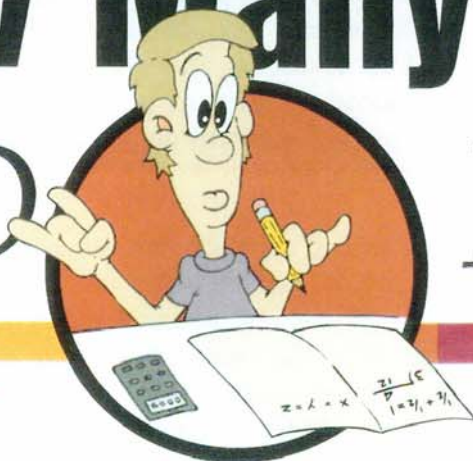


How Many Analysts

D I Need?



by Dave Brown

This time of year, I get a lot of questions about headcount forecasting. Many managers are struggling to create their plan for the New Year and, for some, it is an extremely critical issue. These managers will be committed to the plan and know they will have to jump through hoops if they need to ask for more people later. That pressure often leads to padding the plan (so you don't end up short), which in turn leads to a general lack of confidence in the accuracy of the plan. Implementing a Workforce Management (WFM) software package might seem to be a good solution. Then again, that may come with its own challenges!

Recently, the manager of technical support for a mid-sized software company sent me an e-mail. He said they had purchased a workforce management package primarily to create daily and weekly phone schedules. However, he was also under the impression that it would help with their annual headcount planning and now realized it would not create the complete headcount forecast that he needed. This manager was in a real predicament. He couldn't get what he needed from his WFM system and he couldn't afford to go buy something else. In fact, he had told his superiors that his WFM would "do" his annual headcount plan! Was there a way out of this sticky situation? I told him there was. Even though the WFM system didn't provide what he wanted, it could play an important role in the solution.

There are *three major steps* required to create a realistic headcount plan for the coming year. **First**, you must create the workload forecast. **Second**, you must calculate the required headcount to handle that workload. **Third**, you must calculate all the factors that have an impact on staffing. That may sound simple, but these three steps can be quite complex. *I'll walk through each.*

The first and most important step is to determine what your primary workload is going to be next year. I say primary because most support centers have a "primary" responsibility of responding to customer issues. However, there are other factors that affect headcount requirements, such as attending meetings with product development or getting training on new products. I'll discuss these other factors in step three. The primary workload is comprised of the calls and e-mails (or Web-generated cases) that utilize the majority of your capacity.

There are two options for projecting the workload. The first option is based on trends and this is the most common approach. It requires that you have good historical data of the volume of calls, e-mails, etc. that are received. You'll also need to calculate average handle time (AHT), first contact resolve rates (FCR), and average follow-up time (amount of effort required to close non-

FCR cases). Usually, the volume is not generalized, but is categorized by products, modules, or other factors that probably correlate with your staffing skill sets. It is also helpful to track arrival patterns, such as the percentage of weekly calls received on Monday, Tuesday, etc., and the percentage of calls received in the first hour, second hour, etc. One full year of data is adequate. If you have two or three years, that's even better.

There's no magic to this; you just need to be moderately fluent in Excel or a similar spreadsheet package. Use the historical data to project a standard "arrival pattern." This is a template that tells you what percent of activity will come in for each day of the week (or, depending on your business, possibly day of the month). Also, do this for each hour of the day. These should be percentages so that you can drop in any particular volume and your spreadsheet will distribute the volume across the days and hours.

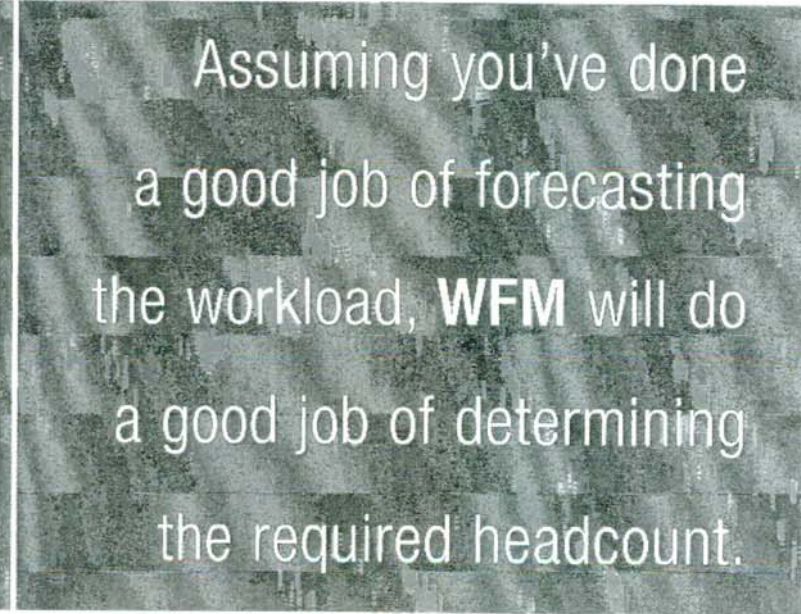
In addition to the arrival patterns, you'll need to plot growth trends (i.e., are calls increasing each quarter or month? By how much?). That's easy enough to do in

