Value of the Library Task Force

Phase One Report

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Introduction

The Value of the Library Task Force is charged with investigating and identifying library-related assessment and valuation methodologies for possible implementation by the HS/HSL (Phase One). The 2.5 month period between the formation of the task force and the due date of the initial report with recommendations is extremely brief given the enormous amount of articles, books, presentations, and web resources available on the subject. As a result, the members concentrated on the information from the HS/HSL ROI Task Force Final Report from 2010 with additional support details from current literature**.**

The Return on Investment (ROI) Task Force was formed in September 2009 primarily charged with investigating automated ROI/CBA tools for use by the HS/HSL. The majority of the final report released in June 2010 discusses the NN/LM MidContinental Region's calculator for journals and books, the process for compiling library-specific metrics, and the results of the automated computation. However, included in the document were sections describing trends in library valuation strategies which the task force members considered worthwhile for further examination. Of particular interest was Luther's white paper on the University of Illinois at Urbana-Champaign's experience with linking library supplied content with successful grant awards and calculating resulting return on investment figures (Luther, 2008). A subsequent 2010 white paper authored by Carol Tenopir and her colleagues at the Center for Information and Communication Studies at the University of Tennessee, conducted similar research on an international scale using feedback from 8 institutions representing 8 countries (Tenopir et al., 2010) The results of both studies and the possible implementation of a comparable initiative by the HS/HSL are discussed in the next section entitled, "ROI and the Grants Process".

Two additional strategies are discussed in "Possible Strategies to Pursue", the first of which describes studies by Tenopir and King regarding faculty information-seeking behavior and the value of library-provided content. The second assessment methodology which has grown in popularity over the last decade is the Balanced Scorecard. Initially created for business enterprises, this performance model has since been adapted for non-profit organizations including government agencies, charities, and libraries.

Also included in this report is a fairly exhaustive list of existing services, resources, and facilities-related measurement "opportunities". Usage or evaluative data is already collected for some of them (ILL statistics, research consultation, workshops, etc.) while others may be considered appropriate for future assessment initiatives.

The final sections include "Recommendations", an appendix, and a selected bibliography.

Summary of Trends

At the ACRL National Conference in April 2011, James Neal, Vice President for Information Services and University Librarian at Columbia University, openly questioned the legitimacy of ROI methods as valid demonstrations of the value of academic libraries. In his presentation entitled, "Stop the Madness: The Insanity of ROI and the Need for New Qualitative Measures of Academic Success," he stated, "Very often ROI studies are really about cost avoidance for users of the library … The challenge of these types of analyses is that the assumption that the library users would purchase content, the technology, and the research support if not provided by the community library today may be specious and thus negate the impact of the argument" (Neal, 2011: 425). Neal suggests that assessment efforts concentrate on users' opinions of the value of library resources and services and cites as examples, Tenopir's research on faculty information seeking behavior and Megan Oakleaf's ACRL report, "The Value of Academic Libraries: A Comprehensive Research Review and Report". He contends, "The work of both Tenopir and ACRL demonstrate the complexity, diversity, and rigor of "value" research" (Neal, 2011: 429). Indeed, in its 2010 Final Report the HS/HSL ROI Task Force recognized the limitations of ROI measures stating, "… as the Task Force reviewed the literature on 'valuing' library processes, it became clear that standard ROI and CBA calculations for resources represent only one element in a more complex financial landscape. The evolution of methodologies to facilitate quantifying intangible components of library operations has provided an opportunity to develop a fiscal reporting framework more representative of overall activities" (HS/HSL ROI Task Force, 2010: 14).

