Demonstrating Library Value: Strategies, Practices, & Tools

How do we value an institution like a library? Can it be measured in terms of dollars spent? Can we measure the benefits, not just economic, but social, cultural, and political? And how can any measure of library value be conveyed appropriately and concisely to patrons, administrators, government officials, and other stakeholders? Library & information science (LIS) institutions are increasingly expected to demonstrate their value. Librarians use a variety of methods and practices in public and academic libraries to justify their expenses and demonstrate value to their stakeholders and communities. Books, webinars, online tools, and studies all play roles in this process and offer different strategies. Librarians can use these materials to craft a case for their institutions and services. Measurement and evaluation of services are critical to collect data and craft statistics that reflect library usage. But qualitative evidence that can be gleaned from surveys, interviews, and personal anecdotes are also important for telling an institution’s story. A mixture of quantitative data and qualitative evidence is the ideal combination when demonstrating the value of LIS institutions.

During the past fifty years, the relationship between library staff and their funding agents has changed dramatically. As Paula Kaufman demonstrates, the climate of library budgeting shifted drastically from the 1970s to the present as book prices and journal subscription costs soared (in addition to increasing technology expectations and costs).¹ The relationships between libraries and their funding bodies transitioned from pleasant and unassuming to forced and threatening. This brought about a call for measurements, analytics, and metrics – funders wanted to know exactly how their money was being spent. This led to a shift towards libraries focusing on input-output statistics: how many books are bought; what are the circulation statistics; what are the gate counts? But in recent years another shift has started to occur: libraries and their stakeholders and funders are now concerned with statistics as well as their context. How many books were checked out in the last month and how is the library contributing to early literacy efforts in the community? What are the circulation statistics and do teens consider the library a safe, welcoming space? What are the gate counts and do citizens consider the library a place to come for cultural enrichment?

This mix of quantitative and qualitative is illustrated in the literature and at professional conferences; at the 2011 Association of College and Research Libraries (ACRL) conference, James G. Neal, the Vice President for Information Services and University Librarian at Columbia University, delivered “Stop the Madness: The Insanity of ROI and the Need for New Qualitative Measures of Academic Library Success.”² In this piece, Neal bluntly argues that straight statistics and ROI figures are inadequate: “ROI instruments and calculations fundamentally do not work for academic libraries, and present naïve and misinterpreted

¹ Paula Kaufman, “Library Economics: Valuing the Academic Library,” class lecture, Economics of Information course from University of Illinois, Urbana-Champaign, IL, November 4, 2014.
assessments of our roles and impacts at our institutions and across higher education. New and rigorous qualitative measures of success are needed.” Neal goes on to explain that ROI calculators, while well meaning, do not tell the entire story of how libraries contribute to academic success. He does laud Carol Tenopir’s research team and the ACRL Value of Academic Libraries study as examples of more comprehensive, nuanced efforts that incorporate data into larger, more reflective analyses. ROI calculators, Tenopir’s work, and the ACRL study are all explored below.

In today’s climate of assessment, measurement, and advocacy there are two major categories of material being published and used with regards to library value: instructive materials intended to be utilized by individual librarians at specific institutions; and overarching studies intended to explore the ways institutions carry out the practice of demonstrating value and how said practices can be improved. With regards to the instructive materials, LIS authors and practitioners recognize the individuality and variety that exist across different institutions, and thus create instructive materials and value-demonstrating tools that are customizable. Most instructive materials and tools are intended to be read, interpreted, and used by individual professionals at individual institutions. Books, webinars, and tools (e.g. ROI calculators, surveys) represent the most widely-used categories of institution-specific materials for determining, demonstrating, and communicating library value.

