Measuring the ROI of Today’s Libraries

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NFAIS
June 15, 2012
About the study:

• Part of a grant to assess the value and ROI of academic library services (Lib-value)
• Assesses the use, value, and ROI of 77 academic library services
• This data is from Bryant University
• Similar project underway at Drexel University (May 2012).
Bryant University
Bryant Library Services
Three Types of Users

- **Faculty**
  - 164 full-time
  - 94 part-time

- **Staff**
  - 465 at all levels

- **Students**
  - 3,216 undergraduates
  - 256 graduate

17 library staff, mostly professional, supports the Bryant Library users
Components of ROI Analysis:

1. Amount of use of all services
2. Return component of ROI
3. Investment component
Surveys to Measure Use & Return

Response Rates

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Faculty</td>
<td>46</td>
</tr>
<tr>
<td>Part-Time Faculty</td>
<td>33</td>
</tr>
<tr>
<td>Staff</td>
<td>7</td>
</tr>
<tr>
<td>Students</td>
<td>7</td>
</tr>
</tbody>
</table>
Students Dominate Reading from the Library

Total Number of Readings from Library per year

<table>
<thead>
<tr>
<th></th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article</td>
<td>24,970</td>
<td>157,700</td>
</tr>
<tr>
<td>Book</td>
<td>3,330</td>
<td>95,680</td>
</tr>
<tr>
<td>Other Publication</td>
<td>2,680</td>
<td>106,800</td>
</tr>
</tbody>
</table>
Proportion of All Readings from Library

- Article: Faculty 50, Students 67
- Book: Faculty 25, Students 20
- Other Publication: Faculty 11, Students 59

Center for Information and Communication Studies
Students Dominate Use of Other Services (Examples)

Annual Usage of Services (Students)

<table>
<thead>
<tr>
<th>Service</th>
<th>Annual Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference searches</td>
<td>26,580</td>
</tr>
<tr>
<td>Formal instruction</td>
<td>32,230</td>
</tr>
<tr>
<td>Workstations</td>
<td>248,900</td>
</tr>
<tr>
<td>Leisure/workspace</td>
<td>178,400</td>
</tr>
</tbody>
</table>
Return Values:

• The return component of ROI is determined by the value gained from reading or using services

• 2 types of value:
  – Purchase value: what readers or users pay for information in their time and/or money to process and read publications or process services.
  – Use value: favorable consequences from reading or using services.
Purchase Value of Some Services:

• The hourly rate of users:
  – Faculty: $56.20 per hour
  – Staff: $36.00 per hour
  – Students: $34.60 per hour
Return or Use Value: Reading Articles:
Principal Purpose of Reading

Faculty
- Teaching: 17%
- Research: 60%
- Other: 23%

Students
- Course Assignment: 56%
- Required Reading: 18%
- Other: 26%
## Ways Affected Principal Purpose: Three Most Cited

<table>
<thead>
<tr>
<th></th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added to General Knowledge</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Improved Result</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>Inspired New Thinking</td>
<td>41%</td>
<td>33%</td>
</tr>
<tr>
<td>Better Understood</td>
<td></td>
<td>83%</td>
</tr>
<tr>
<td>Broadened Perspective</td>
<td></td>
<td>53%</td>
</tr>
</tbody>
</table>
Contingent Value

• The cost of not having access to library-provided articles (minus the library costs).

• Faculty-only (students not asked)

• Total cost: $408,600

• Cost per Faculty: $1,200

• Cost per reading: $27
The Library Investment (Costs)
7 Steps in Analyzing Costs

1. Identify principal services provided
2. Establish resources used for the services
3. Determine data needed for cost analysis
4. Estimate the cost of resources used
5. List all activities involved
6. Sum cost of each services
7. Allocate cost to type of user
List of Activities Involved:

STEP 1: Principal Services (77)
STEP 5: Operational activities (22)
  – Collection development
  – Acquisitions
  – Cataloging
  – Mail processing
  – Administration
  – Etc.
STEPS 2 and 4: Library Resources:

- Library staff
- Space
- Shelving
- Furniture
- Purchases
STEP 3: Data Needed: Example of Labor

- Work status
- Weekly hours
- Annual salaries
- Number of days not at work
- Unpaid overtime
- Overtime paid
- Total compensation
- Average hourly cost
  - Total compensation divided by total hours
Final Steps

• Establish the total cost of each service.
• Allocate the total cost to type of user in two ways:
  – By amount of use from user survey
  – By time spent using from user survey
Allocate by amount of use (journal use)

<table>
<thead>
<tr>
<th></th>
<th>Amount of Use (Reading)</th>
<th>Proportion</th>
<th>Allocated cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>24,970</td>
<td>0.137</td>
<td>$27,861</td>
</tr>
<tr>
<td>Staff</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Students</td>
<td>157,700</td>
<td>0.863</td>
<td>$175,958</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>182,670</strong></td>
<td><strong>1.000</strong></td>
<td><strong>$203,819</strong></td>
</tr>
</tbody>
</table>
Allocate by time spent using (leisure/work space)

<table>
<thead>
<tr>
<th></th>
<th>Hours spent using</th>
<th>Proportion</th>
<th>Allocated cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>915</td>
<td>0.0050</td>
<td>$1,461</td>
</tr>
<tr>
<td>Staff</td>
<td>884</td>
<td>0.0049</td>
<td>$1,432</td>
</tr>
<tr>
<td>Students</td>
<td>178,400</td>
<td>0.9901</td>
<td>$289,367</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>180,169</strong></td>
<td><strong>1.0000</strong></td>
<td><strong>$292,260</strong></td>
</tr>
</tbody>
</table>
Return on Investment of Services

• In addition to values derived from services, a dollar return is:
  – Contingent valuation (net benefit) divided by library investment

<table>
<thead>
<tr>
<th>Service</th>
<th>Return Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article</td>
<td>3.2 :1</td>
</tr>
<tr>
<td>Book</td>
<td>3.5 :1</td>
</tr>
<tr>
<td>Other Publication</td>
<td>4.0 :1</td>
</tr>
<tr>
<td>Reference searches</td>
<td>10.3 : 1</td>
</tr>
<tr>
<td>Formal instruction</td>
<td>35.6 : 1</td>
</tr>
<tr>
<td>Work stations</td>
<td>44 : 1</td>
</tr>
<tr>
<td>Leisure/workspace</td>
<td>21.4: 1</td>
</tr>
</tbody>
</table>
More details and searchable Lib-Value bibliographic database available on the project website:

http://libvalue.cci.utk.edu