

Inputs, Outputs, Outcomes, Measures and Profiles: Assessing Library Performance

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Measuring Performance in Baseball

“Baseball fans are junkies, and their heroin is the statistic”

R S. Weider

More than wins and losses or runs, hits and errors

- Batting statistics: BA, SLG, OBP, OPS, RC
- Pitching statistics: ERA, WHIP, G/F, PFR
- What about the “Intangibles” (qualitative)?
 - Clubhouse attitude
 - Game face
 - Hustle

Competition and salary measurements too

Or As Yogi Berra Said:

“Ninety percent of this game is half mental”

1906: Three Library Assessment Questions

Focus on the Library

- Is this method the best?
- Is our practice adapted to secure the most effective administration?
- Are we up to the standards set by similar institutions?

“The success with which we answer them depends much on the success of our administration.”

J.T. Gerould, 1906

2009: Three Library Assessment Questions

Focus on the User

- What do we need to know about our communities and customers to make them successful?
- How do we measure the effectiveness of our services, programs and resources?
- What do our stakeholders need to know in order to provide the resources needed for a successful library?

Performance Measurement Definitions

- **Inputs** are resources which contribute to development and delivery of resources and services
- **Outputs** are resources and services produced and their use
- **Outcomes** are the effect of the library on the community
- **Performance indicators/measures** are quantified statements used to evaluate the performance of the library in achieving its objectives

What Will We Measure?

“What is easy to measure is not necessarily what is desirable to measure.” Martha Kyrillidou

“Institutional assessment efforts should not be concerned about valuing what can be measured, but instead about measuring what is valued.” A. Astin

Traditional Library Measures: Inputs

Focus on how big/how much

- Budget (staff, collections, operations)
- Staff size
- Collection size
- Facilities
- Other related infrastructure (hours, seats, computers)
- Size of user communities and programs

ARL “Investment Index” measures inputs related to expenditures and staff numbers

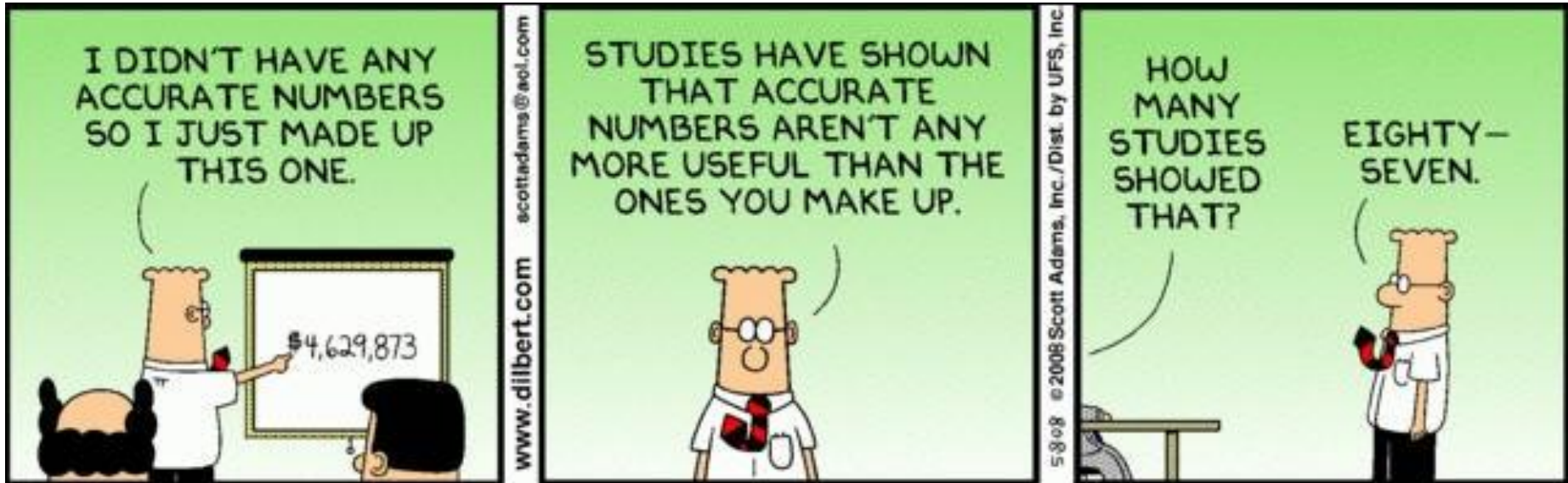
Traditional Library Measures: Outputs

Focus on usage

- Collections (print, electronic, ILL)
- Reference services
- Facilities (gate counts)
- Instruction sessions
- Discovery and retrieval
- Other Web sessions

May indicate if “inputs” are used, but doesn’t tell us what users were able to accomplish as a result.

