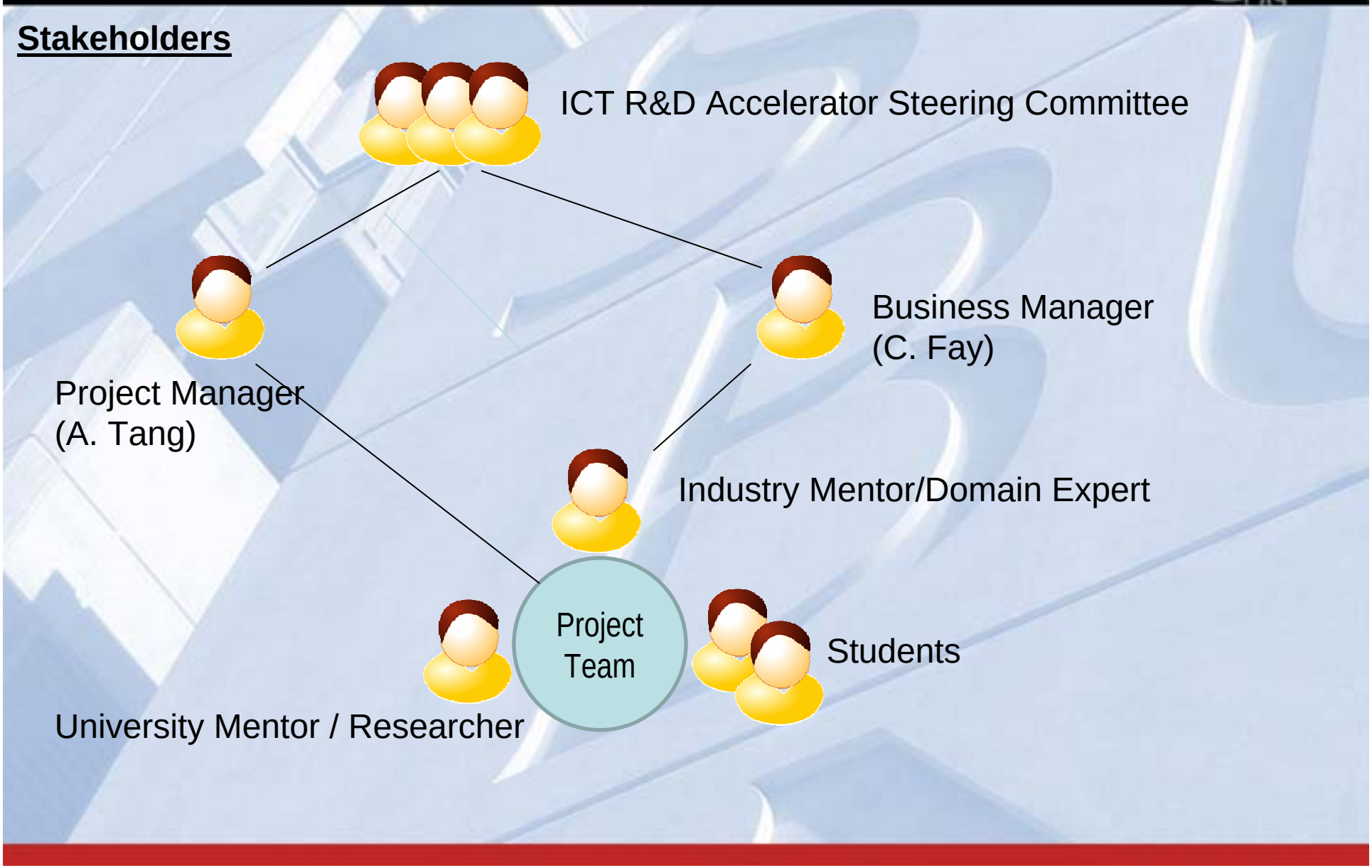
- A company developed a mobile e-commerce solution
- Had issues with scalability of their software architecture and usability of the mobile client and desktop interfaces.
  - 2 student team, one user interface and one architecture academic experts, company mentor
  - Project team undertook a usability evaluation of the interfaces and a proof-of-concept implementation of a revised service based architecture
  - Recommendations from both the usability evaluation and the architecture investigation formed the basis for subsequent revisions of the company's product

