Setting a Course: Goals for the Help Desk

First say to yourself what you would be; and then do what you have to do.
—Epictetus

Key Findings

- Majories of respondents have documented goals in place for help desk service availability, user satisfaction, and call/incident resolution.
- Important drivers of central IT help desk improvement include improving user satisfaction, meeting the changing needs of help desk clients, and improving help desk efficiency.
- Important obstacles to improving the help desk include rapid growth in user demand, lack of funding, and lack of staff expertise.
- Only 40 percent of respondent institutions have strategic plans in place for their help desks.
- Adoption of formal guidelines for four IT service management (ITSM) practices is widespread; these are availability planning, change management, capacity planning, and release management.
- Among institutions that use service level agreements (SLAs) for help desk services, adoption of guidelines for all four ITSM practices is 1.5 times higher than in the overall survey population.
- In general, respondents say the help desk is adequately included in central IT activities related to ITSM practices. Where this is the case, the priority that central IT places upon deploying easy-to-support systems is higher, suggesting better communication between the help desk and other parts of the IT organization.
- ITSM practices and SLAs are more common where a strategic plan for the help desk is in place.
- Relatively few of our respondents have implemented databases for asset management, configuration management, or customer relationship management.

Because the central IT help desk can make or break the successful use of campus information technologies, and because IT is both changing and growing constantly, it is important for any help desk, no matter how good, to seek improvement. In this chapter we examine the goals that drive service improvement as well as the barriers that inhibit it. Goals are often set in the context of a strategic planning process, and so we also examine the status of strategic planning for the help desk at our respondent institutions.

Also in this chapter, we look at four formal IT service management practices in which the central IT organization and the help desk engage as partners to improve
service quality. Finally, we examine the use of three databases related to these practices that can aid in help desk quality improvement efforts.

**Help Desk Goals**

According to most service quality rubrics, setting goals and monitoring the organization’s progress toward meeting them plays an important part in improving service quality.¹ We asked our respondents to indicate whether they had documented goals in place in nine representative areas:

- availability of support services for users (hours per day),
- percentage of total incidents resolved per unit time (service requests, trouble tickets, and so forth),
- number of incidents handled per FTE staff member per unit time,
- percentage of calls resolved during initial user contact,
- resolution time for calls not resolved during initial user contact,
- telephone customer wait times,
- telephone customer call abandonment rate,
- percentage of users indicating they are satisfied with services, and
- percentage of SLA commitments fulfilled.

Figure 9-1 shows the frequency with which respondents said they had documented goals in place for each area. Majorities had goals in place for six of them. By far the most commonly held goal was for support service availability. While we assumed that most respondent institutions had formal lists of goals for their help desk services, even those that didn’t could say they had a documented goal for at least one aspect of availability if the hours of operation of their help desks were posted somewhere.

Roughly two-thirds of respondents reported a cluster of three documented goals: percentage of user satisfaction, help desk calls resolved at first contact, and the number of incidents the help desk resolved per unit time. Unlike service availability, these goals require considerable effort to document and still more effort to track performance against. Incidents resolved per unit time and calls resolved at first contact are common features of automated help desk systems, which just over two-thirds of our respondents say they have in place. On the other hand, user satisfaction is a more subjective goal to measure and, as we will see in Chapter 10 (Figure 10-5), respondents
have implemented numerous unstructured techniques for assessing it. That so many respondents report having a documented goal for percentage of user satisfaction suggests this goal is in place not just because utilities for tracking it come bundled with help desk automation software.

Majorities of respondents also reported tracking the time it takes to resolve incidents that can’t be resolved during initial user contact (“Complex-incident resolution time” in Figure 9-1) and the number of incidents handled per staff member per time unit.

Near-majorities reported goals related to telephone contact—specifically, telephone wait times and call abandonment rate. Automated call management systems typically help track these variables, and such systems’ expense and complexity may help explain the slightly lower frequency with which respondents report these goals.

Relatively few respondents (26.9 percent) cite the fulfillment of SLA requirements as a documented goal. Even so, this percentage is anomalously high because, as we noted in Chapter 8, only 20.5 percent of respondents report having SLAs in place for one or more help desk services.

A majority of respondents (53.6 percent) reported having goals in place in six or more of the areas we asked about. Nearly a quarter (24.3 percent) had documented goals in place for all nine of our representative areas, and only 12.9 percent had no documented goals. The mean number of goals cited was 5.26 (standard deviation 3.354) and the median was 6, reflecting the many reports of high numbers.

