

Staffing level projections and agent schedules

The Call Center Learning Center is excited to announce a new tutorial series on workforce management in call centers. This tutorial series will pull from Prosci's research-based toolkits and best practices reports. [Module 1](#) introduced the workforce management process. This module takes a closer look at collecting personnel data and determining staffing level projections and agent schedules. Module 3 will focus on measuring schedule adherence. Module 4 will conclude the series with best practices in workforce management.

The Workforce Management Process

The workforce management process was introduced in [Module 1](#) of this tutorial series. Workforce management is an **ongoing process** that requires monitoring and adjusting to the dynamic customer demand patterns and agent availability. Figure 1 illustrates the workforce management process.

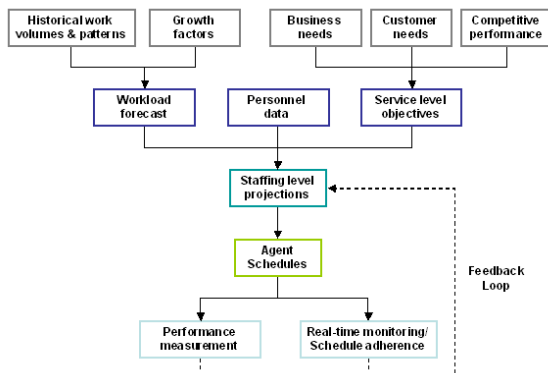


Figure 1 - Workforce management process

This module, the second of four in this series, will focus on collecting personnel data and determining staffing level projections and agent schedules.

Personnel data

Personnel data is the skills and schedule preferences of each call center agent. This information is combined with your workload forecast and service level objectives to determine the agent schedules.

Agents should be profiled according to their **on-the-job capabilities**. The skills you should consider in your contact center are dependent on your contact strategy, and business and customer needs. Some important skills to consider in the profile include the following:

- Sales competencies (includes "cold-calling", cross-selling, etc.)
- Relationship-building skills
- Technical knowledge of your company's product or service
- Problem-resolution skills
- Knowledge of computer systems and applications
- Ability to work in different channels (phone, email, live chat, etc.)

The data collected from the agent skills profiles is an essential part of the scheduling process. Managers will need to be sure that all shifts have adequately skilled agents scheduled to meet performance goals and customer needs.

The other component of personnel data is agent schedule preferences. This includes what time of day agents prefer to work (early or late, day or evening), preferred length of shift (part-time, full-time), requested vacation days, and desired work days (weekdays, weekends).

Staffing level projections

Establishing your call center's staffing requirements is based on workload forecast and service level objectives, as illustrated in Figure 2.

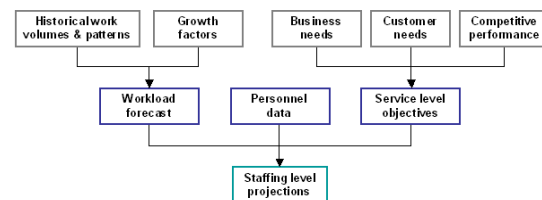


Figure 2 - Information necessary to determine staffing level projections

The following items are important considerations when staffing your center:

- **Hours of operation.** Extended hours impact staffing levels and team structure. If you are a 24x7 call center you may have significant staff level variations at different times of the day.
- **The mix of full-timers, part-timers, permanent and seasonal employees.** More part-timers and seasonals will give you a greater ability to vary the schedules in line with volume fluctuations. However, you will have more training to deliver and your recruitment costs will increase.

- **Volume fluctuations.** Your center will have average periods, quiet periods and peak periods. Build in the flexibility and capacity to handle all of these without wasting resources.
- **The support staff.** Staffing levels will impact the need for team leaders/supervisors, business analysts, managers, technology experts, and trainers.
- **Your occupancy and service targets.** These performance metrics will influence tradeoffs of staffing levels.
- **Specific CSR skillsets.** Your staff levels need to match for each skill set throughout the day.
- **Multimedia contacts and blending.** Staffing needs will vary for different media and blending contacts can add efficiency.

