Open Access in Singapore

*drivers & trends; players & progress*

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Outline

• Impetus for Open Access in Singapore
• Beginnings and current landscape
• Platforms, deposits, usage
• Policies, mandates, routes
• Obstacles to implementation
• Strategies for adoption
Singapore Basics

Physical Land Area: 715.8 sq km

Population: 5.3 million
  3.8 million (71.9%)
  Singapore Residents

Literacy Rate: 96.4% (Aged 15 & above)
  74.1% of those aged 25-34 years have tertiary qualifications

2013 GDP S$370.1bn (US$295.7bn)
  Real Growth: 4.1%
  Per Capita GDP: S$68,541
  (US$54,776)

Sources: Singapore in Brief 2013 published by Department of Statistics, MTI’s Economic Survey of Singapore 2013
Growth of Research Activities in Singapore

Compound annual growth rate 2002 to 2012:

R&D$ -> 7.8%
Researchers -> 6.2%
(excludes postgrad students)

Institutions Included in this Report

Singapore Universities
- Nanyang Technological University (NTU)
- National University of Singapore (NUS)
- Singapore Management University (SMU)

Singapore Research Funding Agencies
- Agency for Science, Technology and Research (A*STAR)
- National Research Foundation (NRF)
Singapore OA Beginnings

2007 – Discussions beginning at universities
2008 – First requests from faculty for APC funding
2009 – First institutional repository
2011 – First university open access mandate/policy
2013 – First funder open access policy adopted
  (following Obama administration OSTP memorandum)
# Institutional Repositories

<table>
<thead>
<tr>
<th>IR</th>
<th>Platform</th>
<th>Content Types</th>
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<tbody>
<tr>
<td>DR-NTU (Digital Repository-NTU)</td>
<td>Dspace (Open Source)</td>
<td>articles, conference papers, theses, books, book chapters, commentaries, selected student research papers/posters, working papers, briefs, teaching cases</td>
</tr>
<tr>
<td>ScholarBank@NUS</td>
<td>Dspace (Open Source)</td>
<td>articles, conference papers, editorials, patents, reviews, sound recordings, theses, video recordings</td>
</tr>
<tr>
<td>InK (Institutional Knowledge at SMU)</td>
<td>BePress (Hosted Solution)</td>
<td>articles, conference papers, books, book chapters, reports, working papers, magazines, dissertations, theses, teaching cases, videos, transcripts, photos</td>
</tr>
<tr>
<td>A<em>OAR (A</em>STAR Open Access Repository)</td>
<td>Dspace (Open Source)</td>
<td>articles, conference proceedings</td>
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Repository “Items”

- Institutional repositories have more than one purpose
  - To capture and showcase the research output of the institution
  - To provide open access articles, theses, etc.
- As such, repositories can be a combination of citation only (metadata) and full text
- Statistics from repositories must be considered with this in mind – not all items are OA full text
DR-NTU - Items

Total No. of items in DR-NTU
16,259 (+ 2341 theses)
DR-NTU - Usage

DR-NTU Full-text downloads 2,490,551 total
ScholarBank@NUS - Usage

Views

- Item views
- Bitstream views

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</thead>
<tbody>
<tr>
<td>Views</td>
<td>160,000</td>
<td>140,000</td>
<td>120,000</td>
<td>100,000</td>
<td>90,000</td>
<td>110,000</td>
<td>120,000</td>
<td>100,000</td>
<td>80,000</td>
<td>90,000</td>
<td>100,000</td>
<td>110,000</td>
</tr>
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InK launched in Jan-11 with 8,000 items, growing to 13,000 items in Mar-14
A*OAR - Items

No. of Publications Archived

Aug-13 Sep-13 Oct-13 Nov-13 Dec-13 Jan-14 Feb-14 Mar-14 Apr-14

39 23 29 75 94 251 32 40
A*STAR - Usage

No. of Views

Aug-13  Sep-13  Oct-13  Nov-13  Dec-13  Jan-14  Feb-14  Mar-14  Apr-14

No. of Views

241  223  513  1543  1712  2468  2451  2980  4032
## How Much OA Full Text?