# 4. Research - Technology Roadmap

- Company providing software and hardware for specific consumer domain
- Needed to determine medium term technology roadmap and solutions
  - One student, one architecture expert academic, one company mentor
  - Investigated range of current and emerging technologies, likely feature demand from consumers, likely business drivers
  - Developed technology roadmap for company
  - Company adopted modified roadmap to inform hiring, resourcing, staff training, technology acquisition

# Project Structure

**Stakeholders**



# Project Management - Lightweight

- Forming and Teaming – (a) Matching Industry Expert & University Researcher & Students; (b) Formalise Projects
- Project Scoping & Execution
  - Goals, Stakeholders, Deliverables, Schedule, Communication, Success Criteria, Working Methods
- Weekly Updates
  - Frequent mentoring of students by industry & university mentors
  - Conduct meetings weekly to summarise progress and to plan for the following week
  - Students are required to write weekly progress report
- Project Deliverables
  - As defined by the project
  - The Industry Experts, the Researchers and the Students shall report their experience
  - Presentation of the Project Results

# Win-win-win

- To the Industry
  - Leveraging the research capabilities of Victorian universities
  - Gain insights and solve difficult problems
- To the Students
  - Learn how to solve difficult industrial problems
  - Learn domain knowledge from industry experts and research techniques from researchers
- To University Researchers
  - Understand current ICT issues faced by the industry
  - Exploring new methods to solve difficult software and computer science problems




# ICT ACCELERATOR LAUNCH
# SUMMER TRIAL PROJECTS

www.swinburne.edu.au/ict

# Overview

- A/Prof Chris Leckie
  - NICTA Victoria Research Laboratory
- Ms Kathy Coultas
  - Department of Business and Innovation
- Mr Marco Marcou
  - MobilityVic
- Prof Leon Sterling
  - Swinburne University of Technology
- Dr Antony Tang
  - Swinburne University of Technology






# APPLICATION AND EVALUATION

ICT ACCELERATOR
SUMMER TRIAL PROJECTS

www.swinburne.edu.au/ict

# Overview

- Two students and an academic mentor from Swinburne or NICTA per project
- Students from software engineering, software development and computer science
- Open to students from all Victorian Universities



# Cost and Timeframe

- Commence Dec. 1st (approx) to Feb 20th
- Cost to client company $5,000
- Each student paid a $5,000 scholarship
- Swinburne/NICTA absorb cost above $5,000
- May locate at Swinburne or Client premises
- Regular project meetings will be scheduled

SWINBURNE UNIVERSITY OF TECHNOLOGY

State Government Victoria

NICTA

# Application Form

- Form available here or at web site
- Fill out asterisked questions at least
- Submit on or before c.o.b. Friday Nov. 11th
- Open process: questions invited at any stage
- See web site for contacts
- Send to Antony Tang, atang@swin.edu.au

SWINBURNE UNIVERSITY OF TECHNOLOGY

State Government Victoria

NICTA

# Evaluation

- Applications reviewed and ranked by Evaluation Committee
- 3 projects to be chosen
- Reviewed in order of receipt
  - first come first served
- Factors:
  - Availability of suitable resources (student & mentor)
  - Suitability of size and duration of project
  - Perceived merit as a tie breaker

SWINBURNE UNIVERSITY OF TECHNOLOGY

State Government Victoria

NICTA

# Contract and Payment

- Invitations (with contract and invoice) sent progressively
- Contract execution and payment expected within 5 working days
- Continues until 3 projects established
- IP remains with the client though researcher may do ongoing research and publish results
- NDA signed if required by client

SWINBURNE UNIVERSITY OF TECHNOLOGY

State Government Victoria

NICTA

# Further details

www.swinburne.edu.au/ict/

ICT R&D Accelerator Program

SWINBURNE UNIVERSITY OF TECHNOLOGY

State Government Victoria

NICTA