

# Multiskill, Multichannel Workforce Management

Is It Right for Your  
Contact Center?



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Not too many years ago, a call center managed its workforce by predicting the number of customer calls that would come in and scheduling agents to meet the prediction. Using Erlang formulas and early voice response systems, managers were able to forecast call volumes and effectively handle overflows when they occurred. But today's customers are using new contact channels, and businesses are implementing new technologies and management processes to handle those new channels and meet customer demands.

Call center managers in particular see the effects of these new demands. Today's customers use e-mail, Web-based orders, and faxes, as well as the telephone, to order products, take advantage of services, and request support. As new contact channels become more accepted and widely used, and customer bases become more global thanks to the Internet, the numbers and types of contacts will only increase.

*Call centers* will have to keep pace with the new technologies and evolve into *contact centers* that can manage the new customer contact channels. *Workforce management systems* will still forecast the number of customer contacts, but they will also have to forecast them by communication channel and contact type before they calculate staffing requirements. *Contact center managers* will have to make much more complex workforce management evaluations to meet customer demand and manage operations. And they will have to answer the even more pressing questions of which agents should deal with which contacts—and how. Most *contact center agents* will have to know not only how to handle phone interactions successfully, but also how to communicate effectively via e-mail and fax, interact by telephone and then respond by mail, and interact via the Web and telephone at the same time.

The CRM software industry coined the terms *multichannel* and *multiskill* to define these contact centers and agents, and CRM literature predicts the inevitability of the multiskill, multichannel contact center.

In this new multiskill, multichannel environment, workforce management applications are mission critical. They ensure that an agent with the right skill is available for every type of contact. Because of this, many workforce management vendors include multiskill, multichannel functionality in their software. Before jumping on the multiskill, multichannel bandwagon, however, decision-makers need to understand the capabilities of this functionality, in addition to the new contact center technologies on the market today. Even more important, they need to know the specific business and customer trends affecting their companies, so they can make the right decisions about whether and when to make use of the multiskill, multichannel functionality of today's workforce management solutions.

This paper will help executives and contact center managers understand the capabilities of the new multiskill, multichannel functionality as well as the issues involved in managing the multiskill, multichannel contact center, so they can make sound decisions regarding workforce management solutions.

# Multiskill, Multichannel Workforce Management

## The road to multiskill, multichannel functionality

The earliest call centers provided service via a single channel, the telephone, and used single-skilled-agent queues. With the advent of ACD skills-based routing technology, call centers were able to route contacts to specific multiskilled-agent queues, to serve customers more effectively and gain economies of scale. With the introduction of new contact channels such as the Web and e-mail, call centers have evolved into contact centers able to serve customers via any contact method the customers choose.

Each of these technological advances have increased the complexity of call center forecasting and scheduling, however. As a result, today's contact centers require accurate planning for diverse routing and agent-skill configurations, in order to ensure the optimal level of customer service at the lowest cost.

To help contact center managers with their planning, most workforce management software solutions offer various levels of multiskill, multichannel functionality. But the key to successful use of this functionality begins with contact center managers understanding their unique business processes and customer service objectives. Then they can accurately determine what workforce management capabilities to deploy and how to take advantage of those capabilities in their contact centers' unique environments. Some centers may benefit from employing multiskill, multichannel forecasting and scheduling capabilities, but others may not.

Perhaps right now your center is handling only inbound telephone contacts, but you are exploring other contact channels, such as e-mail and Web, and you want to know what it's really like to forecast and schedule for the new contact channels. Or perhaps some of your customers already contact you by some method other than telephone calls. If so, you've probably discovered that your workforce management tasks have rapidly multiplied far beyond what you expected. Now you must:

- Forecast the number and type of customer contacts.
- Calculate the resulting staffing requirements.
- Determine which agents should deal with which contacts and how.

Either way, you have begun to learn how complicated it can be to manage the multiskill, multichannel contact center workforce.

## Are you ready to move to multiskill scheduling?

- Are you interested in skill blending because your inbound agent group is overstaffed?
- What kind of experience do you want your agents to have?
- Are you using blending to motivate and retain your senior agents?
- Are you blending because you can't meet existing goals any other way?
- Are you using technology, like predictive dialers, to facilitate blending, or are you blending tasks manually?
- Does your technology support and report on all tasks being performed?
- Do you have historical data that predict patterns?
- Do you use dedicated blending or dynamic blending?
- Do you blend contacts only in emergencies or as standard operating procedure?
- Are your blended tasks similar?
- How do you determine which tasks have priorities?
- Can non-priority tasks be deferred without missing service goals?
- Are your agents trained to perform all tasks?
- Is blending creating more motivated staff or creating burnout?