These Are Self-Reported Statistics Too!



The Challenge for Libraries

- **Traditional statistics are no longer sufficient**
 - Emphasize inputs/outputs – how big and how many
 - Do not tell the library's or customers' story
 - May not align with organizational goals and plans
 - Do not measure service quality
- **Need to demonstrate difference the library makes**
 - To the individual, community and the organization

Assessment and Performance Drivers

- **Accountability and Accreditation**
- **Socio-Info-Techno environmental changes**

“The most notable feature of user behaviour in the networked environment is that the tools and resources they use are those embedded in their workflows [and lifeflows]. Information usage is integrated into these flows.” Peter Brophy
- **Budgetary pressures**

Assessment is More than Numbers

- Focuses on understanding customer needs and the services needed to meet those needs
- Collects, analyzes and uses quantitative and qualitative data for more effective management and decision-making
- Emphasizes ongoing communication with customers and stakeholders
- Seeks opportunities for collaboration and comparisons within the organization, institution and beyond

What Should We Assess?

- The library's contribution to learning and research
 - Student learning outcomes (accreditation driven)
 - Return on investment (externally funded research driven)
- Value of the library to the community
 - Information resources/collections
 - Library as place
 - Current services
- Changes in library and information use
- Organizational performance and effectiveness
- Collaborations

Example: Library Contribution to Student Learning

- **Assessing learning outcomes**
 - What do we want students to achieve?
 - Who are our partners and what do they want students to learn?
 - How has student behavior changed as a result?
 - How has the student applied what is learned?
- **Learning outcomes are not:**
 - Librarians' instruction skills
 - Students' satisfaction levels
 - One shot pre/post test results

Learning Outcomes Assessment

Figure 1: Assessment Cycle

Outcomes

What do we want to achieve?
What do we want the student to achieve?
What does an excellent information literacy program do?

Criteria for Success:

How will we know the students we have met the outcomes? What standards of success will we use to determine program effectiveness?

Assessment:

How will the student demonstrate their learning and ability? What evidence, data, or information do we need to gather about our program? How and when will we gather it?

Continuous Improvement

What, if any, changes are necessary as a result of the learning? What are our priorities and the plan for action?

Analysis

What can we learn from the evidence/data/information? What does it reveal? Are our current activities getting us toward our outcome?



**Library/College
Mission/Values/Goals**

Strategic Directions

**Library Instruction Program
Mission/Goals**

Two Major Trends in Library Assessment and Performance Since 1990

Customer-centered library

- All services and activities are viewed through the eyes of the customers
- Customers determine quality
- Library services/resources add value to the customer

Performance measures

- Based on extensive range of data resources
- Use of benchmarks and ratios
- Identifying key indicators
- Adopting organizational performance models (e.g. balanced scorecard)

Supported by Better Assessment Methods, Data and Analysis

- Qualitative methods such as focus groups, interviews, user-centered design, and other socio-based approaches
- New standardized library assessment tools such as LibQUAL+®
- Large data sets generated with standardized data definitions
- Powerful and easy to use data analysis and presentation tools
- Institutional commitment to assessment

Multiple Methods Are Complementary

- Quantitative provides numbers and dollars
- Quantitative can be used for ratios, benchmarking and return-on-investment

- Qualitative provides information directly from users
 - Their work/life, language, and what's important to them
- Qualitative provides context and understanding

Performance Measurement

“Measuring performance is an exercise in measuring the past. It is the use of that data to plan an improved future that is all important.”