"Value" is a relative term dependent upon the perspective of each stakeholder. Therefore, academic libraries must employ appropriate assessment techniques to document their contributions to the campus community. To this end, Oakleaf advises aligning strategic goals with those of the institution's mission (Oakleaf, 2010: 29). A comprehensive effort involves both valid quantitative and qualitative measurement tools. No longer are "usage" statistics alone considered evidence of value. Instead the impact of using library provided content and services must be determined. This can only be achieved via instruments such as MINES for Libraries® and other survey initiatives that directly query users. In brief, current trends in academic library valuation efforts include:

- Linking library outcomes to institutional goals
- Instituting a holistic approach in assessing value
- Identifying user groups and their specific information needs
    - Developing strategies by which to measure satisfaction
- Combining both qualitative and quantitative assessment tools
    - Incorporating impact (of service or resource) metrics
- Establishing methodologies for tracking performance over time

While ROI metrics remain part of assessment activities, the process has moved to a more complex level combining a variety of measurement strategies to demonstrate the library's contributions to the mission of the campus.

ROI and the Grants Process

In the course of its work on calculating return on investment for resources, the 2010 ROI Task Force identified other valuation options for future review and consideration. In particular, the relationship between library-provided content and grant income a study discussed in Judy Luther's 2008 white paper, *University Investment in the Library: What's the Return?: A Case Study at the University of Illinois at Urbana-Champaign*. This report was ultimately identified as Phase I of a two part research initiative. Phase II was conducted by Carol Tenopir and her colleagues at the University of Tennessee, Knoxville. Methodology of the studies is discussed below.

The concept behind the UIUC models are that ROI can successfully be applied by measuring grant income collected by an institution against the electronic journal citations included in grant proposals. The assumption is that use of electronic journals included in the library's collection represents grant income which the library has had direct impact in generating. By using the ratio of that grant income to the total library budget, the resulting figure can represent every dollar invested by the library returning an amount in grant funding. The UIUC calculation identified $4.38 per dollar in grant funding. This was summarized in the introduction to Tenopir's *University Investment in the Library, Phase II: An International Study of the Library's Value to the Grants Process*.

The test by the University of Illinois Urbana-Champaign used the ROI model where university expenditure on the library was measured against grant income received by the institution. Methodology included gathering 10 years of data on the continuum of the grant process; from the proposal starting point to awards, to expenditures; these were applied against entire library budgets. The numbers of faculty, principal investigators and articles published were included in the calculation of an ROI amount. Researchers were surveyed to report how useful library resources were in the grant process, and the 'soft' or qualitative data was applied by collecting statements from the researchers as to their perception of the value of the library in the grant continuum. Utilizing this process, $4.38 per 1 dollar invested in the library was determined as the ROI.

The viability of the valuation methodology explored in the UIUC case study involving ROI in the various stages of the grant process (outlined in Luther's 2008 white paper) was tested again, and reported by Carol Tenopir in *University Investment in the Library, Phase II*. Application of the same factors to institutions in North America, Western Europe, Asia-Pacific and Africa, with varying amounts of similarity to an American institution (like UIUC, which was represented in the international study).

In this study, quantitative and qualitative data for 8 institutions in 8 countries was collected, and indeed, the return on investment that the parent institutions received in grant receipts demonstrably improved with the contribution of library resources in the grant process.

For example, key findings from the international study included that for every monetary unit invested in the library, the institution received between 15.54/1 to 0.64/1 in research grant income. This was calculated using the entire library budget. Using only the e-collections portion of the library budget, ROI rates varied from 155/1 to 6.4/1. Faculty survey respondents reported numbers of books and articles read (value) was far greater than the number of articles/books cited. The number calculated was for each article or book cited, respondents read between 18 to 40 other books or articles. Tenopir's findings included faculty members who receive grant funding cite more and read more on average than those who receive no funding. Most of those surveyed reported that at least half of the articles and books they cite in grant proposals, reports, and publications came from their institutional library e-resource collections (Tenopir, 2010: 3).