Instructive monographs are among the most popular vehicles for customizable information on how to demonstrate library value. Some address value demonstrating processes and practices, while others tackle the weighty topic of library services evaluation and measurement. Most monographs maintain an introductory tone – librarians are not expected to have extensive economic background knowledge or training. In fact, there is an expectation that library professionals have been suddenly and unknowingly thrust into the unfamiliar territory of having to prove the value of their institutions. Perhaps in the coming years this tone will vanish as library and information science education institutions come to recognize the value of teaching LIS professionals how to demonstrate value.

In their extensively-researched Measuring Your Library’s Value: How to Do a Cost-Benefit Analysis for Your Public Library, authors Donald Elliott, Glen E. Holt, Sterling W. Hayden, and Leslie Edmonds Holt explain the necessity of demonstrating value: “Why do library

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4 Elisabeth Doucett, *Creating your library brand: communicating your relevance and value to your patrons* (Chicago: American Library Association, 2008).
professionals want to document the dollar value of their library’s service? They want to make a strong case for their library. They want strong, convincing evidence to communicate the value of their library to government officials, board members, and donors. The authors explain the fundamental terms and concepts of cost-benefit analysis and library value economics: direct and indirect benefits, contingent valuation, willingness-to-pay and willingness-to-accept, and transaction costs. Strategies for measuring cost and benefits are explained, with the authors cautioning against overstating benefits, tolerating biased survey results, and understating costs.

The authors advocate using a survey of patrons to determine: household consumer surplus on a service-by-service basis; and the total value of the library in terms of household willingness-to-pay via contingent valuation analysis (CVA). A number of tools are provided for conducting the study: a sample timeline, an invitation to participate in the survey, step-by-step instructions for sampling patrons, sample questions for telephone or web-based surveying, and instructions for calculating results (including how to perform a chi-square test for bias in responses). Lastly, the authors offer strategies for how to communicate the results of a study. They suggest turning the statistical results into short, manageable sound-bites that can then be shared in appropriate ways with targeted audiences. Two optional sound-bites presented are: “For each dollar of local tax support to operate our library, members of our community receive more than ____ dollars in benefits from library services” and “A dollar invested in our library’s facilities, equipment, and collections returns more than ____ percent per year in benefits to our community.” The authors advocate using the results to communicate the value of the library to government officials and board members in a concise fashion: “Tell them how constituents regard the library, try out your public sound bites, and offer a few user quotes from the surveys.” This suggests pairing the quantitative results with qualitative anecdotes and context information to more successfully demonstrate the value of the library.

While some books focus on specific aspects of value demonstration, such as ROI analysis, others are more general and explore the larger topic of the measurement and evaluation of library services. Such titles purport to help librarians more effectively track usage statistics and other data at their libraries. Some go a step further and suggest meaningful ways to analyze, interpret, and communicate said data. One such exemplary model is Say it With Data: A Concise Guide to Making Your Case and Getting Results. Right from the preface, author Priscille Dando explains that a mix of data and story/context is the best way to demonstrate value: “While an emotional appeal is nearly always present in an advocacy campaign, it’s the data, the

10 Elliott et al., Measuring Your Library’s Value, 1.
11 A “representation of the monetary value consumers associate with a good or service in excess of any costs they must incur to get it; the difference between the amount of money consumers would be willing to pay for a good or service rather than do without it and the consumers’ cost (including price).” Elliott et al., Measuring Your Library’s Value, 175.
12 Elliott et al., Measuring Your Library’s Value, 75.
13 Elliott et al., Measuring Your Library’s Value, 110.
14 Elliott et al., Measuring Your Library’s Value, 111-112.
evidence, that sparks a call for action. What humanizes it and makes it compelling is how it represents a story in context and creates a new understanding. The key is to tap into the story that numbers can tell.”

