IT Services Survey

JUNE 2013

Key Findings and Recommendations

Prepared By
Division of Information Technology (DoIT) Staff

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EXECUTIVE SUMMARY

Stony Brook University initiated its first-ever, campus-wide, comprehensive IT services survey on February 12, 2013 and allowed each user four weeks to complete it. The survey, which was electronically delivered to all students, and faculty and staff from all areas except Stony Brook Hospital, closed on March 15, 2013. A separate survey was sent to faculty and staff from the educational and research areas of Stony Brook Medicine in April and closed on May 17, 2013. Conducting these surveys allows the Division of Information Technology (DoIT) to develop outcomes-based benchmarking that will help the organization know where improvements need to be made in order to better serve the Stony Brook community.

Students, faculty, and staff were asked to provide an anonymous quality assessment of technology services offered within three main categories:

1. Connectivity and Access
2. Technology and Collaboration
3. Support and Training

Survey respondents were asked to rate their minimum service level expectations, desired service level expectations, and their opinion of current service levels for each question. At the end of this brief survey, respondents were given an opportunity to answer three open-ended questions. Throughout the survey, there were links for respondents to click to elaborate on specific topics.

DoIT utilized the TechQual+ Project survey tool - a common survey instrument for assessing critical IT service outcomes that are expected by students, faculty, and staff and are generalizable across all types of higher education institutions.

RESPONSE RATE

The survey was emailed to 26,882 members of the community. A total of 5,852 surveys were started, 4,677 fully completed, for a response rate of 22%. A summary of response rate by major sub-population follows, a more detailed analysis is at Appendix 1. Overall response rate for this scale of survey is deemed acceptable. Although sub-population response rates do not precisely mirror the community there is little risk that student opinion is underrepresented since their responses comprise 65% of the total responses.
Undergraduate students: Survey emailed to 15,395 undergraduate students. A total of 2,533 surveys were started, 1,903 fully completed, for a response rate of 16%.

Graduate students: Survey was emailed to 7,045 graduate students. A total of 1,318 surveys were started, 1,071 fully completed, for a response rate of 19%.

Faculty: Survey was emailed to 1,573 faculty. A total of 639 surveys were started, 559 fully completed, for a response rate of 41%.

Staff: Survey was emailed to 2,864 staff. A total of 1,360 surveys were started, 1,142 fully completed, for a response rate of 47%.

RESULTS

Empirical (scaled) Responses

The overall results are portrayed at Figure 1. Inspection of the graph reveals that users have varying levels for how “important” the various IT services are (e.g. having a reliable internet service is perceived as more desirable than having collaboration technologies). The top five most desired services were: having fast internet service, having reliable internet service, having complete wireless coverage, having knowledgeable IT support staff, and getting timely resolution to user problems.

Users also rated their perception of the current service level, shown graphically as the diamonds on Figure 1. No service was rated as meeting or exceeding desired service level (which might approximate an “ideal” service delivery). Eight services were rated as not meeting minimum service expectations. Graphically the gap between the diamond and the bottom of the green bar depicts the magnitude of the “service gap”. Clearly there is room for improvement in every single service category. To focus attention on the most significant service gaps, we applied a color coding system. The largest gaps (the services most in need of attention) are depicted in red. Lesser gaps in yellow, and finally services which are at least meeting the minimum expectations in green.

The top five gaps identified (in order) were:

1. Having wireless Internet coverage in all of the places that are important to me on campus.
2. Having a campus Internet service that is reliable and that operates consistently across campus.
3. Having a campus Internet service that is fast and that provides speedy access to websites and rapid downloads.
4. Support for accessing the campus Internet service using my tablet or other mobile device.
5. Getting timely resolution to problems that I am experiencing with campus technology services.

