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Executive Summary
As institutions look to reduce or contain costs, institutional leaders, CIOs, and service managers are challenged to optimize service delivery based on costs, features, and quality. Evaluating quality requires understanding users and their satisfaction with service delivery. This ECAR report synthesizes data from the EDUCAUSE 2011 Core Data Service (CDS) and three focus groups of IT professionals to better understand how and why institutions are gathering satisfaction data. Results from this research indicate that while most institutions develop their own satisfaction surveys, they struggle with asking the right questions and moving from the collected data to action.

Key Findings
- Institutional leaders, CIOs, and service managers are focused on service delivery. Understanding the user perspective is instrumental in making good decisions about service sourcing, investments, and life cycles.
- To best provide IT services that meet user needs, institutions should follow a formal feedback-gathering process that collects actionable data on a regular basis, uses those data to inform decision making, and closes the loop by reporting results and decisions to respondents and to the wider community.
- Institutions are gathering satisfaction data in three main ways: homegrown surveys, professional standardized surveys, and professionally customized surveys.
- A majority of institutions create separate surveys for different IT services—such as help desk, wireless connectivity, or e-mail—and in many cases the survey questions are very similar. This duplication of effort presents an opportunity for collaboration.

Introduction
Institutions understand that measuring user satisfaction can lead to decisions that save money and increase service effectiveness. Colleges and universities are looking to reduce or contain costs; consequently, CIOs, institutional leaders, and service managers are focused on service delivery to make services as efficient as possible without sacrificing effectiveness. Making good decisions about service sourcing, investments, and life cycles could be the key to realizing meaningful savings for the institution while simultaneously providing better services for users. Whether as broker (via cloud services, for example) or as provider, however, IT is challenged to provide effective services by optimizing on costs, features, and quality. Enter “The User”—the ultimate judge of what constitutes quality and which features are necessary.
Findings

Institutions including Pepperdine University and the New Jersey Institute of Technology (NJIT) are using information about user satisfaction to inform decision making about IT services. To assess user satisfaction, more and more institutions are developing their own surveys, all while struggling with the same issues: asking the right questions and moving from the collected data to action.

Understanding Service Effectiveness Starts with the User Perspective

Understanding the user perspective is instrumental in assessing feature requirements, service quality expectations, and satisfaction with service quality. Tapping into this view can also mean big savings for an institution. In 2007, Pepperdine’s annual user assessment indicated low satisfaction with the help desk service. To improve this service, the university explored an outsourcing arrangement that could guarantee satisfaction through a contractual service level agreement. By 2010–2011, the outsourced help desk services resulted in increased satisfaction (from the 2007 baseline and above the contractual agreement) and an annual savings of approximately $250,000.2

User satisfaction was also a key factor in NJIT’s decision to move to the cloud for e-mail, help desk, and e-learning services.3 Here’s how:

- Students’ satisfaction with the switch to Google Apps for Education engendered IT’s confidence in the decision to change e-mail services for students.
- Implementation of a new web-based self-service tool for customer questions increased customer satisfaction and improved staff productivity.
- Faculty’s satisfaction with a Moodle pilot led to a decision to use Moodle as the new e-learning platform.

Satisfaction measures are often used to make decisions regarding implementation of piloted services. Cuyahoga Community College (Tri-C) conducted a mobile learning pilot in 2009.4 Measures of satisfaction from a survey about the pilot indicated that the new service helped students better manage their time for online courses. As a result, the college decided to move the project from a pilot program to an institution-wide service.

Pepperdine, NJIT, and Tri-C are not alone in using satisfaction data to inform service decisions and understand service effectiveness. Assessments for student satisfaction are most widespread, followed by those for staff, and then faculty. Results from the 2011 CDS indicate that 80% of institutions measure students’ satisfaction with IT services. Doctoral institutions are most likely to collect these data (90%), and community colleges are least likely (65%). In the 2011 CDS survey, 63% of institutions provided information about user satisfaction with enterprise systems. However, only about one-third of institutions (32%) measure faculty and student satisfaction with learning management systems.

Adopting an Assessment Process Eliminates “So What?” Metrics

Providing IT services that meet user needs and expectations requires more than just measuring satisfaction; it requires a good process. Continual service improvement processes like Lean Six
Sigma are often used to reduce waste and increase consistency in service delivery. Similarly, using an assessment process to evaluate service and project effectiveness can ensure meaningful and consistent data collection.

Participants in the focus groups held for this report shared that institutions struggle with designing and adopting formal feedback processes that enable them to move from the collected data to actions to improvements. This is to be expected because continual service improvement is still an emerging skill set for higher education IT. Institutions that have experience with service assessment and continual service improvement might consider staff certification in Six Sigma or similar programs to sharpen their skill set. For institutions that are just starting to think about these areas, however, a simple five-step approach will suffice. Successful assessment projects usually include the steps Plan, Collect, Analyze, Decide, and Close. Tables 1 through 5 outline the actions to take at each step, the benefits and challenges involved in each step, and an example scenario.

