Benchmarking IT services in academic libraries

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BENCHMARKING IT SERVICES IN ACADEMIC LIBRARIES

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JANETTA WATERHOUSE, KANSAS STATE UNIVERSITY

NEW YORK LIBRARY ASSOCIATION
NOVEMBER 2, 2023
ORIGINS OF OUR RESEARCH PROJECT

- Organizational changes at the University at Albany
- Clear hints about moving towards centralization
- Justifications required for all positions, including evidence in support of our requests
- Undertook an informal benchmarking survey of ARL directors
Questions: Do you have IT staff in the library? How many? What are your thoughts about centralizing IT activities at the institution level?

Results:
- More than 40 responses
- Many seeing some centralization of IT activities (server administration, desktop support of public and staff computing)
- A few experiencing a complete centralization of IT activities
- Many concerns about service level and support
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- More than 40 responses
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- A few experiencing a complete centralization of IT activities
- Many concerns about service level and support
QUESTIONS FOR YOU
Survey was directed only at the academic members of ARL

SPEC Kits 211 and 271 on Library Systems Office Organization

Qualtrics survey software

Survey expanded to include questions about IT organization, satisfaction, assessment, and challenges

Deployed spring of 2021 for approximately six weeks

72 completed surveys

Eliminated incomplete surveys and one that came from a non-academic library
PARTICIPANTS

- 72 responding libraries
  - 55 (76%) were public institutions
  - 17 (24%) were private institutions
- All libraries reported to the academic affairs division of their universities with a direct reporting line to the provost
SERVICE AREAS

- Web design and development
- Server & systems administration
- Email
- Calendar
- Integrated library system (ILS) or library services platform (LSP)
- Library-specific applications
- Desktop support of staff computers
- Desktop support of public computers
- Digital scholarship technology or equipment
- Hardware or software purchasing
- IR development and support
- Other digital content management support
- Audio visual or media technology or equipment
- Disability services technology or equipment
QUESTIONS ABOUT IT ORGANIZATION

- Who is responsible for the service or activity?
- How satisfied are you with the services provided?
- Has this responsibility changed since 2000?
- If so, when and why?
## RESPONSIBILITY RESULTS

**Table 1. Service responsibility breakdown by unit.**

<table>
<thead>
<tr>
<th>Service responsibility</th>
<th>Library</th>
<th>ITS</th>
<th>Vendor</th>
<th>Consortium</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web design and development</td>
<td>88.9%</td>
<td>5.6%</td>
<td></td>
<td></td>
<td>5.6%</td>
</tr>
<tr>
<td>Sever, system administration</td>
<td>63.9%</td>
<td>19.4%</td>
<td></td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>83.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calendar</td>
<td>9.7%</td>
<td>66.7%</td>
<td>18.1%</td>
<td></td>
<td>5.6%</td>
</tr>
<tr>
<td>ILS LSP</td>
<td>50.0%</td>
<td>2.8%</td>
<td>23.6%</td>
<td>15.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Library-specific applications</td>
<td>86.1%</td>
<td>2.8%</td>
<td>1.4%</td>
<td></td>
<td>9.7%</td>
</tr>
<tr>
<td>Staff computers</td>
<td>76.4%</td>
<td>18.1%</td>
<td></td>
<td></td>
<td>5.6%</td>
</tr>
<tr>
<td>Public computers</td>
<td>58.3%</td>
<td>30.6%</td>
<td></td>
<td></td>
<td>11.1%</td>
</tr>
<tr>
<td>Digital scholarship</td>
<td>83.3%</td>
<td>5.6%</td>
<td></td>
<td></td>
<td>11.1%</td>
</tr>
<tr>
<td>HW SW purchasing</td>
<td>81.9%</td>
<td>6.9%</td>
<td></td>
<td></td>
<td>11.1%</td>
</tr>
<tr>
<td>Institutional repository</td>
<td>79.2%</td>
<td>2.8%</td>
<td>11.1%</td>
<td>2.8%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Digital content management</td>
<td>81.9%</td>
<td>4.2%</td>
<td>6.9%</td>
<td>1.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Audio visual media</td>
<td>68.1%</td>
<td>18.1%</td>
<td></td>
<td></td>
<td>13.9%</td>
</tr>
<tr>
<td>Disability equipment</td>
<td>42.9%</td>
<td>38.6%</td>
<td></td>
<td></td>
<td>18.6%</td>
</tr>
<tr>
<td>Averages</td>
<td>62.2%</td>
<td>21.8%</td>
<td>13.0%</td>
<td>6.5%</td>
<td>9.8%</td>
</tr>
</tbody>
</table>
WEB DESIGN AND DEVELOPMENT: WHO DOES IT?

