Stop the Madness: The Insanity of ROI and the Need for New Qualitative Measures of Academic Library Success

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Return on Investment (ROI) has become the new mantra of academic libraries, a relentless and in many ways foolish effort to quantify impact in the face of budget challenges and the questioning of our continuing relevance to the academy in an all-digital information world. ROI instruments and calculations fundamentally do not work for academic libraries, and present naïve and misinterpreted assessments of our roles and impacts at our institutions and across higher education. New and rigorous qualitative measures of success are needed.

Academic administrators and government funders are asking for new evidence that libraries still matter and make a significant difference in the quality of academic life and the ability of colleges and universities to advance their missions. Are the dollars being invested producing value in economic terms? Academic libraries, under the impact of decreasing or at best flat budgets, have embraced valuation research as a worthy tool to document and demonstrate measurable financial outcomes.

ROI has been applied in the corporate library, and in the public library, where questions on contribution to the bottom line, impact on the local economy, and user cost avoidance have been studied. New work in academic libraries has looked at the relationship between investment in electronic resources and grants revenue in the university, and between student retention and library use, for example. One must question the rigor of some of this research, the ability to track and control for the variables and vagaries of learning and research. One must be concerned about the sponsorship of some of these studies, and the integrity of the process and the outcomes.

This paper is not a scientific study or a literature review or a reasoned analysis of the assessment literature on academic libraries. It is a polemic and a call to action. It is an appeal for the academic library to step away from inappropriate, unsophisticated and exploitable ROI research as a miscalculated, defensive and risky strategy. Certainly, academic libraries must embrace and advance rigorous assessment programs. We need effective and honest ways to explore issues like user satisfaction, the usability of systems and services, market penetration, cost-effectiveness, productivity, impact, and success in advancing institutional priorities. A focus on outcomes can link the academic library to more effective qualitative measures which help us to understand library contribution to successful graduates, productive faculty, and institutional advancement.

In finance parlance, rate of return or rate of profit or return on investment is the ratio of money gained or lost on an investment relative to the amount of money invested, at least according to Wikipedia. For purposes of measuring ROI, both the initial and final value of an investment must be clearly stated, and the rate of return can be calculated over a single period,

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or expressed as an average over multiple periods. This vocabulary and this level of precision do not translate well into the input and output measures which define the work of academic libraries. Therefore, when we seek support for library funding on the basis of ROI study results, we must proceed with caution, as the understanding and expectations of budget administrators and business people serving on university boards may be conditioned by corporate and financial experience.

Very often ROI studies are really about cost avoidance for users of a library and these "economic impact figures" have gained some traction in public libraries. How much money did you save your patrons by loaning books, movies, and other items? How much money does your library save the people of your community by providing computers with Internet access for the public? How many reference questions do you answer and how does this compare with the charges of a private researcher? The challenge of these types of analyses is that the assumption that library users would purchase the 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.

In the academic library, perhaps a better strategy would be to apply the ROI question to the user: how much did the user receive through an investment of time, energy, and resources in the resources and services of the library? What shapes and extends user expectations? How well is the library positioned to meet and exceed those needs? How are library collections, services, technology, space, staffing and organization influenced by these developments? Academic research libraries must develop a more sustained and intimate understanding of their user communities. I pose the following series of questions: who are our users? where and how do we intersect with our users? what do our users want and need? how are our user expectations and requirements changing? how do we know? and how do we respond? Is there an ROI from the user perspective?

Who are our users? Students are an obvious focus, but they come with diverse and wide ranging needs, as full-time and part-time; as undergraduate, graduate and professional; as resident, commuter and distance learning; as U.S. and international; as traditional post-high school and returning; as students with jobs, and families, and various commitments and responsibilities that influence the educational experience and

the relationship with the academic library. We also work with our faculty and their distinctive and expansive demands, as well as researchers from across the disciplinary tribes. Administration users also need to be satisfied, and we are increasingly confronted with the politics of community users, the urgent needs of working professionals, and the special expectations of alumni and donors. And as our collections and services move to the network, the "new majority" users on the web across the world demand more attention.

Where do we intersect with our users? Our users experience the physical library and the web library. They assess the library in the context of the collections we can develop, the services we can deliver, the applications we can enable, and the technologies we can provide. We work as library in the classroom, in the laboratory and at the bedside. The academic library needs to be present to anyone, anywhere, anytime, and anyhow.