**Table 1. Plan**

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<th>Actions</th>
<th>Benefits</th>
<th>Challenges</th>
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</table>
| **What:** Identify what you want to assess.  
**Why:** Outline why you want to assess it. Are you trying to evaluate general effectiveness, or is there a specific question you're trying to investigate?  
**How:** Determine how you will collect data to assess it.  
**When:** How often will you collect these data? Is this effort a one-off or an ongoing assessment strategy?  
**Who:** Determine the users you need to reach. Is it all students? A subset? Students and staff? How many respondents do you want? | Avoid collecting meaningless metrics and wasting considerable resources by starting with clear goals and objectives. This step will ensure collection of meaningful, actionable data. | Institutions often have difficulty scoping the data-gathering process. It can be difficult to determine what you want to know and by when you need to know it. Starting with a specific assessment purpose helps. |

**Example**

**What:** Satisfaction with computer labs in residence halls A, B, and C.  
**Why:** We're trying to decide how to spend funding for computer lab upgrades for next year.  
**How:** Survey students who use computer labs and those who don’t.  
**When:** This survey will be conducted twice—once before upgrades and once after upgrades.  
**Who:** The target population is all students living in residence halls, even those who don’t use the computer labs.
Table 2. Collect

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<td>Use objectives identified in the Plan phase to develop survey, focus group, and/or interview questions.</td>
<td>Developing quality data-collection mechanisms with good questions is challenging for some IT departments. Consider implementing a standardized survey from an external organization or consulting with experts. Faculty or institutional research professionals at your institution could be valuable and less expensive alternatives to external consultants.</td>
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<tr>
<td>Test questions to make sure they will provide the data you need. This may require a pilot survey.</td>
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<tr>
<td>Determine timeline for data collection.</td>
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Benefits: Collect valuable user impressions of service quality through quantitative and/or qualitative methods. Developing a good data-collection mechanism at this stage will enable consistent reuse of questions for benchmarking satisfaction from year to year.

Challenges: Developing quality data-collection mechanisms with good questions is challenging for some IT departments. Consider implementing a standardized survey from an external organization or consulting with experts. Faculty or institutional research professionals at your institution could be valuable and less expensive alternatives to external consultants.

Example:

**Questions:**
- Which computer lab(s) do you use? A, B, C, none
- Rate your satisfaction with each lab on several dimensions (such as hours of operation, support staff availability, or number and type of devices available)
- Rate the importance of each dimension.
- If you don’t use labs, why not?

**Testing:** Send the survey to a small number of students. Follow up with interviews to better understand responses, if necessary.

**Timeline:** Survey will be open for one week.

Table 3. Analyze

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<td>Evaluate data against assessment purpose. Do you have enough information to make a decision?</td>
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<td>If the limitations of the sample are too severe or results are inconclusive, return to the Plan phase and consider alternate formats, timelines, or target populations.</td>
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Benefits: Make good decisions through analysis of accurate data. Carefully considering results and limitations of the data will help you avoid incorrect assumptions.

Challenges: Between survey fatigue and respondent bias, institutions find it difficult to gather adequate data. Incentives, shorter surveys, and multiple communication channels can increase awareness and interest.

Example:

- Computer Lab A was used the most. Satisfaction on three highly important items was low.
- Response from nonusers was low. We'd still like to know why they don’t use Lab A. Consider conducting a focus group with Lab A nonusers.
- Need more insight about why satisfaction is low on highly important items. Return to Plan phase to gather more data.
Table 4. Decide

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<td>Review the initial purpose of this assessment.</td>
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<td>Use data to inform decision making about the assessed service or project. Remember that data can support decisions for inaction as well as for action.</td>
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<th>Benefits</th>
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<tr>
<td>Maintain or improve service quality through data-informed decision making.</td>
<td>Institutions struggle with interpreting the findings and determining how to act on them. Again, consider enlisting help from internal or external experts.</td>
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<td><strong>Purpose:</strong> Need data to inform decision on how to spend funding for computer lab upgrades for next year.</td>
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<tr>
<td><strong>Analysis:</strong> Nonusers don’t use Lab A due to location. Usage of Lab A is sufficient to support a decision to improve Lab A.</td>
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<td><strong>Decision:</strong> Improve Lab A with focus on items that are important but with which users are not satisfied.</td>
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Table 5. Close

