Objectives

After reading this chapter, you will be able to:
1. Explain the purpose of a Service Level Agreement.
2. Describe common help desk performance metrics.
3. Explain some of the difficulties in interpreting metrics.
4. Explain the importance of reporting results in business terms.
5. Describe how metrics are used to evaluate help desk performance.
6. Discuss the importance of customer satisfaction surveys.
7. Describe some mechanisms for call monitoring.
8. List common help desk operating costs.
9. Explain the relationship between cost per call and help desk performance.

Chapter Overview

Measuring the performance of a help desk is challenging, because statistics that seem impressive at first glance are often misleading when examined more closely. How would you view an analyst who receives more calls than other analysts? The number of calls a help desk analyst answers is not always a good representation of performance. The time it takes to effectively resolve an incident varies greatly, depending on the nature of the problem. A simple question, such as “Is the network down?” takes far less time to answer than a more complex problem, such as a computer that will not reboot. How would you perceive an analyst who has the greatest number of closed requests? The number of closed requests can also be deceptive. An analyst who closes a large number of calls in a short amount of time may not be providing adequate responses. Users may need to call the help desk again once they find out that the suggested solution does not fix the problem. This chapter examines different approaches to measuring help desk performance.
More and more employees rely on technology to help them perform their jobs. As a result, help desks must commit to providing a specified level of service. A Service Level Agreement (SLA) is a written agreement between the help desk and its customers (users) that defines the nature and levels of service provided. SLAs set expectations by explicitly defining the products, services, and support structure that the help desk will provide. A sample page from a SLA is shown in Figure 7.1. **Service-level management** refers to the set of people and systems that allows the organization to ensure that SLAs are being met and that the necessary resources are being provided efficiently.

The purpose of a Service Level Agreement is to specify, in mutually acceptable terms, what users can expect from the help desk in regard to the

- Scope of services provided (hardware and software supported)
- Level of services offered (for example, response time and hours of operation)
- Method for measuring and reporting compliance with the agreement
- Process for dealing with conflict between a user and an analyst

![Service Level Agreement](image-url)

**Objectives**
This agreement sets out the minimum level of service that Support Services is required to meet and the corresponding penalties for not meeting such levels. Our objective is to provide a continuously operating service that is well beyond the minimum levels specified.

**Uptime**
The target up-time for primary services is 99.8% each month.

**Support**
All support requests will be handled as soon as possible, the target time to action all support requests is within 15 minutes. Telephone and email support is provided Monday to Friday 8am – 10pm and on Weekends from 10am to 6pm.

**Performance**
All services are continuously monitored to ensure rapid response to any faults, which may occur. Monitoring is carried out on all primary services. Monitoring feedback is provided to technical support staff via email and paging services 24 hours, 7 days.

**Service Level Guarantee**
The service level guarantee will be measured by Support Services and is based on the up-time. If we determine that primary services were unavailable for period exceeding the maximum allowable under the prescribed up-time target, and extending for a continuous duration of 1 hour or more per instance, upon the customer's request, we will credit the customer's monthly invoice the prorated charges of one (1) day of the Support Services fee for each consecutive hour, up to a maximum of 7 days per month. To receive credit if this guarantee has not been met, the customer must contact us within 30 days of the end of the month for which credit is requested.

**Definition of Terms**
- **Primary services:** Network availability, Operating system, Web server, Email server, Database servers.
- **Up-time:** The total percentage of hours each month not affected by down-time.
- **Down-time:** the total duration each month for which the primary services are not operating at a reasonable level. Down-time does not include periods for which the primary services are not operating as a result of scheduled outages or outages which can reasonably be determined as resulting from the customers actions.
- **Customer:** Persons to whom the client has authorized access to the web hosting for the purposes of configuration, testing or development or those persons authorized/requested to act on behalf of the client.
- **Scheduled outages:** From time to time upgrades to hardware and or software may be required, such upgrades will be performed outside of business hours. The client will be notified as far as practicable in advance of such upgrades. Scheduled outages under normal conditions should not exceed 5 hours per year. Under normal conditions the client will be advised via the technical news mailing list no less than 24 hours in advance of any scheduled outage.
- **Client:** The company or individual so named on the web hosting order or hosting agreement.
Most SLAs include the following topics:

- Customers—who is specifically supported by this SLA
- Mission—what the application or service supported does
- Location—where the services and support are located
- Contacts—who provides technical support
- Services covered—specific description of the application or service provided
- Service goals—measurable tasks, deadlines, or milestones
- Hours of support—specific coverage hours provided
- Environments supported—hardware, software, and release levels covered
- Environments not supported—hardware, software, and release levels not covered
- Method for requesting services and reporting problems—telephone numbers, e-mail IDs, and Web addresses for contacting support
- Support levels—specific escalation levels provided in the agreement
- Service metrics—specific measurable events covered by the agreement
- Customer satisfaction—measurable method for ensuring customer satisfaction (such as a survey) and the schedule to be followed

**Characteristics of Effective Service Level Agreements**

The services covered by an SLA must be built around measurable events (such as 50 percent of software-related trouble tickets will be closed during the initial call, 25 percent within two hours, 15 percent within one business day, and 10 percent within five business days). This ensures that SLAs can be monitored for meeting performance standards, and that user expectations are met. To ensure measurability, basic terms such as response and resolution must be defined, as must types of problems and corresponding response levels. Users need to know how to categorize a problem before they know what type of response to expect from the help desk. Performance standards should be set conservatively in the beginning, then increased as more experience with delivering the service is developed.

Effective SLAs have been found to share a number of characteristics, including

- Based on an understanding of business objectives and user requirements
- Developed with input from the help desk and the users
- Simple and easy to understand, with clearly defined terms that are not subject to misinterpretation
- Roles and responsibilities of all parties defined
- Levels of services defined
- Response times for levels of service defined
- Criteria for service evaluation defined
• Management elements (metrics, reporting, conflict resolution) included
• Service types defined and service-level requirements quantified
• Realistic in terms of ability to deliver, measure, and make improvements

Benefits of Service Level Agreements

Service Level Agreements benefit the help desk and the user. The benefits include

• Establishment of two-way accountability for service
• Creation of levels of service that are negotiated and standardized
• Documentation of service levels in writing
• Definition of criteria for service evaluation
• Provision of a basis for improving service levels

A formal Service Level Agreement defines the users’ expectations, clarifies responsibilities, facilitates communication, and establishes a risk-reward system for the help desk staff. Once a Service Level Agreement is in place, statistical measures should be adopted to assess the degree to which services meet expected levels of efficiency and effectiveness.

✓ READING CHECK

1. READING REVIEW Briefly, what is the purpose of a Service Level Agreement?

2. CRITICAL THINKING Why must a SLA define types of problems and corresponding response levels as well as terms such as response and resolution?

7.2 Performance Metrics

Monitoring help desk performance to determine the level of service provided is known as performance measurement. Data used to measure performance are obtained from problem management tracking systems, automated call distribution (ACD) systems, call monitoring, and customer satisfaction surveys. These quantitative measurements of performance are called metrics.