How do we know about our users? We learn from our users in a variety of ways. We ask through an expanding array of survey tools. We measure through a variety of data collection and analysis capabilities. We listen through focus groups, suggestion forums, and online discussions. We observe directly in physical spaces but increasingly and unobtrusively in online arenas. We compare and benchmark ourselves with peer institutions. We conduct experiments, too few and often ineffectively, to understand the impact of changes in our user services. We involve users in a more iterative approach in the design and delivery of programs. We prototype new services and shape and modify in response to user feedback. We look at the user experience over time, the life cycle portfolio of their work, to understand the library role and impact. But perhaps most importantly, we experience the user and welcome those "aha" moments when we realize what works in our libraries from a user perspective.

Our relationship with our users needs to be viewed in the context of the core responsibilities of the academic library. We remain focused on identifying (selection), getting (acquisition), organizing (synthesis), finding (navigation), distributing (dissemination), serving (interpretation), teaching (understanding), using (application), and archiving (preservation) information in support of teaching and learning, and in support of research and scholarship.

But we are taking on new roles, and these changing responsibilities are shifting the boundaries of the

academic library and reshaping user interactions. Individually and collectively, in our acquisition of content and services, libraries are becoming sophisticated consumers on behalf of their user communities. Libraries are expanding intermediary and aggregation activities, pointing to relevant and quality information for students and scholars. Libraries are serving as publishers, not just in the expanding digital collections being created, but also through the innovative models of electronic scholarly communication being advanced in partnership with faculty. Libraries are advancing as educators significantly beyond the information literacy programs which have defined and limited involvement, to a more expansive participation in the teaching and learning process. Libraries are embracing a research and development commitment, creating new knowledge about our user services. Libraries are advancing entrepreneurial strategies, leveraging assets to support new user markets and to develop new user products. And libraries are serving as information policy advocates, influencing state, national and global laws and legislation on behalf of our users and the public interest.

So in the context of persistent and evolving roles, the academic library will be viewed by its user communities in increasingly expansive and schizophrenic ways. We will be legacy, responsible for centuries of societal records in all formats. We will be infrastructure, the essential combination of space, technology, systems, and expertise. We will be repository, ensuring the long-term availability and usability for our intellectual and cultural output. We will be portal, serving as a sophisticated and intelligent gateway to expanding multimedia and interactive content and tools. We will be enterprise, much more concerned about innovation, business planning, competition and risk. And we will be public interest, defending and expanding intellectual freedom, confidentiality, fair use, and barrier-free access to information.

In the context of these dramatic trends and new technologies, academic libraries need to enhance the student experience. Students want technology and content ubiquity, network access anywhere and anytime. They want web-based services, with no lines and no limits on hours. They want technology sandboxes, places for experimentation and fun, but also privacy spaces, places with protection and anonymity. They want support services, help when needed at appropriate levels of expertise, and guidance on advancing

information fluency as a lifelong skill. And students want post-graduate access, not willing to leave behind the rich information content environments they enjoyed at the university.

Similarly, academic libraries need to enhance the faculty experience. Faculty bring to the university a set of expectations: personal advancement and recognition, contributions to scholarly literature, high quality instructional experiences, work with successful students, involvement with innovative projects, collaboration with interesting colleagues, financial rewards, excellent laboratory and library and technology support, and opportunities to experiment. Where does the library appropriately and effectively fit into this inventory?

Ultimately, the academic library needs to be passionately focused on user expectations. Users want more and better content, more and better access, convenience, new capabilities, ability to manage costs, participation and control, and individual and organizational productivity. The ability to satisfy and advance these requirements will define library success.

One arena of pressing importance is the rethinking of space planning and identity, given the amount of real estate a library occupies at a university and a questioning of the use of this space for expensive "book warehouses" and "study halls." I maintain that we are building the "trompe l'oeil library," tricks to the eye, buildings that may have the trappings of the traditional physical library, but in fact are far more dynamic and progressive learning, intellectual and collaborative spaces. Library use trends are changing and technology is the primary catalyst for shifts in our thinking about more flexible and adaptable library space.

As we consider library space, there are key questions related to conception and application that the academic research library must address: Why do individuals enter a space, or what is the motivation and objective? How do individuals navigate a space, or what are the transportation and circulation systems? How do individuals use a space, or what are the sources of positive experience and productivity? What is the balance among function, usability, and aesthetics? How do individuals relate to each other, and what is the mix among private, collaborative and public requirements? What is the symbolic role of space, its emotional or even spiritual quality? How does library space reflect and advance the larger organization, its mission and success and feel?

