

# AGENT UTILIZATION AS A SERVICE DESK METRIC



Despite the proliferation of intelligent service support options, AI-powered [chatbots](#), and [ITSM frameworks](#), service desk agents are still the heart of successful IT serviced delivery and support. IT consumers and end users want to talk with human staff who accurately and empathetically provide the necessary IT support in the fastest way possible. Business organizations, on the other hand, may see manual support processes as cost centers, especially considering service desk budget limitations and the advancement of automated support solutions.

Investing in your [service desk staff](#) has obvious advantages: customers receiving high quality support are likely to continue supporting your business. Avoiding this expense, however, is detrimental. Robotic and boilerplate communications by automated and under-optimized chatbot technologies likely result in customer dissatisfaction.

Both situations are difficult to evaluate without tangible metrics that can quantify these consequences with high accuracy. Luckily, several service desk metrics and KPIs correlate sufficiently with factors involved in service investment decisions and strategies. One of these metrics is **agent utilization**. Let's look at what agent utilization is, including:

- Why, when, and how to use the metric
- Industry-proven best practice guidelines in context of ITIL and ITSM frameworks

# What is agent utilization?

Agent utilization is a measure of service desk support staff productivity. It can be defined as the ratio between Work Produced by a staff agent to their Work Capacity. The mathematical formula is:

$$\text{Agent Utilization} = \frac{\text{Work Produced}}{\text{Work Capacity}}$$

## Challenges with the agent utilization metric

The metric's calculation is where its simplicity ends. The definitions of **Work Produced** and **Work Capacity** are both rather subjective. Calculating these parameters realistically and accurately is complicated. In fact, organizations must strategically approach the task of *defining* these parameters, since these definitions have a strong bearing on the resulting agent utilization value.

### Defining 'Work Produced'

Work Produced generally comprises a range of activities or engagements involving service desk agents. Common definitions of Work Produced refer to the number of inbound or outbound contacts handled by the agent over a specific time period.

Not all support contacts are the same, so the nature of each contact must be evaluated and accounted for within the calculations. Critical, repetitive, and resource-intensive contacts must have a different weight than non-critical support requests solved with a single support request. Further, the Work Produced should be evaluated across different periods, considering the varied workload requirements throughout the year.

### Defining 'Work Capacity'

Similarly, defining Work Capacity to indicate both real-world performance and limitations is also complicated. The Work Capacity of support staff varies with seasons, workload, type of support requests, and the unpredictable circumstances concerning individual employees.

## Adjusted agent utilization ratio

These limitations should be accounted for, as accurately as possible, to produce a ratio between Work Produced and work that is both real and insightful for business organizations.

Here's an [example](#) of agent utilization metric used in practice:

$$\text{Agent Utilization} = \frac{\text{Average \# Contacts Handled in X Time} * \text{Avg. Time Spent per Contact}}{\text{Average Number of Working Hours in X Period}}$$

## How to use the agent utilization metric

The agent utilization ratio is directly related with two vital service desk concepts: [IT support levels](#) and the [cost per ticket metric](#). Organizations aiming to decrease their **cost per ticket** may choose to increase agent utilization, either by increasing Work Produced or reducing Work Capacity. Accordingly, the level of service that an IT organization can offer to its end users is also affected.

Increasing Work Produced requires your service desk agents to be more productive. Appropriate service desk strategies and frameworks must be followed to streamline the service capacity across all service levels. If the Work Produced is measured in terms of service contacts concluded successfully, then a change in process and technologies must be considered. Appropriate [IT service models](#) must be followed.

Work Capacity can be increased with a simple strategy: employ more support staff. Considering the [IT skills gap](#) in the competitive job market, less-predictable and diverse changes to service level requirements, and availability of effective technologies, this is not necessarily an immediate solution for companies looking to increase service desk support capacity. As an unwanted consequence, the existing limited service desk staff is often overwhelmed with high support requests. This further affects workforce productivity, reducing the agent utilization metric in value.

Organizations may not want to over-staff their service desk department considering the proportional increase in cost per ticket. At the same time, aggressive service levels can be hard to realize when expert service desk professionals are not available to follow up on critical support requests.

This suggests that the agent utilization metric is more than just a target required for the service desk staff to aim for. IT organizations can study this service desk metric to understand the levels of service expected by end users, the capacity of their support agents, and the impact of HR decisions on business outcomes.

This is a cause-and-effect cycle with a potential for broad implications in the way business organizations can operate and perform.

## AI Ops for the service desk

A common goal of every organization is to reduce and potentially eliminate cost-centers in favor of profit-centers. In this era of technology-driven business, most organizations eye manual service support capabilities as an investment that offers limited business proposition.

With advancements in AI, service desk support may be [automated altogether](#). In such a situation, the agent utilization ratio will be replaced by an appropriate metric that evaluates the utilization levels of AI-chatbots or other automated technologies.

## Additional resources

BMC Blogs has many resources on IT service desk metrics and best practices. Browse our [Enterprise IT Glossary](#) or see these articles:

- [Help Desk vs Service Desk: What's The Difference?](#)
- [Mean Time to Resolve \(MTTR\) as a Service Desk Metric](#)
- [Introduction to Critical Incident Response Time \(CIRT\): A Better Way to Measure Performance](#)
- [Creating a Service Desk Code of Conduct](#)
- [Introduction to the Enterprise Service Desk](#)