Using Metrics

Creating an effective metrics program requires substantial time and effort. Management must define appropriate metrics, set performance targets, and develop a system for collecting, analyzing, and reporting results. The particular measurements correspond closely to the terms and conditions
defined in the SLA. For example, if the SLA promises that all calls will be answered within 40 seconds, the number of seconds it takes to answer each call must be measured to determine whether the goal is being met.

An effective metrics program requires constant monitoring and adjustment to maintain its effectiveness. Performance targets that are either too easy or too difficult to achieve will need to be adjusted to keep staff motivated. The emergence of new problems may require modifying existing metrics or developing new ones. Likewise, if a situation that generated the need for a metric is brought under control, the metric may be eliminated or monitored less frequently. Ongoing performance monitoring will improve help desk effectiveness and increase user satisfaction. Table 7.1 lists common metrics used to monitor and evaluate help desk performance.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Definition</th>
<th>Uses</th>
<th>Best Practice</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Calls</td>
<td>Total number of calls received in a specified time period</td>
<td>Evaluate and adjust staffing levels</td>
<td>N/A</td>
<td>ACD</td>
</tr>
<tr>
<td>Average Speed to Answer (ASA)</td>
<td>Average time a call takes to reach an available agent</td>
<td>Determine how long users wait to speak to a agent; evaluate and adjust help desk staffing levels</td>
<td>90% within 40 seconds</td>
<td>ACD</td>
</tr>
<tr>
<td>Average Hold Time</td>
<td>Average time user holds prior to reaching an agent, abandoning the call, or leaving a voice mail message</td>
<td>Evaluate and adjust help desk staffing levels</td>
<td>30–60 seconds</td>
<td>ACD</td>
</tr>
<tr>
<td>Average Abandon Rate (ABA)</td>
<td>Percent of users who end a call before the call is answered by an analyst</td>
<td>Evaluate and adjust help desk staffing levels</td>
<td>4–8%</td>
<td>ACD</td>
</tr>
<tr>
<td>After Work Time (AWT)</td>
<td>Total time spent out of the queue finishing up work from a prior call</td>
<td>Measure productivity of the help desk and the individual analyst</td>
<td>N/A</td>
<td>ACD</td>
</tr>
<tr>
<td>Average Call Handling Time (AHT)</td>
<td>Total time spent on the telephone handling an incoming call plus time spent completing a call after hanging up</td>
<td>Measure productivity of the help desk and the individual agent</td>
<td>13.1 minutes (industry average)</td>
<td>ACD</td>
</tr>
<tr>
<td>Available Time</td>
<td>Total time spent logged into the ACD system and waiting for a call</td>
<td>Measure productivity of the help desk and the individual agent</td>
<td>12% of logged-in ACD time</td>
<td>ACD</td>
</tr>
<tr>
<td>Auxiliary Time</td>
<td>Total time spent on non-call-handling tasks, such as: meetings, projects, and training</td>
<td>Measure productivity of the help desk and the individual agent</td>
<td>20% of logged-in ACD time</td>
<td>ACD</td>
</tr>
<tr>
<td>First Call Resolution</td>
<td>Percent of calls resolved on the initial contact with the user</td>
<td>Measure knowledge level of agents; measure complexity of calls relative to agents’ knowledge level</td>
<td>75–80%</td>
<td>Problem management system</td>
</tr>
</tbody>
</table>
Total Number of Calls

The **total number of calls** simply states the number of calls received in a fixed period of time. When determining the volume of calls, it is important to consider the number of inbound ACD calls as well the volume of tickets generated by e-mail, voice mail, and the Web site. A more realistic approach is to track the number of distinct user problems rather than each call, since several calls might pertain to one incident, or one call might contain several issues.

Average Speed to Answer (ASA)

**Average speed to answer (ASA)** measures the average amount of time each caller waits before his or her call is answered by an analyst. This is the elapsed time from when a user places a call and selects an option from the ACD menu until an analyst receives the call. This information comes directly from the ACD system. Best practice indicates that 90 percent of all calls should be answered in less than 40 seconds.

Monitoring the ASA over a period of time allows management to identify trends in the help desk’s ability to respond to inbound call volumes. A high ASA indicates that callers are waiting a long time for calls to be answered, leading to frustration. If the help desk is unable to get to the calls quickly enough, this will translate into a higher abandonment rate.

A number of factors can contribute to increased ASA times. For example, the introduction of a new system or technology typically results in a temporary increase in calls. Likewise, the availability of help desk staff has an effect on ASA rates. Staff may also be away from the help desk for training or a project, which can leave the help desk understaffed. In addition, analyst absenteeism also negatively affects ASA numbers.

It is important to consider these factors when interpreting ASA results. There is no need to increase staff size if high ASA rates are a result of an unusual number of absences during a flu outbreak. If, however, such factors do not account for high ASA rates, there may be a need for increased staffing.

Average Hold Time

**Average hold time** is the average time callers are on hold before their calls are answered by analysts. The average hold time reflects the help desk’s ability to respond to inbound call volume. Like ASA, this metric can be affected by seasonal fluctuations, the rollout of a new application or system, staff absences, or staff dedicated to non-phone activity, and other factors. Taking these variables into account, rising average hold time can indicate insufficient resources. If the help desk is unable to answer incoming calls quickly enough, users are more likely to hang up before their calls are answered, resulting in a higher abandonment rate.
Average Abandon Rate
The average abandon rate reports the percentage of calls that come into the help desk but are not answered by help desk analysts. These are callers who have responded to initial ACD prompts and are waiting in a queue for an analyst to pick up the call, but hang up before their calls are ever answered. These data come directly from the ACD system. Best practice indicates that such calls should represent only 4 to 8 percent of total inbound call volume.

Along with average hold time, the abandon rate provides an indication of how well the help desk is managing the incoming call load. Average abandon rate is subject to the same variations as average hold time, and must be evaluated in context of these additional factors. If the help desk is losing a high percentage of calls to hang-ups, customer satisfaction suffers.

Average Work Time
Average work time (AWT) or wrap-up time is the amount of time an analyst spends out of the queue performing work required to complete the call after hanging up the telephone. This after-call work typically includes completing the problem management ticket and closing it, or escalating the ticket to a higher level.

Average Handling Time
Average handling time (AHT) is the time it takes an agent to resolve a user problem. Average handling times range from as low as one minute to as high as several hours. This broad range is a direct result of the way in which help desks measure and report performance data. A help desk that defines resolution time as the total elapsed time from opening the call to confirmation of call closure from the user will report much longer handling times than a help desk that measures only actual telephone time.

At first glance, a low handling time result seems positive; the less time help desk analysts spend on calls, the more they are available to receive subsequent calls. However, a quick turnaround time does not ensure a quality response. In reality, some problems take longer to solve than others, and if analysts focus on keeping calls brief, they may not adequately solve users' problems.