Since various sub-populations within the University community are distinct and likely have somewhat different needs, usage patterns, and expectations when it comes to IT services we also analyzed the results by major sub-populations. Figure 2 presents the data for the largest campus sub-populations; undergraduate and graduate students, tenured and non-tenured faculty, and staff. The green bars once again represent user expectations, but this figure shows user perceptions of current service levels by major sub-group. The graph allows us to draw much more nuanced conclusions. For example, it is clear that undergraduates are most dissatisfied with network reliability and speed while tenured faculty are the group most dissatisfied with classroom and meeting space technologies. While a complete summary of the findings is beyond the scope of this initial report it is clear that the data provides rich information for us to develop specific projects and plans to improve service. Our initial recommendations are listed in a following section.

**Radar Graph**

The radar graph in Figure 3 shows the perceived to desired and the perceived to minimum ratios.

**Data Table**

The rows shaded red in the three tables below indicate a negative service adequacy gap score.
## Connectivity and Access
Tell us about the quality of the Internet service on campus.

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Min</th>
<th>Des</th>
<th>Per</th>
<th>Adeq</th>
<th>Supr</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Having a campus Internet service that is reliable and that operates consistently across campus.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>6.87</td>
<td>8.66</td>
<td>6.24</td>
<td>-0.63</td>
<td>-2.42</td>
<td>4563</td>
</tr>
<tr>
<td></td>
<td>Dev</td>
<td>1.74</td>
<td>0.77</td>
<td>2.04</td>
<td>2.27</td>
<td>2.07</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Having a campus Internet service that is fast and that provides speedy access to Web sites and rapid downloads.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>6.63</td>
<td>8.61</td>
<td>6.40</td>
<td>-0.43</td>
<td>-2.22</td>
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<tr>
<td></td>
<td>Dev</td>
<td>1.76</td>
<td>0.84</td>
<td>2.00</td>
<td>2.22</td>
<td>2.04</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Having wireless Internet coverage in all of the places that are important to me on campus.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>6.83</td>
<td>8.48</td>
<td>5.94</td>
<td>-0.89</td>
<td>-2.54</td>
<td>4372</td>
</tr>
<tr>
<td></td>
<td>Dev</td>
<td>1.88</td>
<td>1.05</td>
<td>2.08</td>
<td>2.56</td>
<td>2.23</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Support for accessing the campus Internet service using my tablet or other mobile device.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>6.51</td>
<td>8.23</td>
<td>6.10</td>
<td>-0.41</td>
<td>-2.14</td>
<td>3941</td>
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<tr>
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<td>Dev</td>
<td>1.95</td>
<td>1.37</td>
<td>2.08</td>
<td>2.44</td>
<td>2.22</td>
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</table>

Legend: Min = Minimum Level of Service; Des = Desired Level of Service; Per = Perceived Service Quality; Adeq = Adequacy Gap Score (perceived - minimum); Supr = Superiority Gap Score (perceived - desired); n* = Total Respondents Who Completed item; Mean = Statistical Mean; Dev = Standard Deviation; Red Color = Perceived < Minimum; Green Color = Perceived > Desired; Yellow Color = Potential Problem Areas

## Technology and Collaboration Services
Tell us about the quality of Web sites, online services, and technologies for collaboration.

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Min</th>
<th>Des</th>
<th>Per</th>
<th>Adeq</th>
<th>Supr</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Having campus Web sites and online services that are easy to use.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>6.73</td>
<td>8.37</td>
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<td>-0.08</td>
<td>-1.73</td>
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<tr>
<td></td>
<td>Dev</td>
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<td>1.67</td>
<td>2.01</td>
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<td></td>
</tr>
<tr>
<td>6</td>
<td>Accessing Important campus Web sites and online services from my tablet or other mobile device.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
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<td>-0.12</td>
<td>-1.81</td>
<td>3942</td>
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<tr>
<td></td>
<td>Dev</td>
<td>1.90</td>
<td>1.29</td>
<td>1.84</td>
<td>2.16</td>
<td>1.94</td>
<td></td>
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<tr>
<td>7</td>
<td>Having campus technology services available that improve and enhance my collaboration with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
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<td>7.97</td>
<td>6.42</td>
<td>0.08</td>
<td>-1.55</td>
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<tr>
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<td>1.77</td>
<td>2.06</td>
<td>1.84</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Having technology within classrooms or other meeting areas that enhances the presentation and sharing of information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
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<td>-1.84</td>
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</tr>
<tr>
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<td>Dev</td>
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<td>1.26</td>
<td>1.83</td>
<td>2.27</td>
<td>1.95</td>
<td></td>
</tr>
</tbody>
</table>

