



<b>Title</b>	<b>ROI and the university library: preliminary outcomes of the HKU study</b>
<b>Author(s)</b>	<b>Sidorko, PE</b>
<b>Citation</b>	<b>Library Connect Seminar (Elsevier): Communicating the Value of your Library, Laila Vahed, South Africa, 26-27 October 2009.</b>
<b>Issued Date</b>	<b>2009</b>
<b>URL</b>	<b><a href="http://hdl.handle.net/10722/127726">http://hdl.handle.net/10722/127726</a></b>
<b>Rights</b>	<b>Creative Commons: Attribution 3.0 Hong Kong License</b>



*Communicating the Value of your Library*  
*23 October 2009*

# ROI and the university library: *Preliminary* outcomes of the HKU study\*

Peter Sidorko



\* Falsely advertised as “Hong Kong University ROI study outcomes”

## Key trends for a 21<sup>st</sup> Century Academic Library\*

- Customization and personalization
- Need to market content and services and to raise their awareness and availability
- Demand for self-service
- Constant change, and innovative and hybrid approaches and structures
- Successful graduates and **productive faculty as key measures of success**
- Expanding social environments
- Culture of **assessment and accountability**
- Collaboration at all levels
- Delivering content, services anywhere, anytime

\* Neal, J. & Harboe-Ree, C. (2009) *The University of Hong Kong External Review of the University Libraries* [Unpublished Manuscript].

# Overview

- RoI? Value in libraries?
- Earlier studies
- Carol Tenopir (University of Tennessee, Knoxville) & Elsevier studies
  - Phase 1
  - Phase 2
- What next?



# Measuring...

- Quantity: JULAC statistics etc
- Quality: Surveys, LibQUAL+, etc
- Value: Usage analysis eg cost per download etc
- Impact ??

# RoI?

- Return on investment
- Income as a proportion of the amount invested in an asset
- 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”

# Some caveats and limitations

- ROI simply doesn't measure the *indirect benefits* libraries provide
  - Social
  - Cultural
  - Health
  - Etc
- Cannot be readily used for peer-comparison because of the context in which the library resides
- Academic libraries must demonstrate their contribution (value) to the mission of the university.

# Remember Bangor?







# Remember Bangor?

## **The *Consultation* Document, January 2005**

“the support...from the qualified subject librarians is *hard to justify in value-for-money terms* at a time when the process of literature searches is substantially de-skilled by online bibliographical resources.”

J Wright, *From adversity comes strength? Raising a new profile for the library at the University of Wales, Bangor*

<http://www.library.nuigalway.ie/assets/inuls2007/johnwright-fri0945.ppt>

# The Bangor survival solution

1. *Demonstrating Value*
2. Perception and Aesthetics
3. Collaboration
4. Innovation

And this...

The university library of the future will be sparsely staffed, highly decentralized, and have a physical plant consisting of little more than special collections and study areas...

**INSIDE HIGHER ED**

Take Our Reader Survey.

Get Daily E-mail | About Us

October 7, 2009

Home News Views BlogU Audio The Lists

**News**

Search News  Search

[Browse Archives](#)

## Libraries of the Future

September 24, 2009

NEW YORK CITY — The university library of the future will be sparsely staffed, highly decentralized, and have a physical plant consisting of little more than special collections and study areas.

That's what Daniel Greenstein, vice provost for academic planning and programs at the University of California System, told a room full of university librarians Wednesday at Baruch College of City University of New York, where the higher education technology group [Ithaka](#) held a meeting to discuss "sustainable scholarship."

**Share This Story**

**Related Stories**

- » [Open Letter on Open Access](#)  
September 23, 2009
- » [Speak Now, or Forever Hold Your Copyrights!](#)  
September 4, 2009
- » [Brand New, Again](#)  
August 3, 2009
- » [The Equal Opportunity Library](#)  
July 30, 2009
- » [The Interdisciplinary Science Library](#)  
June 17, 2009

**FREE Daily News Alerts**

"We're already starting to see a move on the part of university libraries... to outsource virtually all the services [they have] developed and maintained over the years," Greenstein said. Now, with universities everywhere still ailing from last year's economic meltdown, administrators are more likely than ever to explore the dramatic restructuring of library operations.

Within the decade, he said, groups of universities will have shared print and digital repositories where they store books they no longer care to manage. "There are national discussions about how and to what extent we can begin to collaborate institutionally to share the cost of storing and managing books," he said. "That trend should keep continuing as capital funding is scarce, as space constraints are severe, especially on urban campuses — and, frankly, as funding needs to flow into other aspects of the academic program."