Lower call handling times typically occur when help desks do not provide a high level of first call resolution. Higher call handling times are common at help desks that provide a higher first call resolution rate. The best practice standard of 13.1 minutes is reflective of a help desk with a 75 to 80 percent first call resolution rate. If a help desk has a high call handling time and a low first call resolution rate, it is possible that analysts are not providing efficient support to users.
Independent of how they are measured, resolution times are greatly affected by the nature of the problem and the effort required from the help desk agent to resolve it. Resetting a password will typically take a few minutes, while troubleshooting a failure in a complex system may take hours. Simply comparing resolution times between help desks and disregarding differences in the support environment will result in misleading conclusions.

**Available Time**

Available time reflects the amount of time each help desk analyst is logged into the ACD system waiting to take inbound calls. This data element comes directly from the ACD system. Best practice indicates that this time should equal 12 percent (0.96 hours out of 8 hours) of each analyst’s daily logged in time.

A high available time may indicate that a help desk is overstaffed; with too many analysts available to take calls, some sit idle and wait for the next call to arrive. A low available time can mean just the opposite—that a help desk is understaffed. Careful monitoring of available time, along with other metrics, can help ensure that sufficient resources are in place to meet service levels.

**Auxiliary Time**

In addition to providing live help to users, analysts are also asked to attend meetings, review reports to identify trends, update solutions databases, update Web site content, and attend training seminars and conferences. Auxiliary time is the amount of time each help desk analyst is unavailable to receive calls because he or she is performing non-phone support tasks. Best practice indicates that this time should equal 20 percent (1.6 hours out of 8 hours) of each analyst’s workday.

Table 7.2 presents a look at how a help desk analyst’s time is allocated among several different activities.

<table>
<thead>
<tr>
<th>Analyst Mode/Task</th>
<th>Percentage of Time Spent</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Time: Total time spent logged into the ACD and waiting for a call</td>
<td>Up to 12%</td>
<td>Up to system 0.96 hours</td>
</tr>
<tr>
<td>Call Handling Time: Total time spent on the telephone handling an ACD incoming call plus time spent completing an ACD call after hanging up</td>
<td>68–70%</td>
<td>5.44–5.60 hours</td>
</tr>
<tr>
<td>Auxiliary Time: Total time spent on non-call-handling tasks such as meetings, projects, and training</td>
<td>20%</td>
<td>1.6 hours</td>
</tr>
</tbody>
</table>
Help desk analysts need to spend time away from the phones. Even if these tasks were not analyst responsibilities, it would still be necessary for analysts to spend time doing something other than telephone work. Without regular time away from the phones, analysts would suffer from burnout and decreasing productivity.

By monitoring auxiliary time, help desk management ensures that staff members are balancing time on and off the phones. It is critical that analysts spend time away from the phones only when scheduled, or adequate phone coverage may be lacking.

**First Call Resolution**

**First call resolution (FCR)** is the percentage of incidents that are resolved by the help desk on the initial contact. This metric is obtained directly from the problem management system. Best practice indicates that the help desk should provide 75 to 80 percent of first call resolution.

First call resolution allows managers to assess the performance of individual help desk analysts. Analysts who consistently resolve fewer first contact calls than their peers may require additional mentoring or training, while the practices of analysts with high resolution rates could be used as a model for training other staff members.

**Sources of Data.**

Most of the data used to create reports comes from two sources: the ACD application and the problem management application. Table 7.3 presents typical metrics collected by ACD systems, while Table 7.4 lists metrics available from problem management programs.

**Interpreting Metrics**

Just as important as collecting metrics is the practice of evaluating them appropriately. Some companies overemphasize a particular metric to the point that the metric itself becomes the primary focus, rather than the overall goal of customer satisfaction.

For example, suppose a help desk emphasizes the average speed to answer (ASA) metric above all others. A high ASA figure indicates that users do not wait long for their calls to be answered. Low ASA figures often lead to user poor customer satisfaction ratings, since users wait longer than average to have their calls answered. While ASA is undoubtedly important, it has no connection to whether the user’s problems were solved. A help desk that answers incoming calls quickly but does not resolve problems will also rate poorly in customer satisfaction.

Understanding and interpreting performance metrics is crucial to the success of a help desk. Used correctly, metrics present a snapshot of areas
<table>
<thead>
<tr>
<th>Report Frequency</th>
<th>ACD Metrics</th>
<th>Target Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>Call volume</td>
<td>Help desk</td>
</tr>
<tr>
<td></td>
<td>Number and percentage of abandoned calls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of calls by time of day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average speed to answer (seconds)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average call duration (minutes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incoming and outgoing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>By call type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For all calls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Longest wait time (minutes)</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>Weekly call volume</td>
<td>Help desk</td>
</tr>
<tr>
<td></td>
<td>Weekly number and percentage of abandoned calls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly number of calls by time of day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly average speed to answer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly average call duration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incoming and outgoing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>By call type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For all calls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly longest wait time</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>Year-to-date monthly call volumes</td>
<td>Help desk</td>
</tr>
<tr>
<td></td>
<td>Year-to-date number and percentage of abandoned calls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly volume of calls by time of day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly average number of calls by each week day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly average speed to answer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly average call duration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incoming and outgoing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>By call type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For all calls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly longest wait time</td>
<td></td>
</tr>
</tbody>
</table>

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Table 7.4: Metrics Produced from ACD Applications

<table>
<thead>
<tr>
<th>Report Frequency</th>
<th>Problem Management Reports</th>
<th>Target Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>Open incidents detail report</td>
<td>Help desk</td>
</tr>
<tr>
<td></td>
<td>Daily number of incidents (previous day)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daily resolution rates (previous day)</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>Open incidents summary report</td>
<td>Help desk</td>
</tr>
<tr>
<td></td>
<td>Weekly number of incidents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly incidents by call type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly incidents by priority level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly resolution rates and times by call type</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>Year-to-date monthly incidents (show number of incidents reported by phone and voice mail, and system generated)</td>
<td>Help desk</td>
</tr>
<tr>
<td></td>
<td>Monthly number of incidents by call type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly number of incidents by priority level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly resolution rates and times by call type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>YTD monthly resolution times by call type and call priority</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Top ten common problems and solutions</td>
<td></td>
</tr>
</tbody>
</table>
where improvement is needed and areas where goals have been met. The interpretation of common help desk metrics is challenging; many times a result that initially appears positive or negative may actually be just the opposite. Consider the following examples.

Situation 1: A help desk has experienced a drop in the total number of calls received. This would be considered positive if the assumption is that users are not experiencing as many problems as before (perhaps due to effective user training). Perhaps users are contacting the help desk via other methods, such as e-mail or Web forms. On the other hand, it could also be true that users are no longer calling the help desk for support because they have been dissatisfied with the service they received in the past.

Situation 2: A help desk has experienced a drop in total call handling time. Again, this could be interpreted positively. Perhaps analysts are very knowledgeable and are able to deliver answers within a shorter time than before. However, it is also possible that analysts are providing simple answers that end the phone calls in a short time, but do little to solve users’ problems. This would result in user dissatisfaction, and may lead to a drop in total call volume.