I would suggest a set of guidelines for future planning and design of library space. Focus less on statistical and operational formulas. Focus more on diversity of need and personal adaptability and customization. Design for the agile rather than the static. Start with the user and not the collection. Start with the technology and not with the staff. Bring the classroom and the academy into the library. Conceive the library five years ahead, because mutability makes a longer view a waste of time. Think more about playground and less about sanctuary. Prepare for anxiety, disruption and chaos.

New organizational models will be needed to support a user-oriented academic library. Conventional administrative hierarchies combined with academic bureaucracies should be set aside in favor of structures which include a centralized planning and resource allocation system, a loosely-coupled academic structure, and maverick units and entrepreneurial enterprises.

Similarly, we must develop a new and more rigorous set of expectations for the academic research library professional staff. We must seek individuals who have a clear sense of mission and well-developed self vision, with the requisite base of knowledge, an understanding of strategic positioning, and a commitment to continuous improvement. This translates into professional staffing with diverse academic credentials and experience (ferals, if you will) who can tackle the deep subject expertise and the diversity of assignments required in the future academic research library.

The future academic library must also enable and integrate 2.0 elements: social networking, collective intelligence, permanent beta, software as a service and not a product, artificial intelligence and expert systems, and the focus on library as information as well as involvement. Library 2.0 is about mutability, with perpetual change and hybrid structures and approaches. Library 2.0 is about fertility, growing and developing with opportunities for productivity, enrichment, resourcefulness of thought and imagination. Library 2.0 is about participation, of expanded sharing, active association, shared authority, and massively distributed collaboration.

The future academic library must also rethink our approach to collaboration to better support users. A more radical set of strategies must be built on bi- and tri-lateral combinations, and incorporating sustainable business models, new legal and governance structures, and public-private partnerships. The areas for working together might incorporate centers for excellence, mass production activities, new infrastructures, and new initiatives. The litmus test for success must consider advances in quality, productivity and innovation.

Our users want us to be authoritative and virtuoso, that is trusted sources. They want us to be authenticated and secure, appropriate and pertinent, that is reputable and relevant. They want us to be accessible and omnipresent, that is always there everywhere they need us. They want us to be achromatic and advocative, that is supportive of the diversity of needs but also a voice for their shared interests. They want us to be audacious and attentive, that is bold and innovative but not way out in front or too far behind. They want us to be assimilative, that is learning from their experiences, and virtuous, caring and supportive.

To best support users, the academic library must embrace the "human" objectives, like success, happiness, productivity, progress, relationships, experiences, and impact. How can we help users attain their goals, achieve wellbeing, realize benefits, move forward, make personal connections, participate fully, and have significant effect in their worlds through us?

ROI may be a more relevant tool as academic libraries integrate a more market-based, customized and entrepreneurial approach to the packaging and delivery of information. The word "entrepreneur" was first applied in France to individuals who "entered (entre) and took charge (preneur)" of royal contracts. The king would grant a noble the right to build a road or a bridge, for example, and to collect the tolls in return for a gift or a favor. The noble would in turn appoint an individual, the entrepreneur, who would arrange the financing, supervise construction, and manage the completed facility. The entrepreneur guaranteed the noble a fixed income, and kept any proceeds left over in compensation for his service and his risk. Howard Stevenson of Harvard defines entrepreneurship as a management style that involves pursuing opportunity without regard to the resources currently controlled. Economist Joseph Schumpeter, writing in 1911, brought the concept of innovation to the definition of entrepreneurship, including process, market, product, factor, and organizational innovation. His work emphasized the role of the entrepreneur in creating and responding to economic discontinuities and as "a person who carries out new combinations."