Under such a system, individual university libraries would no longer have to curate their own archives in order to ensure the long-term viability of old texts, Greenstein said. "What is the proportion of a library

# \$\$\$

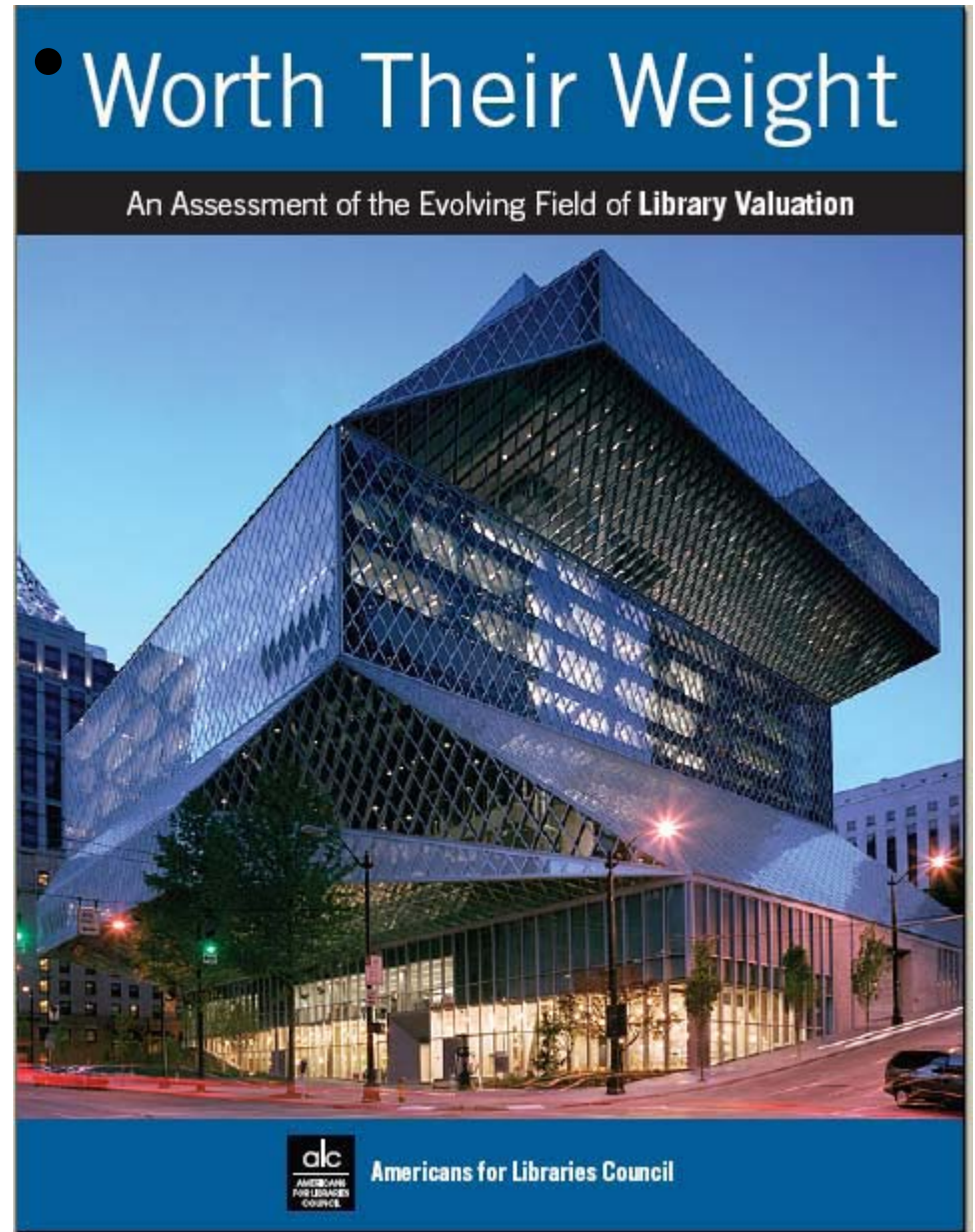
- with universities everywhere still ailing from last year's economic meltdown, administrators are more likely than ever to explore the dramatic restructuring of library operations
- “...and, frankly, funding needs to flow into other aspects of the academic program.”
  - Attributed to Daniel Greenstein, vice provost for academic planning and programs at the University of California System, Libraries of the Future, Inside Higher Ed, September 24, 2009  
<http://www.insidehighered.com/news/2009/09/24/libraries>