**Service Improvement Drivers and Barriers**

The goals discussed above reinforce our assumption that higher education help desk administrators want to improve the quality of the services they provide. As we begin our exploration of the methods they use to achieve those improvements, it is useful to know what forces in their environments are driving their efforts at service improvement and what forces oppose them.

**Drivers of Help Desk Improvement**

From a list of eight service improvement goals (plus “other”), we asked our respondents to select up to three primary drivers for improving their help desks. More than three-quarters selected improving user satisfaction with help desk services, suggesting that most feel their clients’ satisfaction is a good indicator of help desk quality (see Figure 9-2). Indeed, as we learned above, 64.4 percent of respondents had a documented goal in place for user satisfaction.

Again acknowledging the client’s importance, more than two-thirds of respondents said that meeting the changing needs of faculty, staff, and students was a primary driver. Turning to more internal concerns, fewer respondents—but still a majority—cited improving help desk efficiency as a primary driver.

Fewer than a third of respondents said a primary driver of help desk improvement was meeting the strategic goals of the institution or of the central IT organization. As we saw in Chapter 4, 68.5 percent of our respondents said the primary goal of their central IT organizations was to provide IT infrastructure and services that further the institution’s strategic goals, yet here we find that fewer than half that number cite that goal as a primary driver of help desk improvement. This may represent a distinction between the strategic focus of the central IT organization and the more operational focus of the help desk.

Relatively few respondents reported that a primary driver of improvement was staying current with best practices in help desk management. Only 1 in 10 respondents said that motivating greater
institutional support for IT initiatives was a primary driver of help desk improvement, suggesting that at most institutions the help desk’s performance has not been linked with past infusions of support.

While a majority of respondents said improving help desk efficiency was important, very few cited help desk cost reduction as a driver. If efficiency is calculated as effectiveness divided by cost, it would appear that help desks concerned with efficiency are more likely to pursue it by increasing effectiveness than by reducing cost.

**Barriers to Help Desk Improvement**

We also supplied respondents with a list of potential barriers to improvement of the central IT help desk. While none of them resonated with substantial majorities of our respondents, Figure 9-3 shows that very slim majorities did select one pair. From half of our respondents we heard that rapid growth of user demand was an obstacle. This issue resonated for Herb Wilson, director of IT support at the University of Colorado at Boulder: “It’s not so much that numbers of users are increasing,” he said. “It’s that new technologies are proliferating faster than old ones can be retired. In practical terms, the more energy we put into expanding our services, the less is available for improving the old ones.”

Only 3 of the 25 respondents (12.0 percent) who anticipated decreases in the next three years in their institutions’ spending on the central IT help desk cited rapid growth in user demand as a barrier to help desk improvement. By contrast, 58.1 percent of those who anticipated increases cited that barrier. This finding surprised us, because we expected that brighter funding prospects would raise respondents’ confidence in their ability to improve help desk services in the face of increasing demand. It appears instead that respondents who...
anticipate funding increases fear that the extra money will be consumed by expanded—but not necessarily improved—services. Those who anticipate budget reductions may also anticipate a reduction in their clients’ expectations, and thus perhaps fewer of them see increasing demand as a barrier.

Half of respondents also cited lack of funding as a primary barrier to help desk improvement, not a surprisingly large response in view of our finding in Chapter 7 that 55.7 percent of respondents felt their central IT help desk funding was less than or much less than adequate. Among that combined group, almost three-quarters (74.7 percent) of respondents identified lack of funding as a barrier. Similarly, among those who told us their central IT budgets had been decreasing over the past three years, nearly two-thirds (63.8 percent) cited lack of funding as a primary barrier to help desk improvement.

Just under a third of respondents cited lack of staff expertise as a barrier, and 2 in 10 cited difficulty developing IT policies and procedures. Between 10 and 15 percent of respondents cited lack of user engagement, technology issues, difficulties in working with other campus IT service providers, and lack of institutional leadership support as primary barriers to help desk improvement. Significantly fewer than 10 percent of respondents cited immaturity of industry standards/best practices, and fewer than 5 percent cited lack of acceptable return on investment.

**Strategic Planning for the Central IT Help Desk**

Respondents to the 2006 EDUCAUSE Core Data Service survey report that 73.4 percent of their campuses have stand-alone IT strategic plans in place, and 80.1 percent report that
their campus strategic plans include strategies and directions for IT.\(^2\)

Whether conducted specifically for the help desk or included in a broader IT context, strategic planning can give the help desk a handle on its strengths and weaknesses, on the opportunities and threats present in the environment, and on directions it may want to go in the future. As Figure 9-4 shows, nearly two-thirds of our respondents had taken steps in this direction. More than one-third had an IT strategic plan that included planning for the help desk, a few had stand-alone strategic plans for the help desk, and another quarter had strategic plans for the help desk in the works. Surprisingly, more than a third of respondents had no strategic plan for the help desk at all.