The conclusion of the HS/HSL 2010 ROI Task Force was that while there were obstacles in attempting the UIUC methodology and the international study that followed, it provides a valid and more significant representation that the HS/HSL could use for justifying value to the organization. The effort would be considerable, but relating how the HS/HSL's resources input reflected in resulting grant awards to the campus would illustrate benefit in a way that could be clearly understood by the institution's stakeholders.

<u>Possible Strategies to Pursue</u>

Relationship of information seeking behavior and resource usage

Carol Tenopir and Donald W. King, both of the University of Tennessee, Knoxville, have been studying the information seeking and scholarly reading habits of university researchers and faculty for decades. Their more recent work has involved the use of surveys distributed to five universities in the United States (Oct. /Nov. 2005) and six institutions in the United Kingdom (2011). The former focused on journal literature while the latter included all types of resources. Both employed the "critical incident technique" whereby responses to the questions are based on the latest scholarly resource accessed. This is predicated on the assumption that memory of the most recent experience will facilitate more accurate feedback (Tenopir, Volentine, & King, 2012: 131).

Results of the surveys confirm the importance of library provided content to faculty research and scholarship. Feedback is mostly in the form of quantifiable data expressed in percentages since the majority of the questions are in multiple choice format. Examples include source of material, principal purpose of use, impact, age of publication, format, time spent searching, etc. However, the opportunity to provide comments is included.

Advantages of implementing a similar faculty survey by the HS/HSL:

1. Justification for some of the metrics used in calculating ROI values for resources (e.g. time spent searching, time saved by accessing via the library) (Tenopir, 2012: 10)
2. Actual surveys for both initiatives are readily available and should be adaptable for HS/HSL purposes
3. Insight into UMB researchers/faculty information seeking/use behavior
3. Positive statements "… enrich quantitative results and provide additional explicit evidence of the value that the access to e-collections brings" (Tenopir, 2012: 10)
4. Negative statements may indicate areas for improvement
5. Results useful for additional information (e.g. demographics associated with e-book versus e-journal usage, data on purpose for accessing content (research/teaching), correlation of age of material with purpose, etc.)
6. Assessment of responses to impact of content question(s) partially achieves Oakleaf's "value of use" metric

Disadvantages:

1. Resources oriented, library services are marginalized
2. Time consuming for staff to administer and analyze
3. Possible poor response rate
4. Not conducive to frequent, repetitive use, consequently not appropriate for comparison over time

Link to US surveys:

http://web.utk.edu/~tenopir/research/survey_instruments.html
(Note: Surveys are listed separately for each of the 5 institutions)

Link to UK survey:

http://www.jisc-collections.ac.uk/Documents/Reports/UK%20Scholarly%20Reading%20and%20the%20Value%20of%20Library%20Resources%20Final%20Report.pdf
(Note: Link is to the PDF report, questionnaire begins on p. 126)

Balanced Scorecard (BSC)

Information in this section is primarily taken from "Building Scorecards in Academic Research Libraries: Performance Measurement and Organizational Issues", a 2013 article appearing in the open access journal, *Evidence Based Library and Information Practice*. (http://ejournals.library.ualberta.ca/index.php/EBLIP/article/view/19650/15252)
The four authors are affiliated with one of each of four university libraries which participated in a one year ARL pilot on implementing scorecards at their respective institutions. They include: McMaster University (Canada), University of Washington, Johns Hopkins University, and the University of Virginia. (The full citation and URL for the article are provided in the bibliography at the end of this document. See Lewis, Vivian, Steve Hiller, Elizabeth Mengel, and Donna Tolson …)

The BSC was briefly discussed in the social return on investment section of the Final Report submitted by the HS/HSL ROI Task Force in 2010. The model was originally developed by two Harvard professors in the 1990's for for-profit enterprises. However, it has since been adapted for use by a variety of non-profit organizations including state and federal agencies, law enforcement organizations, charities, and public and academic libraries. The University of Virginia was an early adopter beginning in 2001.