Dando includes an informative chapter on beginning statistics for librarians; she stresses the importance of maintaining validity and accuracy when creating and using statistics. She explains basic statistical concepts: distribution, mean, median, mode, and outlier. There are also chapters on two different modes of measurement: surveys and focus groups. The survey chapter explores survey methods (mail, online, telephone, etc.), survey design, sample selection, and question design. The focus group chapter covers crafting a comfortable environment, selecting participants, moderating procedures, and analyzing outcomes. The last chapter focuses on how to communicate your findings concisely and clearly. Charts, graphs, and infographics are the suggested formats. Again, Dando focuses on connecting the data to the larger ideas: “Context is what makes data compelling. Never express numbers in isolation. A meaningful context demonstrates a direct connection to the issue at hand. […] What does it help you say, and why does it resonate? The bottom line is that your purpose is not to share the data but to share the ideas behind it.”

This focus on contextualizing statistics within a broader narrative is indicative of the shift towards a mixture of quantitative and qualitative evidence when demonstrating library value.

In addition to books, webinars are another popular instructive tool. Webinars about measuring and demonstrating library value are especially popular among academic libraries, particularly those focused on a specific field (e.g. art, medicine, etc.). Such webinars usually present tools and practices for assessment, evaluation, and/or communication of library value, with specific examples taken from the institution(s) of the speaker(s). One such webinar is “Institution Advocacy & Demonstrating the Value of Art Libraries,” presented on December 12, 2014 by the Art Libraries Society of North America. Targeted specifically at art librarians, the webinar focused on conducting assessment, communicating value, and using statistics and advocacy to prevent branch closures. It featured past American Library Association president Patricia Glass Schuman.

A webinar related to value demonstration presented live on November 12, 2013 was “The Evolution of Usage Statistics,” which was co-sponsored by Library Journal and Swets, an information services company. The webinar featured, among others, Charlie Sicignano, the Head of Technical Services at the University of West Georgia’s Ingram Library, and Chan Li, a library data analyst at the California Digital Library. Both librarians explained how tracking usage data statistics has influenced their positions and institutions. Sicignano explained that the library,

16 Dando, Say it With Data, viii.
17 Dando, Say it With Data, 74.
along with other campus units, had been under pressure to demonstrate current and potential future value as accreditation deadlines loomed. The library was able to use usage metrics to make choices about which databases and journals are most important to users and which could possibly be cut: “[Analyzing usage statistics] gives us a good idea of how we’re serving the campus. It gives us a good idea of how we’re serving the faculty. And it also gives us a good idea of whether we’re spending our money wisely. […] We have to show that we’re alert to what our students need.”20 Sicignano explained that usage statistics are great for everything from applying for government funding to recruiting new faculty members; he also explained the necessity of keeping usage statistics accessible and in a flexible format (in order to use the data for different efforts and within different standards).

Chan Li explained her involvement in the California Digital Library’s (CDL) efforts to move beyond plain usage data to a weighted value metric when determining journal value. She explained that usage data and impact factors, the traditional methods, are somewhat limited in their utility for analysis; CDL’s new analysis model takes multiple perspectives into account, including utility (usage and citation), quality (impact factor and SNIP21), and cost-effectiveness (cost per use and cost per SNIP). This analysis allows for a high level of granularity in terms of the usage and value of each title across various disciplines; it also allows the library to determine value-based pricing for titles across publishers. Li also explored various issues with usage measures: HTML vs. PDF access and usage; unintentional downloads; different download methods from different access points; and uncounted uses from digital repositories (e.g. PubMed). She points to alternative metrics (e.g. storage, links, bookmarks, and online conversations) as the way of the future for measuring a variety of types of value. Both Sicignano and Li emphasize the importance of the quantitative data, which is their focus, but also explain their personal relationships with consortia, publishers, and stakeholders, which is what allows them to convey the quantitative in a personalized, more contextualized way.

In addition to books and webinars, many organizations and groups have created value determining and demonstrating tools for the use of individual librarians and institutions; examples include: value toolkits, return-on-investment (ROI) calculators, and surveys. These tools offer customizable ways for librarians to quickly and easily determine basic statistics and figures for their institutions without engaging in a large-scale study. Some are so user-friendly that patrons themselves can plug in information and figure out how they have personally benefitted from the use of library services.