**IT Service Management Practices**

Growing out of the PC explosion of the 1980s and the radically different IT support paradigm it required, the British government’s Central Computer and Telecommunications Agency (now the Office of Government Commerce) developed a framework by which IT service organizations could structure their efforts to improve service quality.\(^3\) This framework, now in use worldwide, is called the IT Infrastructure Library (ITIL). Because ITIL is more descriptive than prescriptive, many commercial entities, including such well-known corporations as IBM, HP, and Microsoft, have developed more action-oriented ITIL-based service improvement methodologies and market them under various names. To embrace all these service improvement practices in a single term, we will refer to them collectively as IT service management (ITSM) practices.

Formal ITSM implementations in higher education seem relatively rare. Only one of our qualitative interviewees, New York University, has carried one out and is incorporating ITIL practices into the fabric of its central IT service organization. NYU has shared its experiences during this process at several EDUCAUSE conferences,\(^4\) and the university’s efforts are the topic of one of the case studies\(^5\) accompanying this report.

Among the other institutions we interviewed, only the University of North Carolina at Chapel Hill was planning a formal ITIL implementation. Priscilla Alden, assistant vice chancellor for ITS user support and engagement, described it this way: “We are putting together some funding for an ITIL project as part of the central IT organization’s service...
desk model that we’re developing…. I am hoping that ITIL will drive people to recognize the importance of a service desk. ITIL’s unified service desk model requires the whole IT organization to interact more effectively as a team, so it should benefit all of us.”

In our online survey, we asked respondents if formal guidelines were in place within their central IT organizations for four basic ITSM practices related to planning and management. These, and the working definitions we provided for them in our survey questionnaire, were

- capacity planning (to ensure that systems and services are sufficiently robust to support the organization’s commitments to users);
- system availability planning (to ensure that systems and services are available when, where, and to whom the organization says they will be);
- change management (to ensure that changes to systems and services are orderly, support the organization’s commitments, and so forth); and
- release management (to ensure that new systems and services are well tested, that version control is maintained, and so forth).

These planning and management items are only a subset of the dozen or so areas addressed in ITIL, but they occur at the interface between the help desk and the rest of the central IT organization. Their adoption is diagnostic of the extent to which those two entities communicate and collaborate—key elements in the success of a service management initiative.

As this chapter’s findings suggest, the ITIL service level management area (via SLAs) is also an important component of various ITSM frameworks, and we addressed its adoption among our respondents in some detail in Chapter 8. For completeness’ sake we revisit some of those findings in this chapter.

While not limited to the help desk, two additional ITSM areas, incident management and problem management, are integral to it. Our survey addressed many elements of those ITSM areas in detail without asking general questions about them by name. And of course a third additional ITSM area, service desk management, is the overarching topic of this research study.

**Use of Basic ITSM Practices**

As we saw in Chapter 8, only 20.5 percent of respondents had SLAs in place for help desk services. The four ITSM planning and management practices we asked about were in much more common usage (see Figure 9-5). More than two-thirds of respondents said they had formal guidelines in place for availability planning, and more than 60 percent of respondents had guidelines in place for change management and release management. A slim majority of respondents had capacity planning guidelines in place.

The many ITSM practices function together to enable substantial improvements in IT service quality. Accordingly, we expected to find all five of the practices we asked about in use at many institutions. In fact, only 10.8 percent of respondents were using all five. Nearly three times that many (28.4 percent) had adopted four; of these, only 14.0 percent included SLAs among the four they had adopted. Respondents adopting two or three practices made up 30.8 percent of the survey population. Adopting only one practice were 11.9 percent of respondents, while nearly one in five (18.1 percent) had adopted none.

As Figure 9-6 shows, respondent institutions that had adopted SLAs for help desk services were more likely than others to have adopted formal guidelines for practices in each of the four ITSM planning and management areas we asked about. The average difference between bars within a pair is about 20 percentage points.

