# Measuring for Service Level Management

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Providing the basis for managing relationships between the IT service organization and its customers, service level management deals with how user service requirements are understood and managed.  Service level management covers a variety of activities related to planning, monitoring and reporting.  In this article, we describe the minimum set of data and measurements required for effective service level management. Then, we list factors critical to the success of data gathering and measurement. With the ongoing monitoring and evaluation of key indicators and metrics, the IT service organization is in a better position to ensure the required quality of service is provided in cost-effective ways.

## Benefits of Service Level Management

Many benefits can be realized from a well-implemented service level management discipline.

**Harmony between the user and the IT organization -** The most important benefit is that the IT organization gets an accurate picture of what the users need. This may sound trivial, but the lack of well-implemented service level management disciplines causes most of the rifts between IT and users. A Service Level Agreement is a give-and-take relationship between IT and users - users articulate what they need, and IT gains support in getting the resources needed to provide it. Both parties must realize that any requested service may be provided, but none come free.

**Efficiency of IT operations -** Another advantage of having a Service Level Agreement is that IT can allocate just enough resources towards what the users really need. The Service Level Agreement reminds IT of what really matters to the business, so it does not waste resources providing services that are no longer needed, or are too complex and advanced for users. We have seen many IT organizations spend a fortune on technology products that users don't need, simply to create the illusion that IT is on the cutting edge. However, any admiration from users is short-lived if they do not gain any business advantage from those advanced products or services.

**Improved user satisfaction** - A user of any computing resource will be satisfied if his perceived satisfaction level is exceeded. With a Service Level Agreement, IT has an opportunity to set this expectation level realistically. IT now has a better chance to satisfy its users, since satisfaction is no longer arbitrary or subjective.

## Data and Measurement Requirements

In this section, we describe the minimum set of data and measurements required for effective Service level Management. Then, we list factors critical to the success of data gathering and measurement.

**System configuration data** — The hardware, software, and other system components installed. The system connection diagram, as well as how the separate components interact with one another. This information is essential for understanding the costs of achieving target service levels.

**Cost of system operation** — The operational costs of running the system, such as:

- Staff requirements
- Recurring costs of hardware, software, and supplies
- Vendor support requirements (e.g., maintenance contracts)
- Power, air conditioning, and other environmental costs

**Service level measures** — The measurements related to the service level targets specified in the Service Level Agreement:

**Industry benchmarks** — Performance targets accepted in the industry as practical and achievable.

**Problem history data** — Information to aid in analysis and reevaluation of the Service Level Agreement.

We recommend the following measures with respect to the performance of service level management:

**End-user satisfaction rating** — A measurement derived from periodic surveys asking users how satisfied they are with the service provided by the IT organization.

**Attainment of service level targets** — A measurement of how often the IT organization was able to achieve the service level targets documented in the Service Level Agreement. Data factors that are critical to the success of service level management are:

**Essential service performance measures are available -** We have seen service level planning sessions become a waste of time because IT did not prepare sufficient system historical performance data. Without this information, users will have no restraints as to what target to ask for, and IT can neither validate nor argue against user requests.

**Industry performance benchmarks on hand to validate set targets -** IT will naturally set a low target, whereas users will always ask for a high target. Industry benchmarks assist in service level negotiation process, because they provide objective values that have been achieved elsewhere. Service targets based on industry benchmarks should be more easily acceptable to both IT and users.

**Users appreciate the costs of desired service levels -** Users always ask for the earth and sky, so you must make them aware that they will pay the cost directly or indirectly. By doing this, you require users to evaluate what they want versus what the business can afford. Treating IT as a business — with its own cost and revenue infrastructure — reinforces the cost issues to users.

**Organization Requirements**

People responsible for service level management should have the technical skills to understand the capabilities of the existing computer system as well as alternatives currently available in the market. They should also have data gathering skills to collate measurements related to service levels. During the creation of the service level document, negotiation skills play a crucial role in its success. Management should choose the right participants in the service level negotiation activities and give them full authority to decide on behalf of all the other users.

The following organizational factors are critical to the success of service level management:

**Support from senior management -** The Service Level Agreement should be a covenant between the highest management of both the IT organization and the users. This ensures that it will be backed with the proper focus, attention, and resource allocation.

**All users are represented during negotiations -** Since the aim of a Service Level Agreement is to cover all services service level agreement's aim is to cover all services provided to users, it is but fair that all user groups are represented. If one or two are neglected, sooner or later their complaints will reach high management and you would have to redo your Service Level Agreement. This is because any additional service to be provided to users will impact the IT organization's overall capability of meeting the entire Service Level Agreement.

**Tools Requirements**

Apart from the typical office productivity tools needed during the creation of the Service Level Agreement, many of the tools required for Service Level Management measure specific service targets. It is difficult to manually measure from the user's point of view - either users must perform the measurements themselves, or an IT representative must go to the user location, interrupt the user, and perform the measurement. There are few tools to help - those that are available simulate user keystrokes and record response times. These automated measurement tools must be deployed judiciously, as too many online measurements can degrade system performance.

Tool-related issues critical to the success of service level management are:

**Service level document accessible to all users -** The Service level Agreement should be read and understood by all members of the IT organization, as it forms the basis for how they will be judged by the users. Users should also have access to this document in case they would like to know more about the system that they use and what to expect (e.g., when the application is available, and how fast it should run.)

**Measurement of service level targets done with minimal intervention -** When IT staff find themselves too busy (as is often the case), they set aside monitoring and measuring activities all too often. Worse, if measurements are performed manually, there is greater risk

of error, whether accidental or intentional. Accordingly, measurement should be automated whenever possible.

A user of any computing resource will be satisfied if his perceived satisfaction level is exceeded. With a Service Level Agreement, IT has an opportunity to set this expectation level realistically. IT now has a better chance to satisfy its users, since satisfaction is no longer arbitrary or subjective.