Inside IT

By Ray Grant

Improving Service Quality with Benchmarks

College and university information technology (IT) departments are constantly challenged to improve technical services to faculty, staff, and students. However, IT staff don't always know how well they are doing, what areas might need improving, or what should be done to effect the greatest improvements. Staff may become so enmeshed in day-to-day operations that they fall prey to the temptation to listen to the loudest whiners and rely on anecdotal information to set goals and develop plans. To avoid this problem and to substantially improve services, three years ago Information Technology Services (ITS) at Portland Community College (PCC) decided to start gathering data about what the department does and how well the work is done.

The administrative services team began by developing benchmarks to measure the quality of services. Each benchmark was to be directly tied to a long-term service and was to be clearly measurable over time. The benchmarks were composed of discrete measurements (number of installations per month, number of help-desk calls, etc.) as well as customer surveys. ITS started with four internal benchmarks:

1. *The number of infrastructure problems.* These problems were defined simply as technical problems that affected a group of people larger than a single office. These were logged into a Remedy Help Desk system, where they were coded as infrastructure problems. In the first year, it was difficult to get the problems correctly reported. Some staff were afraid that reporting the problems might reflect poorly on their performance and were thus reticent to log the problems into Remedy. Although this has improved, staff still sometimes struggle to correctly record the cause of the problems. This benchmark has been very useful for understanding trends in reliability and availability for certain key resources. The data helped the department obtain funding to replace ten-year-old host computers and to acquire redundant Internet connections.
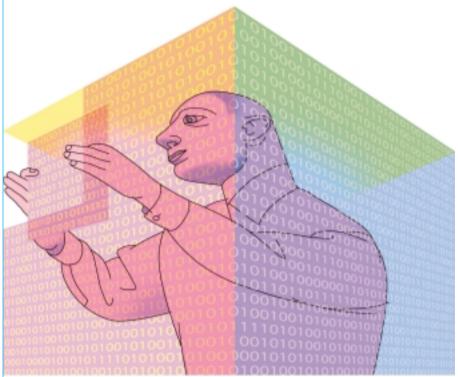
2. *The percent of network service requests completed on time.* These requests are for network moves, adds, and changes. The ITS department was well into the first year of data collection when it discovered that it had not paid enough attention to this data. Some services were requested far in advance but could not be started until people and equipment arrived. Therefore, the elapsed time between the request and the completion date did not correctly reflect service time and was not a useful metric. With the amount of work necessary to manage the other benchmarks, this benchmark was temporarily abandoned. It still seems to be a valid benchmark and may be resurrected.

3. *Customer satisfaction with training programs.* A small team in ITS has the sole job of providing technology training and documentation for faculty and staff. A survey is used to measure three variables: the pertinence, the convenience, and the effectiveness of the training. The goal is to understand if the training addresses the correct topics, whether it is offered at times and locations that are convenient, and whether the participants' learning goals are satisfied. People who attend a course of any type or length are sent an e-mail the next day and asked to complete a brief survey via a Web link. The survey was well designed and the request is immediate, so the rate of participation has been very good. In the first year, the computed satisfaction rating was found to be extremely high: 91 percent. The goal for the second year—to achieve at least the same rating—was accomplished.

4. *Customer satisfaction with help-desk services.* The four-person PCC help desk receives 30,000 calls per year. Staff and faculty use it to request assistance with technical problems. Full-time employees are hired and trained to be help-desk specialists. ITS designed a survey to collect information about the knowledge level of the help-desk staff, the availability of the service, and the effectiveness of the help. The effectiveness rating also reflects the quality of other ITS services, since many requests are assigned to other specialists. The biggest problem with this survey is obtaining a representative random sample because faculty and staff are often reluctant to return the survey. In addition, the survey is anonymous, which makes it difficult to follow up to get a high rate of return. Respondents are asked to rate the importance and the quality of six items. They are also asked to give their employee category (faculty, administrator, full-time, part-time, etc.) and to assess their skill level with computing technology. A gap analysis is used to compare an importance rating for

each item with the quality score for that item. Cross-tabulations are done by employee category and skill level. Comments are also solicited, which reveal some important trends. On the whole, this has proved to be a good benchmark and has allowed the department to develop clear strategies for service improvements.

In general, internal benchmarks focus on doing things right. External benchmarks, on the other hand, emphasize doing the right things. The goal with external benchmarks is to use data from similar institutions to compare the types of things done and the level of resources available. If these benchmarks are used for improvements, care should be taken to choose comparisons that can be tied to service quality. It is not always adequate to learn that there is not as much money, as large a staff, or as many computers as at other institutions. The bottom line is accomplishing the most with scarce resources and determining what is necessary to improve customer service. For example, the solution may involve better planning, staff training, or process improvement. It also may be more useful to compare an institution with just a few others that represent best practices rather than with an average from a large survey.

Specific benchmarks can be found in several current publications. Kenneth Green is doing some very fine work with his annual Campus Computing Survey (http://www.campuscomputing.net). The COSTS Project, directed by David Smallen and Karen Leach, also provides useful information (http://www.costsproject.org). Unfortunately, these resources don't break out the data for large community colleges. Community colleges vary greatly in size, and support requirements do not scale linearly across all categories. For example, the seventeen community colleges in Oregon collect annual data about their technology-support activities. Although the effort is worthwhile, PCC is much larger than the other Oregon schools, which tends to skew the data and make comparisons difficult.

The following are several key lessons learned about collecting and using benchmarks to improve services:

- Start with just a few key benchmarks. Each one should represent an important service. The work of collecting and analyzing the data should be commensurate with the value derived from improved services. In other words, try to avoid selecting a benchmark that will require a large amount of time unless it is key to improving a very important service.
- Develop a good system for data collection. Make sure that the process is documented and that the people who collect the data are trained. This is not a task that should be delegated entirely the first time without some oversight by a manager. Unanticipated data problems will always arise. Also, make sure to design the collection process well from the beginning so that it can be replicated from year to year. This is important for obtaining comparative data to help understand trends and see improvements.
- Based on outcomes, establish clear goals and action plans to improve the services. The best benchmark is one that shows a need for improvement. Perfect scores are not very useful for developing improvement strategies.
- Communicate with internal staff regarding the importance of the process and the data and with customers regarding the results and the expected changes. Both types of communication are very important. At PCC, college management receives an annual report that includes benchmarks and improvement strategies.
- Continue to improve the benchmarking processes and carefully add new benchmarks. There is *always* room for improvement. Be creative in finding ways to measure how well the department is doing.

PCC is just beginning to develop quality benchmarks. Now that initial efforts have been successful, there is a growing appreciation among staff and customers about the value of the process. As the collection and analysis become more routine, benchmarking is becoming part of the service culture. The result should be a definite improvement in service quality.

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