- Library: 89.9%
- ITS: 5.6%
- Vendor: 0%
- Consortium: 0%
- Other: 5.6%
WEB DESIGN AND DEVELOPMENT: SATISFACTION

Library:
- 82% Satisfied or Very satisfied
- 14% Neutral
- 5% Unsatisfied

ITS:
- 25% Satisfied
- 75% Unsatisfied

Other:
- 50% Satisfied or Very satisfied
- 50% Neutral
DESKTOP SUPPORT OF STAFF COMPUTERS: WHO DOES IT?

- Library: 76%
- ITS: 18%
- Vendor: 0%
- Consortium: 0%
- Other: 5.6%
LIBRARY SUPPORT OF STAFF COMPUTERS: SATISFACTION

Library:
- 87.3% Satisfied (50.9%) or Very satisfied (36.4%)
- 12.7% Neutral

ITS:
- 76.9% Satisfied (7.7%) or Very satisfied (69.2%)
- 15.4% Neutral
- 7.7% Unsatisfied

Other:
- 75% Satisfied
- 25% Very unsatisfied
Library: 63.9%
ITS: 20%
Vendor: 0%
Consortium: 0%
Other: 16.7%
Library:
- 81.3% Satisfied (26.6%) or Very Satisfied (54.7%)
- 14.1% Neutral
- 4.7% Very unsatisfied

ITS:
- 25% Satisfied
- 75% Unsatisfied

Other:
- 25% Very Satisfied
- 50% Satisfied
- 50% Neutral
SERVICES MORE LIKELY PROVIDED BY ITS THAN LIBRARY STAFF:

- Email (88.3%)
- Calendar (63.7%)
SERVICES MOST LIKELY PROVIDED BY LIBRARY IT STAFF

- Web design and development
- Library-specific applications
- Digital scholarship
- Hardware and software purchasing
- Digital content management
OTHER SERVICES CAMPUS IT SUPPORTS:

- Server and system administration (19.4%)
- Support for staff computers (18.1%)
- Support for public computers (30.6%)
- Audiovisual technology and equipment (18.1%)
- Disability services technology or equipment (38.6%)
Service most likely to be outsourced to a vendor or consortium:

- Library: 50%
- ITS: 2.8%
- Vendor: 23.6%
- Consortium: 15.3%
- Other: 8.3%

Likely reflects move towards cloud-based platforms
SERVICES SUPPORTED BY VENDORS:

- Email (16.7%)
- Calendar (18.1%)
- Institutional repository (11.1%)
- Digital content management (6.9%)
- Library applications (1.4%)
SERVICES SUPPORTED BY CONSORTIA:

- ILS/LSP (15.3%)
- Institutional repositories (2.8%)
- Digital content management (1.4%)
RESPONSIBILITIES MOST LIKELY TO BE SHARED:

- Disability services technology and equipment (18.6%)
- Server and system administration (16.7%)
- Audiovisual technology and equipment (13.9%)
- Support for public computers (11.1%)
- Support for digital scholarship (11.1%)
- Hardware and software purchasing (11.1%)

None of the other services rose above 10% of respondents as shared
Satisfaction is lower when service provided by campus IT in six categories:

- Web design and development
- Server and system administration
- Desktop support of staff computers
- Digital scholarship technology and equipment
- Hardware and software purchasing
- Disability services technology and equipment
There were three categories where no respondents indicated dissatisfaction:

- Email services
- Library specific applications
- Desktop support for public computers
THOUGHTS ON RESPONSIBILITY AND SATISFACTION

- Most library IT functions continue to be managed by library staff
- Satisfaction for most IT functions is higher when managed by library staff
- Dissatisfaction is related to lack of resources, staff, or control
CHANGES IN RESPONSIBILITY 2000-2020

Most likely to change

- ILS/LSP
- Server and systems administration
- Desktop support of public computers

Reasons for change

- Increasing reliance on virtual machine (VM) platforms
- Cost savings
- Increased efficiency
- Fewer staff required
QUESTIONS ABOUT IT ORGANIZATION?
NEED FOR FURTHER RESEARCH

- Repeat in 5-10 years to develop longitudinal data
- Deeper dive into specific service categories
- Impact of cloud computing on IT organization and staffing
- Conduct a similar study with smaller universities or colleges
What techniques does the library use to evaluate the effectiveness of information technology services?
QUESTIONS FOR YOU
ASSESSING IT: ASSESSMENT STRATEGIES USED?

