Digital Libraries: Redefining the Library Value Paradigm

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Context

• This paper raises the issue of “value” that academic libraries, through digital content, bring to their institutions.

• This “value” concept is that as perceived by university administrators.

The (academic) library is dead!
Long live the (academic) library.
University Administrators
Want more than just “information” from the library
Administrator needs at HKU

• Recruiting, retaining and evaluating productive faculty, and students
• Connect faculty with collaborators, grants and other opportunities
• International institutional reputation
For administrators, libraries need to...
Demonstrate that they

- Provide “value” to the organisation (as defined by the administration)
- Promote the organisation’s **reputation**
- Contribute to faculty and student **productivity**
- Manage “**information**” in its broadest possible definition.
The “Value” Spectre

The “value” of academic libraries

2 Examples
"Not everything that counts can be counted, and not everything that can be counted counts."
What we count and measure

- Size
- Usage
- Satisfaction

But do they count (matter)?
Emerging **risks** for research libraries (March 2010)

- **Risks associated with uncertain library “value”**
  - Weakened visibility
  - Poorly communicated

Example 1.
Value in $s$ and efficiency.
RoI?

- Return on investment
- Normally measured in monetary terms
- For every $ invested in the library, how many (if any) $s are generated for the university?
- Only a single measure of library “value”
A recent study

- Phase two study into research library contributions to grant success.
- 8 research libraries across all continents (including HKUL)

The hypothesis

• The model is that library’s investment in materials (especially digital materials) increases researchers’ productivity and success with grant applications.
• This increase in productivity produces a measurable increase in grant receipts due to increased citations, as well as recruitment and retention of productive faculty.
1. Data collection

**FACULTY DATA**
- # Regular (tenure line) headcount faculty
- # Principal Investigators/Regular Researchers

**GRANT AWARDS & FUNDING**
- # Grant proposals
- # Grants awarded
- Amt. of grant income expended (acquitted)
- Total # grants expended (acquitted)
- Amt. average size grant

**LIBRARY EXPENDITURES**
- Amt. total Library budget
- Amt. Library materials budget

**FACULTY PRODUCTIVITY**
- # articles published (institutional records, if available)
- # articles published (Scopus)
- # articles per PI/RR
- # articles per headcount faculty
- Total # grants expended (acquitted)
- # grants per PI/RR
- # grants per headcount faculty
2. Faculty Survey Questions

• How many proposals (with you as PI) submitted?
• How many grants funded (with you as PI)?
• Total monetary value of your grants?
• Importance of citations in proposals and reports?
• How many citations in proposals, reports, articles?
• **What % of citations from the library e-collection?**
• For each cited, how many others do you read?
3. Interviews with Administrators

- Mission of the University and the Library’s role
- A further source of qualitative data that illustrates the value of the library
The Formula

Combining Survey and Data elements

\[
\left( \frac{\text{number of grant awards} \times \% \text{ of faculty who say citations are important to grant awards}}{\text{number of grant proposals} \times \% \text{ of proposals that include citations obtained through library}} \right) \\
\times \\
\frac{\text{average size of grant} \times \text{number of grants expended in one year}}{\text{total library budget}}
\]
Other Findings from the Study
Faculty told us that

- Digital content increases:
  - research **efficiency**
  - productivity
  - interdisciplinary perspectives, and
  - international perspectives
- Digital resources allow faculty to **integrate resources** into their proposals, etc.
- Between 50% and 99% of items cited in grant proposals etc are from the **library’s digital resources**
Example 2.
Value through reputation enhancement!
Knowledge Exchange

• The HKU "Knowledge Exchange" initiative aims to make HKU researchers and their research highly visible.

• The creation of HKU ResearcherPages in HKU's institutional repository, highlight the research and achievements of each professoriate staff at HKU, including their authored publications which are freely available in open access.
• Contact details
• Research interests
• Areas for media comment
• Bibliometrics on quantity and quality of research output
• Fulltext items authored by these HKU researchers
• HKU research and researchers are more visible and “findable”
• Discover a HKU expert through Google.
• Show **download counts** of publications, and paper and citations metrics from Scopus and Thomson Reuter's ResearcherID.

• Allow the HKU author to manage, control, and take charge of digital presence, or **reputation**, is shown to the world.