In 2007, the Public Library Association (PLA) published a toolkit titled Libraries Prosper with Passion, Purpose and Persuasion! A PLA Toolkit for Success.22 The task force that produced the toolkit desired to help public librarians “showcase the value of public libraries by

connecting [their libraries] directly to the things that communities value most.”

Rhetorically the toolkit focuses heavily on “advocacy” (a buzzword during the late 2000s), including sections on advocacy planning, advocacy in action, and advocacy resources; the content itself is very focused on value demonstration. There is a section on general “fast facts” about the benefits of libraries, which the toolkit suggests librarians use to bolster arguments for the significance and value of their specific institution. There is also a section on measurement and evaluation that stresses a mix of qualitative and quantitative data: “You can gather [evaluation] information formally (through surveys, interviews or focus groups) or informally based on your own anecdotal evidence. Using both approaches will give you the fullest range of information.”

The toolkit includes many useful evaluation tools, such as a community survey, a cost/benefit worksheet, and a customizable handout titled “Libraries are an Excellent Investment.” Throughout the book, the importance of contextualizing data and action items within the larger narrative of how the library benefits its community is stressed.

A popular type of tool for demonstrating value that can be found online is ROI and cost/benefit calculators tailored to library services and collections. Perhaps one of the original, and certainly the most widely adapted, online formula is that created by the Massachusetts Library Association and modified for web use by the Chelmsford Public Library. Chelmsford’s “Library Use Value Calculator” is targeted at patrons who want to know how much money they have “saved” by using library resources. The calculator allows patrons to quantify and input their library use (e.g. adult books borrowed, magazines read, meeting room use) and then see the individual and total sum costs of all of the services. The page includes a window that explains how each cost was calculated: the average Amazon.com price for books, the estimated purchase price average for magazines, the estimated value of renting meeting room space per hour, etc. This type of calculator is less sophisticated and nuanced than a traditional ROI calculator; it does not take into account the investment (i.e. tax contribution) of the average citizen. However, it could easily be modified to do so, if the patron knows how much they paid in property taxes in the last year. Also, it does not specify the time period of library use.

Academic and special libraries have adapted the Chelmsford calculator to demonstrate their specific value as well. For instance, the National Network of Libraries of Medicine (NNLM) has created a version of the calculator that incorporates new fields such as journal use and classroom instruction. The NNLM calculator also incorporates the size, type, and budget of the library, as well as the time period of assessment. Such calculators can easily be used by library staff to calculate and present figures to stakeholders; they can also be promoted by library staff to patrons as a fun tool for figuring out how much basic cost value the library collections and services are to a given patron household or group.

24 Public Library Association, Libraries Prosper, 23.
Another online tool that was developed recently and is available for use by individual libraries is the Impact Survey.\(^{27}\) The Impact Survey started as a research initiative at the University of Washington, sponsored by the Bill & Melinda Gates Foundation. The University of Washington Information School conducted a large-scale survey in 2009, “Opportunity for All: How the American Public Benefits from Internet Access at U.S. Libraries,” which explored library patron computer and internet usage and how said usage impacts the lives of patrons. With 45,000 responses and four specific library case studies, “Opportunity for All” was considered a success and the Impact Survey was crafted into a customizable, publically-available tool. Now libraries all over the country can access the Impact Survey and deploy it in their own communities to help demonstrate the value of their institution.

The survey includes questions on a variety of topics, including satisfaction with library resources, type of internet use (communication, civic engagement, job searching, etc.), and receiving help from library staff. Survey results tease out life impacts of being able to use library computing resources: applying for jobs, applying for financial aid, finding health and wellness information, and accessing government forms and services. These benefits go beyond straight input-output, quantifiable statistics and attempt to create a broader picture of how library use and computer/internet access are shaping and affecting patrons’ lives. The survey purports to help libraries make better strategic planning decisions, make stronger budgetary arguments, especially for increased technology, and help increase awareness of the library’s effect on the community and the digital divide: “[The survey] can help you evaluate your library’s technology services and identify where you are excelling or making progress and where there is room for improvement. […] [The survey results] can be used to build awareness and support for library technology services among local decision makers and other stakeholders.”\(^{28}\) The Impact Survey is about taking anecdotal evidence of the library’s value and impact on the community and quantifying it in a more concise and easily communicated way.