Legend: Min = Minimum Level of Service; Des = Desired Level of Service; Per = Perceived Service Quality; Adeq = Adequacy Gap Score (perceived - minimum); Supr = Superiority Gap Score (perceived - desired); n* = Total Respondents Who Completed item; Mean = Statistical Mean; Dev = Standard Deviation; Red Color = Perceived < Minimum; Green Color = Perceived > Desired; Yellow Color = Potential Problem Areas
Respondents were asked three open-ended questions at the end of the survey.

1. Is there an IT service that Stony Brook does not offer that you would find helpful?
2. Please tell us about any information technology impediments to your work or study at Stony Brook University that we should be working to improve. What should we be doing better?
3. Please tell us about any information technology areas at Stony Brook University that are exemplars or work especially well. What should we do more of, or do more often?
The following Wordle tag cloud captures and ranks keywords from these responses.

**Question #1:** Is there an IT service that Stony Brook does not offer that you would find helpful?

We received 660 responses to the first question with more than 60 people indicating they were satisfied with Stony Brook’s current IT service offerings. Overall, new services that users identified as desirable were in the areas of general support and networking, followed by educational/learning opportunities, applications, desktop support, communications, collaborative tools, instructional technology, printing services, equipment, facilities, and website development/design.

**Question #2:** Please tell us about any information technology impediments to your work or study at Stony Brook that we should be working to improve. What should we be doing better?

Open-ended question #2 garnered 1,549 responses with 45% of the comments identifying Stony Brook’s network services as an impediment to their work or study. It was even higher among undergraduate students. Of the 645 undergraduate responses received, 475 or 74% mentioned networking as an area Stony Brook should be working to improve, specifically wireless networking, with specific calls for enhancements to reliability, coverage, performance/speed, and connectivity. Both undergraduate and graduate students mentioned specific areas on campus where networking is either unreliable or non-existent. The residence halls, Javits Lecture Center, and the Main Library topped the list as areas where they’d like to see wireless improvements made.
Additionally, students cited computer labs/SINC Sites, printing, applications, Blackboard, facilities/classroom spaces, and University communications as impediments to their work. Students said they want SINC Sites open more hours, faster computers, consistent software across labs, more computers to sit at, and clearly-posted hours outside of computer labs. When it comes to printing, students want access to printing in more locations, improved Print From Anywhere services including the ability to print from their smartphones, and more color printing options. Students said that Stony Brook’s library search tools and access to journals were an impediment to their work and some said they would like to see a more seamless transition between different applications such as Blackboard, SOLAR, CBASE, and Google Apps instead of having to log in to multiple applications. A number of students said they find the Blackboard and SOLAR interfaces unintuitive. They are looking for more places to plug in their devices in classrooms and in the libraries and asked for updated technology (especially projectors) in certain classrooms and mandatory training courses for faculty so their instructors know how to use the technology in their classrooms.

Of the 232 faculty responses to open-ended question #2, the top impediment identified was teaching facilities, followed by networking, Blackboard, Google Apps, help/support, applications, desktop services, communications/information, SB Capture, and telephones.

DoIT received 354 responses to open-ended question #2 from staff members who identified applications such as PeopleSoft, SOLAR, WolfMart, Cerner, Nolij, and Lawson (just to name a few) as causing impediments to their work and areas where Stony Brook could make improvements. The recent change to Google Apps was mentioned by 50 staff members as being an impediment with some staffers commenting along the lines of “Google may be good for students, but it is not a professional, business-like application.” Other areas for improvement cited by staff members included networking, desktop support (many want administrative rights), and help/training/information.
Top 10 Areas Identified as Impediments by All Respondents