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<td>Close the loop by reporting data-collection results to respondents and the community.</td>
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<tr>
<td>Report on decisions that were made with the collected data. Include a timeline for when the community can expect to see changes.</td>
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<td>Create a culture in which users value giving feedback as much as service owners value getting it by reporting results and decisions to the community. Closing the loop with dissatisfied users will engender trust and uncover process improvement opportunities.*</td>
<td>Releasing detailed data can lead to varying conclusions among campus constituents and, as a result, unreasonable expectations. Be prepared to respond to feedback that points to solutions that are not feasible.</td>
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<th>Example</th>
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<td>- Survey results were posted to the IT website.</td>
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<td>- A campus-wide announcement was made about plans to improve Lab A.</td>
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<tr>
<td>- E-mails were sent to survey participants alerting them to the posted survey results and the campus-wide announcement.</td>
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<tr>
<td>- While respondents requested that we double the number of machines in Lab A, the data show that the traffic in Lab A does not warrant additional machines.</td>
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Many institutions follow some of these steps, but few implement all of them. For example, 55% of institutions share survey results publicly (Analyze and Close); however, only 18% share action items and objectives based on survey results (Analyze, Decide, and Close).
Options for Data Collection Are Abundant and Should Be Chosen Wisely

Surveys are by far the most popular method of collecting satisfaction data. Other methods include gathering feedback through advisory and student group meetings, focus groups, and social media. For example, one institution we spoke with has a social media manager who monitors a Twitter feed to watch for user complaints and feedback.

Among institutions using surveys, there are different options for development:

- **Homegrown**: IT departments regularly develop their own customized surveys. These surveys typically inquire about the breadth of IT services and are usually conducted for the purposes of annual planning. See Figure 1.

- **Professional Standardized**: Some institutions tap into the user perspective via standardized surveys from external organizations, many of which offer the ability to benchmark results against those of peer institutions. See Figure 2.

- **Professionally Customized**: A few institutions turn to external consultants to conduct professionally customized assessments of user satisfaction. See Figure 3.

Although differences surface in focus, length, and use across the three survey types, there are similarities in survey timing and target populations. For all types, the majority of surveys (51% for homegrown, 57% for professional standardized, 75% for professionally customized) are conducted periodically, asking the user to reflect on a semester or more of activity. About 25% of surveys are conducted near the time of service delivery, such as automated help desk customer satisfaction surveys. Survey timing is found to be closely related to survey purpose (see the sidebar “Survey Purpose”). Surveys conducted for the purposes of IT annual planning are usually reflective, whereas ongoing IT assessments are conducted at the time of service.

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**Survey Purpose: Why Are These Data Collected?**

IT Annual Planning: 46% of institutions gather satisfaction data for the purposes of annual or strategic planning of IT services.

Ongoing IT Assessment: 28% of institutions conduct regular, ongoing assessments of services, usually on the help desk service.

Institutional Research: 18% of institutions glean IT satisfaction information from general Institutional Research surveys. These surveys have incidental references to IT services, producing data that was used to inform IT decision making.
Homegrown surveys, profiled in Figure 1, are the most popular method for collecting satisfaction data (employed at 65% of institutions). These surveys are developed by IT staff and are most often used specifically for annual planning of IT initiatives.⁶
Figure 2 profiles professional standardized surveys. About one-quarter of institutions (26%) use professionally developed surveys like TechQual+ and the Measuring Information Service Outcomes (MISO) survey. These surveys contain broad questions about service use and expectations that can be used universally. To address more specific areas, some of these resources allow the addition of a few institutionally developed questions. A benefit of using standardized surveys is the ability to benchmark results against those of peer institutions.

Although TechQual+ and MISO are used mainly for annual planning, other surveys in this category such as the National Study of Student Engagement (NSSE) are used for general institutional research purposes. These institutional research surveys have incidental references to IT services, producing data that can be used to inform IT decision making.
Figure 3 shows the profile of professionally customized surveys. Very few institutions (4%) opt to enlist consulting services for satisfaction surveys. This low engagement might be due to the expense involved. If resources are available, however, these surveys are an option for institutions that do not have access to survey expertise and are in need of a survey that contains specific campus terminology. Institutions interested in using a professionally customized survey should first consider the extent to which their population suffers from survey fatigue. These surveys are often long and involved. If survey length is a concern, institutions should discuss this with the survey development consultant.

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<th>Institutions using this method</th>
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<td>Typical survey length*</td>
<td>40</td>
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**SURVEY PURPOSE**

- 75% Annual Planning
- 25% Institutional Research

**TOP SERVICES ASSESSED**

- Help desk
- Wireless
- E-Mail
- Computer lab
- LMS
- Classroom technology
- Website

**TOP-3 QUESTIONS ASKED**

1. Do you use it?
2. Are you satisfied?
3. Is it important to you?

**Who are you?**

- What are your expectations?