*As the quiz above demonstrates, you need to answer many questions before you decide whether multiskill scheduling is right for your center.*

Before you purchase technology to solve these complex contact center issues, remember that two thirds of your costs are still related to staffing. Workforce management is still both the art and the science of putting just the right number of resources in place at exactly the time you need them. In other words, remember the basics of workforce management and take the time to determine whether multiskill, multichannel workforce management is right for your contact center.

***“The overarching purpose of workforce management technology is to put the right staffing resources in the right places at the right times, to produce a quality customer interaction.”***

*Workforce Management Software Market Report 2000*

Frost & Sullivan

## The basics of workforce management

Initially, there were three drivers behind workforce management:

- The random arrival of customer calls
- Service expectations
- Operational and budgetary needs

Workforce management originated because calls arrived randomly, and call centers had no control over when customers would pick up the phone and dial. While 200 calls might arrive at the start of the business day, only 10 calls might arrive two hours later. With experience and the help of Erlang C formulas, call center managers learned how to predict call volumes. So while the calls continued to arrive randomly, they could be predicted down to the number of calls, average handle time, and call patterns. Now your experience and tools enable you to forecast busy time-of-day and day-of-week patterns, and you staff accordingly.

Enter multichannel contacts. Have the three basic workforce management drivers—random contact arrival, service expectations, planning needs—changed? No. But the complexity involved in forecasting, scheduling, and tracking, not to mention meeting customer needs satisfactorily, has increased exponentially. Now your center must respond to customer phone calls, e-mail, Web interactions, and faxes, in addition to making outbound contact via all of these channels.

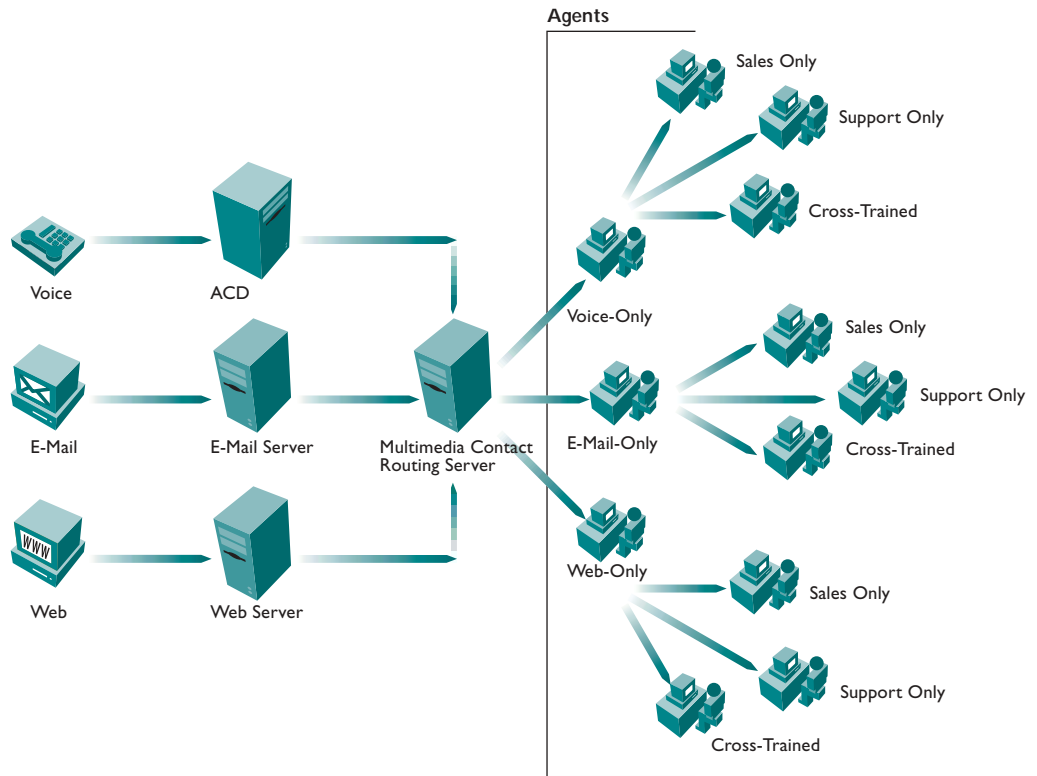
It may be clear that your call center ought to expand to a multichannel contact center, but it may not be clear that your staffing and scheduling ought to expand from single-skill to multiskill to handle multichannel contacts. For example, is it better to staff and schedule single-skilled agents (support only or sales only) for each channel, or would it be better to have only cross-trained agents to handle both types of contact?

