# Global Access to Science: Meeting the Revolution



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# The Revolution in Science

"A scientific revolution is just beginning. It has the science-based innovation potential to create an era of that could completely eclipse the last half-century of technology-based innovation; and with that, a new wave of global social, technological and economic growth."

Towards 2020 Science



#### **Growth or Survival?**

Whether supporting growth or meeting urgent needs to solve problems that are global in scale, the new science will challenge university IT and Library capabilities in unprecedented ways.

# Paper was challenging once too!



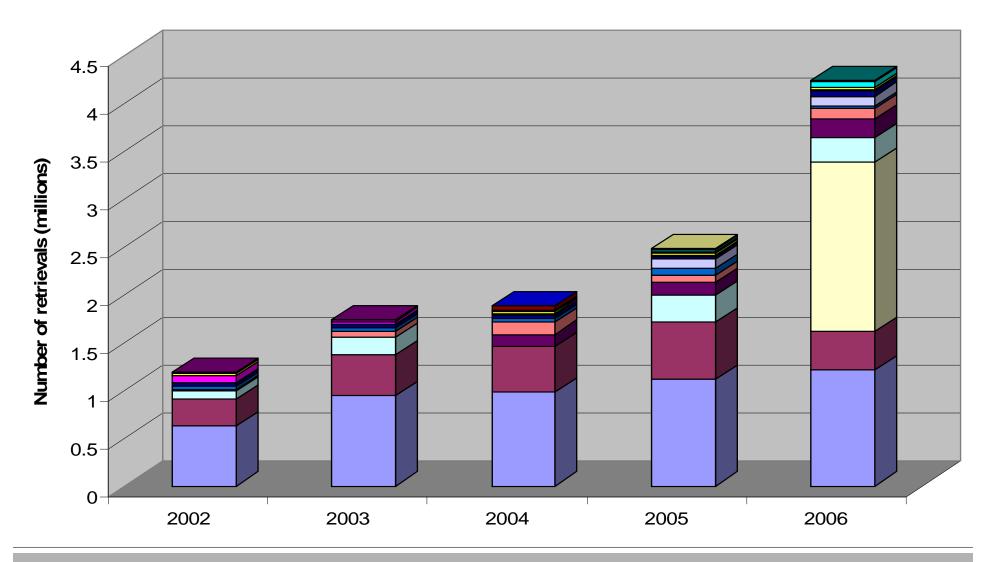


'...put yourself in the place of your ancestors at the time the printing press was invented. "My God', they cried, 'now there could be as many as a thousand books. How will we ever read them all?'

Sir Arthur C Clarke

#### **QUT Library - Trends in Electronic Full Text Retrievals**

Source: QUT Library Quarterly Reports - Usage Statistics (2002-2006) (colours represent access through different vendors, one colour per vendor)



# **Institutional Repository**

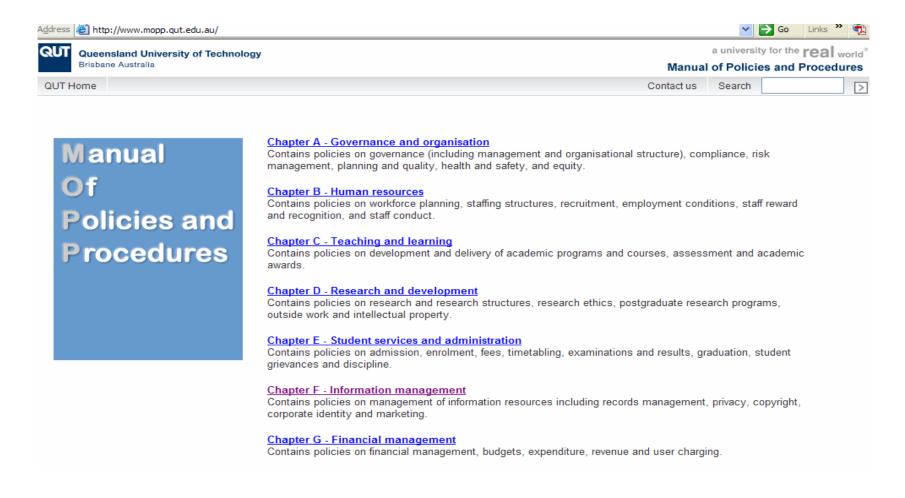
"An Institutional Repository is an online locus for collecting, preserving, and disseminating – in digital form– the intellectual output of an institution, particularly a research institution."

