Measuring impact and outcome

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Do we make a difference?
The challenge to prove it

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Definitions

input	a contribution of work, information, or material
output	the amount produced, the results supplied
impact	the effect or influence of one person, thing, or action, on another
outcome	the consequence, visible or practical result or effect of an event or activity
value	the importance or preciousness of something, the perception of actual or potential benefit
benefit	a helpful and useful effect that something has

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Why should we measure outcome

Accountability

- Limited resources
- Competing priorities
- Results-based budgeting
- Public reporting
- Increasing demand for services

Management of resources

- Planning
- Allocating resources
- Optimizing outcome
- Monitoring effects of change

Promotion of the library's role

- Competing ways of information provision
- Communication of benefits
- Influence on policy makers

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The data libraries present today …

Input
- Income / expenditure
- Collection size / additions
- Number of staff
- Study places / PC's
- Cataloguing data

Output
- Loans / in-house use
- Reference transactions
- ILL / document delivery
- User training lessons
- Attendances at events / exhibitions

- Amount of services / media / facilities offered
- Amount of use

Did users benefit?
Usage is not synonymous with value

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Input/Use
- Collection turnover
- Use rate of PC-places

Costs/Use
- Cost per loan
- Cost per session (on an electronic resource)

Use/ Population
- Library visits per capita
- Loans per capita

Processes
- Book processing speed
- Correct shelving
- Reference fill rate

- Quality of services
- Efficiency of services

Benefits?

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Different outcomes

positive	— negative
direct/immediate	— long-term
actual	— potential
intended	— unexpected

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- Actual users

- Potential users

- Financing authorities

- Politicians

- Library staff

- The public

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- **Knowledge**

- **Information literacy**

- **Democracy**

- **Social inclusion**

- **Local identity**

- **Lifelong learning**

- **Individual well-being**

Changes in skills, behaviour, knowledge, attitudes

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Outcome of libraries

Short-term
- information gained
- problems solved
- time saved
- information seeking skills improved
- IT skills improved

Long-term
- information literacy
- improved academic success
- better career chances
- changes in behaviour (reading, use of information)

Economic value
- time saved
- effect on the economics of a community / a commercial firm / an institution

Benefits for the future
- information stored / made accessible for use in 100 years

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Problems of ‚measuring‘ outcome

- Benefits may vary as to user groups

- Values may be seen differently

- Data are not consistent (differing ways of collection)

- All tested methods are time-consuming

- Influences on users are complex:
  Can we trace improvement back to library services?

- We may have to use surrogate measures

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Outcome compared to traditional data

Input	Output	Performance	Outcome
collection size	issues	collection turnover	factual knowledge
staff at reference desk	reference transactions	reference fill rate	conceptual knowledge
resources spent on user training	hours of user training	attendances per capita	promotion of academic / pro-fessional success
			information skills

user satisfaction?

"Satisfaction on the part of a user is an outcome. So is dissatisfaction" **ACRL**

"Customer satisfaction ... is neither outcome nor output. Rather, it is a qualitative assessment of library outputs." **Jennifer Cram**

- **Previous experience affects the perception**
- **Loyalty influences the answers**
- **Users may be satisfied without any tangible benefits**

Qualitative performance indicator?

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Possible methods to measure outcome

Financial value

Assessing the market value or proxy price of the library's services or a single service

Social impact

Assessing the imputed value of the library by social audits

Information literacy

Assessing the impact of library use and user training on the users' information skills

Academic / professional success

Assessing the relation of academic / professional success (duration of studies, examination results, papers published) to the use of library services

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Financial value

- Actual or potential benefits to users quantified in money

- "Proxy prices" (shadow prices) = prices that would be paid for a service the library offers in the market

- Evidence of libraries directly affecting the economics of their institution / community

Not: Costs of a service as determined in a cost analysis

Goal: To show return on investment
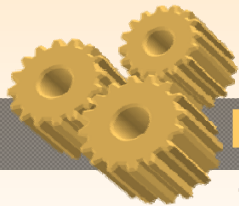
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Financial value

Replacement value of a client's time

"The value that users place on library services must be at least as great as their sacrifice in accessing and using them".

Glen Holt

Example: **Parliamentary Library New Zealand**
"Time costs" were compared with purchase costs of the assets used to provide a service

Result: **Services had a value between two and twenty times the annual budgets**

Contingent valuation

Willingness-to-pay = **What would users be willing to pay for a certain service?**

Willingness-to-accept = **What sum would users accept as equivalent for giving up a certain library service?**

Example: **St. Louis Public Library Services**

- **Market price assessed for each service (as far as possible)**

- **Telephone survey, focus groups, interviews**

Result: **WTA: 9 $ Dollar payback to every 1 $ in current taxes if I agree to close all libraries**

WTP: 1 $ paid more to every 1 $ if all libraries are kept open

Financial value

Proxy prices

- What price for a reference transaction done by a commercial firm?

- What prices for lending books / media from commercial suppliers?