Number of Comments

Networking: 45%
Applications: 7.8%
Facilities/Classrooms/Meeting Spaces: 6.0%
Blockboard: 5.8%
General Support: 4.7%
Computer Labs/SNC Sites: 4.4%
Printing/Scanning/Copying: 4.0%
Email: 4.0%
University Communications: 3.2%
Desktop Services: 3.1%
Top 10 Areas Identified as Impediments by Undergraduate Students

- Networking: 73.6%
- Computer Labs/SLC Sites: 8.8%
- Printing/Scanning/Copying: 5.6%
- Applications: 3.7%
- Blackboard: 2.9%
- Facilities/Classrooms/Meeting Spaces: 2.3%
- University Communications: 2.2%
- General Support: 1.4%
- SB Capture: 1.2%
- Virtual SLNC Site: 1.2%
- Websites: 1.2%
Top 10 Areas Identified as Impediments by Graduate Students

- Networking: 42%
- Computer Labs/SINC Sites: 8.9%
- Applications: 8.1%
- Blackboard: 8.1%
- Printing/Scanning/Copying: 7.8%
- Facilities/Classroom spaces: 5.3%
- Software: 4.4%
- General Support: 3.3%
- Desktop Services: 3.1%
- Email: 2.8%
Top 10 Areas Identified as Impediments by Faculty

Number of Comments

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>24.6%</td>
<td>50</td>
</tr>
<tr>
<td>Networking</td>
<td>16.5%</td>
<td>30</td>
</tr>
<tr>
<td>Blackboard</td>
<td>12.1%</td>
<td>20</td>
</tr>
<tr>
<td>Help</td>
<td>11.1%</td>
<td>15</td>
</tr>
<tr>
<td>Applications</td>
<td>10.8%</td>
<td>15</td>
</tr>
<tr>
<td>Google Apps</td>
<td>8.7%</td>
<td>10</td>
</tr>
<tr>
<td>Desktop</td>
<td>7.7%</td>
<td>10</td>
</tr>
<tr>
<td>Information</td>
<td>5.3%</td>
<td>5</td>
</tr>
<tr>
<td>SB Capture</td>
<td>1.9%</td>
<td>2</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>1.9%</td>
<td>2</td>
</tr>
</tbody>
</table>
Question #3: Please tell us about any information technology areas at Stony Brook University that are exemplars, or work especially well. What should we do more of, or do more often?

Of the 381 combined faculty and staff responses to open-ended question #3, customer service received highest marks among DoIT’s exemplar areas that should be maintained. Staff noted training, communications, and Google Apps as the next set of exemplars, while faculty highlighted Google Apps, Blackboard, communications, training and classroom technology.
Tops among the 383 undergraduate responses to open-ended question #3 was wireless (more than 120 responses), followed by SINC Sites and customer service (less than 60 comments each) and printing (40). Undergraduates also cited communication, Google Apps, mobile apps, software, Blackboard, Virtual SINC Site, CoLAs, training, classroom technology, SB Capture (Echo 360) and library resources among DoIT’s exemplars.

The graduate student population (225 responses) noted wireless and customer service (both receiving more than 50 mentions) as among two areas where DoIT should keep up the good work. Software offerings, Google Apps, printing, SINC Sites, Blackboard, Virtual SINC Site, mobile apps, classroom technology, communication, training, and CoLAs also received votes.
Recommendations

While additional analysis and consideration of detailed plans is warranted, it is also the case that the survey clearly enunciates the need for timely action in several key areas. While more detailed planning will be forthcoming, it is clear to many of us that the survey data is a clarion call for us to rapidly engage in certain immediate steps. Those recommendations are summarized at a high-level in the following bullet points:

1. We need to accelerate our current three year network plan and to increase the standards and aspirations inherent in the existing plan. While the plan is directionally correct, the pace is too modest when weighed against user satisfaction and in many cases the plan lists objectives which are too modest. As a simple example the existing plan does not provide the sort of pervasive and ubiquitous wireless coverage that our users are demanding.
Aiming too low in our expectations will simply exacerbate existing user dissatisfaction. DoIT will develop and publish a revised plan within the next 60 days.