**Computer Practice 7.1  Create a Line Item Summary report**

Complete the following exercise using the HelpSTAR software that is on the CD in the back of the book. Note: The password for all of the sample users in these exercises is 'helpstar'.

1. Start HelpSTAR.
2. Login as John Keyser.
3. Select Data Analysis > Reports from the main menu. The ‘Reports’ window will be displayed.
4. Click the plus sign next to the ‘Line Item Summary’ folder to display its contents. Five subfolders will be shown.
5. Click the ‘By Support Rep’ folder. The ‘Date Range’ dialog box will appear.
6. Accept the default dates.
7. Click the ‘OK’ button.
8. The report will show all requests, grouped by the support rep responsible for the request. To navigate through the pages of the report, use the right and left arrow buttons at the top of the report window.
9. To print the report, click the ‘Print’ button located at the top of the report window.
10. Exit HelpSTAR.
Situation 3: A help desk analyst has a much higher average handling time than other staff members. This could be the result of an overly chatty analyst who does unnecessary talking during the course of a call, such as an analyst who explains the reason behind every step of the repair process. On the other hand, the analyst could be receiving calls that are more challenging than those answered by other staff members and would thus require more time. This is particularly true in skill-based routing situations in which more-complex calls are routed to an analyst with superior knowledge and skills.

Clearly, metrics must be evaluated in context. Variation from standard levels can be the result of a wide range of factors and does not necessarily indicate poor performance. For example, call volume fluctuates frequently, with increases every time an upgrade or new product is introduced. In turn, this increase in call volume leads to longer hold times and possibly to higher abandonment rates. If the longer hold times were not considered in the context of the new product introduction, the results would be misleading.

Similarly, call handling time sometimes spikes upward when a new product or system is rolled out. Help desk staff may not have much experience with the new technology themselves, so they may have to go to other sources such as programmers to find answers to questions. In this situation, call handling time gradually decreases as help desk staff become more familiar with the product.

If the help desk is exceeding its service-level goals every month, it may be performing exceptionally well. On the other hand, the service goals may be set too low. While this looks good on paper, in reality analysts may be bored and users may be dissatisfied. In such a case, it may be necessary to set higher service targets, such as changing the average speed of answer from 60 seconds to 45 seconds and then reevaluating the service level in a few months. Another explanation for a help desk that consistently exceeds performance targets is overstaffing. There may be too many analysts in relation to the number of incoming calls. In this situation, costs are needlessly high for the level of service required.

Performance that does not meet target levels demands investigation, since the help desk is unable to fulfill user expectations, leading to low levels of user satisfaction. If service goals are not being met, the targets may be set too high. Service targets that are unrealistic—whether high or low—tend to decrease analyst motivation.

On the other hand, the targets may be appropriate, but the help desk may be understaffed. If the poor performance results are not linked to unrealistically high targets or lack of staff, the problem may lie in the help desk’s inefficiency. For example, some analysts may not have the skills needed to handle the types of problems they are assigned. Another possible explanation is that certain analysts are not following the proper help desk procedures. It is important to identify the cause of poor performance and to take corrective action as soon as possible.
Reviewing Performance and Reporting Results

Help desk staff and management review performance data on a regular basis. In many companies, the more general metrics such as call volume, hold time, abandonment rate, and customer satisfaction are discussed at a group level. More specific results such as call handling time, first call resolution, and available time are more meaningful when addressed on an individual basis. To ensure optimal performance, staff members need to know what is being measured and what effect their actions have on these measures. The goal of individual reviews is to provide feedback to the analyst, whether positive or negative. Positive feedback can be a significant factor in analyst motivation and job satisfaction. Discussion of areas for improvement provides an opportunity for an analyst to develop skills in these areas.

The importance of an individual statistic depends on the group viewing the data. Users are most concerned with promptness, courtesy, and the ability of the help desk to solve their problems. Help desk staff are focused on the amount of work they are asked to perform and whether they have the resources to be successful. Help desk managers want to know whether the staff is able to resolve calls in a timely manner and whether call trends indicate the need for changes. Finally, senior management is concerned with the overall performance of the help desk in terms of customer satisfaction and return on investment. Return on investment (ROI) compares the cost of providing support to the value of a support group’s services and benefits. Table 7.5 on page 198 lists common types of help desk metrics and their potential value to the business.

When communicating help desk performance to senior management, statistics such as average speed to answer, average abandon time, and average call handling time are not very useful. Management is not particularly interested in hearing that average speed to answer went from 40 seconds in June to 35 seconds in July. To be effective, help desk management reports must demonstrate how the help desk is contributing value to the business.

Consider the following example. Pamela Jurgen is a salesperson for a footwear manufacturer. Recently she was contacted by a retailer that is interested in placing a large order. Pamela prepared a proposal that included detailed financial information created in Excel. The customer just called and wants to move ahead with the order, but would like to discuss one or two details of the financial information. The customer also asks whether the order can be shipped tomorrow if it is placed today.

When Pamela tries to open the Excel file, she receives an error message stating that the file is corrupt. She tells the customer she will have to call back later to discuss the figures. In a panic, she telephones the help desk. Within twenty minutes, the help desk analyst is able to restore a backup copy of the file to Pamela’s computer. This enables Pamela to call the customer and complete the sales order that same day. Without the responsiveness of the help desk, the company could have lost the order.

This positive outcome would not appear on any report of standard help desk metrics. While information about the incident would be reported,
such as call duration and call handling time, nothing would be conveyed about the contribution of the help desk to the business.

To present this type of information to management, information must be collected that focuses on the specific business impact of the help desk's efforts. This is possible only if the help desk has a keen understanding of the businesses it supports. For example, a help desk could track the number of times an analyst intervened to help an employee close a sale, ship an order, or meet any other critical business deadline. Although extra time and effort is required to track these incidents, communicating the value added to the business could result in improved perception of the help desk and funding for future needs.

**Reviewing and Revising Performance Metrics**

The selection of performance metrics should be reviewed periodically and revised, if necessary. New services may require completely new metrics. More and more companies allow users to submit problems via e-mail or a form on a support Web site. These requests cannot be measured with traditional calling metrics such as average hold time. New metrics would need to be created, such as a measure of the elapsed time from when an e-mail message is submitted to the time a response is sent.

<table>
<thead>
<tr>
<th>Information Measured</th>
<th>Value to Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average abandon rate</td>
<td>A low abandon rate could indicate that Callers are willing to wait because they are confident the analyst will solve their problems Callers don’t need to wait because their calls are being answered quickly In both cases, users are returned to productivity levels as quickly as possible.</td>
</tr>
<tr>
<td>Average speed to answer</td>
<td>If the phone is being answered quickly, problems are addressed promptly and users are able to return to their work.</td>
</tr>
<tr>
<td>First call resolution</td>
<td>Users are able to return to normal work within a short time, without the need to make additional calls.</td>
</tr>
<tr>
<td>Total service events handled by Group/department System/application Severity</td>
<td>The total events statistic makes it possible to identify the origin, focus, and severity of calls. These data are used to determine areas that may need to be evaluated and changed in order to increase productivity.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Responsiveness provides an indication of how more-complex problems are handled. If a problem requires escalation or referral to another agent, responsiveness determines how quickly the user can return to normal productivity levels.</td>
</tr>
<tr>
<td>Resolution time</td>
<td>Knowledge of average call resolution time gives users an idea of how long it will take to resolve their problems. This information allows users to plan accordingly.</td>
</tr>
</tbody>
</table>
In addition, more and more support centers are moving toward uni-
fied queues. In a unified queue, phone calls, e-mail messages, Web forms, 
and faxes are all in the same queue. The average hold time for a phone 
call that sits in a unified queue is very different from the average hold time 
for a phone call in an ACD queue.

