

A Distributed and Underpinning Approach to ICT Education

Rosemary Stockdale

Department of Information Systems

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Where we were last year

Faculty of ICT



Telecommunications
Computer Science
Information Systems
Astronomy

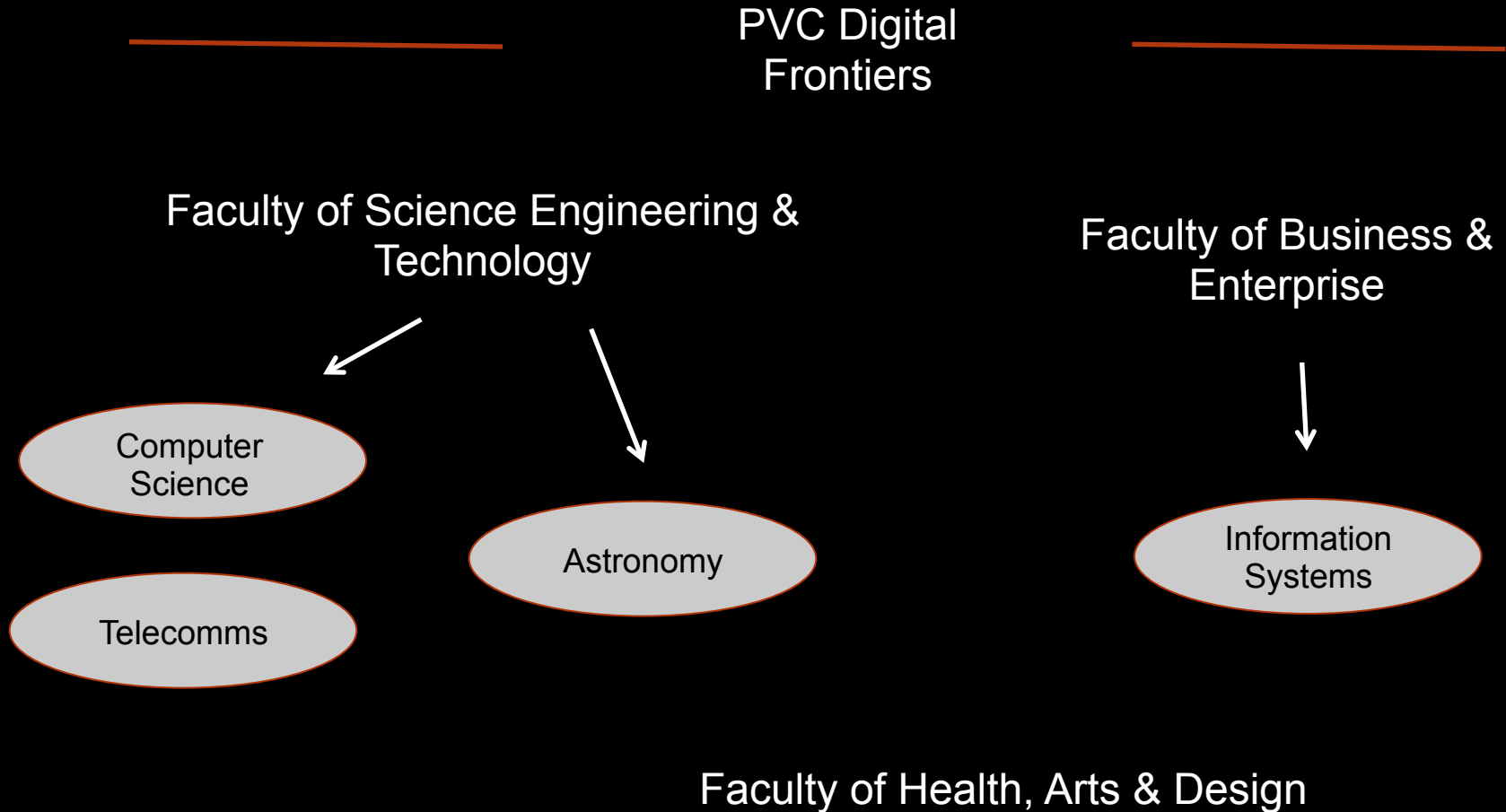
Faculty of Engineering

Faculty of Business and
Enterprise

Faculty of Life Sciences

Faculty of Design

Where we are now



Role of PVC Digital Frontiers

- Role created to take on:
 - a University wide view of ICT
 - engagement with external bodies and industry
 - generate ideas for internal, cross-university and external engagement
- Issues
 - Politics
 - Marketing
 - Budgets
 - Cross faculty teaching

Issues

- Marketing
 - Faculty and university marketing departments
 - Need to coordinate efforts
 - Overcome the faculty focus of marketing initiatives
 - Communication and ideas
- Budgets
 - Faculty model of finance
 - Who 'owns' what?

Issues

- Cross faculty teaching
 - Ownership of units
 - Cross faculty cooperation
 - e.g. programming unit and first year project unit
 - Units taught across faculties
 - e.g. Introduction to e- science
- Introduce students to the fundamentals of e-Science and the key role that information technology plays in scientific discovery
- Prepare students for the "big data" challenges of modern science-related careers
- Equip students with practical strategies for computer-based data analysis
- Develop student capability in data modelling, analysis, and visualisation
- Build understanding of how e-Science influences research activities at Swinburne

Appropriate units in all degrees

- We are a university of technology
 - Units in technology in Arts, Business, Education etc.
 - Digital radio in an arts degree
 - Technology innovation in a business degree
 - Computational element in Institute of Social Research

“I did my studies in broadcast radio, but an ICT degree would have been more useful in a career in radio”

“I did Business Information Systems which is the most useful thing an entrepreneur could do”

Where we are now

- Top level leadership is working to reduce territorialism
- Finding solutions to how we teach across faculties on a sustainable basis
- Developing joint units in computer science and information systems
- Developing double degrees with technology and business
- Developing an ICT based degree with majors
- Working towards the vision of technology savvy graduates

What have we learned and where are we going?

- Communication across faculties needs to be made inherent in the day to day
- Non-ICT disciplines view of ICT is 'unexpected'
 - Overcoming this is a challenge and a benefit?
- There are new opportunities to enhance ICT skills
- ICT does not advertise itself well enough
 - Enthusiasm for our capstone projects
 - Putting ICT into other degrees

Aim to have every Swinburne graduate ICT savvy

Are we there yet?

- We have a number of issues to overcome
- Building on internal and external connections and collaboration
- Industry input and engagement
- Addressing university silos – new ISM contributes to this
- Dedication to the idea of ICT as an underpinning to all degrees
- Senior management buy-in

Thank you!

rstockdale@swin.edu.au

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