



9 August 2005
Potts Point

The Sydney Opera House FM Exemplar Project: Leading Change in Australian FM

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CRC for Construction Innovation

and

Paul Akhurst
Sydney Opera House



CRC Construction Innovation
BUILDING OUR FUTURE

Sustainability and Facility Management Forum



3 key questions

1. Who are we?
2. What's this project about?
3. Leading change in Australian FM?

1. Who are we?



CHARGE!



Researchers

THE BRIDGE IS OURS!

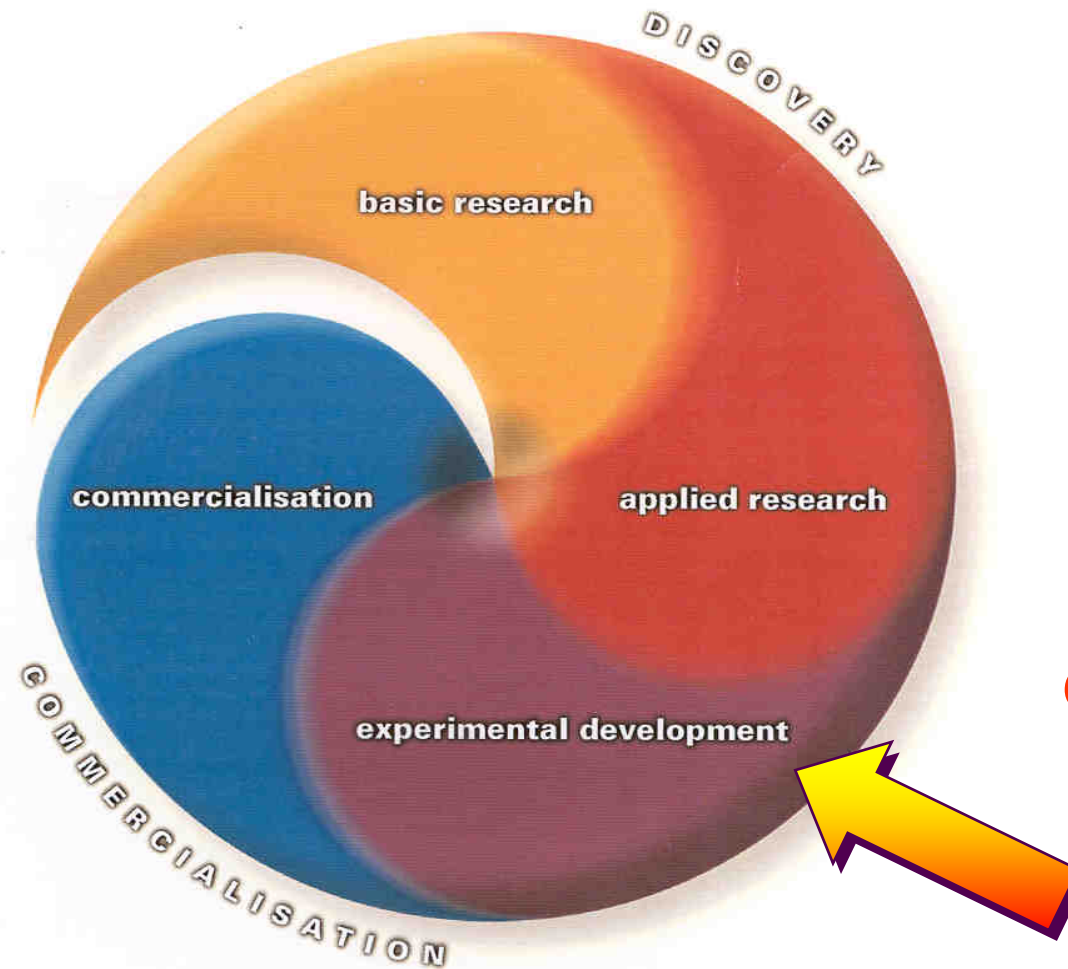


Research Users

We build bridges!