- Track usage of web pages, ILS, etc. (93.1%)
- Track the number of helpdesk tickets (84.7%)
- Track the number of hardware or software installations (62.5%)
- LibQUAL survey (31.9%)
Interview internal users (47.2%)
Conduct user surveys (66.7%)
Interview external users (38.9%)
Conduct focus groups (61.1%)
Other (text entry required) (25%)
UX STUDIES A COMMON FORM OF ASSESSMENT:

- UX studies (more than surveys, e.g. interviews with eye and movement tracking)
- Usability testing
- Usability work
- User testing, accessibility testing of libraries websites and web applications
- We have a dedicated UX department, which is an incredible asset
- Some of the user-facing approaches listed above are conducted via our UX initiative
- Structured user testing
OTHER FORMS OF ASSESSMENT

- How long helpdesk tickets are open, progress on projects
- Track content of helpdesk tickets from library staff and users
- Anecdotal, word of mouth
- Conducting a campus-wide needs assessment
OTHER FORMS OF ASSESSMENT, CONT'D

- MISO survey
- Track hardware and software usage (LabStats)
- Technology Strategies [Committee] with reps from across the libraries
- Detailed assessment projects
Libraries use a mix of qualitative and quantitative methods

User surveys and focus groups have increased in use and probably reflect the rise in user experience as a focus of academic libraries

Assessment of IT activities is ripe for further research

Communicating assessment findings is critical to achieve assessment goals
COMMUNICATING ASSESSMENT FINDINGS

- Annual or informational report to administration
- Presentations at faculty or all-staff meetings
- Mass emails to staff
- Departmental or library newsletter
- Articles for publication in library literature
NEED FOR FURTHER RESEARCH

- What forms of assessment are most useful?
- How do assessment results inform strategic planning, staffing, or organizational decisions?
- How are assessment findings communicated more broadly?
- Do administrations conduct assessment before and after organizational changes?
QUESTIONS ABOUT IT ASSESSMENT?
Please list the top three challenges the library systems operation in your institution will face in the next two years.
QUESTIONS FOR YOU
IT CHALLENGES: RESPONSES

- Responses:
  - 62 institutions completed all three responses
  - 9 entered two challenges
  - 1 did not respond

- Open text box for qualitative feedback that was put into themes for comparison to past data and between institutions
TOP IT CHALLENGES

- Staffing – 58 responses by 50 libraries (69%)
- Budget – 32 responses by 30 libraries (42%)
- Migrating from one system to another – 17 total responses
  - One institution had this topic for all three responses!
- IT centralization – 10 total responses
  - Our primary reason for conducting this research
- Security – 8 total responses
MULTI-FACETED IT CHALLENGES

- Responses for 2 categories were more loosely assigned a theme
- User services – 15 total responses across a spectrum, including:
  - User experience
  - User support
  - User access
  - User service profile expansion without additional budget
Digital services – 11 total responses across a spectrum including:

- Digital content/resources
- Digital repositories
- Digital strategy
- Digital user experience/support
- Digital space planning
LOW COUNT CHALLENGES

- Cloud services – 6 total responses
- Management of research data – 5 total responses
- 4 responses each
  - Market consolidation, staff development, storage, sustainability
- 2 responses each
  - AI, emerging technologies, OSS balance, project management, technology management
OUTLIERS

- 11 total one-off responses related to
  - Processes/workflows – CDL, ERM, OER support
  - Interpersonal issues – teamwork, partnerships, expectations
OUTLIERS, CONT'D

- Other
  - Faculty research – did this mean supporting faculty research on campus or library faculty doing research?
  - Managed technology – does this differ from technology management?
  - Obsolete technologies – one institution is directly attacking this problem
  - System integration – perhaps could be considered under the category of technology management?
  - Transitioning solutions – unsure the context of this response
THOUGHTS ON CHALLENGES

- The top two challenges mirror those in the 2002 SPEC Kit: staffing and budget
- New services was a major category in the SPEC Kit, correlating closely with the many digital services challenges mentioned in our study
- Migrating from one system to another was high on our list, perhaps reflecting the many libraries implementing either Alma or open-source options
- Some challenges seem to be reflective on the time (new services, migrating) and others to be ever-present (staffing and budget)
CONCLUDING THOUGHTS

- Conducting this research gave us valuable insights into the state of IT organization and management across North America
- Highlighted the wide variety of organization and management practices
- Many of our challenges are similar, and benchmarking studies like this one help us to develop a greater understanding of the environment and culture of our peer institutions
QUESTIONS?
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