Other studies

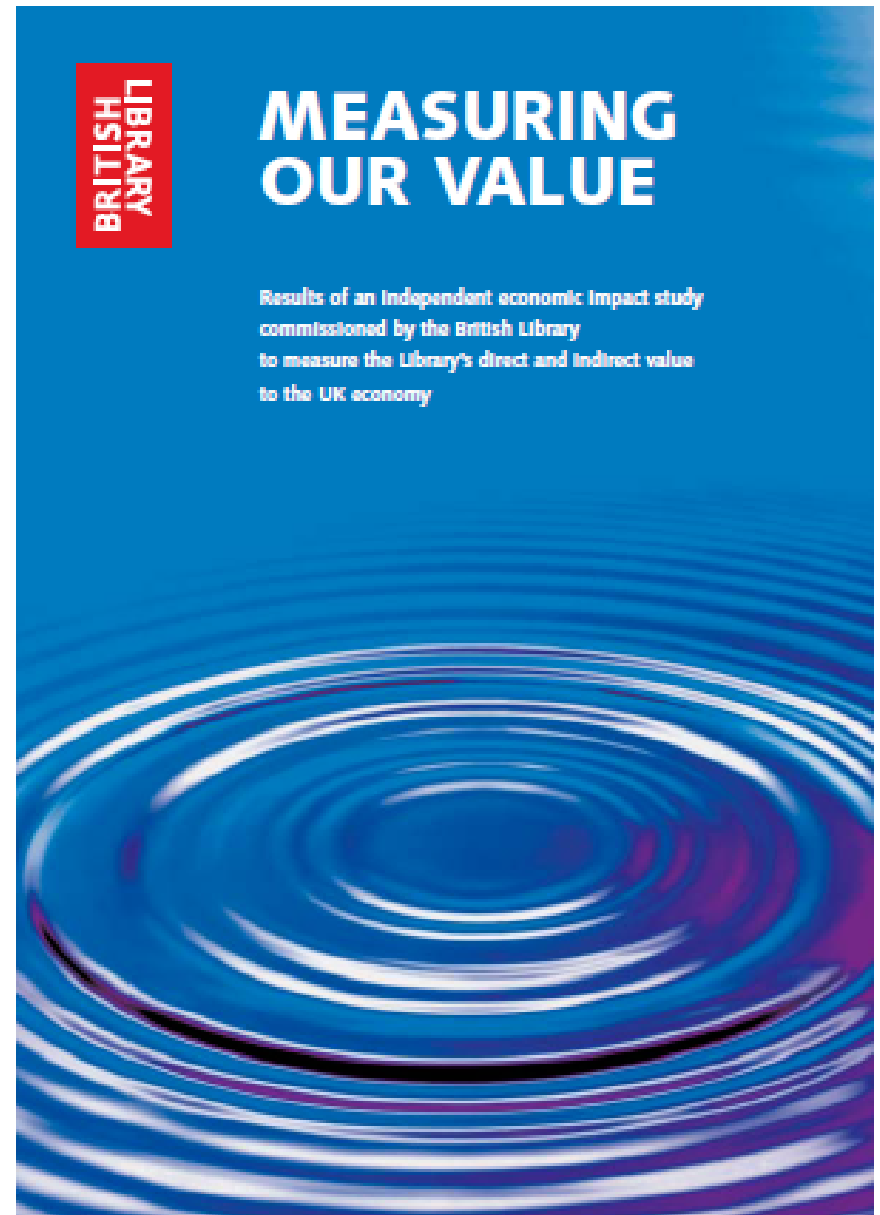




- U.S. Public Libraries approach to demonstrating “value”
- Several methodologies adopted, with differing parameters
- Many qualitative in nature
- Those providing a dollar RoI usually fall in the \$3 to \$6 return for every \$1 spent



- Technique supported by the Nobel Prize winning economists Kenneth Arrow and Robert Solow
- A quantitative methodology used by UK Government, the World Bank and the OECD
- *Contingent Valuation* method, asking \$ questions
- For every £ 1 of public funding the British Library receives annually, £ 4.40 is generated for the UK economy.
- If the British Library did not exist, the UK would lose £ 280m of economic value per annum.