Organizations and individuals can be viewed as sitting on an entrepreneurial continuum, at one extreme the "promoter" who feels confident of the ability to seize opportunity regardless of the resources under current control, and at the other extreme is the "trustee" who emphasizes the efficient utilization of current resources. Stevenson has identified a series of factors that pull individuals and organizations towards particular types of entrepreneurial behavior. The first factor is strategic orientation; that is, how strategy is formulated—the basis of opportunity or on the basis of resources in hand? It is important to note that the entrepreneur is not always focused on breaking new ground, for according to Stevenson, opportunity can also be found in a new mix of old ideas or in the creative application of traditional approaches. A second factor is commitment to opportunity; that is, a revolutionary action orientation operating in a short time frame versus an evolutionary compromise process acting in an extended time frame. The third factor is commitment of resources; that is, a multistage commitment of resources with minimum investment at each stage or decision point versus careful analysis and large scale commitment of resources after the decision to act. The fourth factor is control of resources; that is, the ability to leverage other people's resources deciding over time what resources need to be brought in-house versus the need to control and own a resource from the outset. A fifth factor is management structure. It is the awareness of progress through contact with principal players, as opposed to formal relationships in which specific rights and responsibilities are assigned through delegation of authority in a hierarchy. The sixth factor is reward philosophy: compensation based on performance linked to value creation and teamwork in contrast to compensation based on individual responsibility, assets controlled, short-term targets and reward through promotion to more responsibility.

Perhaps the fullest expression of the entrepreneurial development in the academic library is the expanding interest in business operations to create new income streams for the organization, to learn through these activities, and to apply these lessons to library programs. The objectives also aim to secure expanded visibility in the national library and information technology communities, and to increase credibility in the university, where the tradition for such activities in the academic divisions is established.

Entrepreneurial activities present some significant challenges for academic libraries, and include: creating a firewall between these business developments and the support being provided to students and faculty, finding risk and development capital, and developing and recruiting staff skills for business ventures. Other challenges include creating the technology infrastructure, managing intellectual property and legal concerns, moving from cost recovery to profit models, moving from staff to software mediation to handle expanding volume of transactions, and forging effective business partnerships within the university and with outside organizations to help grow the business program.

In the process, we ask ourselves fundamental questions. Can we offer additional information or transaction services to our existing customer base? Can we address the needs of new customer segments by repackaging our current information assets or by creating new business capabilities through the Internet? Can we use our ability to attract customers to generate new sources of revenue? Will our business be significantly harmed by other companies providing some of the same value we currently offer? How do we become a customer magnet through electronic commerce? How do we build direct links to new customers? How do we take away bits of value digitally from other companies? Can we use the Internet as both a tool for global learning and scholarly communication and for technology transfer and entrepreneurial activities?

Entrepreneurial initiatives that build on e-commerce capabilities must be sensitive to new measures that are very different than what has governed our thinking in the academic library, for example:

QUALITY = CONTENT + FUNCTIONALITY

VALUE = QUALITY + TRAFFIC

PRICE does not equal COST OF INPUTS
PRICE = PERCEIVED QUALITY + VALUE

SUCCESS does not equal RESOURCE ALLOCATION
SUCCESS = RESOURCE ATTRACTION

Successful entrepreneurial activities in the academic library will require a redefinition of the physical, expertise, and intellectual infrastructure, and a

new understanding of the geography, psychology, and economics of innovation. That is the where, who, how, and why of productive change. Advancing the entrepreneurial imperative will demand a commitment to the tools of the trade, and these include business plans, competitive strategies, and venture capital. And it will mean advancing from incremental to radical change.

Now having bashed ROI and its application to the work of the academic library, allow me to cite two very significant and positive developments. The first is the work of Carol Tenopir (Tennessee) and her research team which is pursuing with IMLS funding a more comprehensive study of "the growing need to demonstrate the return on investment and value of the library to the various stakeholders of the institution (students, faculty, policy makers, funders) and to guide library management in the redirection of library funds to important products and services for the future." These studies are expanding beyond the ROI analysis of investment in content and the impact on institutional grant revenue to looking at teaching and learning, use of ebooks, the impact of special collections on fundraising, the value of information commons spaces, and the impact of the library on student success.

The second important development is the recent publication by ACRL of its *The Value of Academic Libraries: A Comprehensive Research Review and Report*. It reviews the literature on the value of libraries, suggests next steps in the demonstration of academic library value, and outlines a research agenda in areas like: student enrollment, student retention and graduation, student success, student achievement, student learning, student experience, attitude, and perception of quality, faculty research productivity, faculty grants, faculty teaching, and institutional reputation and prestige.

In its assessment of the definition of value, the ACRL study focuses our attention on two areas: financial value and impact value. It also emphasizes the critical migration away from product (collections) to services supported by staff expertise that results in value for users.

The work of both Tenopir and ACRL demonstrate the complexity, diversity, and rigor of "value" research. ROI may provide us with calculations that seek to document a financial relationship between action and benefit, but too often in the library community, these studies are poorly constructed, ineffectively executed, and naïvely 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.