SLA implementation was also associated with the total number of ITSM planning and
management practices for which respondents’ central IT organizations had adopted formal guidelines. Among those who had SLAs in use for help desk services, more than half (52.7 percent) had adopted guidelines for all four of the ITSM planning and management practices we asked about. This is 1.5 times the percentage of respondents in the rest of the population that had adopted guidelines for all four of those practices (35.2 percent). Only 11.8 percent of respondents who had SLAs in use had adopted none of our four ITSM practices, compared with 20.5 percent of the overall respondent population.
Among those who had SLAs in use, the mean number of ITSM planning and management practices for which formal guidelines were in place was 2.98 (standard deviation 1.367) with a median of 4, reflecting the preponderance of respondents whose institutions had adopted all four of the planning and management practices. This compares with a mean of 2.18 practices (standard deviation 1.539) and a median of 2 for respondent institutions without SLAs in use.

These findings suggest that even though relatively few respondent institutions had implemented SLAs, we can consider SLAs together with the four ITSM planning and management practices as a set of tools frequently used in concert for managing the central IT help desk.

### ITSM and Planning Practices

The total number of ITSM practices our respondents were using (SLAs in use and ITSM practice guidelines adopted) was significantly associated with the number of goals, from our list of nine, that the help desk had in place. Help desks using none of the five ITSM practices we asked about had a mean of 3.56 of our goals (standard deviation 3.475), while those using all five practices had a mean of 7.00 goals (standard deviation 2.537)—almost twice as many.

Mean number of ITSM practices (from our list of five) was also significantly associated with strategic plan status. Respondents with no strategic plan in place or under development reported using a mean of 1.92 practices, those with a plan under development reported a mean of 2.74 practices, and those with a plan in place, either stand-alone or integrated into the central IT organization’s strategic plan, reported a mean of 3.06 practices. (Standard deviations ranged from 1.560 to 1.663.)

Neither of these associations is surprising; both strategic planning and goal-setting are important elements of most IT service management implementation methods.

### The Help Desk’s Partnership with Central IT

The ultimate goal of the ITIL framework and the service management methods that have emerged from it is to improve IT service quality and consistency. One of ITIL’s tenets is the importance of the relationship between the service or help desk and the rest of the central IT organization. Communication is important, of course, even if it’s one way, but including the help desk in central IT decision making is even more important.

Time and again our qualitative interviewees reinforced this point. North Dakota State University’s Rosi Kloberdanz, director of IT client services and help desk manager, told us, “We have help desk representation on every committee in central IT. Inevitably, everything involves help desk support. We’re not there yet—we’re not on all the relevant committees outside central IT. But distributed IT support staff and key stakeholders come to our meetings, and we haven’t had to fight to get them here.” Kathy Beardsley, help desk manager at the University of Delaware, puts it this way: “One of the things that has really helped with our success is the relationship between the help center and the other IT areas. We work with them, playing the role of the user advocate when new projects get under way. The days are over when a new system is implemented without us being involved.” Interviewees from Berry College, Dartmouth College, and the University of St. Thomas told us much the same things.

As Table 9-1 shows, majorities of our respondents answered affirmatively when asked if their help desk personnel were adequately included in central IT activities concerned with the four ITSM planning and management areas we addressed. We asked these questions of all respondents, not just those who had formal guidelines for ITSM practices in place. Among all respondents, most saw help desk participation in availability planning as adequate, followed by
change management and release management. Help desk staff participation in capacity planning was least frequently seen as adequate. These percentages track closely with those for respondents who reported having formal guidelines for these processes (see Figure 9-5).

Counting only those respondents who had guidelines in place, we found proportionately more frequent agreement that help desk participation was adequate. The biggest differences were in the change management and release management categories, where having ITSM guidelines in place made a positive difference of more than 13 percentage points in agreement that the help desk was adequately included in that central IT activity. The difference for capacity planning was 10.4 percentage points, and for availability planning it was 5.4 percent.

As Figure 9-7 shows, a 41.4 percent plurality of respondents said the central IT organization adequately involved the central IT help desk in all four of the ITSM planning and management activities we asked about. About a third that many reported adequate involvement in two or three activities, and even fewer—8.6 percent—reported adequate involvement in one. Nearly 2 respondents in 10 (17.6 percent) reported that the help desk was not adequately included in any of the four central IT ITSM activities. One might expect this latter group to be made up of respondents with no formal guidelines in place for the ITSM activities we asked about; in fact, only 35 percent of them had no guidelines. The remaining 65 percent of this group had implemented from one to four of them. All five groups included respondents with between zero and four guidelines in place.

In Chapter 4 we reported on the priority the central IT organization places on deploying easy-to-support systems. This is another area in which central IT can cooperate with the help desk to improve client service. As Figure 9-8 shows, the mean priority central IT places on easy-to-support systems was significantly associated with reported adequacy of the help desk’s inclusion in basic ITSM activities. In each ITSM activity, the reported mean priority on deployment of easy-to-support systems was about half a point higher, on a five-point scale, among respondents who said the level of help desk inclusion in those activities was adequate. Thus it appears that at many institutions, inclusion of the help desk in central IT’s ITSM activities is part of a set of practices that also includes deployment of easy-to-support systems.