<table>
<thead>
<tr>
<th></th>
<th>Total Deposits</th>
<th>Total Full Text</th>
<th>FT Researcher Submissions (articles, conferences, etc)</th>
<th>FT Theses Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTU</td>
<td>18,600</td>
<td>13,335 (72%)</td>
<td>10,994 (59%)</td>
<td>2,341 (13%)</td>
</tr>
<tr>
<td>NUS</td>
<td>28,133</td>
<td>9,284 (33%)</td>
<td>1,008 (4%)</td>
<td>8,434 (29%)</td>
</tr>
<tr>
<td>SMU</td>
<td>13,209</td>
<td>3,045 (23%)</td>
<td>2,740 (22%)</td>
<td>122 (1%)</td>
</tr>
<tr>
<td>A*STAR</td>
<td>550</td>
<td>550 (100%)</td>
<td>550 (100%)</td>
<td>--</td>
</tr>
<tr>
<td><strong>Singapore TOTALS</strong></td>
<td><strong>60,492</strong></td>
<td><strong>26,214</strong></td>
<td><strong>15,292</strong></td>
<td><strong>10,897</strong></td>
</tr>
</tbody>
</table>
Institutional Policies/Mandates

• NTU OA Mandate 2011 - requiring deposit of fulltext of all staff publications and higher degree theses

• SMU OA Policy 2013 - requiring deposit for all publications, giving faculty choice of access level: open, SMU only, abstract only

• NUS does not have a mandate or policy of its own, but encourages OA and will comply with funder mandates
A*STAR Mandate

• A*STAR is a publicly funded agency that promotes and funds R&D to create economic growth, industry development and positive societal outcomes

• August 2013 – Green (self-archiving) Open Access mandate

• All peer-reviewed publications generated from A*STAR funding must be deposited in an open access repository no later than 12 months after publication

• Can deposit in A*OAR or any other repository of the researcher’s choice
National Mandate - NRF

- Singapore National Research Foundation (NRF) is a department within the Prime Minister’s Office set up in 2006

- As a national funder of Research, Innovation and Enterprise, it funds strategic initiatives and builds R&D capabilities

- **NRF requires research-performing institutions to have open access policies, in order for their researchers to tap on their grants (effective July 2014)**

- Promotion, compliance and enforcement to be done by the research performing institutions
Green or Gold Route?

• Generally, institutions are following and promoting Green OA (self archiving)

• No universities providing funds for Gold OA, though individual researchers may choose to do so

• A*STAR and NRF allow for use of grant money to pay for Gold Article Processing Charges (APC)

• A*STAR supports Green, allows funds to be used to pay for APC in Gold OA journals, but cautions against publishing in hybrid journals at this time
Obstacles to Implementation

• Lack of knowledge about OA
• Concern about copyright, lack of understanding
• Lack of interest/concern for OA
• Cannot locate final manuscript versions
• Extra work for researchers for green OA – not well integrated into workflow, some institutions providing support for this extra work but variable
• Need to publish in high impact journals, so fully OA journals rarely a top choice
• No university funding for gold OA, though researchers can budget for it in grant applications
Strategies for Adoption

• Mandates not strictly enforced at this time, preference is for researchers to see merits and willingly comply
• Strong focus on education and promotion
• Deposit services range from assistance in helping researchers to deposit to full deposit services
• Some integration between repositories and other research reporting platforms, but needs improvement to facilitate easy deposit
NTU Strategies for Adoption

• Researchers able to submit in 3 ways
  – Email manuscript to Library
  – Deposit manuscript via RIMS when updating (Research Information Management System)
  – Deposit directly into DR-NTU

• “OA Blitz” saw personalized outreach to all faculty by subject librarians resulting in 800 full text deposits in one semester (Fall 2013)

• Academic Publishing series of talks for postgraduates and early career researchers highlights Open Access

• OA and mandates discussed in new faculty/researcher orientations
NUS Strategies for Adoption

- Library partnering with Faculty of Arts and Social Sciences to promote direct submission to ScholarBank@NUS
- Workshops highlighting how faculty will benefit from participation, showing connection between Google Scholar and ScholarBank@NUS
- Library assists researchers with full-text submission while working on improving submission process
SMU Strategies for Adoption

• Promote InK and OA during faculty orientation
• Follow up by research librarians with individual faculty to encourage full text deposits
• Presentations made at school meetings
• Work with Provost, Deans, Associate Deans to promote and garner wider support
• Pull data from Research Publication System which has option to upload full text
• Plan to replace RPS with new integrated system with workflows, easy to use, automatically push items to InK
A*STAR Strategies for Adoption

• Organize workshops and talks to educate researchers about open access
• Roadshow to introduce the 2013 OA Policy/mandate as well as discuss copyright and OA in general
• Individual visits to A*STAR research institutes, and talks at staff townhalls with Q&A
General Messages for Researchers

• Permanent archive/URL of publications
• Wider audience
• Increased visibility
• Easily retrievable via search engines
• Use statistics for your publications
• Possible increase in downloads of your publications
• Possible increase in citations to your publications
• Comply with funder and university mandates
Thank you!

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Karen Tan, NRF