***“The growth of multimedia contact methods, the increased importance of skills-based routing, and the proliferation of virtual contact centers is adding to the complexity of staffing and forecasting for customer contact centers.”***

*Workforce Management Software Market Report 2000*

Frost & Sullivan





The truth is that some multichannel contact centers function more efficiently with single-skill staffing and scheduling, while others do better with multiskilled agents. How do you decide which is right for your center? Your first step is to consider the various approaches to multiskill staffing and scheduling and weigh the pros and cons of each.

## Three approaches to multiskill scheduling

When single-channel becomes multichannel, does single-skill automatically become multiskill? Not always.

In a traditional call center, you forecast your workload, calculate staffing needs based on your service goals, create staff schedules, and then track staff performance against your initial goals and plan. When the traditional call center goes multichannel, however, you need agents with various skill types to handle those channels and you must decide how to schedule and train (or cross-train) them. You reach this decision by determining whether single-skill scheduling is sufficient or whether you need to expand your single-skill operation to include one of these approaches to multiskill scheduling:

- Block-of-time scheduling using multiskilled agents
- Mixed scheduling using a combination of single-skilled and multiskilled agents
- Scheduling for full contact blending using multiskilled agents

Each approach uses different degrees of multiskill scheduling and offers different levels of economies of scale, so you have to consider carefully how each approach would apply to your contact center.

### Block-of-time scheduling using multiskilled agents

One of the first approaches contact center managers use in scheduling multiskilled agents for additional work is to use block-of-time scheduling. Many multichannel contact centers schedule blocks of time during which an agent works on one type of contact at a time. The blocks can be an entire shift or week, but more commonly span an hour or two within a shift. Block-of-time scheduling requires that some agents learn multiple skills, but requires them to use those skills only at certain points in their day. It allows them to keep their skills active, and it gives them variety in their workdays.

For example, a contact center could schedule an agent group to handle inbound telephone contacts from 8:00 a.m. to 10:30 a.m., respond to faxes from 10:30 a.m. to 11:30 a.m., answer e-mail messages from 1:30 p.m. to 2:30 p.m., and so on. A comprehensive workforce management product will have a tool that automatically plans the activities based on the staffing group and other defined parameters. The process is similar to optimizing projects and breaks.



Block-of-Time Scheduling

Block-of-time scheduling is the first step for many contact centers on the road to implementing true contact blending. It utilizes their multimedia contact routing server's skills-based routing technologies and their workforce management solution's multiskill, multichannel functionality.

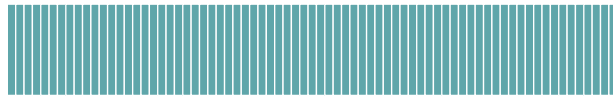
### Mixed scheduling using single-skilled and multiskilled agents

Another multiskill scheduling approach is to set up a cross-trained agent group dedicated to handling a mix of contacts. The concept is based on having one or more destinations for each contact type or channel. Aimed at making the contact center more effective, this approach may also reduce staffing costs. The dedicated multiskilled (or cross-trained) group has skills for handling several types of contacts (such as service, sales, and support) and/or multiple channels (such as telephone, e-mail, and Web), while the other agent groups handle only one contact type and/or channel.

Let's say, your contact center accepts two types of customer contacts—service and sales. You could establish one agent group to handle service contacts, another to handle sales contacts, and a multiskilled (or cross-trained) agent group to handle both types of contacts. The contact center could thus employ agents only able to take service contacts and agents only able to take sales contacts, as long as it also employs agents able to handle both service and sales contacts. Using a mixture of single-skilled and multiskilled agents provides you with options for routing one group's contacts to the multiskilled (cross-trained) agent group. You could route sales contacts, for instance, to both the sales agent group and the multiskilled agent group.