### Use of ITSM Databases

A key concept in ITIL and related frameworks is the careful management of information about the IT environment and those who use it. We asked about the status of three different databases for managing this information:

- asset management databases, which maintain detailed information about capital equipment, its nature, owner, location, and so forth;

<table>
<thead>
<tr>
<th>ITSM Activity</th>
<th>Percentage of All Respondents (N = 427)</th>
<th>Percentage of Respondents with Guidelines in Place (N = 224)</th>
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</thead>
<tbody>
<tr>
<td>Availability planning</td>
<td>71.8%</td>
<td>77.2%</td>
</tr>
<tr>
<td>Change management</td>
<td>69.2%</td>
<td>82.6%</td>
</tr>
<tr>
<td>Release management</td>
<td>63.1%</td>
<td>76.9%</td>
</tr>
<tr>
<td>Capacity planning</td>
<td>59.2%</td>
<td>69.6%</td>
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configuration management databases, which are an extension of asset management to include information about the relationships between assets of all sorts, including hardware, software, and documentation; and

- customer relationship management databases, in which information about individual clients is stored, analyzed, and used to improve the client’s IT experience.

Our respondents’ use of these three databases varies considerably (see Figure 9-9). Asset management databases were the most commonly used, with almost 4 in 10 respondents reporting full implementation. Slightly fewer than one-quarter of respondents had implementations in progress, and about the same number were planning them; 15.7 percent had no plans to implement an asset management database.
Fewer than one-quarter of respondent institutions had fully implemented configuration management databases, and implementations were under way at about the same number. Another 3 in 10 were planning implementations, while about a quarter did not plan to implement configuration management databases.

Customer relationship management databases were the least used of these three tools, with full implementations at fewer than 2 respondent institutions in 10. Another 14.1 percent had implementations under way, with about twice that number in the planning stages. Nearly 4 in 10 respondents said their institutions had no plans to implement a customer relationship management database.

As of the date of our survey, more than half of respondent institutions had fully implemented none of these service management databases (see Figure 9-10). Roughly a quarter had implemented one, and slightly more than 2 in 10 had implemented two or three.

### Summary and Implications

Our survey respondents told us their help desks set a variety of goals. More than 60 percent had documented goals in place for support service availability, percentage of user satisfaction, calls resolved at first contact, and incidents resolved per unit time. More than 40 percent of respondents had eight or nine of the nine goals we asked about; the average respondent institution had 5.26 of them.

Two of the three most often cited drivers of help desk improvement were outward looking: improving user satisfaction and meeting the changing needs of faculty, students, and staff. The third most often cited driver was improving help desk efficiency (although not necessarily by cutting costs). Likewise, two of the three most often cited barriers to improving the help desk involved external forces: rapid growth in user demand, especially among respondents who expect increased budgets.
in the next three years, and lack of funding. An internal factor, lack of staff expertise, was the third most often cited.

Almost two-thirds of our respondents have a strategic plan for the help desk in place or under development. Most of those with a plan in place (35.0 percent of all respondents) said it was integrated into the central IT strategic plan. Only 4.9 percent of respondents reported having a stand-alone plan for the help desk.

A majority of respondents are using three or more of the five IT service management practices that we asked about. Availability planning, change management, and release management were the most commonly implemented; capacity management implementations were reported somewhat less frequently, and service level agreements much less frequently.

Among the two-tenths minority of our respondents whose help desks had SLAs in use at the time of our survey, just over half had implemented all four of the ITSM planning and management practices we asked about. That is 1.5 times the percentage of those in the overall survey population who had adopted those four practices. To us, this reinforces the status of SLAs as an important component of the ITSM framework and suggests that the five practices we studied are part of an assemblage of best practices that many help desks are adopting.

Respondents with formal guidelines for ITSM practices in place or with SLAs in use were 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.

Substantial majorities of respondents (70 to 80 percent) agreed that the central IT help desk is included adequately in activities related to ITSM practices. At respondent institutions where help desk inclusion was acknowledged to be adequate, the priority that central IT places upon deploying easy-to-support systems was higher, reflecting a climate of cooperation.

Relatively few of our respondent institutions have implemented databases for asset management, configuration management, and customer relationship management. More than half have implemented none of them, and only 7.3 percent had implemented all three, suggesting that the value of these components of IT service management has yet to be widely appreciated.
## Endnotes