any spreadsheet. Then you'll need to use that trend (growth rate) to forecast the volume over the next year. You'll probably want to forecast (estimate) the total volume expected each month, then drop that volume into the distribution pattern spreadsheet. Before I discuss the other option for determining workload, I want to point out that most high-end WFM packages will do all or most of the work I just described for you.

The second approach requires that you understand all of the factors and variables that influence workload. For example, in one center I managed, we were able to determine the average number of calls that a new user would make during their first six months of ownership. We also determined that the calls would typically start coming in about a month after the product shipped. We then determined the average number of times the rest of the customer base would call during a year. Knowing the new customer call-rate and the existing customer call-rate allowed us to create a good forecast model. By tracking our customer base and working closely with sales, we were able to forecast our calls relatively

accurately. There are typically other factors that can be determined through good data analysis, such as the number of calls generated by a new release or what happens at year-end. Therefore, in this variation, you don't base your forecast purely on trends, but rather base it on ratios and forecasts.

Please note that both approaches can produce reasonably accurate forecasts, and that's all that really matters. If you're not expecting any big changes in your business, then basing your forecast on trends is fine. If, however, you expect a ramp up/down or significant new products or upgrades, then the second approach may be better for you. You must determine which makes most sense for your business.



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The second step is where WFM comes into play. What you'll need to do is take one of the monthly workload forecasts and run it through your scheduling process the same as if that was your current workload and you had to cover the phones, handle the e-mails, do the follow-up research to close the open cases, etc. Depending on what your forecast looks like, you might just run this simulation for your end-of-year volume and then create a ramp up plan to get from here to there. Alternatively, you might run twelve simulations and create a staffing requirement for each month of the coming year (or something in between).

I want to emphasize how valuable WFM software is in performing this part of the planning process. Assuming you've done a good job of forecasting the workload, WFM

will do a good job of determining the required headcount. All WFM software utilizes Erlang or some other complex formula to compensate for variations in call arrival patterns (a.k.a. random rate of arrival) and meet defined service level targets. WFM allows you to dial-in your efficiency levels, utilization factors, and acceptable abandon rates. It also allows you to easily perform "what if" scenarios. You can vary the service level target and see the impact that it will have on headcount. Moreover, you can answer that all-important question, "What will happen if I don't get the required headcount?" You can use WFM to predict your service levels (hold times) based on pre-defined staffing levels. If you're familiar with staffing calculations, you know that reducing headcount by 10 percent doesn't necessarily equate to a 10 percent reduction in service levels; it could double your hold times (or worse). WFM will give you the answers.

The final step in headcount forecasting is taking the headcount required to handle that primary workload and factoring in all the other requirements. For starters, you'll need to factor in sick time, vacation time, and training time. Most support centers have additional responsibilities such as attending product development meetings, reviewing documentation, creating articles for the knowledge management system, etc. You may even send your people into the field to do implementation and consulting assignments or pre-sales work. These are just a few examples of the staffing requirements that are not handled well by most WFM systems. On top of that, you'll also want to calculate the management and other overhead staffing levels. So, the WFM output becomes your baseline and then you add in these other factors to create your complete and accurate headcount plan.

Unfortunately, I have yet to find a WFM system that considers all these variables. That's why WFM will not generate your complete headcount plan for next year. However, WFM is an essential tool for daily scheduling and plays a critical role in the planning process I've described.



Dave Brown is a management consultant, teacher, and writer. Dave teaches management training programs for Support Center University (www.SupportCenterU.com). He also consults with selected clients to establish world class service operations and is considered an expert in the area of process improvement, staffing models, and change management.

Reach Dave at his office in Boulder, Colorado (303-494-4932) or by e-mail at dave.brown@SupportCenterU.com.