**CONSIDERATIONS**

- Professionally developed
- Customizable—ability to use specific campus terminology
- May be expensive

**Service charge**

- MOR Associates
- Maguire Associates

*Survey length is determined by the median number of questions.*
Independent of survey type, institutions survey faculty, staff, and students in similar proportion. Students are the most polled group, with 69% of institutions surveying students specifically. Faculty and staff are surveyed by 47% of institutions (see Figure 4). About a quarter of institutions (26%) survey the general population of service users (help desk customers, computer lab users, kiosk users, and others), which could include students, faculty, staff, visitors, or other types of users.

Figure 4. Percentage of Institutions That Survey Students, Faculty and Staff, or Both

Duplication of Data Collection Effort Provides Opportunities for Collaboration

Survey development is not an expected core competency of IT. Discussions with focus group participants echoed this sentiment as they discussed struggles with survey design and analysis. Many IT organizations lack the skills necessary to gather effective user-satisfaction data; however, as Figure 1 shows, 65% of institutions step outside their skill set to develop homegrown surveys. What’s more interesting is the frequency with which these surveys are aligned in terms of content.

Based on content analysis of 74 homegrown surveys, IT organizations are independently gathering similar metrics on similar services (see Top Services Assessed in Figure 1). A majority of institutions want to know about usage and satisfaction for help desk, wireless, e-mail, and other similar IT services. Professional standardized and professionally customized methods offer options for gathering these data without expending limited, unskilled resources. So why aren’t more institutions using these types of service surveys?

Focus group discussions provided some insight on this topic. A common obstacle to using standardized services is the extent to which survey questions may be customized. Homegrown surveys are popular because IT practitioners often need to ask questions that are specific to their varied IT environments. For example, many institutions offer multiple instances of IT services. Surveys must be very specific about which IT service is being discussed so that ratings of satisfaction (or dissatisfaction) point to a specific service.
With so many institutions expending resources to develop such similar surveys, an opportunity exists for collaboration. Focus group participants suggested a question bank. Such a resource would provide institutions with a list of professionally developed but customizable questions about IT services of interest. This resource would take some of the guesswork out of developing homegrown surveys and provide expertise where skills are lacking. To address this need, Appendix A includes some example questions about the top-five most frequently asked about IT services (see http://net.educause.edu/ir/library/pdf/ECAR_SO/ERS/ERS1209/ERS1209QB.pdf).

Conclusions and Recommendations

User-satisfaction data helps institutions make decisions about service delivery. Without the proper expertise, institutions find it difficult to know where to start collecting these data and how to use results to inform decision making. To overcome these challenges institutions should consider the following tactics:

- Use an assessment process to ensure results are purposeful and actionable, such as the five-step process: Plan, Collect, Analyze, Decide, and Close.
- Choose a data-collection strategy based on assessment goals and the institution’s environment. For example, if the institutional environment is highly decentralized, a homegrown survey with specific terminology might be most appropriate.
- Develop questionnaires in collaboration with other institutions gathering satisfaction data. Use the question bank in Appendix A as a starting place.
- Use incentives, short surveys, and multiple communication channels to increase participation and reduce survey fatigue.
- Benchmark results against past results and peer results to understand where your organization stands. Are your users more or less satisfied than they were? Are they more or less satisfied than other users with similar expectations?
- Report results to respondents and the community for greater transparency and to increase interest in future participation.
- Consider developing staff skills in Lean Six Sigma or another service management competency. The IT organization of the future will require skills in service management, process management, and continual service improvement.

Methodology

Measuring User Satisfaction: Why It’s Important and How to Do It analyzes data from Module 1 and Module 2 of the 2011 CDS, as well as information gathered during three focus groups of IT professionals conducted in the first quarter of 2012. A total of 818 institutions participated in CDS 2011 Module 1, and 727 institutions participated in CDS 2011 Module 2. Two questions from CDS 2011 were of interest:

1. M1Q23: Home page of IT organization’s user satisfaction surveys (optional)
2. M2Q18: Are students invited to participate in surveys of IT service usage, satisfaction, and/or priorities? If yes, provide URL of student IT survey results or “none” if not available.

From these two questions, a total of 119 URLs to satisfaction surveys from 114 institutions were mined to understand survey characteristics (survey purpose, survey length, services assessed, questions asked, etc.), assessment practices (for example, sharing of results, sharing of action items, and year-to-year benchmarking of results), and survey implementations (such as tools used, time of year for deployment, and frequency of deployment).

Institutions that participated in this year’s CDS can find additional analysis and benchmarking tools for CDS data posted on the EDUCAUSE CDS website (http://www.educause.edu/coredata).

About the Author
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Citation for This Work

Notes
9. See National Survey of Student Engagement (http://nsse.iub.edu/).