Wikipedia

"What are Repositories? They are simply the result of researchers discovering that if their children can do it, then so can they."

Les Carr, May 2007









#### **1.3.2 Policy**

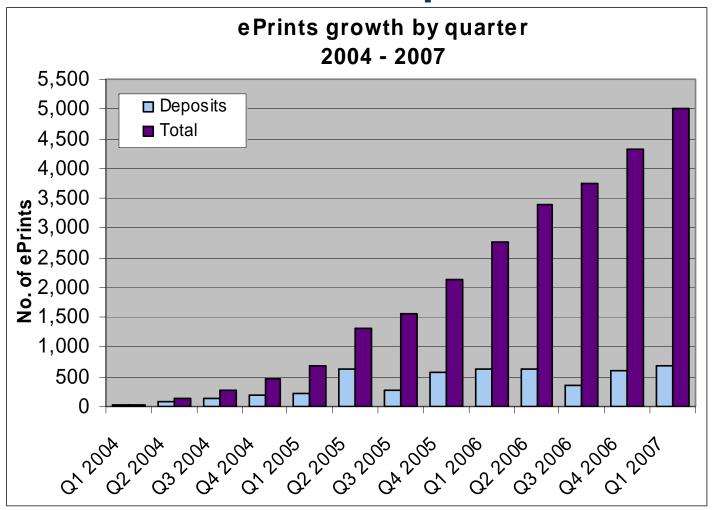
Material which represents the total publicly available research and scholarly output of the University is to be located in the University's digital or " E print " repository, subject to the exclusions noted. In this way it contributes to a growing international corpus of refereed and other research literature available on line, a process occurring in universities worldwide.

#### **1.3.2 Policy**

The following materials are to be included:

- Refereed research articles and contributions;
- Un-refereed research literature, conference contributions, chapters in proceedings, etc (the accepted draft).
- Theses as prepared for the Australian Digital Theses (ADT) process.
- Access to these contributions will be subject to any necessary agreement with the publisher.
- The material is to be organised in the repository according to the same categories used for the reporting of research to DEST
- Material to be commercialised, or which contains confidential material, or of which the promulgation would infringe a legal commitment by the University and/or the author, should not be included in the repository.

## **QUT ePrints Deposit Rate**





#### **QUT ePrints Top 10 Authors**

Date range: 05/2006 - 05/2007

| Rank | Author              | File Downloads |
|------|---------------------|----------------|
| 1    | Frost, Ray          | 45858          |
| 2    | Worthington, Andrew | 28153          |
| 3    | Cunningham, Stuart  | 25547          |
| 4    | Skitmore, Martin    | 21709          |
| 5    | Watters, Jim        | 21442          |
| 6    | Courtney, Mary      | 20493          |
| 7    | Kloprogge, Theo     | 19555          |
| 8    | <u>Farrell, Ann</u> | 19198          |
| 9    | Pham, Binh          | 18852          |
| 10   | Ferreira, Luis      | 18062          |

## The Rise of Mandates for Open Access

- European Research Commission (ERC)
- National Institute of Health (NIH)
- Australian Research Council (ARC)
- National Health and Medical Research Council (NHMRC)
- Australian Productivity Commission (APC)
- Wellcome Trust



#### **Funder and Institutional Mandates**

- Funder mandates, 15, (Belgium, Europe, UK, Australia)
- Institutional mandates, 11
   (Belgium, Europe, India, Portugal, Russia, Switzerland, Turkey, UK, Australia)

--as of 31 May 2007, Registry of Open Access Repository Material Archiving Policies.

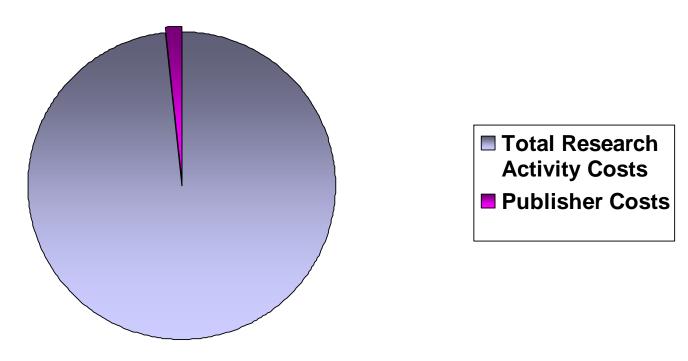
www.eprints.org/openaccess/policysignup/



#### **Gold or Green?**

- Gold: provides publisher revenue but challenges researchers and libraries.
- Green: may bypass or duplicate publisher containers but is more controlled by the researcher (whether immediate or deferred access).
- Will Gold evolve from Green?