**READING CHECK**

1. **Reading Review** Where are help desk performance metrics obtained?

2. **Critical Thinking** What metrics might a help desk manager use to eval-
uate the performance of an individual support specialist?

### 7.3 Customer Satisfaction

**Customer satisfaction** is the customer’s perception of the service that is 
being provided by the help desk. The standard metrics just described are 
statistical measurements; they do not measure customer perceptions. Cus-
tomer satisfaction is influenced by many factors, including the quality of 
the answer, the hold time, and the total time it takes to solve the problem. 
These factors are easy to quantify. Other factors, such as whether the cus-
tomer was treated with courtesy and respect and whether the analyst was 
knowledgeable enough to solve the problem within a reasonable time, are 
more difficult to quantify. While customer satisfaction is not easily meas-
ured or quantified, it is a crucial measure of overall help desk perform-
ance. Best practices indicate that 90 percent or higher of the customer 
base should rate their overall satisfaction with the help desk as “satisfied” 
or better.

Customer expectations play a major role in determining customer sat-
isfaction. Common user expectations include the following:

- Help is available when needed.
- Users are treated with courtesy and respect.
- Analyst is responsive to user needs.
- Analyst keeps promises and commitments.
- Analyst is knowledgeable enough to solve the problem.

The level of service that users expect comes from service standards 
listed in the SLA. Still, expectations may vary from one user to the next. 
One user may call and expect a problem to be solved within 5 minutes, 
while another might expect a solution in 15 minutes. If an analyst solves 
the problem in 15 fifteen minutes, the first user may be unhappy because 
an expectation was not met. On the other hand, the user who expected a 
problem to be solved in 15 fifteen minutes would probably report being 
satisfied with the service provided.
Measuring Customer Satisfaction

Companies use a variety of techniques to measure customer satisfaction. Formal methods include surveys, questionnaires, and evaluation forms. Less-formal methods of gathering information include telephone calls and e-mail messages to users. The most common method is to survey users immediately after they have completed calls to the help desk. Some help desks also conduct customer satisfaction surveys of all users on an annual basis.

Customer Satisfaction Surveys

Customer satisfaction surveys are a regular part of a help desk quality assurance program. These surveys provide valuable information about areas in which the help desk is performing well and areas that need improvement. Unfortunately, some help desks survey user satisfaction only when problems begin to surface, such as when call volume decreases.

Event-based satisfaction is obtained from one-time surveys completed by users soon after service encounters. The best time to discover a user's feelings about a help desk interaction is as soon as possible after the call has been completed. The user's state of mind immediately following the completion of a call strongly influences the user's lasting impression of the experience. The survey must be short enough to encourage its completion, consisting of no more than two or three brief questions. The purpose of the survey is simply to find out what the user thought of the service provided.

Overall satisfaction is determined through ongoing surveys, conducted at regular intervals, and annual surveys. Regular surveying provides valuable insight into customer satisfaction trends. If the entire user base is not being surveyed, a cross-section of users must be selected.

Communicating Results

Once the survey data have been collected, they are reviewed to identify areas in which service is not meeting expectations, as well as areas in which service exceeds user expectations. The results of ongoing and annual customer satisfaction surveys are shared with help desk staff and with users. The results of event-based surveys are used to appraise the effectiveness of individual agents. Managers review survey results with individual agents, and agents are encouraged to comment on specific findings.

READING CHECK

1. **Reading Review** What is the most common method of measuring customer satisfaction?

2. **Critical Thinking** Write a list of the questions you would include in an annual customer satisfaction survey.
In the early twentieth century, successful businesses often based their success on knowing their customers by name and providing service tailored to customers’ individual needs. In the early twenty-first century, even small businesses are likely to use technology tools that automate customer service. This can help a company keep operating costs down, but customers may often find themselves in an impersonal maze of computer-generated telephone responses that may not address their specific problems. The loss of personal service can erode customer satisfaction and cause a company to lose out on sales. With the newest help desk technology, companies can have it both ways: They can use automation to keep costs low and provide more personal service at the same time.

Traditionally, many different groups within companies have managed data about customers. For example, a company’s sales department might have one set of data on a customer and the billing department might have other data on the same customer. This can make it difficult for anyone in the company to have all the relevant customer information. Even on help desks, an agent who handles e-mail communications and another agent who handles telephone calls might not have the same set of information about a customer who has requested service through both channels.

By contrast, state-of-the-art customer service technology integrates customer information from all sources into a single view, and it does this in real time. For example, suppose Marcia Tucker uses her telephone company’s self-service Web site to add call-waiting to her service. At the same time, she downloads information about the company’s residential DSL service. A week later, she calls the phone company’s help desk for assistance using the call-waiting feature. The agent who takes the call has immediate access to her customer record on a computer screen, and the record includes her request for information about DSL service. The help desk agent can answer the call with a personal greeting: “Thank you for calling the Help Desk, Ms. Tucker. My name is Jason. How may I help you today?” When Ms. Tucker explains her problem, Jason might say, “I see that you’ve had call-waiting only for a week. Have you had this problem before?” After resolving her call-waiting problem, he could say, “Are you still considering residential DSL service, Ms. Tucker? Is there any way I can help you with that decision?” With the customer’s approval, Jason could forward her call to a sales agent.

Raising Customer Satisfaction, Lowering Costs

Looking Ahead

1. How has technology affected the ability of companies to offer personalized service?

2. How might personalized customer service, as in the example of Ms. Tucker and the telephone company, enable the help desk manager to convince senior managers that the help desk is adding value to the business?
7.4 Call Monitoring

Call monitoring is the process of observing and evaluating agent performance for quality assurance and training purposes. Call monitoring confirms that users are receiving courteous and efficient service and keeps abusive users in check by informing them that their calls may be monitored. Call monitoring is also used for staff training purposes.

Monitoring Formats

Help desk managers use a combination of call monitoring methods to evaluate agent performance. The most commonly used techniques are real-time remote monitoring and call recording. In addition to telephone calls, many help desks monitor e-mail responses, fax correspondence, and Web chat sessions.

Real-Time Remote Monitoring

In real-time remote monitoring, a manager listens to calls without being present at the agent’s workstation. Remote monitoring tends to produce an accurate portrait of agent performance, since the agent is usually unaware of precisely when monitoring takes place. Feedback can be provided immediately after a call or during regularly held feedback sessions. A sample call monitoring form is displayed in Figure 7.2.