Consumer surplus

- Value that users place on the consumption of a service in excess to what they "pay" to get them (time, travelling)

Example: St. Louis Public Library Services got a surplus 3:1

All methods want to show that libraries do not only create immaterial "value", but that a market value can be proved, and that there is a return on investment.

PROBLEM *Would users indeed pay such a sum?*

Interested stakeholders
- Financing authorities
- Public

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Social impact

Preciousness of library services

- for the individual (direct benefit)
- for the population (indirect benefit)

Methods

- interviews (e. g. "street surveys")
- questionnaires
- telephone surveys
- focus groups

connected with questions as to

- sociodemographic data (age, gender, ethnic origin, income, employment status, academic status)
- frequency of library use

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Functions of the library
that were deemed most important:

- children's literacy
- establishing reading habits
- leisure reading
- cultural meeting point
- access to information
- help in finding information
- job and training information

Direct benefit – potential benefit:
Different views of users / non-users

PROBLEM

Subjective assessment
often anecdotal evidence

Interested stakeholders

- Politicians
- Public
- Management

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Information literacy

- Assessing the library's role in conveying information skills and competences
- Assessing the library's actual and potential role for information seeking

Impact of library use and training

- Outcome – based education
- Accreditation models
- Standard (ACRL)

Methods used:

- Surveys after instruction ("reaction data")
- Assessing the quality of bibliographies / papers
- Self-assessment of users
- Behavioural observation
- Test   -   pretests / posttests
                -          basic skills
                -          conceptual knowledge (e. g. critical reading)
- **Additional data:**   -   faculty
                -          term, grade
                -          frequency of library use

Information literacy

Example of a "mini-quiz"

Students ...

- are aware of options to get material not available locally

- can recognise a Web address, a book citation, a serial citation, and a call number

- know how to use the operators AND and OR

- know the difference between primary and secondary sources

- know the difference between popular and scholarly journals

- think library skills will be useful in their chosen profession.

Information literacy

PROBLEM

User surveys after a training lesson focus on user satisfaction, not on outcome, and might be complimentary

Self-assessment not reliable

- 90 % of students rated their library skills as adequate
- 53 % were "minimally competent"

Danger to rely on attitudes / opinions

Difficulty to trace skills / competences back to the library

Interested stakeholders

- **users**
- **staff**
- **institution / community**

Information literacy

Information seeking behaviour

- New ways of communication
- Information channels outside the library

What part of information seeking and provision is done via libraries?

Where could libraries step in?

What role do they have as to certain subjects / professions? (chemists, psychologists, nurses, teachers)

Information literacy

Example:

German special collection programme (DFG)
Evaluated from the user perspective

5 subjects: English studies, economics, biology,
history, mechanical engineering

Survey of 5000 academics as to:
- information seeking ways
- procuring documents
- problems, expectations

PROBLEM *Indirect way to prove outcome*

Interested stakeholders
- Users
- Management
- Institution
- Financing authorities

Academic / professional success
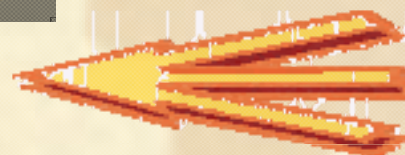
Success

- **Good exams**
- **short duration of studies**
- **Quick employment after finishing education**
- **Highly reputed publications (citation impact)**

Library use

- **Average time per week spent on using the library**
- **Number of books borrowed**
  - core material
  - special material
- **Use of reference desk**
- **Attendance at user training**

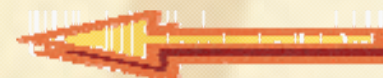## How to get the data?

Library use → automated system
user diaries
questionnaire, interview

Exams, duration of studies, employment level → university records

citation impact → citation index

Academic / professional success

Advantage:

Mostly <u>not</u> relying on attitudes, but on concrete data.

PROBLEM

Data for individual users might be hard to obtain

*A positive correlation **does not** prove that the success is due to the library*

Interested stakeholders

- **Users**
- **Institution**
- **Financing authorities**
- **Management**

Measuring outcome needs users' cooperation

They are asked

- to rate their benefits / failures after the visit / use
- to rank library products and services
- to put a financial value on services
- to rate their own skills and competences
- to participate in tests
- to agree giving private data for evaluation programmes

In addition, data about users are collected

- from the automated system
- from attendance lists
- from institutional records.

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Definition of mission and goals

Collection of input data

Assessment of costs

Collection of output data

Assessment of quality

Outcome

What outcome is expected?

What is **provided** by the library that could lead to outcome?

What **money** is spent to achieve outcome?

What **use** is made of the services offered?

In how far does the **performance** of the library render outcome possible?

- Large input / good performance may give the basis for high outcome
- Intensity of use seems to indicate realised benefits

Is there an impact on people's lives?
Can we prove it?

"The search for an ultimate measure of benefit may be illusory".

Don Revill

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Measuring
Impact
And
Outcome on
Users

http://www.uni-muenster.de/ULB/outcome/index.html

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