The metaphor of the IT help desk “on the front line” suggests various images. We may envision the help desk staff “in the trenches,” “dug in,” or “under fire.” All are apt descriptors of the help desk’s unpredictable and sometimes frenzied nature. Operating stresses can encourage a short-term focus on the here and now, keeping one’s head down, meeting the objective at hand, and just getting through the day.

This ECAR Roadmap synthesizes 454 responses to a January–February 2007 online survey of the EDUCAUSE membership and interviews with 36 IT professionals involved with help desk concerns, and it summarizes the 2007 ECAR study, Service on the Front Line: The IT Help Desk in Higher Education, by Mark C. Sheehan. To order the full study or to learn about subscribing to ECAR, visit the ECAR Web site at http://www.educause.edu/ecar or contact us at ecar@educause.edu.
With these pressures at hand, it is all too easy to overlook the help desk’s broader, more strategic role in helping the whole institution get value from IT. The help desk is the institutional face of IT, interacting on a daily basis with clients from throughout the enterprise. Good help desk service reinforces a communal sense of satisfaction with technology by enabling, facilitating, and supporting its use in pursuit of the institution’s mission. A help desk can operate, too, as a “canary in a coal mine,” bringing underlying IT problems to light as staff resolve users’ problems. These activities, in turn, can identify and generate support for new central IT initiatives.

ECAR’s research study, Service on the Front Line: The IT Help Desk in Higher Education, underscores the importance of the help desk’s integration into central IT organizational planning and management activities. It identifies a cluster of deliberate and organized practices that help desks and their parent organizations employ together. At the core of these are process frameworks and best practices that can be grouped under the heading of IT service management (ITSM). Our research shows that institutions whose help desks are included in the ITSM activities of the central IT organization tend to report higher levels of overall help desk service quality. We attribute this to the synergies gained by incorporating into the development of central IT systems the unique business intelligence that the help desk acquires in its dealings with its clients.

In addition, our research reveals associations between overall help desk service quality and other managerial practices: the effective use of metrics to improve user service, the status of a strategic plan for the help desk, and the help desk’s organizational maturity. So, while the help desk’s pressure cooker of day-to-day activities may foster a reactive and immediate managerial stance, an expansive view yields more far-reaching benefits to both the help desk and IT organization at large.

A Snapshot of Today’s Higher Education IT Help Desk

Among our respondent institutions, IT services are still highly centralized. Most respondents (88.5 percent) have only one central IT organization, and at most institutions, central IT provides nearly all IT infrastructure and three-quarters of IT support services. Help desk services are also highly centralized within our respondent population: about three-quarters of respondent institutions provide all help desk services from one or more central IT help desks; about three-quarters of these have only one.

Majorities of our respondents’ help desks support a wide range of infrastructure and identity-related services and common instructional, administrative, and personal productivity applications. In traditional fashion, the help desk is most likely to ply its trade over the telephone or via e-mail. Walk-in interactions and assistance delivered at the client’s location are also very common. Surprisingly, help desks use interactive text communication (chat, instant messaging,
METHODOLOGY

- A literature review from journalistic, academic, and IT practitioner sources, as well as IT service management–related standards and frameworks
- A quantitative online survey in January–February 2007 to 1,649 EDUCAUSE membership institutions that generated 454 responses
- Interviews at 24 institutions with 36 individuals who are involved in IT help desk concerns, including higher education CIOs, help desk managers, and others, conducted mostly by telephone as well as at the June 2007 ECAR Symposium
- Four case studies

and text messaging) infrequently or not at all. Most service is provided by campus personnel, with just over 16 percent of respondents outsourcing any help desk service.

About two-thirds of respondents’ help desks are available beyond standard campus business hours. Despite large user populations, help desks provide their services with remarkably few staff. At institutions with enrollments of 4,000 FTE or fewer, the mean number of full-time equivalent help desk staff is about 7; at institutions with between 4,001 and 15,000 FTEs, it is about 10; and at institutions with more than 15,000 FTEs, the number is just under 18. These figures include student employees.

More than two-thirds of respondent institutions use an integrated suite of help desk automation tools. Web-based help documents are common for both help desk staff and users, too, although only one-third of our survey respondents told us their help desks use client self-service features effectively to reduce the demand for help desk services.

IT Help Desk Service Quality Enhancers

Service on the Front Line: The IT Help Desk in Higher Education notes positive associations between help desk service quality and the adoption of several practices, as discussed in this section.

ITSM and SLA Practices

While they may not be crucial to the success of every help desk, the practices and functions outlined in the ITSM literature appear to be consistently associated in our data set with the positive impact the help desk has and with the overall quality of its services. The four ITSM planning and management practices we asked about—capacity planning, system availability planning, change management, and release management—are in common usage. More than two-thirds of respondents say they have formal guidelines in place for availability planning, and more than 60 percent have guidelines in place for change management and release management. A slim majority of respondents have capacity planning guidelines in place. Another important component of various ITSM frameworks is service level management, usually in the form of service level agreements (SLAs). Surprisingly, only 20.5 percent of respondents say they have these in place.

