Evaluation of the impact of library discovery technologies on usage of academic content

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Why this study?

• Commissioned by UKSG/Jisc in July 2013
  ➢ Lots of interest in library discovery technologies
  ➢ Questions about whether libraries, publishers and other stakeholders should be engaging with those technologies
  ➢ Follows on from the UKSG research report on Link resolvers and the serials supply chain and the work of KBART

• Small-scale study
  ➢ A UK perspective

• No previous usage data analyses – fill in the gap
  ➢ 2 studies about to report shortly

• Work started in July 2013
Objectives of the research

- Evaluation of the impact of library discovery technologies on usage of academic resources
- Provide evidence to determine if there is a case for
  - Investment in library discovery technologies by libraries
  - Engagement with library discovery technologies by publishers and other stakeholders in the information supply chain
- Provide recommendations for stakeholders to best support the discovery of academic resources
- Identify additional research, data, discussion and initiatives that will support the findings of the study
Methodology

• Phase 1: survey of UK HE libraries  
  ➢ Objective: determine the current RDS landscape

• Phase 2: case studies of libraries and publishers  
  ➢ Objective: collect usage data + views and perceptions on the impact of library discovery technologies

• Phase 3: interviews with stakeholders  
  ➢ Objective: obtain a bigger picture on the perceived impact of library discovery technologies and an insight of where the sector is going
Methodology (cont’d)

• Survey: 62 respondents
  ✓ Online questionnaire distributed to UK HE library directors

• 8 publishers and stakeholders

• 6 case study libraries

• Data received from 6 libraries & 4 publishers/content providers
  ✓ COUNTER JR1, BR2 and DB1 or close equivalent
Phase 1: UK RDS landscape

RDS use in academic libraries

The UK HE landscape:

- 77% of UK HE libraries are already using an RDS at their institution
- A further 11% are in the process of implementing an RDS
- RDS implementation in HE libraries had probably reached its peak in the last 12 months

77% of UK HE libraries are already using an RDS at their institution.
Phase 1: UK RDS landscape

RDS products used by UK HE libraries

- 3 products dominate the library discovery market in our sample
- Half of the survey respondents considered the RDS to be a replacement for their previous OPAC, although there was an indication that online catalogues are still needed for some specific transactions
Phase 2: usage study

What are we going to present?

1. General findings – general picture
   • Data received from the 6 participating libraries and 4 of the participating publishers
     • Libraries’ usage data – journal, e-book and database
     • Publishers’ usage data – journal

2. Findings for a case study library – more detailed picture
Overall journal usage trends

Relative usage per FTE vs RDS implementation

1st year vs 2nd year
there may be a new graph - see Claire
Valérie, 05/11/2013
Overall journal usage trends – constant titles

![Graph showing overall journal usage trends with RDS implementation marked.]

RDS implementation

Relative usage per FTE

Loughborough University
Overall e-book usage trends – constant titles

RDS implementation

Relative usage per FTE
Overall database usage trends

RDS implementation

Relative usage per FTE
check graph again with claire - ok for one library omitted but what about the other one missing?
Valérie, 05/11/2013
Publishers - overall journal trends

The graph shows the relative usage per FTE over time. The implementation of RDS is indicated with a vertical red line. Different publishers are represented by different lines and markers:

- **W**: Blue line and square marker.
- **Z**: Purple line and triangle marker.
- **Y**: Red line and circle marker.
- **X**: Green line and diamond marker.

The x-axis represents the RDS years from RDS - 12 to RDS + 24, while the y-axis shows the relative usage per FTE ranging from -0.30 to 0.40.
Broad picture – key findings

• What does the usage analysis suggest?
  • Journals – some impact
  • E-books – definitely a positive impact
  • Databases – cannot tell

• Interpretation of the aggregated data – challenge - why?
  • Multi-dimensional environment – lots of noise in the results
    • other factors may affect usage, notably the volume of content available
      • We’ve tried to control for this with the ‘constant titles’ but there may be other factors
  • No common pattern by type of resources for each library
    • Except for e-books maybe?

• Next: look at a case study library in greater detail
Journal usage per FTE for library E

- Journal usage levels increasing before RDS
- RDS effect on constant titles shows a decrease in usage level immediately after implementation and then a sustained increase at a higher pace

All
Constant titles
W
X
Y
Z

Increased journal title availability
E-book usage per FTE for library E

- Overall usage going up
- Constant titles going up
- Increase inflated by one
- Subscription making up for 70% of the usage of the constant title set throughout
- E-book usage for publisher W increased by a factor of 8
Database usage per FTE for library E

- Database usage increased significantly immediately after RDS
- Issues with database counting?

Suspected multiple counting issue
What can we say from the usage analysis?

- No straightforward answer – but it seems that overall library discovery technologies influence positively the use of academic resources
  - The effect may vary according to the type of resources – e-books seem to benefit greatly from RDS
- Isolating the sole impact of RDS is a challenge – multi-dimensional environment
  - Many other factors may affect usage – we have tried to control for content growth by providing an analysis including constant titles
- More data needed for a meaningful analysis
  - 2-year post-implementation data is not enough to pick up a trend and isolate other variables influencing usage
Additional findings from libraries

Perceived advantages for libraries:

- Generally, high levels of library satisfaction with RDS
- Increased usage – borne out by usage data
- Enhanced user experience (primary motivation – not increased usage)
  - One stop shop = single interface linked to full text
- Better use of subscriptions – no silos

Perceived challenges:

- Usage data analysis – not done routinely
- RDS searching aimed at undergrads? Starting point?
  - Can researchers benefit from RDS too?
- Lack of clarity in coverage from RDS suppliers
- Interoperability between systems
- Lack of co-operation between some publishers and some RDS suppliers
Additional findings from publishers and content providers

Perceptions when engaging with RDS:
- Improving discoverability and visibility of content
  - still very low traffic from RDS compared to search engines
  - particularly relevant for smaller publishers?
  - better service for their authors and readers
  - can publishers afford to wait and see where it is going?

Perceived challenges:
- Metadata RDS optimisation for improved discoverability
- Dilution of the publisher’s brand within the RDS
- Lack of feedback/communication from RDS suppliers
- Lack of visibility and understanding of how data are used
  - Relevancy ranking
Other stakeholders in the information supply chain – some key findings

RDS – great tool – probably changing the library landscape in the short to medium term

But the use of RDS raises some questions:

✓ Are RDS a long term valid solution to Web-scale information searching?
✓ Costs & benefits to libraries?
✓ What is the effect on A&I databases for specialist information?
THANK YOU!

- Recommendations soon available in the full report that will be presented to UKSG

- For a copy of the report:
  - Check out the UKSG website - [http://www.uksg.org/](http://www.uksg.org/)
  - Contact us for a copy of the report - lisu@lboro.ac.uk