

## Ask the Expert:

Dave Brown on Customer Service



**A reader asks:** “What is the minimum number of customer service representatives necessary to justify use of a workforce management (WFM) system? And what do you do if you don’t have enough people to justify one?”

**Answer:** The two factors that drive the need for WFM are the complexity of the environment and the importance of meeting your service-level targets. If one or both of those factors is high, then it’s likely that you can justify WFM. More headcount increases the complexity of the scheduling task, but so do other things. You typically can cost-justify a WFM software purchase if you have 35 to 50 agents. If you are using (or planning to use) skill-based routing to route calls or e-mails to agents based on their particular skills, then you probably need WFM due to the added complexity.

The importance of consistently meeting service levels often depends on exactly what the call center does. For instance, if you’re taking orders (generating revenue), you probably can justify the investment at a fairly low headcount. That’s because not being staffed correctly can result in abandoned calls and lost sales. On the other hand, if you are a pure customer service operation, you’ll need to justify the cost based on improved utilization of your staff. Benefits also come in the form of increased customer satisfaction and loyalty as a result of the improved service levels you’ll be able to provide, but that’s more difficult to put a dollar value on.

But our reader wants to know what to do if she can’t justify it? A common issue I encounter is, “I can’t get approval to spend the \$100,000 for WFM software, even though I can demonstrate the ROI.” What then?

First of all, you **cannot** just build a spreadsheet model and base your staffing calculation on some ratio of calls-to-agents. Not if you want to have consistent service levels and proper utilization of staff. It just doesn’t work. There is a true science to creating staffing models—which must consider “random rate of arrival” and be based upon “queuing theory” (see sidebar). If you build a spreadsheet tool that does not apply these factors, you are doomed.

There are ways around this. I’ve worked with clients to build customized spreadsheets that **do** utilize the proper formulas. It’s not impossible, and the result is a tool that gets the job done, although it may require a little more effort and some manual steps (as opposed to the WFM software that automates the process). To do this, you need someone that is a “power user” of spreadsheets. They’ll also need a solid understanding of call center operations and how to

## Definitions

**Queuing theory** is a form of mathematical or statistical science derived from probability theory. The result of queuing theories are queuing formulas, such as Erlang and several others. The essence of queuing theory is to predict the likely time it will take in queue (i.e., the line at the bank or telephone hold time), based on a number of variables and probability formulas. One of those variables and required algorithms is the “random rate of arrival.”

**Random rate of arrival** refers to the fact that calls are not evenly disbursed in any given period. For instance, we might know that we’ll get approximately 60 calls in a particular hour of the day. However, it is unlikely that we will get one call every minute. Calls arrive at random. So a formula needs to consider the likely or possible rate of arrival (probability) when predicting the hold times.

apply queuing theory (staffing formulas). If you don't have those capabilities in-house, you probably can bring in the expertise and get this done for 25 to 50 percent of the cost of purchasing the WFM software.

For more information on scheduling methods and formulas, search the Web for "Erlang," or ask Dave to send you more info.

***Have A Tough Question?*** Submit your question to Dave at [dave.brown@SupportCenterU.com](mailto:dave.brown@SupportCenterU.com). He will respond to all inquiries, and if your question is selected for publication, you'll receive a complimentary copy of his book, *Optimizing Support Center Staffing*.

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