<http://www.bl.uk/pdf/measuring.pdf>

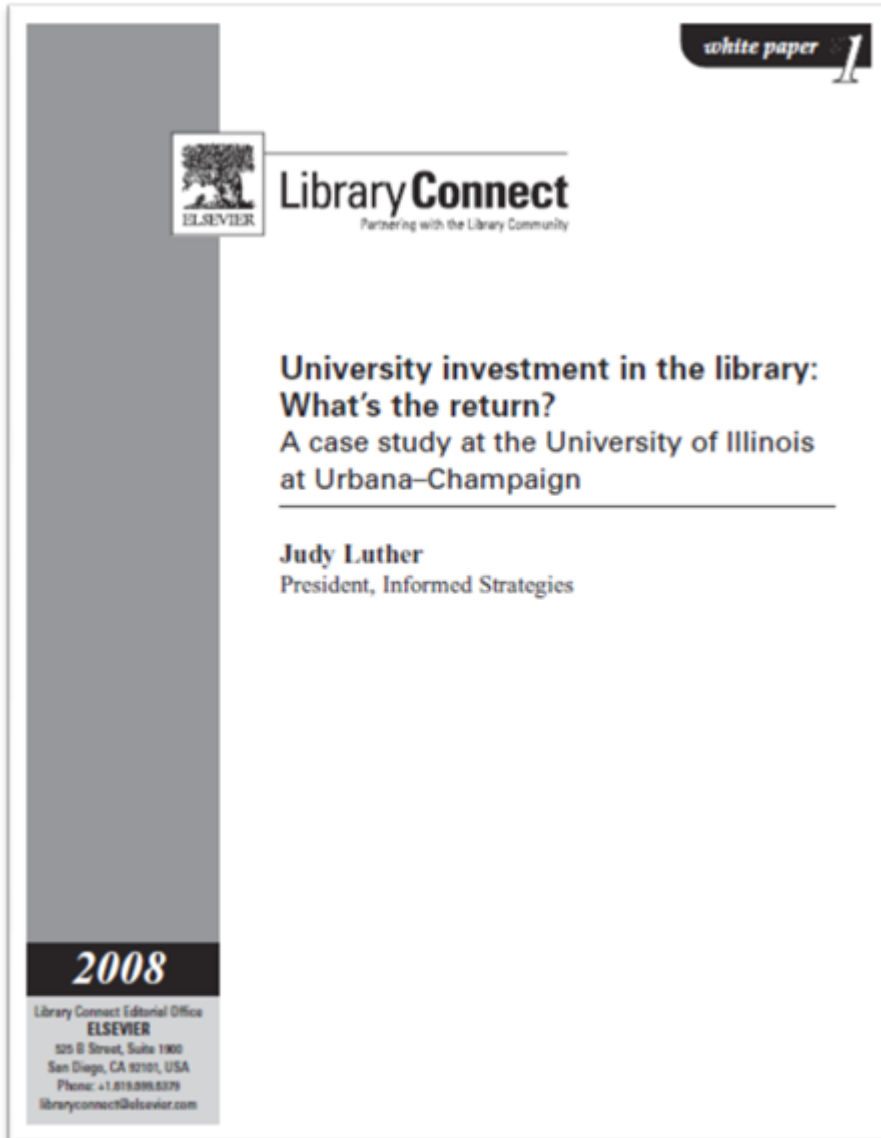


Carol Tenopir/Elsevier Studies

# Study in 3 Phases

- Phase 1: ROI in grants, case study at University of Illinois, Urbana-Champaign (completed 2008)
- Phase 2: ROI in grants, expanded to 8 countries (in progress now)
- Phase 3: ROI for grants/research, teaching, student engagement (proposal pending)

# Phase 1



- Changing metrics: from inputs and activity to outputs and productivity measures
- “for each dollar invested in the library, the university received *x dollars in return.*”



# Goal: to demonstrate that library collections contribute to income-generating activities

- Quantify a return on university's investments in its library
- Focus on library's role in **externally funded research process**
- *Not* trying to claim an allocation back to library
- *Not* a budget argument
- *Not* a cost/time savings exercise
- *Not* creating a predictive model

# Phase 1: The hypothesis

- Library's contribution to revenue-generating activities of faculty by examining the role of library-sourced citations in **grant applications**.
- The model for the study is that the library's investment in materials **increases researchers' productivity**.
- This **increase in productivity produces a measurable increase in grant receipts due to increased citations**, as well as recruitment and retention of productive faculty.

# Phase 1: University of Illinois

- The study found that for every \$1 invested in the library, \$4.38 in grant income is generated for the university.

