



Skill-Based Routing

by Dave Brown

If you've been thinking that skill-based routing (SBR) is something you don't have to concern yourself with, something that is only applicable to large and complex call center operations, you should think again. SBR is a term that is often misunderstood. All it means is that, instead of routing calls (or e-mail) to any agent, we utilize some logic and intelligence to route particular types of calls to agents who are more qualified to handle them. While SBR can become complex, as I'll discuss, it can also be implemented in a basic form with significant results. I typically categorize the implementations of SBR as Basic, Intermediate, and Full. And now there's a new twist...SBR for e-support!

Basic SBR

In a Basic implementation, calls are routed to the correct skill group, then, if necessary, overflow to another group that has been determined to have the next-best skills, and so on. Once a routing plan has been established, management can use it to develop cross-training plans and train the staff to match the routing. Over time, this can be an effective method and, for at least 50 percent of support centers, a Basic implementation is sufficient. The weakness is that it routes calls to a group, not a person. As a result, persons within the group who have not yet been cross-trained can still get calls they aren't prepared to handle. The strength of this method is the ease of staff planning and the predictability of queue hold times.

Intermediate SBR

An Intermediate-level implementation of SBR requires the development of many more queues—one for each possible combination of skills. For instance, rather than have a Product A queue and a Product B queue that overflow to each other, we might have those two queues, plus a third queue that is a combined queue (Product A and B). Agents would be assigned to a queue based on their skill level. They would likely start out in either A or B, then “graduate” into the combined queue when they have been cross-trained. The call flow would be changed so that Product A and Product B calls overflow to the combined queue; not to each other.

This method addresses the weakness of the Basic method: agents will not get calls for which they are not qualified or trained. It is, however, a much more complex environment to manage. To maintain consistent service levels, the total number of people that can receive calls for any given

skill set must be carefully balanced for every period during the day. In an environment with a high number of skill sets, but relatively low call volume (where shorting one person in a queue can have a dramatic effect), this sort of implementation is difficult to effectively manage and can make hourly adjustments a nightmare. In fact, it would be virtually impossible to effectively manage without sophisticated staff planning tools. These tools, such as Prime Time Skills from Blue Pumpkin Software, typically cost over \$100,000, including implementation and configuration. Obviously, Intermediate implementation of SBR requires a substantial investment, both initial and ongoing. In general terms, companies should consider the Intermediate implementation if they have between 50 and 100 agents, have multiple queues or call groups (because of specific technical skill requirements), or if it cannot be assumed that the majority of people in a group would be able to accept overflow calls from another group.

Full SBR

In this method, which is what is typically considered “true” skill-based routing, the phone system routes calls to the skill profile of each individual agent, not groups or queues. At this level, everything we said about Intermediate SBR (pro and con) is even more pronounced. While this is the ultimate, as far as routing customers to employees for proper skill matching is concerned, it is also the ultimate challenge to manage, particularly in a low-volume setting, where slight staffing deviations have huge impacts on service level.

Full SBR might be indicated when the operation has hundreds of agents and dozens of skill-sets (potentially creating thousands of possible combinations). It is likely to require an initial investment in the neighborhood of \$500,000, plus the ongoing expense of at least one full-time administrator. Only about 10 percent of support operations really require this level of SBR.

SBR for e-Support

The best and easiest way of routing the electronic incidents is to purchase a product that can blend those incidents with phone calls using the logic programmed into the ACD. There are a number of products out there, but one of the best is eCenter from Servicesoft. The ACD Bridge module links eCenter to your ACD and uses the logic you’ve designed to route phone calls (including Full SBR) for routing e-mail and Web-initiated incidents. With this system in place, phone calls, e-mails, and the Web are all queued up for the next available agent. Agents don’t need to check e-mail between phone calls. The system queues them up and treats them the same, or according to your defined priorities. This technology transforms your call center into a “blended” contact center.

Summary

It is hard to imagine a support operation that can’t benefit from SBR. Even in the most basic implementation, SBR improves efficiency and customer satisfaction. Categorizing calls and e-mail, and routing them to an agent who is more likely to resolve the issue, produces more first-contact resolutions. This reduces callbacks, often reduces staffing requirements, and always results in happier customers. SBR is a methodology that should be understood by every support manager.

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