Single-Skilled Service Agents (All Day)



Single-Skilled Sales Agents (All Day)



Multiskilled Service/Sales Agents (All Day)

■ Service  
■ Sales

Many workforce management applications provide the ability to implement this type of staffing and take advantage of the skills-based routing technology of various media servers, such as ACDs, by modeling their skills-based routing configuration in the forecasting and scheduling process.

### Scheduling for full contact blending using multiskilled agents

A third approach to multiskill scheduling is full contact blending. In this approach, both the workforce management software and the multimedia contact routing server determine periods of availability in each agent's schedule for inbound call handling, and match "free" agents to other work. This method involves charting the incoming contact workload as it arrives in peaks and valleys and filling in the agents' slack periods with other work, such as outbound calling, e-mail response, Web transactions, or other activities. For example, you can blend the e-mail work with the telephone calls, fitting the e-mail in between calls.



This approach allows contact centers to get the maximum benefit of economies of scale, where every agent is cross-trained to seamlessly react to any changes in contact volume. If few e-mail messages arrive, agents spend a greater proportion of their time processing other contacts, such as Web transactions or telephone calls. If a flood of e-mail messages arrives, agents can spend more time answering e-mail and less time processing other contacts. It also allows multiskill agents to work all their skills all the time.

## Pros and cons of multiskill staffing and scheduling

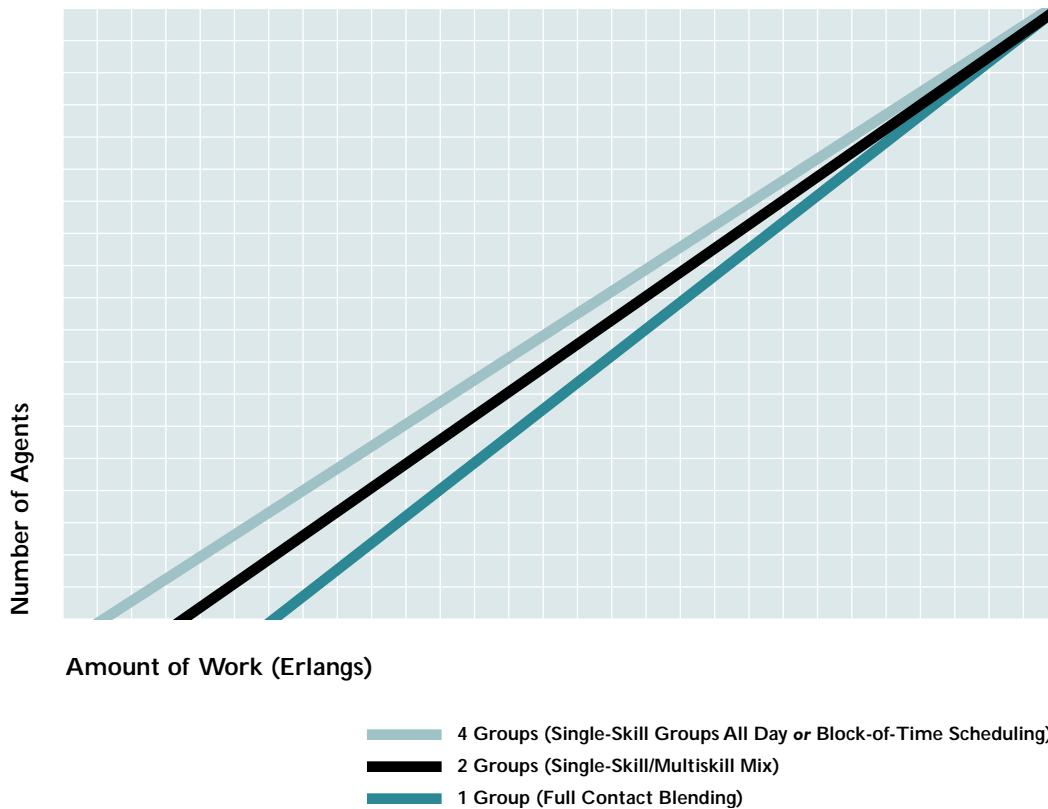
Multiskill staffing and scheduling offer many benefits. You have access to more agents when each agent can handle multiple types of work and you haven't divided the work pool into smaller single-skill groups. You can use more of the skills of each individual agent, which can increase employee satisfaction and make it easier to retain agents. You have more flexibility in the way you handle contacts. And, finally, because you can handle more contacts with fewer agents, you can achieve greater economies of scale and lower costs.