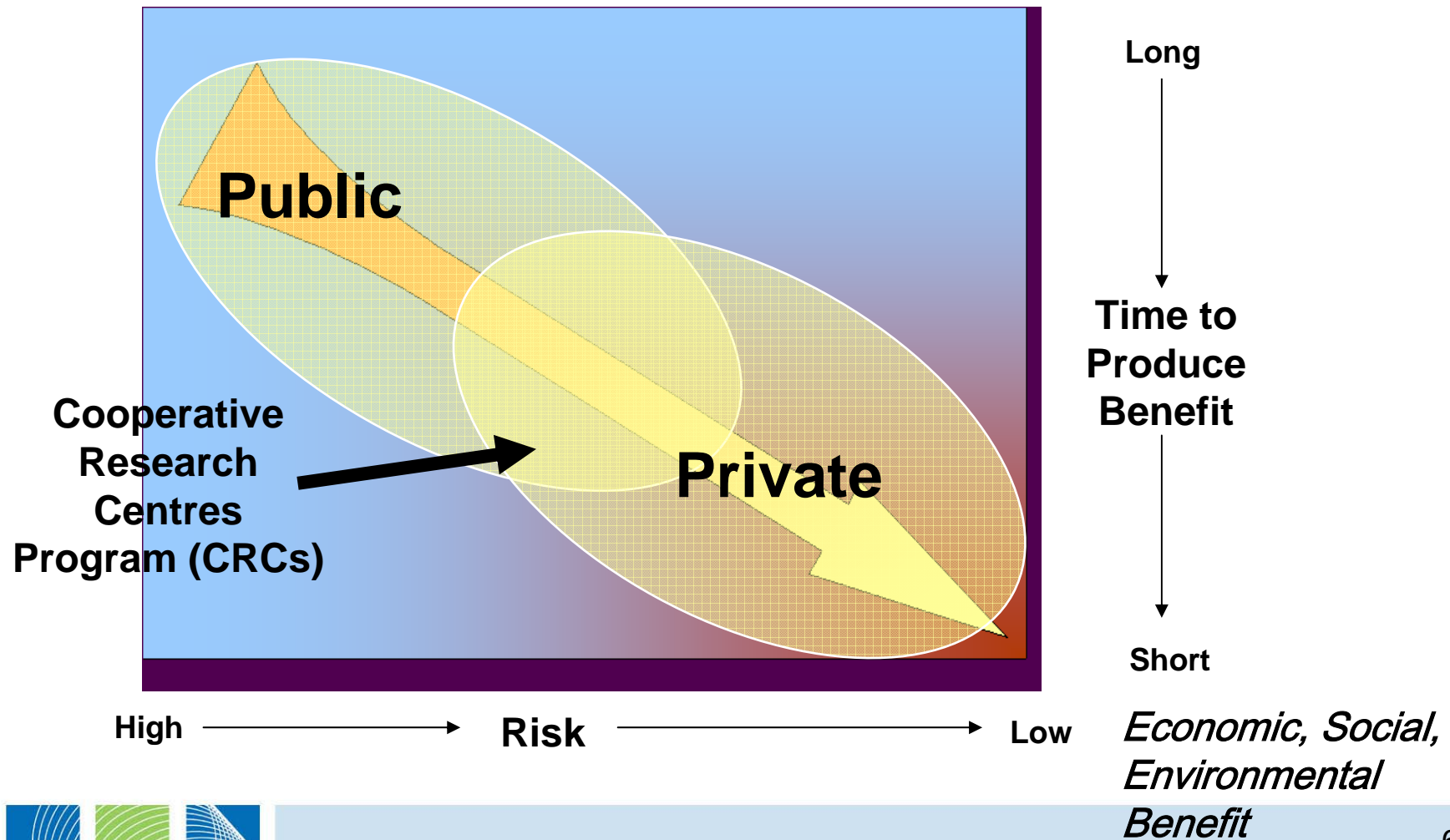


CRC's in the Innovation Cycle



**Cooperative
Research
Centres
Program
(CRCs)**

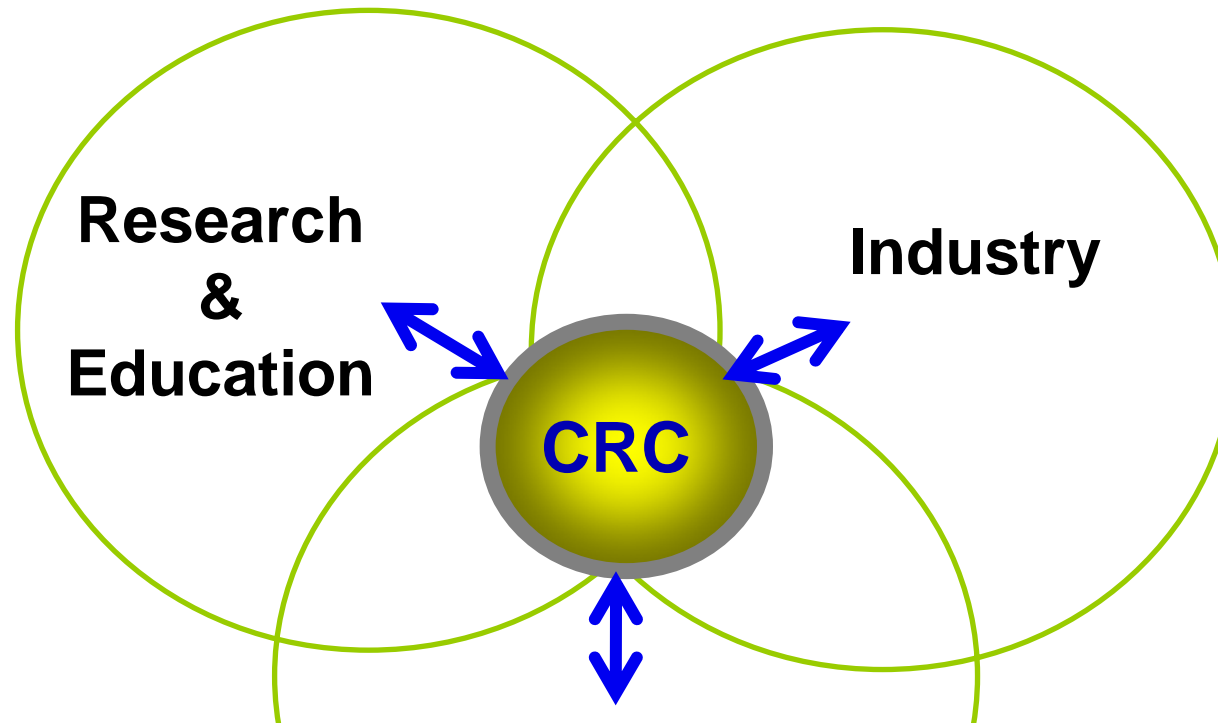
The Research Continuum



Public-Private Partnerships in R&D

- Build innovative networks of industry, government and researchers for applied outcomes
- Research skills training for industry
- Respond to global challenges with national and international partnerships

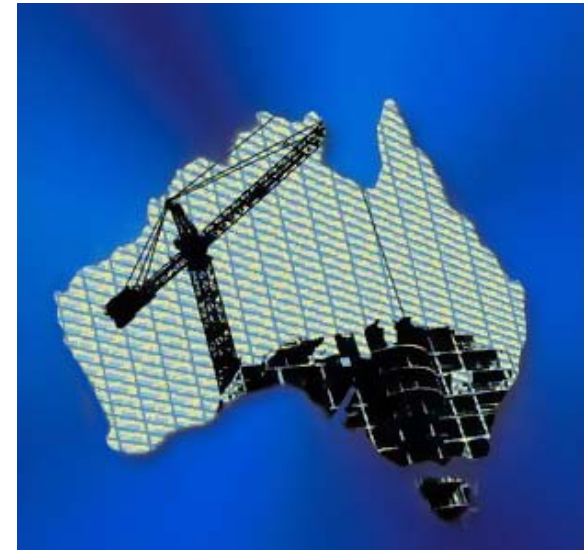
The CRC for Construction Innovation



**Over 300 people across Australia
contributing to the CRC vision**

Our Vision

**To lead the Australian property
and construction industry in
collaboration and innovation**



Industry Partners



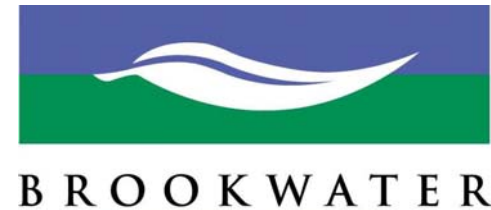
ARUP



Rider Hunt



dem



WOODS BAGOT



CRC Construction Innovation
BUILDING OUR FUTURE

Government Partners



Dedicated to a better Brisbane



Research Partners



The UNIVERSITY
of NEWCASTLE
AUSTRALIA



The University of Sydney
AUSTRALIA

University of
Western Sydney
Bringing knowledge to life





CRC now on International CIB Board

ACIF Alliance

1. Air Conditioning & Mechanical Contractors Association
2. Association of Consulting Architects Australia
3. Association of Consulting Engineers Australia
4. Australian Institute of Building
5. Australian Institute of Quantity Surveyors
6. Construction Industry Training Services Group
7. Engineers Australia
8. Facility Management Association of Australia
9. Master Builders Australia
10. National Electrical and Communications Association
11. Planning Institute of Australia
12. Property Council of Australia
13. The Royal Australian Institute of Architects