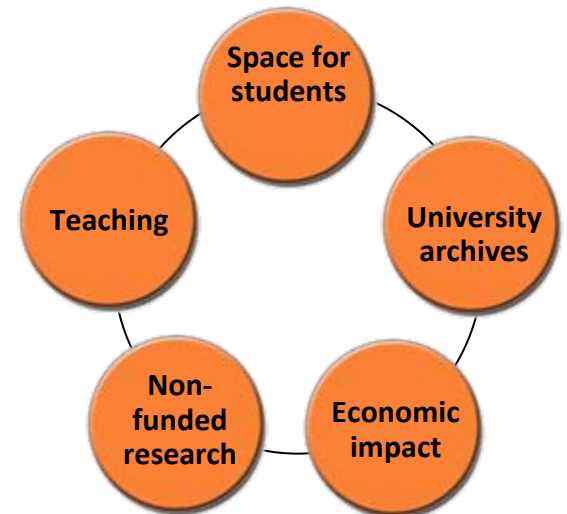
# ROI Model for UIUC\*

$$\begin{aligned} & 78.14\% \text{ faculty w/ grants using citations} \\ & \quad \times \\ & 50.79\% \text{ grant award success rate using citations from library} \\ & \quad \times \\ & \quad \$63,923 \text{ avg. grant income} \\ & \quad = \\ & \$25,369 \text{ avg. grant income generated using citations from library} \\ & \quad \times \\ & \quad 6232 \text{ grants expended} \\ & \quad \div \\ & \quad \$36,102,613 \text{ library budget} \\ & \quad = \\ & \text{\$4.38 grant income for each \$1.00 invested in library (ROI Value)} \end{aligned}$$

\* Kaufman, P (2008) *University Investments In the Library: What's the Payback?*  
<<http://www.ideals.uiuc.edu/handle/2142/3587>>

# An Economist's Review\*

- **“Overall the model is valid”** \*      \* Dr. Bruce Kingma, Associate Provost, Syracuse University
  - Worthwhile to replicate this model at other universities
  - Worthwhile to measure the complete system of inputs—library resources, faculty, staff, students—and determine the influence of each on the system
- Benefit of the library is more than the impact on research grants



\* Kaufman, P (2008) *University Investments In the Library: What's the Payback?*  
<<http://www.ideals.uiuc.edu/handle/2142/3587>>



- In addition, the study sought to confirm the benefits of using electronic resources and the resulting impact on productivity over a 10-year period by examining:
  - Budget shift from print to electronic resources
  - Changes in intellectual output in the form of publications
  - Changes in grant success rate
  - Relationship between these trends

# Limitations

- “the context for this ROI model is limited to grant income and does not address the value of resources to faculty in conducting their research or teaching” (Luther, p.4)





# Phase 2: Institutions



# Phase 2 participants

- The University of Adelaide, Australia;
- University of Ottawa, Canada;
- *University of Hong Kong*;
- Waseda University, Japan;
- KAIST, Korea Advanced Institute of Science and Technology;
- University of Pretoria, South Africa;
- CSIC, Spanish National Research Council; and
- University of Tennessee, USA.

# Some issues

- Differences in terminology (academic ranks, expenditures or income)
- Variations in data that universities keep and who keeps it over 10 years
- Reluctance to part with certain data
- Bureaucracy, bureaucrats
- Fiscal year, academic year, calendar year and differences in hemisphere
- Languages

# Triangulated approach

- Faculty survey
- Data collection (10 year span)
- Interviews



# 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?

# 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



# Interviews

- Dean of Science
- Dean of Engineering
- Deputy Vice Chancellor

# Phase 2: Aggregated Survey Results

- 71%-98% (over 90% in 5) state it is “important”, “very important” or “essential” to cite articles or books in their grant proposals
- Average # of citations in grant proposals: Range of 20-46 (articles or books)
- % of citations from e-collections varies from 50-99%
- For every article/book cited, 18-40 more are read

## Phase 2: Aggregated Survey Results (cont.)

- Respondents report they spend at least 3.5 hours per week finding and accessing articles, and at least 9.8 hours reading articles.