The basic tool is comprised of four "perspectives": user, budget, internal processes, learning/growth potential (staff). Each has three to four library defined goals correlated with the strategic objectives of the organization. A target (or benchmark) is established for each goal against which performance results are compared. Finally, a method to collect the data (surveys, usage statistics, resolution time for processes or troubleshooting, etc.) must either be identified (if existing) or developed. Libraries tend to compile large amounts of data which are not integrated into a cohesive representation of performance or value. Additionally, Matthews, citing Palmer's 1993 article, indicates that "…organizations concentrate on measuring what is easily measurable, which results in a bias toward measuring performance in terms of economy and efficiency, rather than focusing on effectiveness" (Matthews, 2008: xv). One of the fundamental concepts of the scorecard is to concentrate on a small number of carefully selected goals exemplifying aspects of the library's strategic objectives. The results when compared with their targets and tracked over time provide a "balanced" view of the organization's operations, services, and activities and their value especially with regard to supporting the mission of the institution.

The UVa Library website provides the metrics for their Balanced Scorecard tool for 2007-2009 (http://www2.lib.virginia.edu/bsc/metrics/all0708.html). Examples of their goals for the user perspective include (abridged):

Goal 1: Provide excellent service to users of the University of Virginia Library
Metric is the overall rating in student and faculty surveys
Target1 (complete success) is 4.25 out of 5
Target2 (partial success) is 4.0 out of 5

Goal 2: Educate users in the skills necessary to fulfill their information needs
Metric is overall instruction rating in user education participant surveys
Target1 (complete success) is 4.0 out of 5
Target2 (partial success) is 3.5 out of 2

Goal 3: Develop high quality collections that reflect the needs of the Library's users and support the University's mission
Metric is circulation of new monographs
Target1 (complete success) is 60% of all new monographs circulate within two years of the time of cataloging
Target2 (partial success) is 50% of all new titles circulate within the first two years after cataloging

Goal 4: Provide convenient and timely access to the Library's collections
Metric is turnaround time for new book and ILL requests (external resources)
Target1 (complete success) is satisfy the turnaround targets 75% of the time
Target2 (partial success) is satisfy the turnaround targets 50% of the time
NOTE: Target for both new books and ILL is 7 days from request to fill

Implementing the Balanced Scorecard methodology is not for the faint of heart. The process is extremely complex involving the entire library, systematic review of current practices and measures, and requires agreement on specific metrics and data collection for the four perspectives.

> The Scorecard forces an organization to have new – sometimes challenging – conversations, and to analyze aspects of its current and future state that may have otherwise gone unexamined. Ultimately, the Scorecard may substantially shift an organization's strategic direction or dramatically change how its human capital and other resources are allocated. The Scorecard is, by its very nature, a change driver. And the change is relentless. The model commits the organization to continuous and regular reflection and to communicate the results of those reflections with a new level of discipline and precision (Lewis, et al., 2013: 188).

Advantages of the BSC:

1. Broadly based: includes metrics associated with entire organization

2. Aligns library's strategic goals and measures with institution's mission
3. Customized to the needs of the organization since the library selects the goals and metrics for each perspective
4. Tracks performance over time
5. Identifies areas for improvement
6. Practical implementation by other academic libraries
7. Considerable amount of information available in literature
8. Demonstrates library's value to the institution's mission and commitment to continual improvement
9. Implementing an accepted business methodology lends *gravitas* to the endeavor and the results

Disadvantages:

1. Requires commitment and participation from the entire library
2. Requires significant staff time to initiate:
    a. Reviewing/selecting goals to be assessed
    b. Identifying metrics and tools to be applied
    c. Possibly developing and implementing metrics not currently tracked
    d. Selecting appropriate target benchmarks
3. Requires significant staff time to maintain:
    a. Collection of metrics and comparison with targets
    b. Assessment and recommendations (as needed) for improvement if result(s) fail to meet target
    c. Regular review of goals for relevancy / identify and substitute new goals when appropriate

"Structuring and implementing a scorecard model for a library demands a clear formulation of mission and strategic goals – a duty that has not yet been performed by every academic library" (Poll, 2001: 716).