Instructive materials and practical tools allow individual libraries and librarians to craft their value-demonstration narratives and bolster them with appropriate statistics. As LIS institutions are increasingly expected to justify and communicate their worth, academic case studies and overarching explorations of a variety of value metrics have emerged. Some arose from individual institutions applying previously discussed instructional methods and tools, while other studies have created and implemented new ways of measuring value and impact. Two recent large-scale efforts to study how academic libraries can better demonstrate their value are the Association of Research Libraries (ARL) affiliated LibValue project\(^{29}\) and the Association of College and Research Libraries (ACRL)’s study, *The Value of Academic Libraries*.\(^{30}\)

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\(^{28}\) “Impact Survey,” iSchool University of Washington.


Funded by the Institute of Museum and Library Services (IMLS), the LibValue project was developed by librarians at ARL libraries to create tools for measuring academic library value that are more nuanced and complex than the existing methods: “While libraries have traditionally been rather modest about broadcasting their own worth, today they must learn to make clear the often unrecognized ways in which they contribute to institutional success. This demonstration of value is exactly what LibValue […] aims to empower.”

The first phase of the project attempted to create an ROI measure that tied the use of library resources to grant funding acquired by faculty; the University of Illinois tested this ROI measure and found that in the year of 2006 every dollar invested in the library returned $4.38 in grant income. The second phase limited the ROI measure to electronic collection use and expanded the testing grounds to international universities. Also, quantitative and qualitative data were collected and measured. Researchers found that in six out of eight countries the ROI ratio was greater that 1:1 and that, qualitatively, academic libraries contribute significantly towards many larger institutional goals. The third phase expanded to multiple projects that were developed over a three-year grant period (2009-2012) to determine multiple methods and metrics for library value.

The end results were a number of publications and an online toolkit with modules for: teaching & learning, scholarly reading, the (learning) commons environment, digitized special collections, e-books, and comprehensive value. Each module presents sections pertaining to the goals, methodology, current/past use of the topic of study, and relevant tools for deploying the module at additional institutions. For instance, the Scholarly Reading module, whose purpose is to “assess the value of library journal, book, and other scholarly collections to faculty, graduate students, and undergraduate students in the academic environment by examining patterns and outcomes of reading,” includes information about how many universities it has been deployed in, what the key methodology is, copies of the surveys used to gather data from faculty, graduate students, and undergraduate students, and a webcast wherein a principal investigator explains the module and some of its findings.

The ACRL study, The Value of Academic Libraries, is another attempt to study and improve the methods of demonstrating library value. Developed for ACRL by Megan Oakleaf of the iSchool at Syracuse University and published in 2010, the final comprehensive report states the purpose and intent of the study: “Increasing recognition of the value of libraries and librarians by leaders in higher education, information technology, funding agencies, and campus decision making is one of ACRL’s six strategic priorities. […] Our purpose is to identify resources to support [librarians] in demonstrating the value of academic libraries in clear, measurable ways.” The study explores the many definitions of value, used within and outside of LIS, which can apply to library buildings, collections, and services: use and utility, return-on-investment, the production of a commodity, the external impact of libraries, and the value of

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34 Megan Oakleaf for ACRL, The Value of Academic Libraries.
libraries in relation to their competitors. The study then hones in on an academic-specific definition of library value that is based on how the academic library contributes to the goals of the institution. This concept is termed “value on investment” and is not limited to purely financial terms, but rather expresses value in a multifaceted way. The report contains three main sections: a literature review, a “what to do next” section, and a proposed agenda for further research. The literature review brings together value-demonstration concepts and practices from academic, school, public, and special libraries.