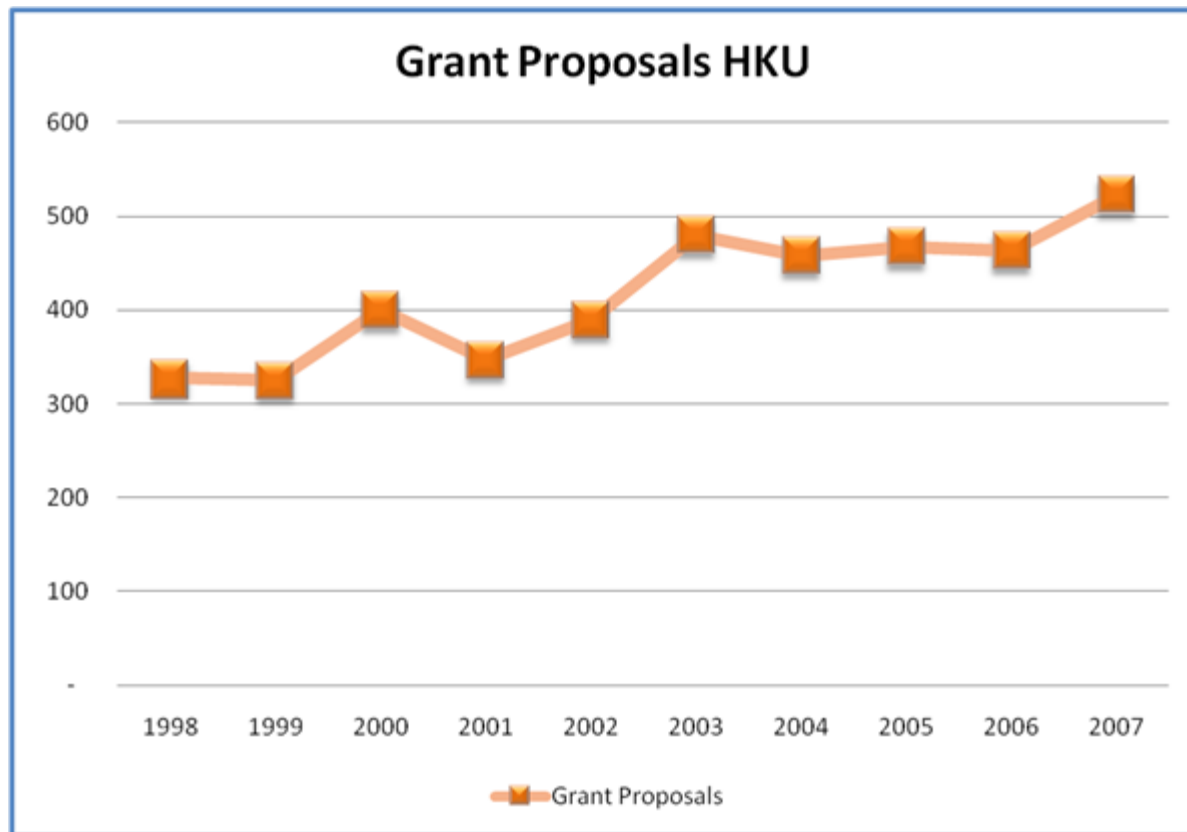
# What we can show so far...

- For every monetary unit invested in academic libraries, the parent institutions receive a return on investment of **up to 15.54 for every unit of currency**
- 5 of the 8 countries, the ROI for grants is more than 1:1
- ROI for grants varies according to the goals of the institution:
  - research-focused vs. teaching-focused;
  - emphasis on science/technology/medicine vs. emphasis on social sciences and humanities; and,
  - the availability of external funding sources.

# What we can show so far...

- Academic library collections help faculty be productive and successful
- Libraries help generate grants income
- E-collections are valued by faculty and bring return on investment to the university, no matter where in the world

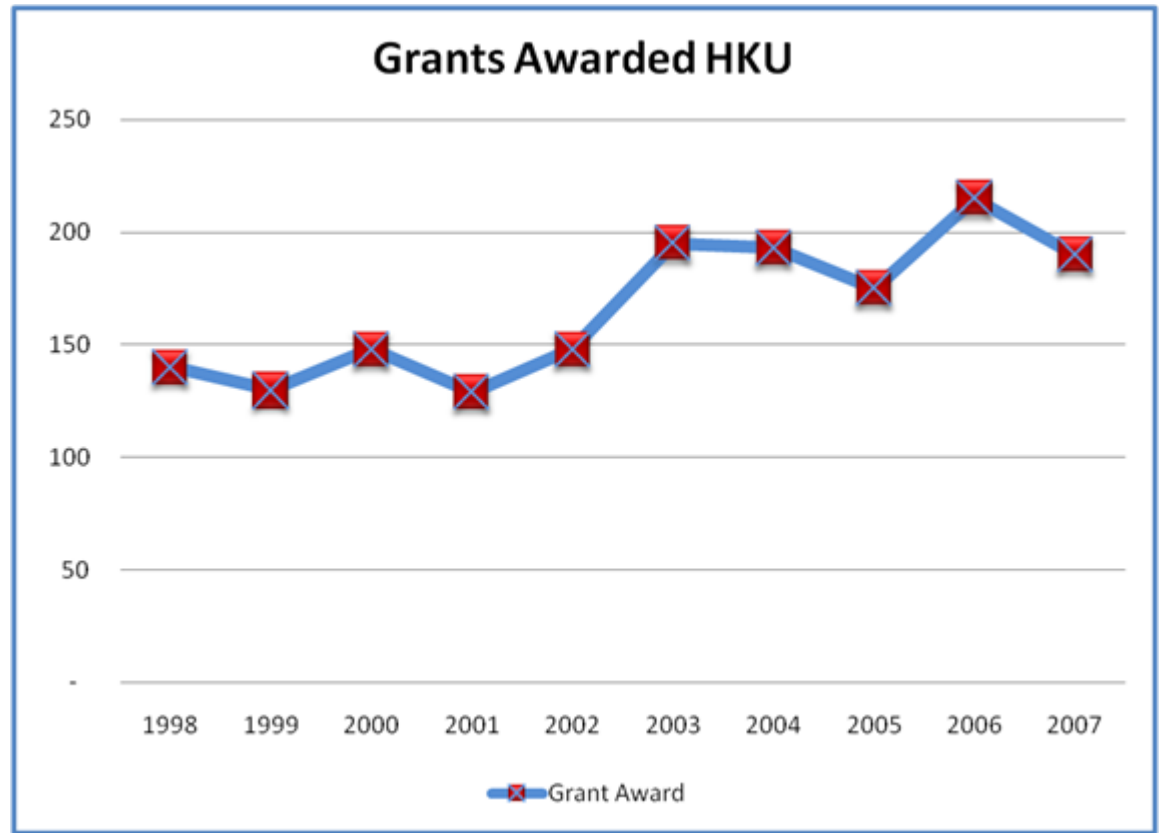
Grant proposals up  
**59%** over 10 years