The many ITSM practices and SLAs function together to enable substantial improvements in IT service quality. Respondent institutions that have adopted SLAs for help desk services are more likely than others to have adopted formal guidelines for practices in each of the four ITSM planning and management areas we asked about. While just over one-third of the entire respondent pool have adopted all four, among those that use SLAs, half again as many (52.7 percent) have adopted all four ITSM practices. To us, this reinforces the status of SLAs as an important component of the ITSM framework and suggests that SLAs and the four ITSM practices we studied contribute to an assemblage of best practices that are associated with help desk success.

Goals and Strategic Planning

Our findings reinforce what seems obvious: a healthy set of goals and a strategic plan for the help desk go hand in hand with service quality. Our research shows the clear, significant association between mean overall service quality and the number of goals the help desk meets often or almost always. Among respondent institutions where service quality is poor or fair, the mean number of goals met is 3.93 (standard deviation 3.875). Where quality is very good or excellent, the mean number of goals met is 5.66 (standard deviation 3.108).

Strategic planning and mean overall service quality are also significantly associated. Where no strategic plan is in place, mean overall service quality is 3.40 (standard deviation 0.895) on a scale ranging from poor (1) to excellent (5). Where a strategic plan for the help desk is integrated into the IT institution’s strategic plan, mean overall service quality
is almost half a point higher, at 3.86 (standard deviation 0.776). Where the strategic plan for the help desk stands alone, mean service quality lies between these figures.

Respondents with formal guidelines for ITSM practices in place or with SLAs in use are significantly more likely to have a strategic plan for the help desk in place, either stand-alone or integrated into the central IT strategic plan.

Metrics

Clearly, it isn’t enough to merely collect metrics; the help desk must put that information to work. Respondents’ agreement that the help desk uses metrics effectively to improve user service is persuasively associated with service quality. Respondents strongly disagreeing have a mean service quality of 2.86, just under “good,” while those strongly agreeing have a mean service quality of 4.05, just over “very good.”

Also positively associated with agreement that the help desk uses metrics effectively were SLA use, how many documented goals the help desk has met, and the number of basic ITSM planning and management practices for which the central IT organization has adopted formal guidelines. Again, the use of metrics appears to be part of a set of practices that are employed together by successful help desk organizations.

Maturity

The level of development of respondents’ help desks, their “capability maturity,” is positively associated with several factors, including more robust help desk toolsets for help desk administrators, staff, and clients; the number of goals the help desk has adopted; the status of strategic planning for the help desk; and alignment of campus expectations of the help desk with its resources. It is also positively associated with the use of SLAs, the number of basic ITSM practices for which the IT organization has formal guidelines in place, and the perceived adequacy of the help desk staff’s involvement in central IT’s ITSM-related activities.

RECOMMENDATIONS

Based on its findings in Service on the Front Line: The IT Help Desk in Higher Education, ECAR offers the following recommendations to enhance the IT help desk’s service quality:

1. Integrate planning and communication with central IT.

While communication is necessary to the help desk/central IT partnership, alone it is not sufficient for the partnership’s success. Help desk management and staff are uniquely aware of the consequences to the client community of central IT decisions, and thus their involvement in central IT decision making is essential. Reinforcing both conventional wisdom and ITSM doctrine, our results show that communication between the help desk and the campus was also associated with help desk quality: in general, the better the institution’s help desk service quality, the more likely respondents were to agree that help desk costs and value were well documented and well understood by the help desk’s constituents.

2. Develop a service desk strategy.

Our research findings show again and again that ITSM practices and help desk service quality go hand in hand. Adoption of formal guidelines for each of the ITSM practices we asked about was associated with higher overall service quality. We found that in general, the more of these practices an IT organization adopts, the higher the level of service quality. Also, the greater the extent to which the central IT organization includes help desk staff in those activities, the better our respondent institutions’ mean overall help desk service quality. None of these findings is particularly surprising; a primary goal of ITSM practices is service quality improvement.

3. Leverage the help desk’s public face.

Among the nine central IT service areas we asked about, the help desk had its greatest positive impact on central IT service reputation and perceived value. The work of the help desk seems to have a strong influence on perceptions about central IT, reinforcing the idea that the help desk is in many practical ways the “public relations face” of the IT organization. Among our respondents, where overall service quality was high, the mean impact of the help desk was consistently greater across our nine central IT services. Thus, it appears, ensuring that help desk users feel good about help desk services can produce benefits for the entire IT organization.