Side-by-Side Monitoring

Side-by-side monitoring takes place at the agent’s workstation. This type of monitoring is used most frequently with new agents who benefit from instant feedback on their performance. Once an agent gains experience, more accurate results are achieved through the use of remote monitoring, since the agent’s behavior is not influenced by a manager’s presence.

Call Recording

One of the newer methods of call monitoring is the use of sophisticated call recording systems. Call recording uses various technologies to record actual help desk calls for later analysis. These systems can record all calls of all agents, or they can be set up to selectively record calls from different agents at different times and days so management can analyze a random sample. Later, the recording can be listened to by both the manager and the agent. Some of these systems also capture the computer screens the agent uses during a call so the manager and the agent can determine whether the entries were made accurately and efficiently.
For many help desk managers, monitoring analysts’ handling of calls takes more time than any other single task. Technology has provided tools that help managers monitor calls more efficiently. A digital call recording and monitoring system, for example, can be set to alert a manager to calls that exceed a specified time limit. The manager can then listen to long calls to evaluate how the analysts could have handled them in less time.

Call length and other standard metrics can help managers identify which calls they want to evaluate, but metrics alone do not tell the whole story of whether analysts are handling calls in ways that produce customer satisfaction. While playing back a recorded call, an effective manager will listen for clues to call-handling skills and techniques that cannot be measured in minutes. These include:

- **Duplication**
  A help desk analyst who asks a caller’s name when the caller has already stated it should pay more attention. Making the customer repeat the information annoys the customer and lengthens the call.

- **Interest**
  Calls in which analysts show interest in the callers and their problems are more likely to produce positive outcomes than those in which analysts seem distracted or inattentive.

- **Assumptions**
  When a caller presents a problem that sounds like hundreds of others the analyst has heard, the analyst can easily assume that it calls for the same solution. Such assumptions, however, can keep the analyst from listening closely enough to determine whether this caller’s actual needs are different.

- **Responsibility**
  An effective help desk analyst will take responsibility for a problem and its resolution. Evasions such as “This isn’t really my territory” waste time and undermine the caller’s confidence in the help desk.

- **Control**
  Efficient call handling requires that the help desk analyst to stay in control of the discussion so that it stays focused on the problem. Allowing it to wander off point will lengthen the call and can make it more difficult to obtain the information that will lead to a solution.

- **Friendliness**
  Analysts should speak to callers in a friendly tone but should not overdo it. A genuinely friendly, helpful manner fosters customer satisfaction, but insincerity has the opposite effect.

Based on what they hear in recorded calls, managers can help individual analysts improve their customer relations skills and resolve problems more efficiently. Managers can also identify examples of successful call handling and use them as models in training classes.

Call recording systems can benefit help desk analysts as well as their employers. For example, a recording of a call from a disgruntled customer can protect an analyst against an unfair accusation of rudeness or ineptness. Some digital call recording systems also allow analysts to flag calls that they found troublesome. For instance, an analyst could flag a call that went off course because the caller wandered from one subject to another. The analyst could then take the initiative of asking her manager to review these calls with her and discuss ways in which she could have kept the conversation on track.

**Reviewing Concepts**

1. How do call recording systems help managers identify calls they want to review?
2. On help desks that use call recording, what information should analysts be given about it?
Drive-By

A drive-by takes place when a manager overhears an agent’s phone conversation with a user while passing by and stops to provide feedback. Drive-bys should not be relied on for regular agent evaluation, since they are unplanned events.

Characteristics of an Effective Call Monitoring System

Call monitoring, when performed effectively, is perhaps the best metric for evaluating the quality of service provided by help desk agents. In practice, effective monitoring is a time- and labor-intensive activity. To ensure that the effort is worthwhile, a monitoring system must possess the following characteristics:

- Analysts are informed that they may be monitored (may be required by state law).
- Analysts understand the purpose of monitoring and how results will be used.
- Analysts are told which lines are not monitored (can be used for personal calls).
• Only qualified designated personnel are permitted to monitor.
• Evaluation criteria are objective and standardized, and are applied consistently.
• Feedback is given promptly.
• Results are reported in such a way that an individual cannot be identified.

✓ READING CHECK

1. Reading Review Why do help desks monitor calls?

2. Critical Thinking If you were a help desk manager, which types of call monitoring would you use? Why?

7.5 Quality Versus Cost

The ability to consistently provide a high level of service is key to achieving customer satisfaction. **Quality assurance** is the process of monitoring whether services being provided meet the needs of users. To determine whether quality levels are met, management uses metrics, customer satisfaction surveys, and call monitoring. Some of the questions considered in evaluating the quality of service include the following.

- Are users satisfied with the level of service the help desk is providing?
- Is the help desk meeting the requirements of the Service Level Agreement (SLA)?
- Are help desk staff and management satisfied with the service they are providing?

The quality of service must be balanced against the cost of providing the service. **Cost per call** is the average cost of each call coming in to the help desk. The standard cost-per-call formula is annual operating and overhead costs divided by number of calls received for the year. For example, if total costs were $3,000,000 and 100,000 calls were received, the average cost per call would be $30. The Help Desk Institute’s Best Practices Survey for 2002 found that the average cost per call was $29.58.

While the formula itself is relatively simple, identifying all of the costs involved with operating a help desk and interpreting the results of the cost-per-call calculation are much more complicated. Costs fluctuate widely as a result of the structure of the help desk, the services provided, and the definition of call. For example, a help desk that uses a dispatch structure will generally have a lower cost per call than a help desk that emphasizes first call resolution.
Determining Operating Costs

Within the confines of a limited budget, the help desk tries to satisfy the service levels set in the SLA. The higher the budget, the more the help desk can procure the resources required to meet user expectations. The main expense of all help desks is staff. The second most expensive resource is usually telephone costs, particularly if a toll-free phone number is provided for callers. In general, the following elements are considered in calculating help desk operating costs:

- Salaries and benefits for help desk staff (salary and wages, benefits package, incentive compensation, recruiting fees, and temporary staffing costs)
- External services provided to users (contracts for hardware maintenance, off-the-shelf software support, and outsourced help desk functions)
- Training for help desk staff (cost of internal and external training programs)
- Help desk software maintenance (purchasing and updating all types of help desk software, including call tracking systems, knowledge bases, remote control, reporting software, and self-healing software)
- Hardware purchase or leasing (purchasing or leasing hardware used by help desk)
- Yearly ACD and telecommunications equipment maintenance costs
- Facilities overhead (office space rent, furniture, wiring, telephone service, telephone equipment, office equipment leasing, subscriptions, resource material, customer communication and marketing, office supplies, and travel expenses).

Once total costs have been established, the term call must be defined before cost per call can be calculated. Help desks define a call in many ways. Some help desks use the total number of incidents rather than calls. An incident could have originated by e-mail, Web, fax, or phone. Other help desks track each type of incident separately, resulting in average cost per call, average cost per e-mail message, and average cost per Web incident.