71-98% state it is “important” to  
“essential” to cite articles or books in  
their grant proposals



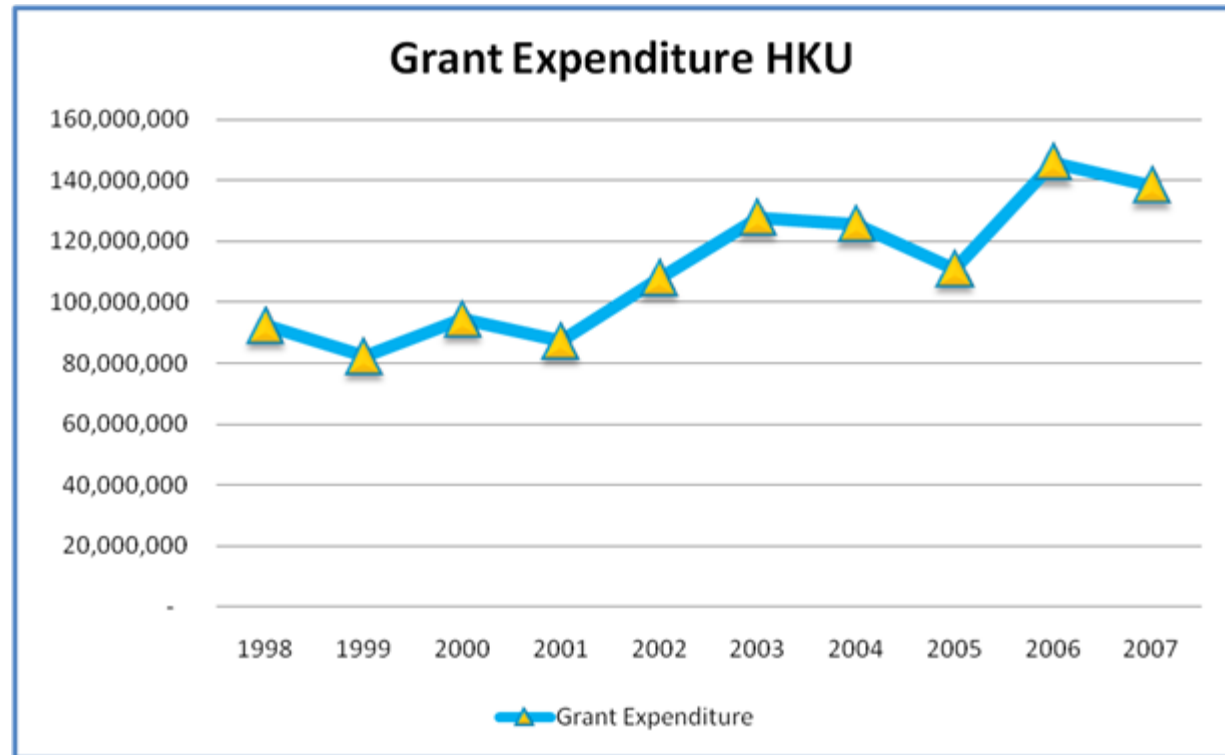
Grants awarded up  
**36%** over 10 years



71-98% state it is “important” to  
“essential” to cite articles or books in  
their grant proposals



Grant expenditure up  
**50%** over 10 years



71-98% state it is “important” to  
“essential” to cite articles or books in  
their grant proposals





# University administrators' long-term goals

- attracting and retaining productive faculty,
  - fostering innovative research,
  - facilitating interdisciplinary collaboration, and
  - raising the university's prestige.
- Comments and data from the faculty surveys indicate that, in addition to helping generate grant income, the library also serves these administrator goals

# Lessons confirmed in Phase 2

- E-resources help faculty be more efficient and productive and increase their interdisciplinary and international perspectives
- Administrators rely on the library to help recruit, evaluate, and retain productive faculty, undergraduate, and post-graduate students, and to bolster the institutional international reputation
- The vast majority of faculty use library e-resources to help prepare their grant proposals, articles, and reports and they consider these resources an important part of the grants process.