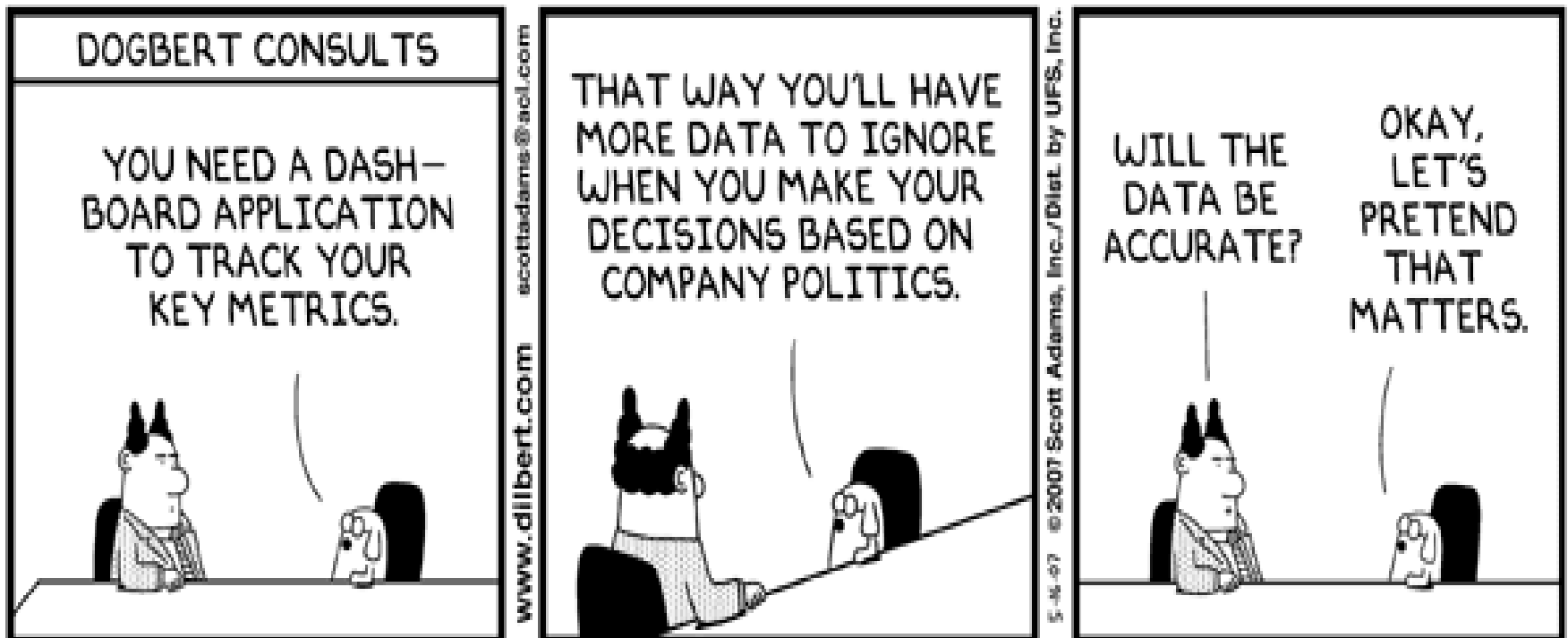
“Performance measures are no more than an aid to planning and service delivery, not the driving force behind it.”

Peter Brophy

Performance Measures and Indicators

- Identify most important measurable indicators of library organizational performance to:
 - Library, user community, stakeholders
- Criteria for performance indicators should be (ISO 11620)
 - Informative, reliable, valid, appropriate, practical, comparable
- Performance indicators and measures should relate to institutional and library mission, goals and outcomes
- Performance measures are generally quantifiable

A Skeptical View of Metrics



London School of Economics Library Service Standards – Dashboard Approach

- Availability of the library catalogue and IT equipment
- Enquiries and complaints
- Queuing
- Shelving
- Books, journals, course packs – orders and availability
- Repairs and binding
- Archives

<http://www.lse.ac.uk/library/about/SLDs/SLDsHome.htm>

Benchmarking

- Benchmarking is a systematic and structured approach concerned with best practices within and/or between organizations
- Benchmarking may use existing statistics, performance measures or standards
- Comparability both in data definition/acquisition and type of organization is critical for effective benchmarking