Comparing the figures from a cost per incident help desk to the figures from a cost per call help desk can be very misleading. For example, a cost per incident calculation takes into account all contacts related to the incident until it is closed. If this requires three phone calls and an e-mail message, the total cost for the incident would include all four contacts. On the other hand, if cost per call is calculated, the total cost would be reported for each of the four contacts. The cost per call result would clearly be lower than the cost per incident figure.

Cost per call also varies depending on the services provided, which can range from the simple (password resets) to the complex (software and/or hardware conflicts). A help desk that has implemented self-service tools will
most likely have a higher cost per call than a help desk that has not. Using self-service technology, users can resolve many simpler problems on their own without contacting the help desk. As a result, the calls that are made to the help desk tend to involve more-complex problems that require more time and lead to increased costs. The help desk that does not provide self-service options receives calls for simple problems along with more-complex calls. The simpler calls are resolved quickly, lowering the average cost per call.

**Interpreting Cost per Call**

Meaningful cost-per-call data require careful interpretation. It is overly simplistic to assume that a lower cost per call is desirable. In reality, higher cost-per-call figures can be indicative of an extremely effective help desk. There are a number of reasons why greater costs are associated with higher performing help desks.

- **Calls are longer in duration.** First call resolution requires the analyst to spend more time speaking with the user to ensure that the exact nature of the problem is well-defined.
- **More staff members are required.** If more time is spent on each initial call, there must be enough analysts available to answer calls that come in while the other analysts are busy on first contact calls.
- **Training costs are higher.** A high rate of first call resolution requires well-trained, experienced analysts.

When interpreting cost-per-call figures, first call resolution rates and customer service ratings must be considered. A high cost-per-call figure coupled with high first call resolution and high customer satisfaction does not indicate a problem. On the other hand, a low cost-per-call figure coupled with low first call resolution and low customer satisfaction does demand attention. Table 7.6 explores the impact of cost per call, first call resolution, and customer satisfaction on help desk effectiveness.

<table>
<thead>
<tr>
<th>Cost per Call</th>
<th>First Call Resolution</th>
<th>Customer Satisfaction</th>
<th>Overall Effectiveness (1-5 scale, 5 = highest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>High</td>
<td>5</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>4</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>2.5</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>1</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>1</td>
</tr>
<tr>
<td>Low</td>
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<td>Low</td>
<td>2.5</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>4</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>5</td>
</tr>
</tbody>
</table>

**Table 7.6** Impact of Cost per Call, First Call Resolution, and Customer Satisfaction on Overall Help Desk Effectiveness

CHAPTER 7  Performance Management
Like all statistics that are available to management in operating the help desk, cost per call must be interpreted along with all available metrics to determine the overall value and success of the help desk. Factors such as how quickly phones are answered, how long it takes to resolve a problem, and how users perceive the service being provided should all be taken into account when evaluating help desk performance.

Understanding and correctly using performance metrics is crucial to the success of a help desk. Used appropriately, performance metrics are a powerful way of demonstrating the help desk’s value to the organization. When the metrics used by the help desk accurately reflect the service levels promised in the SLA, chances are that the goal of customer satisfaction will be met.

**READING CHECK**

1. **Reading Review** What is the standard formula for calculating cost per call?

2. **Critical Thinking** Last year, the help desk at Armbruster Manufacturing introduced Web-based self-service support in an effort to reduce support costs. Now, the average cost per call is higher than it was when all contact with the help desk was via telephone calls. Does this mean the self-service support is ineffective? Why?
The following points were covered in this chapter:

1. As more employees rely on technology to perform their jobs, help desks are increasingly required to provide specified levels of service. A Service Level Agreement (SLA) is a written definition of the nature and level of service a help desk is obligated to provide.

2. Support managers use standard metrics, such as the average time to answer and average call handling time, to evaluate the performance of the help desk and of individual support specialists. The metrics used by a help desk correspond closely with the terms and conditions defined in its SLA.

3. The interpretation of common help desk metrics is challenging; many times a result that initially appears positive or negative may actually be just the opposite. A decrease in call handling time may indicate a more efficient help desk, or it may suggest that analysts are not spending sufficient time to resolve user problems. A decrease in the number of calls to the help desk could mean users are more able to solve problems on their own, or it could indicate that users have such a low perception of the help desk that they do not bother to call.

4. Reports on how the help desk contributes to the company’s success are more effective than metrics for demonstrating performance to senior management. Developing this kind of information requires the help desk to have a keen understanding of the business and to collect information about contributions it has made, such as the number of times an analyst has helped an employee close a sale or meet a critical deadline.

5. Companies use surveys, questionnaires, and evaluation forms to measure customer satisfaction. They may also use informal methods such as telephone calls and e-mail to users. To measure event-based satisfaction, they generally use one-time surveys completed by users soon after service encounters; the results are used to evaluate the performance of individual agents. To measure general satisfaction, they survey all users or a cross-section of the user base annually or at other regular intervals.

6. Customer satisfaction surveys are a critical component of a help desk quality assurance program. User surveys provide valuable information about areas in which the help desk is performing well and areas that need improvement. The most common method is to survey users immediately after they have completed calls to the help desk.

7. Call monitoring helps ensure that users receive courteous and efficient service from the help desk, and it is useful for training purposes. The most commonly used monitoring techniques are real-time remote monitoring and call recording. Many help desks monitor e-mail and fax correspondence and Web instant chat sessions as well as telephone calls. Side-by-side monitoring by a manager at a support specialist’s workstation is most often used to provide immediate feedback to new agents.

8. Common help desk operating costs include staff salaries and benefits, external services, training, equipment purchase or lease, hardware and software maintenance, and facilities overhead.

9. The quality of service must be balanced against the cost of providing service. The standard way to determine cost per call is to divide annual operating and overhead costs by the number of calls received for the year. Costs fluctuate widely according to help desk structure, the services provided, and the definition of call.
Chapter 7 Review

Key Terms

The following terms were defined in this chapter:

- auxiliary time
- available time
- average abandon rate
- average handling time (AhT)
- average hold time
- average speed to answer (ASA)
- average work time (AWT)
- call monitoring
- call recording
- cost per call
- customer satisfaction
- drive-by
- event-based satisfaction
- first call resolution (FCR)
- overall satisfaction
- performance measurement
- quality assurance
- real-time remote monitoring
- return on investment (ROI)
- service-level management
- side-by-side monitoring
- total number of calls

Reviewing Key Terms

Write the letter of the key term that matches each definition below:

1. A measurement that compares the cost of providing support to the value of a support group’s services and benefits.
2. A metric that measures the average time callers are on hold.
3. The customer’s perception of the service that is being provided by the help desk.
4. A type of monitoring that takes place at an agent’s workstation to give agents immediate feedback on their performance.
5. A metric that measures the amount of time an analyst spends out of the queue performing work required to complete the call after hanging up the telephone.
6. A metric that indicates the percent of incidents that are resolved by the help desk on the initial contact.
7. The process of observing and evaluating agent performance for quality assurance and training purposes.
8. A type of call monitoring in which a manager overhears an agent’s phone conversation with a user while passing by and stops to provide feedback.
Reviewing Key Terms (continued)

9. A metric that reflects the amount of time each help desk analyst is unavailable to receive calls due to time spent performing non-phone support tasks.