The “what to do next” section synthesizes the literature review into a list of recommended strategies and practices for current and future use, including: defining outcomes; focusing on assessment; figuring out what exactly libraries enable various patron groups to do; collecting usage data (while ensuring patron privacy); determining and increasing the library’s impact on student enrollment; demonstrating a link between libraries and student retention; improving and expanding student library job opportunities; determining the library’s role in increased student performance and learning; documenting how libraries contribute to courses; parsing out the library’s role in student experience surveys; enhancing and documenting the library’s role in faculty research and grants; enhancing and documenting library support for faculty teaching efforts; documenting the library’s contributions to the ranking/profile of its institution; taking part in higher education assessment and accreditation processes; establishing a library liaison to the institutional assessment office; encouraging staff professional development that focuses on skills needed to assess and communicate library value; making sure demonstrating value is a top priority for library administrators; and utilizing the power of library professional associations.

This list is lengthy but still does not claim to be exhaustive. The report suggests that this section is designed to be a series of recommendations that can be adopted and adapted at institutions as their librarians see fit. The final section, a research agenda, lists ten areas for potential specific research: student enrollment, student retention and graduation, student success, student achievement, student learning, the student experience, faculty research productivity, faculty grants, faculty teaching, and institutional reputation. These are areas where quantitative and qualitative research can be conducted on the institutional level to make more comprehensive arguments for library value and importance. One of the overall takeaways from the report is that traditional measures of library inputs, outputs, and processes are not satisfactory when attempting to demonstrate value. Instead, an impact-based value system is advocated:

“Noticeably absent from this [report] are traditional library measures […] [Instead, we] focus on how librarians can accelerate their efforts to demonstrate academic library value by embracing an outcomes approach that reveals the impact of libraries on users.”36 Such an approach still requires data sources and value “indicators,” which can be measured quantitatively. But the data is then contextualized within the larger institutional goals and narrative (e.g. retention, faculty securing grants, improving the undergraduate learning experience) so that the value and success of the library can be directly tied to the value and success of the institution.

36 Megan Oakleaf for ACRL, The Value of Academic Libraries, 93.
Large-scale measures for studying and improving the practice of demonstrating the value of public libraries have also emerged. Following up on the aforementioned toolkit, PLA has established a Presidential Task Force on Performance Measurement (PMTF).\(^\text{37}\) Starting in the summer of 2013, the task force developed easily-to-administer patron surveys on seven topics: digital inclusion, civic/community engagement, early childhood literacy, economic development, job skills/workforce development, summer reading, and education/lifelong learning. Perhaps building on the ACRL Value of Academic Libraries study, the PMTF states that the project will be outcome-based in order to “demonstrate the real differences public libraries make in the life of the customer.”\(^\text{38}\) The performance measurement surveys are still being developed and the task force will expand the project to more test libraries in 2015. The eventual deliverable will be practical tools that will help libraries use the survey results for planning, outreach, marketing, and advocacy.

So how is the value of an institution like the academic or public library measured? Increasingly, LIS professionals are using a concise, narrative-driven mixture of outcome-based data and positive anecdotes to demonstrate library value to administrators, stakeholders, and even patrons. Professional organizations are leading the way in terms of large-scale studies on how librarians accomplish the task of value-demonstration. In addition to institution-specific efforts, new organizations and efforts, such as the library-supporting non-profit EveryLibrary also have a role to play. EveryLibrary is a national non-profit that works with public libraries at the local level to advocate for library ballot measures. While librarians work to demonstrate the value of their institutions to their stakeholders, professional associations and non-profits will help to fill the gaps of knowledge and technical support, with the primary strategy of communicating concise, contextualized data that tells the story of library impact, value, and success.

Bibliography