Common Benchmarking Examples

Benchmarking usually done with peer libraries

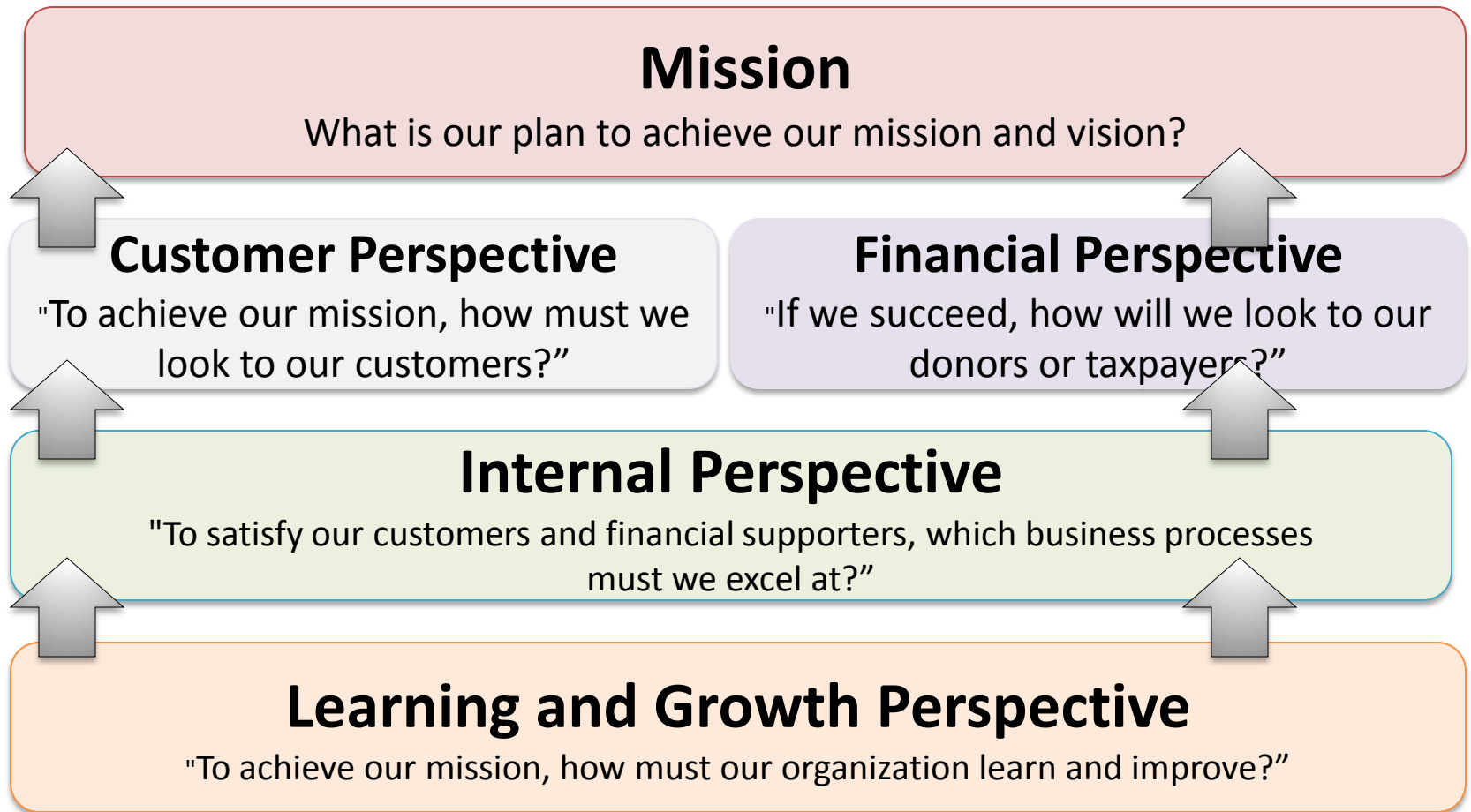
- Salaries
- Staffing
- Budget
 - Collections, staff, operations
- Collections
- Service metrics
- Facilities

Ratios often used include librarians per student, book expenditures per faculty, seats per student etc.