Current/Potential HS/HSL Valuation Opportunities

Following is a list of library services and attributes for consideration in valuation activities. (NOTE: * in the Services sections denotes statistics are available)

A1. Services (currently evaluated):

1. Research consultation *
2. Workshops *
3. IRB research consent form review*
4. Consultations *
5. Classes within the curriculum *
6. Consent document editing *

A2. Services (not currently evaluated)

1. Systematic review service (survey in draft form)*
2. NIH public access policy compliance *
3. LibGuides *
4. Publication strategies consultation
5. Information desk activities *
6. Circulation services activities
7. Corporate Memberships/Individual or Alumni Memberships – value to the community
8. HSHSL-sponsored campus events/symposia * – we may have evaluations for some events

B. Resources

1. Bodycomb & Del Baglivo, "Using an automated tool to calculate …" *JMLA*, April 2012
2. Usage statistics (variety)
3. Troubleshooting e-related access issues
4. ILL (statistics only; no evaluative data)
    a. Cost of borrowing material from elsewhere
    b. Funds received from lending our material
5. Digital Archive (usage stats)
    a. Thesis/capstone project archiving
    b. School-related resources
6. Print collection

C. Physical building

1. Classroom usage (statistics & income)
2. Group study space
3. Collaborative space/study pods
4. Housing other campus offices
5. Meeting Room/Video Conference Room value
6. Presentation Practice Studio * (evaluations available)
7. Gate count

D. Overall library-related

1. Awards, grants, contracts
2. LibQUAL+ (existing survey): assess responses from the latest survey
3. Brinley Franklin, “FY2009 library Cost Study Final Report” April 2010
4. AAHSL, NCES, ACRL statistics
5. Middle States Accreditation 2016 (future)
6. Symposia sponsorship
7. Listening tours (identifiable themes?)
8. Staff related
    a. Professional activities
        1) Participation on campus, consortial, regional, national levels
        2) Publications
    b. Education/skill attainment or in process
    c. Comparison with sister institutions
9. Historical collections
10. Outreach
    a. Services provided to consumers
    b. Weise Gallery
    c. Community activities

E. RML

The Regional Medical Library (RML) is comprised of HS/HSL staff and faculty dedicated to fulfilling the obligations of the National Network of Libraries of Medicine, Southeastern Atlantic Region contract awarded by the National Library of Medicine to the University of Maryland, Baltimore.

1. Outreach Overview
    a. Budget
    b. RML Staffing
        1) 7 faculty librarians
        2) 3 support staff
    c. Geographic/population scope
    d. Number of network libraries
2. Resource Sharing & Network Support
    a. Docline, Linkout, Loansome Doc
    b. Consortia and group purchasing support
    c. SE/A Resource Sharing Plan
3. Emergency Preparedness
4. Training
    a. Presentations
    b. Webinars
    c. CE Workshops
        1) Number of CE course offerings
            i. On-site
            ii. Online
        2) Quantity in number of hours, number of participants

        3) Scope of population/audience, #’s, % of types
        4) Evaluation of instruction via MLA CE evaluation forms
            i. Quantitative rating of instruction/instructors
            ii. Qualitative feedback/coded responses
        5) Geographic reach
            i. By state, county (Outreach Activity Reporting Form)
            ii. Reported zipcodes (Outreach Activity Reporting Form)