2. One of the impediments to the development of a robust, reliable and pervasive network on campus has been the over-reliance on a chargeback model to cover costs. Our current model relies too much on departments and divisions providing funding for the network as a marginal cost. DoIT will analyze the shortfalls in network funding and make recommendations for covering the costs within the next 90 days.

3. We need to document and codify our plans for the installation of technology in campus learning and meeting spaces. These plans need to be linked to current and planned campus space planning efforts. We are likely to need to increase our investment in technology installations but we can not ascertain the level of effort needed absent an over-arching plan. DoIT will work with the Provost’s Office and the Dean’s to refine the plan and ascertain recommended investment changes within the next 120 days.

4. To address the issue of timely service to the community and faced with the realistic limitation that tight budgets will constrain staff growth we must develop tools and processes that allow us to be more agile and responsive. DoIT will accelerate current plans to invest in the appropriate IT Service Management tools to allow for better processes, tighter collaboration across the many IT organizations on campus which in turn will make us more responsive to user needs. DoIT is on course to select a system and implement beginning with the new fiscal year.

Summary

While the survey highlighted and clarified the need for improvement in many areas it is also important to note that the survey also offered many positive comments about IT services at Stony Brook. While the authors have appropriately focused on what needs to be done to improve, it was also heartening to see end user feedback that can be paraphrased as, “You folks are great, keep up the good work.”

It is also important to note that this was the first survey of its kind and the real value in gathering the feedback is to make a sustained and systematic process whereby we can monitor progress over time, track trends and changes, and hold ourselves accountable for continued improvement. On behalf of the collective and distributed IT staff across the campus we want to thank the community for their feedback, candor, and continued support.
Appendix 1 - Survey Response Rate Details

Undergraduate students: Survey emailed to 15,395 undergraduate students. A total of 2,533 surveys were attempted, 1,903 actually completed, for a response rate of 16%.

UO=45 completes (14% response rate)
U1=371 completes (23% response rate)
U2=418 completes (19% response rate)
U3=385 completes (15% response rate)
U4=684 completes (14% response rate)

Graduate students: Survey was emailed to 7,045 graduate students. A total of 1,318 surveys were attempted, 1,071 completed, for a response rate of 19%.

GO=32 completes (6% response rate)
G1=374 completes (20% response rate)
G2=122 completes (16% response rate)
G3=75 completes (37% response rate)
G4=223 completes (25% response rate)
G5=205 completes (22% response rate)
C1=3 completes (9% response rate)
C2=0 complete (7% response rate)
C3=14 completes (8% response rate)
C4=7 completes (4% response rate)
C5=0 complete (0% response rate)
C6=0 complete (0% response rate)
C7=0 complete (0% response rate)
P1=10 completes (32% response rate)
P2=1 complete (3% response rate)
P3=2 completes (7% response rate)
P4=3 completes (9% response rate)

Faculty: Survey was emailed to 1,573 faculty. A total of 639 surveys were attempted, 559 completed, for a response rate of 41%.

Tenure Track=298 completes (46% response rate)
Qual Fac=248 completes (35% response rate)
Librarians=13 completes (71% response rate)

Staff: Survey was emailed to 2,864 staff. A total of 1,360 surveys were attempted, 1,142 completed, for a response rate of 47%.

Professional=874 completes (63% response rate)
Management=71 completes (73% response rate) 
UUP Title=4 completes (50% response rate) 
Classified=178 completes (22% response rate) 
Athletics=12 completes (23% response rate) 
Traintrn=3 completes (13% response rate)
Overall TechQual Core Questions Results

Green vertical bars depict user expectations from minimum to ideal on a 10 point scale.

Diamonds represent user perception of current service level. Color coding used to highlight problems.
TechQual Core Questions by Students, Faculty and Staff

Green bars represent users' expectations of service from 1 (low) to 10 (high). Top of bar is ideal desired, bottom of bar is minimum acceptable.

Markers indicate user perception of how we are delivering today.
Figure 3

The radar graph shows the perceived to desired and the perceived to minimum ratios.