Introduction and Statement of Topic

Research libraries are increasingly being called upon by their institutions to show accountability and value in relation to the investments made and the needs required by the university. This accountability and value-added level of performance, or organizational capacity, is not being fully assessed or measured through the use of collected data over time.

In addition to being called upon to show accountability, libraries are having to be more inventive, agile, responsive, and effective to hold the attention of faculty, students, and administrators, as well as to respond to the flux in the information technology environment. The delivery of new and responsive services and products to the primary user community is central to the issue of accountability. The requirement to be agile and innovative is a result of the acute attention paid to expenditures and performance and their relation to one another. Libraries will not escape this attention and, indeed, as one of the largest budgetary units on many campuses must be ever more articulate about how and when they are adding value to the overall performance of the institution.

What defines an inventive, agile, responsive, and effective organization? How can those qualities be measured? These questions are the subject of this background paper for the ARL New Measures Work Group.

1. What Organizational Experts Tell Us

In her book, Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation, Dorothy Leonard-Barton describes the nature of four core technological capabilities: physical systems; skills and knowledge; managerial systems; and values. She goes on to discuss four types of activities that create and sustain these capabilities: creative problem-solving; implementation of innovative methodologies and operational tools; experimentation; and importing knowledge.
Leonard-Barton goes further indicating that continuously renewing or transforming organizations display a set of characteristics common across different types of organizations:

- enthusiasm for knowledge
- the drive to stay ahead in knowledge
- iteration in all activities
- higher order learning (learning that cuts across all activities)
- leaders who listen and learn

Leonard-Barton researched organizations that build and manage knowledge effectively. She looked for indicators that showed how organizations turned knowledge and experience into renewable assets. Research libraries accumulate knowledge about how they operate but all too often these measures are so internally focused as to bear little relation to the critical changes and challenges in the world of higher education. A greater degree of agility and inventiveness will be crucial to the future of the research library.

The agile organization is an organization that learns from its performance, failures, risks, and successes and moves quickly to incorporate learning from these performance factors. Indeed, in most of the literature on organizational effectiveness over the past five years, the organizational learning process appears as an important aspect of organizational capability to innovate and perform at increasingly higher levels.

Jill Janov defines an inventive organization as “…one with enhanced capabilities to imagine and create. It is capable of more than adapting to the external operating environment and meeting customer requirements. An inventive organization is one that:

1. Continuously questions the assumptions that gave rise to the enterprise
2. Surprises and delights customers in service and product, warranty, and function
3. Focuses on how something is used and not simply what it was designed to do
4. Leads change through a well thought out strategy that is aligned with organizational structure, policies, and practices
5. Knows when and how to obsolete its existing product or service without alienating its current customers
6. Learns how it learns
7. Encourages experimentation by asking why not?
8. Chases dreams instead of the competition”

Research libraries are at a point in their evolutions where they need to consider how they might want to “re-invent” themselves. However, without key pieces of data and information, this recreation or transformation will be flawed in conception and in execution.
2. Need for This Focus

Current ARL statistics do not capture some critical dimensions of organizational capacity. Although, ARL captures employee counts and salary information for research libraries, that information does not describe activities undertaken by the individuals represented by those figures.

Furthermore, there is little data on research library success and what creates it. While there is the potential to measure the responsiveness of individual institutions through the use of internal surveys, work effectiveness and climate assessments, few if any research libraries are gathering data in these areas longitudinally.

To fully understand the responsiveness of these organizations to their environments, more data is needed in the following areas:

Human Resources and the Obtaining of Talent:
• success of recruitment efforts – how many positions are posted, how many applications received; how quickly are positions filled; what are demographics of recruitment efforts?
• level of employee retention – how long do individual employees stay in the institution; what are indicators that point to high retention levels and what are indicators that point to rapid loss of new employees?
• organizational criteria for necessary talent – how does the organization determine the talent it needs for future development of services?

Individual and Group Performance Measurement
• individual and group performance measures based on competency-based position descriptions and expectations
• promotion and tenure of professional employees – what are criteria based on? How do criteria connect to organizational performance expectations?
• degree of individual and group accountability for success of the enterprise; what is degree of decision making scope at each level of the organization?
• compensation based on competencies – what is the structure of the compensation system and does it relate to specific performance expectations and level of individual and group competencies
• required credentials for specific positions – what educational credentials are required for specific positions?