5. Consultations
    a. Outreach
    b. Funding
    c. Resources
    d. Technology
    e. Health Literacy
    f. Consumer Health
    g. Public Health
    h. Informatics
6. Communications
    a. Number of SE/A Current blog articles
    b. Social Media
7. Funding/Sub-contracting
    a. Number of awards monitored per year/contract
    b. Amount of funding awarded to sub-contractors
        1) HS/HSL awards
    c. Number of site visits for evaluation
8. Exhibiting
    a. Number of exhibits
    b. Size of audiences
    c. Number of demonstrations
    d. Quantitative/Qualitative feedback (collected via tablet app)
9. Additional Sources of feedback/evaluation
    a. NN/LM RFI –2016-2021 contract
    b. Mid-contract review (2013)
    c. Regional Advisory Meetings
    d. Social Media/Communication Assessment Study

Recommendations

The final component of Phase One of the Task Force's charge is to issue a report recommending "a strategy to be implemented at the HS/HSL …" However, after reviewing the literature and discussing the valuation initiatives summarized in the previous sections of this document, the task force members unanimously agreed that no single optimal method could be endorsed. Establishing "value" for service organizations is a complex endeavor requiring the identification, collection, and evaluation of a variety of data via comprehensive and valid measurement techniques. The ultimate goal is to report credible results to the campus stakeholders. Neal contends, "… too often in the library community, these studies are poorly constructed, ineffectively executed, and naively communicated. And in the final analysis, do not respond to the legitimate questions being raised by our administrators and funders, and do not advance the academic library as a critical factor in institutional success" (Neal, 2011: 429).

More time is needed to thoroughly evaluate each of the methods described above with regard to its functionality and applicability for use by the HS/HSL. It is entirely possible that all three may ultimately be considered viable efforts since each provides a different valuation perspective:

- **Linking Library Value to Grant Income**: Luther and Tenopir's respective studies are intriguing since they directly link library-provided content to grant income. In FY13 UMB received $479.8 million in extramural funding (**http://research.umaryland.edu/**). An investigation to determine the impact of library resources in securing grant awards at UMB would almost certainly demonstrate "value". However, questions remain regarding the existence and availability and/or accessibility of the data required to conduct similar research at the HS/HSL. Moreover, the focus of the investigation is on resources and does not include services activities. Finally, it is not an iterative valuation strategy.
- **Faculty Information Seeking Behavior and Use of Library Resources**: The US and UK survey initiatives examining faculty information seeking behavior yielded interesting results especially with regard to the purpose and outcome of accessing scholarly material. Again, the services aspect of library operations is not included. Nevertheless, the potential to gain insight into UMB faculty information needs and impressions would be extremely useful. However, similar to the grant studies, it is a tool that can be administered only on an infrequent basis.
- **Balanced Scorecard**: The BSC methodology addresses the problem of bias in favor of resources, is an ongoing effort, and is customizable to the Library's strategic goals. However, implementation and maintenance of the BSC require absolute and ongoing commitment to the endeavor especially on the part of the Library administration. The task force members feel strongly that the authority for pursuing this strategy lies with the Division Heads since it is a project that involves the entire organization. Additionally, it is highly recommended that the article describing the ACRL BSC pilot project discussing the experiences of four academic institutions (Lewis et al., 2013) be read before any decision is made regarding further investigation.

To fully evaluate each of these strategies in order to recommend one or more for implementation would require considerable staff time and effort to become familiar with the components and functionality, assess the feasibility of use for the Library (including the availability of metrics/data from other campus offices), and determine the customizability of the measurement tools. Therefore, the Task Force endorses the recommendation in the Final Report of the 2010 ROI Task Force that a standing committee be appointed to pursue valuation activities for the HS/HSL. This would provide a more stable and consistent working environment, critical attributes for projects of such significant complexity. (See Appendix for additional recommendations for a committee.) A serious evaluation program requires a comprehensive effort to understand the methodologies, inclusion of all stakeholders in the process, development of sustainable procedures, and a long-term perspective.

Appendix: Recommendation for a Value of the Library Committee

Chair: Ideally, it should be a division head which would facilitate communication with Library administration, UMB faculty, and other campus offices

Membership: Staff committed to participating in the process since the complexity of the subject matter demands significant study, cooperation, and collaboration.

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