Follow these steps to determine staffing level projections:

1. Gather the **forecasted contact volumes and types** you developed for your call center (see [Module 1](#) of this tutorial series for more information)
2. Gather the **service level objectives** you developed for your call center (see [Module 1](#) of this tutorial series for more information)
3. Develop a **"typical week" table** by distributing the volumes and contact types across the days of the week and the hours or half-hours of the day. Figure 3 shows a version of this table for one-half day in a multi-media contact center. You will need to complete a table that includes the volume and contact type forecast for each day of the week.

Time of day	Phone	Email	Web chat	Fax	Postal mail
8:00 AM					
8:30 AM					
9:00 AM					
9:30 AM					
10:00 AM					
10:30 AM					
11:00 AM					
11:30 AM					
12:00 PM					

Figure 3 - Example of workload forecast table for one-half day in multi-media contact center

4. Calculate the **base staffing requirements** using Erlang tools or other workforce management applications. Base staffing will tell you how many active agents are required in each time interval. Erlang tools are incorporated into most workforce management systems. If you are not currently using a WFM system or if you are not familiar with Erlang tools, you can use [free workforce management calculators online](#).
5. Add in **rostered staff factors**. Rostering boosts the necessary staff level to account for "unproductive" or "non-contact" time, such as breaks, lunch, training, vacation, sick time and utilization factor (the percentage of time agents are taking calls while logged into the ACD).
6. Create a variety of model or "dummy" schedules and **run simulation models** to test the impact on service level and occupancy. Produce an aggressive model, a conservative approach and a mid-point model.
7. Based on these test results, **select the optimum model for your call center**. You can now begin to actually translate staffing level projections into agent schedules. Don't forget to refer to each agent's personnel profile when formulating the schedule.

Workforce Management Systems

Creating work schedules manually is a very time-consuming and sometimes very frustrating duty. Workforce management systems (WFM systems) automate the process of creating work schedules. Using a WFM system in your call center has some key benefits, including the following:

- Ensures the right number of resources are scheduled to match projected workload, thereby optimizing cost and service level
- Allows for greater flexibility
- Reduces labor costs to create and administer employee work schedules
- Improves accuracy in forecasting for budgeting purposes
- Enables more creative scheduling options (e.g. part-time, split shifts, 4 day weeks)

There are several types of tools for calculating staff work schedules with varying levels of sophistication:

- Spreadsheets or simple call center calculators
- Basic workforce management systems
- Fully integrated, skills-based, multimedia workforce management systems

You will need to determine the level of automation your contact center requires for its scheduling and forecasting processes (e.g. large center, multimedia handling, skills routing, multiple work shifts, etc.)

An Ongoing Process

Now that you know all of the steps needed to create agent schedules, it is important to remember that workforce management is an ongoing process. You will need measure your call center's performance with the new schedule and make necessary adjustment if your performance objectives are not met. It is recommended that you use the [Call Center Measurement Toolkit](#), a guide to help you accurately measure key performance indicators (KPIs) that may be affected by changes to your staffing level projections and agent schedules. You will want to keep an eye on your service level performance, in addition to agent utilization, average speed of answer, and any other KPIs used in your call center.

Resource guide

Benchmarking Reports and Management Toolkits

[Call Center Measurement Toolkit](#)

How to measure and improve call center performance; an excellent guide to developing a performance measurement system with concrete recommendations for improving call center performance. Learn how to accurately measure service level, agent utilization, schedule adherence, and several more performance measurements essential to workforce management.

[Call Center Planning and Design Toolkit](#)

A comprehensive guide to call center strategy, planning and design; an excellent resource for new contact center start-ups, existing call center improvement and future planning with detailed templates and planning roadmaps. It includes detailed information on the Workforce Management Process and how to select an appropriate WFM system for your call center.

[Call Center Best Practices - Operations Edition](#)

Benchmarking report - Over 240 call centers from around the world share how they have improved service quality, productivity and customer satisfaction. This report shares lessons learned by call center managers regarding their most effective management practices. It also includes best practices in workforce management.

[Call Center Best Practices - Technology Edition](#)

Benchmarking report - this report shares lessons learned by call center technology managers regarding the most effective applications, systems and technologies that are having the greatest impact on call center efficiency, employee effectiveness and customer satisfaction. The report also includes in-depth data on best practices in workforce management tools and systems.