The Balanced Scorecard

- A model for measuring organizational performance developed in the 1990's by Kaplan and Norton that:
 - Helps identify the important statistics
 - Helps ensure a proper balance
 - Organizes multiple statistics into an intelligible framework
- Clarifies and communicates the organization's vision
- Provides a structured metrics framework for aligning assessment with strategic priorities and evaluating progress
- ARL Library Scorecard Pilot in 2009 with 4 libraries

Four Perspectives Outline the Major Goals of the Organization



Facilitate world-class research, teaching and learning through leadership in the creation, access, use, and preservation of information and knowledge for scholars at the University of Virginia

Customer Perspective

Easy access to superb information and resources

Welcoming spaces that promote productivity and collaboration

Services and programs that add value to scholarship

Financial Perspective

Increase financial base for unrestricted funds

Focus on resources & services with high ratio of value to cost

Maintain funding levels to responsibly steward the University's knowledge resources

Internal Processes

Marketing & Communications

Promote Library as intellectual crossroads

Library Services

Develop effective digital services

Align administrative, technical, and public service priorities

Operational Efficiency

Prioritize strategic programs and adjust budget and staffing accordingly

Learning And Growth

Strategic Skills / Workforce

Recruit, develop, and retain productive, highly qualified staff

Infrastructure

Implement space and technology upgrades to support cutting-edge services and initiatives

Culture

Promote culture of assessment and accountability

Develop "community" model of leadership and organization

University of Virginia Balanced Scorecard

Customer Perspective Measures

- *C1: Easy access to superb information and resources*
 - Customer satisfaction with collections (modify U.1.a.)
 - Circulation of new monographs (U.3.a.)
 - Use of electronic databases (modify F.2.a.)
 - Use of reference services -- desk visits, virtual reference transactions
 - Use of on campus delivery service

UVa Metric 3a.

Circulation of New Monographs

- *Target1*: 60% of newly cataloged monographs should circulate within two years.
- *Target2*: 50% of new monographs should circulate within two years.
- *Method*:
 - Data from the SIRSI records documenting circulation of print monographs over a two-year cycle. Only items circulated to users (not binding, etc.) are counted.
- *Result FY07*: Target 1 Met.
 - 62.9% circulated (16,363 out of 26,032)

Measuring Quality: Performance Measurement in Libraries

Edited by Roswitha Poll and Peter te Broekhorst, IFLA, 2007

Uses a Balanced Scorecard Approach

Use Indicators

- Market penetration
- User satisfaction
- Library visits per capita
- **Seat occupancy rate**
- Number content units downloaded per capita
- Collection use (turnover)
- % stock not used
- Loans per capita
- % loans to external users
- Attendance at training sessions per capita

Measuring Quality: Seats per Capita

- **Background**
 - Library as physical place to work is still important
- **Definition**
 - Number of seats provided divided by population served
- **Aims**
 - Adequacy of number of seats to population
- **Method**
 - Count number of seats; population is persons not FTE
- **Interpretation and Use of Results**
 - Higher score (more seats per person) is better

Questions about Performance Measures

- Measuring what is most important or measuring what can be measured?
- Are all measures or indicators equal?
- How do measures or indicators relate to outcomes?
- How much time and resources should go into devising measures, methods and analysis?
- How do we incorporate customer perspectives?
- How can qualitative information be used?

Library Profiles

Qualitative Complement to ARL Statistics?

2009 ARL Initiative

Narratives provide qualitative information on:

- Services
- Collections
- Collaborative relations

Descriptions of collections, services and collaborative relations should be specific in terms of products and services that are strategically important and identify assessment approaches currently in use.

Potential Uses of the Profiles

- Stand on their own as accompanying descriptions to the annual statistical data
- Identify possible new descriptive variables for annual statistics that represent today's research library
- Test and develop an alternative, multi-factor index to measure and assess collections, services and collaborative relations

Focus on Outcomes and Value

Some New Metrics for Libraries

- Uniqueness of collections
- Value of consortia and other partners
- Administrative and budgetary efficiencies
- Student outcomes/student learning/graduate success
- Contributions to faculty/researcher productivity
- Data access, organization and preservation
- Generating new knowledge
- Organizational return on library investment (ROI)