Of the three approaches described, full contact blending offers the greatest potential for realizing economies of scale if your contact center is the right size. Mixed scheduling with a combination of single-skilled and multiskilled agents comes next, providing incremental reductions in FTE requirements. Block-of-time scheduling offers no such reductions because it uses multiskilled agents with single-skill scheduling.

However, multiskill scheduling has its drawbacks. An obvious one is the cost of purchasing multiskill, multichannel contact center technologies in order to route multichannel contacts and manage multiskilled agents. Be sure you carefully evaluate the return you will gain from your investment in the additional technologies *before* making your decision.

Another drawback is the increasing complexity you introduce into your workforce management planning when you factor in agent skills. Not only must you develop and manage elaborate skills-based routing configurations, but you must also develop adequate availability of capable agents with the skills necessary to handle various types of customer contact.

Finally, it is important to point out that you may already be deriving the maximum level of economies of scale with your current staffing configuration. As the graph on the next page shows, using fewer agents with multiple skills does not always make it possible to handle more contacts with fewer agents. In a large center, for example, staff occupancy is often so high that there is little time for alternate tasks. In a small center, however, or in a large center with small dedicated-agent teams, the occupancy levels can often drop sufficiently to allow time for "filler" work. So while it may seem that only large centers would benefit more from the technologies necessary to make blending workable, in fact it is in the smaller centers, or larger centers with many small work groups, where blending can most improve contact center efficiency.



## Scenario

A contact center with 5,000 agents services many contact channels, such as phone, e-mail, Web, and fax. The e-mail contacts make up 10 percent of the total workload. Therefore, the center has 500 agents in a single-skill staff group to handle these contact types. Should the center utilize a multiskill, fully blended approach to service the e-mail contacts? The answer is no, because the number of agents required to handle this contact volume is very large, so the agents are already operating at their maximum occupancy level of efficiency. A multiskill contact blending approach is not going to provide any additional economies of scale for the center.

Applying the same 10 percent e-mail contact workload to a small center's operation, or to a small work group of 250 agents, would require only 25 agents to handle this amount of work. Therefore, the occupancy level would be quite low and the center would realize additional economies of scale by implementing a contact blending approach.

Finally, you need to consider the type of contact in combination with the skill level of your agent pool to determine the best way to handle specific contacts. For example, in a multichannel contact center, you could set up a separate team for handling e-mail in block-of-time scheduling, or you could apply a true blending approach to fit the e-mail work in between telephone calls. The question is whether blending on a contact-by-contact basis is the best choice, or whether a schedule that includes dedicated blocks of time for each kind of contact would be more effective.

If concentration is required to complete an e-mail response effectively, then blending the contacts is risky. While processing e-mail, agents might be interrupted by incoming phone calls, resulting in errors or in the need to rethink e-mail responses later, which might extend average handle time. Some agents may be able to switch contact channels quickly and effectively, while others may need to focus on one thing at a time.

## Base your decision on your unique contact center environment

Availability of the technology and potential for cost reduction are not in themselves suitable reasons for shifting to multiskill, multichannel scheduling. You should make such a shift only after carefully analyzing your own unique business and resource planning needs, the different approaches to multiskill utilization, the benefits and drawbacks of each approach, and the effects of implementing multiskill, multichannel processes on your center and your customers.

For instance, in addition to the workforce management considerations discussed here, you also need to consider your business drivers, CRM strategy, available pool of agents, and other factors. These considerations may merit a multiskill, multi-channel strategy, even though they may increase costs.

Although new technologies have made major changes in customer demand, your center's underlying workforce management concepts haven't changed—work is still work. You already have a keen understanding of workforce management principles, so you know that managing multichannel contacts is basically a forecasting issue. Once you determine the level of demand for each channel, you must determine the skills you need to meet those demands, work through the process of deciding whether multiskill staffing and scheduling are right for your contact center, and, if they are, determine which approach to multiskill scheduling is the best approach for your unique contact center environment and business needs.

When you have completed this process, be sure the workforce management solution you use offers the multiskill, multichannel functionality you need, both for today and tomorrow. The workforce management solution from Aspect Communications offers this functionality and is flexible enough to meet the continually increasing complexity challenging today's contact centers. Based on TCS technology, the Aspect workforce management solution is built upon 25 years of experience in managing staffing and scheduling in more than 3,000 contact centers in 40 countries across all industries.



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