Creativity and Innovation Capacity:
• degree of creativity and innovation of individuals and the collective – how many new products and services has the organization generated in the past year; how are these evaluated?
• degree of staff involvement with the academic community – how many contact hours do library staff have with faculty and students; what is the product of staff involvement with faculty?
• level of learning among staff – how do staff learn new skills? how is the effectiveness of this learning assessed?
• the organization’s ability to take advantage of opportunities posed as either negative or positive
• what is the level of risk-taking in the organization? how many new initiatives have been undertaken and what has been the result of these initiatives?
• how are risks aligned with organizational strategic priorities?
• what are financial costs associated with innovation and/or risk-taking

Organizational Effectiveness, Structure and Climate:
• effectiveness of organizational structure – how does the organization assess itself and the viability and usefulness of its organizational structure?
• organizational climate – how does the organization’s climate contribute to its effectiveness; how does the organization measure the climate?
• how does the organizational infrastructure account for the investment in human resources?
• the organization’s ability to reallocate resources
• planning – how does the organization use its planning process to incorporate learning and meet the challenge to be agile?

There may be many other measures, which could show organizational capacity over time. It is clear, however, that organizational capacity is defined by a complex and highly inter-related set of characteristics, facts, and data.

3. Data Gathering Procedures

To develop data elements that capture information on the effectiveness of an organization’s capacity will require further winnowing of the key pieces of information that will help the leaders and employees of the research library to better understand how their practices and behaviors lead to success.

Some classic methods will doubtless be required to gather data. Among these methods are surveys seeking numerical data and interviews seeking both qualitative or narrative data and quantitative data. In some cases other bodies may already be collecting some of the data elements listed above. For instance,
Integrated Postsecondary Education Data System (IPEDS), the College and University Personnel Association (CUPA), and the Society for Human Resource Management (SHRM) may be collecting some information on human resource practices in universities. Some measures in this area are the success of specific recruitment practices, the level of retention of talented staff, and the level of investment in employee learning.

Other tools are organizational climate surveys, which can develop longitudinal data when used at regular intervals. An example of such a tool is the Campbell Organizational Survey (COS) which measures organizational climate on eighteen dimensions against a research-developed norm. The dimensions measured by this particular climate survey are: employee satisfaction with the work itself; working conditions; stress-free environment; co-workers; diversity; supervision; top leadership; pay; benefits; job security; promotions; feedback; planning; ethics; quality; innovation; general contentment.

4. Questions for Further Research

Janov suggests that we tend to look at our human resources as “costs” though our rhetoric is that people in the organization are the most important assets.⁴ A powerful question, then, is how do we assess our human resources as assets rather than costs. This question requires a focus on individual and collective performance assessment that is observable and measurable in terms of its impact on the primary user population.

While the old model of measuring performance assumed that the more people on the job the better, current thinking is causing libraries to consider the output of individuals as the critical measurable factor. This is leading to a new view of what it takes to be effective. With cutbacks in many library budgets, providing on target services and products with fewer employees is more likely to be a measure of effectiveness than is performing many unmeasured tasks with more people. This is an area that should be investigated to determine the common measurable factors across research libraries.

An understanding of basic library professional competencies for academic librarians and other professionals is needed. In addition, various competency-based compensation models should be built and vetted by the research library community.

5. Next Steps
Libraries must show the impact they have on learning needs and research needs. To do so a key focus for the New Measures initiative must be to define specific measures and data elements that will yield information about the capacity of the research library to meet emerging needs and rise to the challenges of a rich technological revolution in the knowledge management world.

Specific steps to take are:

• identify data already collected by research libraries or other bodies on the practices and performance of the human resources functions
• consider and study organizational capacity criteria established by other groups, such as the Malcolm Baldrige Quality Award Criteria
• identify measures which will have the strongest impact and will most clearly show organizational capacity
• identify measurable aspects of organizational performance, such as effectiveness of deployment of staff, effectiveness of organizational structure, effectiveness of planning efforts, and effectiveness of the organization in meeting new demands and challenges
• establish a working group as a subset of the New Measures Group specifically charged with investigating the measurable aspects of organizational capacity and assisted by the ARL/OLMS; this group could also be a subset of or draw upon the membership of the ARL Leadership Committee
• seek outside experts in the area of performance measurement with a specific focus on organizational agility and responsiveness

While the ARL statistics paint a broad picture of how research libraries are organized to do the work they do, a set of quantitative and qualitative statistical measures against which research libraries could consider their performance will be a key guidepost to the future development and performance of these organizations.

4 Ibid.