**200,000 members
across Australia**



Rockefeller Center, 1932

2. What's this project about?

A unique opportunity

- To leverage iconic nature of SOH's national and international profile in promoting FM best practice
- To showcase methodologies for measuring and managing economic, social and environmental impacts of FM across recommendations contained within the Australian FM Action Agenda
 1. *Performance Benchmarking*
 2. *Strategic Asset Management and Procurement*
 3. *Digital Facility Modelling*





Sydney Opera House – FM Exemplar Project

Project Leader: Jason Morris, Rider Hunt



Research Coordinator: *Lan Ding, CSIRO*



The University of Sydney
AUSTRALIA



Dedicated to a better Brisbane

WOODS BAGOT

FMA Queensland Branch Lunch Forum, 31 May
2005

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Strategies



Aim

Develop World's Best Practice in three key research areas: procurement, benchmarking and digital facility modelling – in a business alignment context

Achieve a conceptual framework for future integrated FM systems. The framework to include the structure, process and relationship between procurement, benchmarking and digital facility modelling

Deliver guidelines in procurement, benchmarking and digital facility modelling to support SOH strategic asset maintenance and operational plans

Benchmarking



Objectives

Establish benchmarking standards and systems for the FM community and specifically for SOH

Achieve world's best practice by analysing similar relevant benchmarking schemes, identifying and incorporating their useful features into a proposed system for adoption by SOH

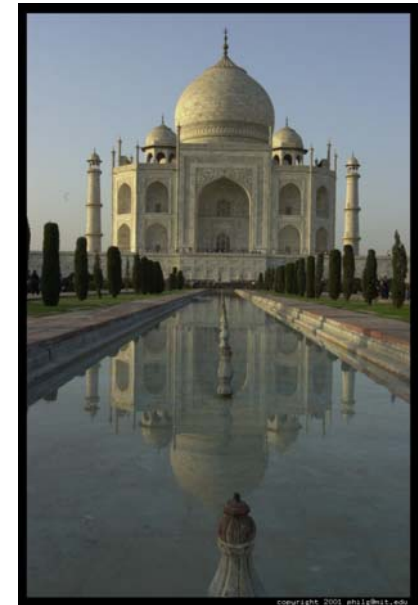
Benchmarking



Examples of the Similar Buildings

Iconic buildings

- St Basil's, Red Square, Moscow
- The Tower of London
- The Leaning Tower of Pisa
- The Empire State Building, NY



Opera Houses

- La Scala
- Covent Garden
- Paris - Bastille



Procurement



Objectives

Define procurement process and strategies required by SOH

Define service assessment and analysis of contractors

- Financial criteria
- Performance criteria

Establish potential automation of procurement process

Scope

Maintenance task

- Electrical services
- Cleaning and waste
- Air conditioning

Partnering /Subcontract

- Performance of contractors
- Sharing of risk

Business Alignment



Aim

Control of the impact of the Facility Management functions on Sydney Opera House core business process

Digital Facility Modelling



Aim

Study the potential of Digital Facility Modelling (DFM) for the Sydney Opera House (SOH) to support its operational and strategic Facility Management (FM) practices

3. Leading change in Australian FM?

Industry Dissemination

- Extensive series of national seminars and workshops – Feb 2006 and Nov 2006
- Held in conjunction with FMA
- Complementing the Australian Government's Action Agenda

You will hear about it!

Where do we want to be?

- **Leading the Australian industry in collaboration and innovation**
- **International leadership for our research and industry partners**

Planning for future success

- Delivering benefits through high impact research
- Strengthened industry linkages – ACIF + FMA
- 2nd International Conference:
 - *Clients Driving Innovation:
Moving Ideas into Practice*

our Second International Conference...

Clients Driving Innovation

– *moving ideas into practice*

12-14 March, 2006 on the Gold Coast

... see you there!



Image courtesy of Tourism Queensland



www.construction-innovation.info



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