10. A metric that measures the average time it takes an agent to resolve a user problem.

11. A metric that reflects the amount of time each help desk analyst is logged into the ACD system waiting to take calls.

12. A relatively new type of call monitoring that uses various technologies to record actual help desk calls for later analysis.

13. A measure of customer satisfaction obtained from one-time surveys completed by users soon after service encounters.

14. A metric that measures the average amount of time from when a call is placed until it is answered by the help desk.

15. A type of call monitoring in which a manager listens to calls without being present at the agent’s workstation.

16. A metric that reports the percentage of calls that come into the help desk but are not answered by a help desk analyst.

17. A metric that indicates the number of distinct user problems a help desk receives in a fixed period of time.

18. The people and systems that allow an organization to ensure that it meets the terms of its SLA and that necessary resources are provided efficiently.

19. A measure of customer satisfaction determined through the use of ongoing surveys conducted at regular intervals.

20. The process of monitoring whether services being provided meet the needs of users.

21. The average cost of responding to each service request.

22. The monitoring of help desk performance to determine the level of service provided

Reviewing Key Facts

True/False
Identify whether each statement is True (T) or False (F). Rewrite the false statements so that they are true.

1. Effective SLAs are developed with input from users as well as the help desk.

2. Creating an effective metrics program requires minimal time and effort.

3. A measurement of the total number of calls should include tickets generated by e-mail, voice mail, and a Web site.

4. A low average handling time (AHT) means that a help desk is performing efficiently.
Chapter 7 Review

Reviewing Key Facts (continued)

5 Help desk analysts assigned to telephones should spend all of their time answering calls from users and resolving their problems.
6 If a help desk exceeds its service level goals every month, its goals may be set too low.
7 Best practices indicate that at least 90 percent of the customer base should rate their overall satisfaction with the help desk as “satisfied” or better.
8 The results of annual customer satisfaction surveys are used to appraise the effectiveness of individual help desk agents.
9 In an effective monitoring system, analysts are told which lines are not monitored.
10 The standard cost-per-call formula is the number of calls received divided by the total salaries of the help desk staff.

Completion
Write the answer that best completes each of the following statements:

1 The services covered by an SLA must be built around _______ events.
2 Some help desk metrics, including the average abandon rate, are obtained directly from the _______ system.
3 The selection of performance metrics should be _______ periodically.
4 Customer satisfaction surveys are a regular part of a help desk _______ program.
5 The main expense of a help desk is its _______.

Understanding Key Concepts
Provide brief answers to the following questions:

1 What are the benefits of Service Level Agreements to help desks and users?
2 Help desk metrics are obtained from what sources?
3 What tools does management use to ensure that help desk service quality levels are being met?

Critical Thinking
As directed by your instructor, write a brief essay or discuss the following issues in groups:

1 Should an SLA for a new service use aggressive service standards or conservative service standards? Why?
2 When should a support manager consider adjusting the help desk’s performance goals?
3 What is the relationship between customer satisfaction and standard metrics?
Help Desk Projects

Complete the projects listed below:

1. Use a Web browser to find two ACD products. Compare them in terms of the metrics they provide, and discuss how those metrics would be useful to a help desk.

2. Interview your school's technical support manager about the metrics the school uses for evaluating help desk performance. Find out where the manager obtains the metrics, how the metrics are used, and how often performance goals are reevaluated. Write a report about your findings.

3. Invite one of your school's help desk analysts to speak to your class about how much time he or she spends handling (a) telephone calls and (b) other duties. As a class, interview the analyst about the risk of burnout and the importance of spending some work time away from the phone.

4. Use a Web browser to find Service Level Agreements for two different organizations. Evaluate and compare the agreements in terms of what you have learned in this chapter.

5. Work with several classmates to create a questionnaire for users that would measure event-based satisfaction. Decide how and when you would distribute the questionnaire and how you would use the responses in managing a help desk.

6. Work with several classmates to create a survey that would enable a help desk to measure overall customer satisfaction. How often would you distribute the survey? To whom would you distribute the survey, and by what means? How would the results be useful?

7. Imagine that you are the help desk manager for your school. Using what you have learned in this chapter, create a draft of a Service Level Agreement that you would present to the school's directors as a starting point for negotiating a final agreement.

8. Form a team with two classmates. While two of the team members play the roles of caller and help desk analyst during a service call, the third should use the call monitoring form in Figure 7.2 to evaluate handling of the call. Switch roles so that each person on the team acts as both an analyst and an evaluator.

9. Use a Web browser to research help desk management software products. Identify two products from different companies, and compare them in terms of features that would help with metrics and Service Level Agreements. If you were a help desk manager, which product would you select? Why?
Help Desk Strategies

Review the following case studies and respond to the questions:

1. At Rayden Equipment Corp., sales rose 18 percent last year and set a new record. Help desk metrics show that the average time on hold has decreased from 70 seconds to 40 seconds in the past year, and the average call handling time is now 11.6 minutes, nearly 20 percent lower. The total number of service requests is up slightly, and most of the calls come from the sales and marketing departments. The last annual survey found that 88 percent of the employees who used the help desk were satisfied with the service they had received. Seventy-one percent of the help requests were resolved on the first contact with the user. The average abandon rate is about the same as last year’s, at 6 percent. Agents now spend 21 percent of their logged-in time on auxiliary tasks and 10 percent waiting for calls.

- If you were the help desk manager, what information would you emphasize in a report on the help desk’s performance to the company’s senior management?
- In your report, would you suggest that the help desk staff be increased? Explain.
- Do the metrics indicate that the help desk should receive additional training? Explain.

2. The help desk at Foodsmart, a large regional grocery store chain, sends the following questionnaire to users immediately after their calls to the help desk are resolved:

   Thank you for contacting the Foodsmart Help Desk. To help us in our effort to continue providing the highest level of service, please take a moment to answer these questions about your most recent experience with us.

   Did the Help Desk succeed in helping you resolve the problem?
   Were you treated courteously?
   Please rate the Help Desk’s response to your request as one of the following: (a) Excellent; (b) Satisfactory; (c) Somewhat disappointing; (d) Completely unsatisfactory. __________
   How many times per year do you call the Help Desk, on average?

- Is the number of questions appropriate?
- If you were the help desk manager, would you make any changes to the questionnaire? Explain.

3. The help desk supervisors at Bridgeport Pharmaceuticals monitor at least two calls handled by each help desk analyst on every shift. The supervisors use electronic monitoring equipment to listen in on the calls. The analysts know that some calls are monitored, but they do not know when the supervisors are listening. While monitoring each call, a supervisor uses a form to evaluate the analyst’s handling of it. The supervisors do not share their findings with the analysts. Instead, they give the forms to the department’s manager, who uses them as the basis of analysts’ twice-yearly performance ratings. The manager also reviews the information for patterns that indicate a need for more training of individual analysts or the help desk as a whole.

- What type of call monitoring does this represent?
- Is the information gathered from the monitoring being used as effectively as possible? Explain.