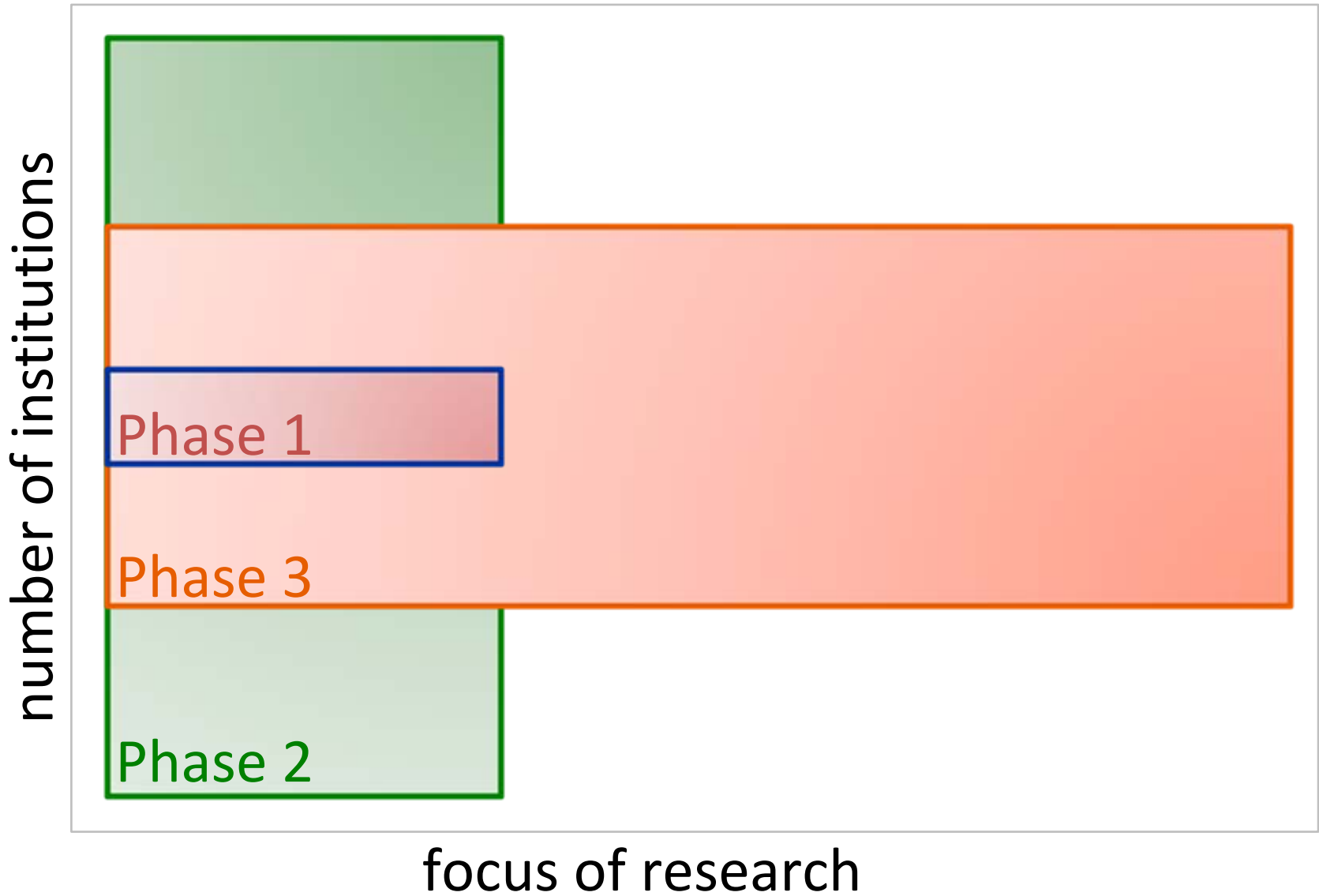
# Lessons from Phase 2

- **Differences between individual institutions and countries need to be taken into account**
- ROI in the grants process is **ONLY** one important and convenient way to quantify the value of the academic library **but it underestimates the total value of the library**
- This is a **beginning step** to an important way of thinking about academic libraries and their role in the institutions they serve.

# Phase 3

- US\$1million grant from Institute of Museum and Library Services
- Will examine how to quantify other ways in which the library creates value through its contributions to **teaching, learning, student engagement, research and the university's overall stature**

# Phases expand



Thanks for listening.

Watch this space ...

??????

... for further updates