## **R&D** vs Publishing



Publisher costs as proportion of total research activity costs, Australia, '03/'04

(Research Communication Costs in Australia, Emerging Opportunities and Benefits, Houghton, Steele and Sheehan, CSES Working Paper, No.24, August 2006)



#### **Familiar Confusables**

- What is a repository? i.e. what's in it?
- What does publishing mean?
- Journal title =research quality?
- Copyright as obstacle, distraction or enabler?

# Oak Law Homepage (http://www.oaklaw.qut.edu.au/)



about contact media

#### Navigation

- About the project
  - Background and Context
  - Objectives
  - Outcomes
  - Advisory group
  - Contacts
- Publications and Presentations
- Media
- Links
- Reports
- Positions Vacant



Legal Protocols for Copyright Management: Facilitating Open Access to Research at the National and International Levels

#### Legal Framework for e-Research Conference 2007

Submitted by Scott on Tue, 2007-04-24 15:16.

Wednesday 11 July - Thursday 12 July @ Surfers Paradise Marriott Resort and Spa, Gold Coast, Queensland.

The conference promises to be an exciting and engaging forum for researchers, technologists, and educators with interests and expertise in e-Research who recognise the need to remain current in this rapidly advancing field.

With vast change to the global research sector due to advances in information and communications technology (ICT) e-Research now supports all disciplines from the sciences to humanities.

This conference will examine legal issues facing e-Research both in Australia and internationally such as contractual frameworks, data ownership/access/reuse, privacy, Science Commons and IP licensing. It will provide insights into new ways of thinking about research management in the expanding e-Research environment.



#### **Semantic loss**

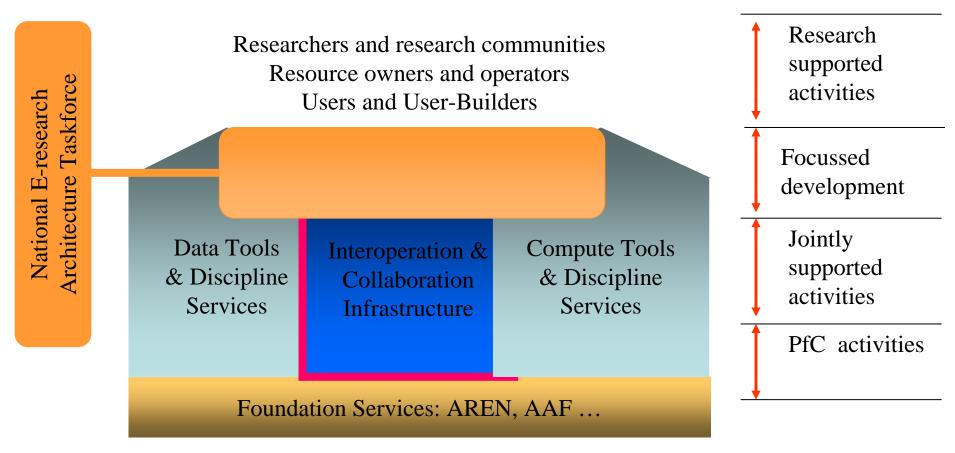
"Those who focus on open access, far from being radical, are not being nearly radical enough."

Timo Hannay

# Responding to the Data Deluge

- Data more systematically linked and accessible
- The institutional repository due for a rethink
- Data duration a global issue
- Tools and techniques of eResearch

#### **NCRIS Platforms for Collaboration**



NCRIS funds national components, and co-funds other components, noting that foundation services are to be mostly member funded

#### The Investment Plan

The Investment Plan is now public at:

http://www.ncris.dest.gov.au/capabilities/collaborative\_

investment\_plan\_platforms.htm

# The Challenge of the Activist Mission

- Informed understanding of the rapidly changing dynamics of scholarly publishing
- Readiness to lead in enhancing accessibility to the research of our institutions
- Clarity about the role and strategic deployment of repositories and their use
- Repudiation of the view that the 'problems' are too big for those with service enabling roles
- Knowledge of significant changes in the way Science is done and communicated
- Disposition to lead, or share the lead, in dealing with the data deluge