• HKU authors now have incentive and tools to correct errors, add missing publications, and **enhance their reputation** as shown in these HKU ResearcherPages, Scopus, and ResearcherID.

• **University reputation** is enhanced as HKU paper and citation counts are positively amended, offers of contract research and research collaboration increase, and, invitations to speak and consult grow.
The HKU Scholars Hub

The HKU Scholars Hub is the institutional repository of The University of Hong Kong. It seeks to collect the intellectual output of HKU and make it available to the widest possible audience. Records are made in the Hub for items that are fulltext open access, or for URLs that hyperlink to the same.

Quick search of The Hub

Search the author, title, abstract and series fields.

Search

For phrase search, please use quotation marks, for example, "Wann, John", or "Behavior Therapy".

Featured Scholar

Dr Tang, SF
Assistant Professor
New indexes, many ways to search
Access points for discovery (in Google!): names, dept, position, languages spoken, papers written, their subjects, etc.
<table>
<thead>
<tr>
<th>Scopus</th>
<th>ResearcherID</th>
</tr>
</thead>
<tbody>
<tr>
<td>AuthorID: 7202539421</td>
<td>RID: C-4405-2009</td>
</tr>
<tr>
<td>Document Count: 301</td>
<td>Document Count: 673</td>
</tr>
<tr>
<td>Cited by: 3881</td>
<td>Times Cited: 8090</td>
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<td>h Index: 27</td>
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<tr>
<td>Co-authors: 150</td>
<td>Co-authors: Collaboration Network</td>
</tr>
</tbody>
</table>
Prof Tam, Paul Kwong Hang
譚廣亨
Pro-Vice Chancellor and Vice President (Research)
Chair of Paediatric Surgery

**Bibliometrics, external**

**Scopus**
- **AuthorID:** 7202539421
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ResearcherID

- A global, multi-disciplinary scholarly research community.
- Uses unique identifiers assigned to each author.
- Eliminates author misidentification.
- Provides author’s citation metrics instantly.
- Search for collaborators, review publication lists and explore how research is used around the world.
Tam, Paul
ResearcherID: C-4405-2009

Other Names: Tam PKH; Tam P; Tam KH; 湯文亨
URL: http://www.researcherid.com/rid/C-4405-2009

Subject: Critical Care Medicine; Emergency Medicine; General & Internal Medicine; Genetics & Heredity; Immunology; Integrative & Complementary Medicine; Neurosciences & Neurology; Pathology; Pediatrics; Surgery; Transplantation

Description: Chair of Paediatric Surgery and Division Chief. Professor Tam has received numerous awards including the BAPS prize, Royal College of Surgeons’ gold medal etc. He has published extensively including 19 chapters in 11 books and over 211 original articles in international journals. He was the Founding Director of the Centre of Human Development and Birth Defects.

My URLs: http://hub.hku.hk/prp0060
http://www.hku.hk/coloffice/menu/gvc-tam_Biography.htm

Publications
My Publications (673)
View Publications
Citation Metrics

Publication List: Citation Metrics
This graph shows the number of times the articles on the publication list have been cited in each of the last 20 years.
Note: Only articles from Web of Knowledge with citation data are included in the calculations.

Citation Distribution by year

Total Articles in Publication List: 673
Articles With Citation Data: 278
Sum of the Times Cited: 8176
Average Citations per Article: 29.41
h-index: 28
Last Updated: 11/30/2010 00:51 GMT
On any relevant search, entry for Hub usually comes top of page.
• An expert finder

• A system to supply documents and metrics for the HKU Research Assessment Exercise

• A system to support applications for research grants and tenure applications

• A Reputation Management tool, individual and corporate.
• A tangible demonstration of the value that the library, through a digital collection, brings to the institution.
Conclusions
Academic libraries must:

• Re-evaluate our **culture of assessment** for relevance

• Develop effective **metrics and techniques for measuring and validating the impact of information provision, services and systems, especially digital content**

• Measure and articulate the **value of information** in educational and professional settings

• Effectively demonstrate the **value that our digital collections** bring to the organisation in the form of **productivity and reputation**.
Libraries can no longer rely on measuring and evaluating size, use and satisfaction alone for their survival.

Our impact must be measured by our relevance to the organisation’s mission and the value we create.
Thank you!* 

I acknowledge and thank David Palmer (HKU) for his work on the Scholar’s Hub, and from whom several slides in this presentation have been adapted.