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Dynamic Dispatch

Is Your Mobile Workforce Running on All Cylinders?

By Tom Gorman

Productivity improvements are a major focus in today's competitive environment. How can a technician be better utilized? How can wasted truck rolls be reduced? What is a good target for cable operators to determine if they are "running on all cylinders?" Dispatch operations can provide data to answer these questions.

Dispatch takes on many forms, from one person with a two-way radio system to sophisticated centralized operations with automation systems installed. What does your dispatch operation look like today? Is it a "dumping ground" for things to be done that no one wants to do? Is it considered to be a "command and control" center? Is service fulfillment the primary mission of your dispatchers? If not, consider how to make this the centerpiece of your customer service delivery. In the dispatch center, quota administration, dynamic routing and assigning of work and accurate closing of work orders are the mission. A productive workforce is a natural occurrence when a good dispatch operation is in place.

What does the transition to a dynamic dispatch environment involve? Dynamic dispatch is the ability to successfully maintain a balance between workload and workforce. It involves taking a detailed minute-by-minute, hour-by-hour look at your current operations and asking what and where the organization can streamline.

Managing the workflow

Let's take a closer look at quota management. (See Figure 1.) Quota is the means to create capacity for handling work orders. The primary method is the point system. A point is a way of measuring time. For example, if one point equals 5 minutes, then 12 points would equal 1 hour of time. Work to be performed is then assigned a point value. Therefore, if a service call is determined to take 45 minutes to complete, it is assigned a point value of nine points. Add 10 minutes to drive to the job, and that service call would have a total point value of 11. Multiply the number of technicians by the number of points in a day (96 points = 8 hours), and a quota administrator will establish how much work can be done daily, based on technician work calendars.

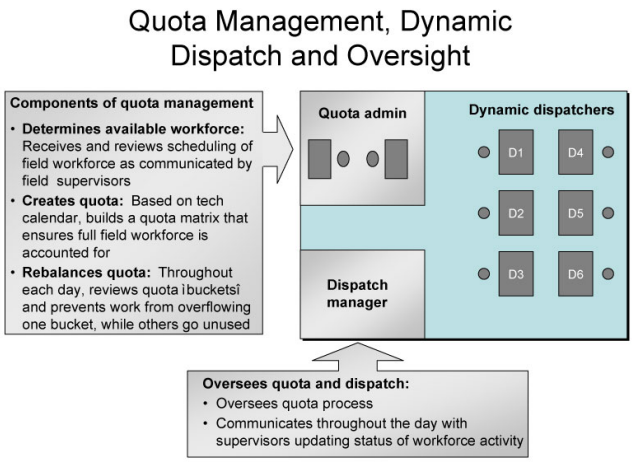

Figure 1: Quota management and dynamic dispatch

Overbooking is a critical component of quota management. If your goal is to complete a certain number of points, it is imperative to find a way to have enough work available in the event there

is a cancellation. Dispatchers must fill the "hole" in the workday with another job if a cancellation occurs. If this doesn't occur, then it will be near impossible to improve productivity. In order to determine how to overbook quota, the cancellation rate must be determined. Customers who call to cancel their appointments make up a small portion of this number. Some operators have adopted an aggressive pre-call program where dispatchers pre-call customers to clear work orders in which a problem no longer exists (possibly a line problem resolved on the previous day). This process results in up to a 15 percent cancellation rate. An additional component of a well-developed pre-call program is to cancel scheduled trouble calls if the customer does not answer during the scheduled window. Systems that follow this plan have been able to reduce unnecessary truck rolls by as much as 40 percent. In order to do this, you'll need to partner with customer care to ensure customer care reps inform the customer about the pre-call program.

The next consideration of quota management is the amount of "must do" work that is scheduled. A customer calling who is completely out of service would fall into this category. Generally, an additional 10 percent of work comes in each day as "must do." This work can be used to counter the 15 percent cancellations and fill gaps in the workday. In order to come up with a proper overbook rate, take the desired productivity, add the cancellation rate and subtract the must do rate:

Desired quota + cancellation - must do.

If the desired productivity is 84 points, it would look like Figure 2 for a group with 10 techs, 20 percent cancellation rate, and a 10 percent must do rate.

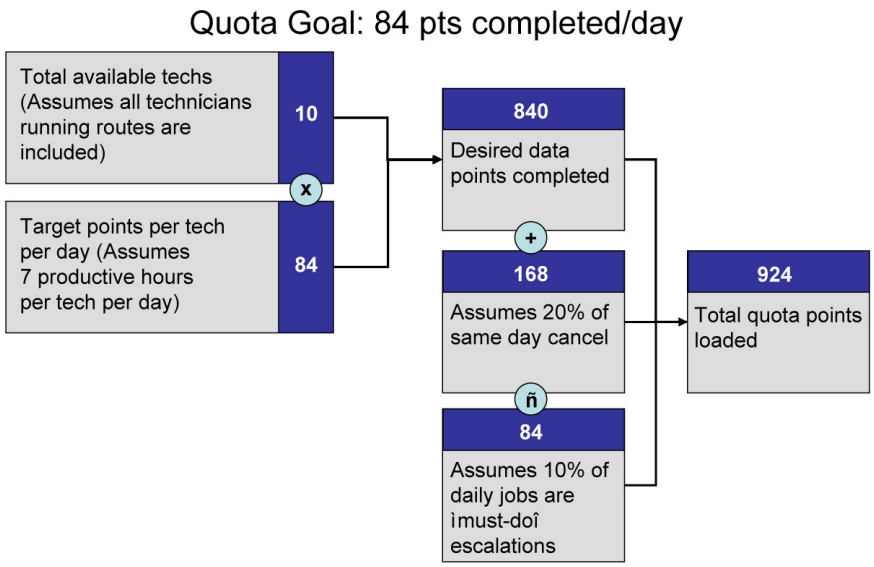

Figure 2: How to hit an 84-point productivity goal

Managing the workforce

Now that we've taken a closer look at the workload, let's evaluate methods for better utilizing the workforce. In a dynamic environment, jobs are issued in real time as a tech becomes available. As one job is called in as complete, another one in reasonably close proximity is issued. Techs should have two jobs at a time: the one that they are working on and the next one. As job No. 1 is called in as complete, the

dispatcher assigns job No. 3 and so on. If a "must do" job comes in, it gets put right in the mix and is not held until the end of the day. This requires some definite changes in operations and expectations; however, it results in a better customer experience.

First, use of text messaging is important. Techs can get the first two jobs sent via text messaging the previous night so that they know what is coming their way the following day. Jobs can be text messaged out throughout the day, which limits phone interaction with dispatch, resulting in minimum hold times. Consider a Blackberry type phone that makes texting easier. There are now commercial-grade pocket PCs that run Windows applications. The use of such a device can prepare a market for automated workforce management; most automation vendors can run their applications on these devices.

Second, communications to and from dispatch must be after every job. It is critical that dispatchers know the status of all field techs.

Third, all work must go through dispatch and be on a work order. Field supervisors should route all "special project" work through dispatch. The "verbal work order" is a dangerous way to run a service fulfillment operation. Instead, supervisors will be able to be in the field coaching, training and intervening if there is an issue. They can take their lead from the dispatchers, who know where their field force is and what issues they are having. (See Figure 3.)

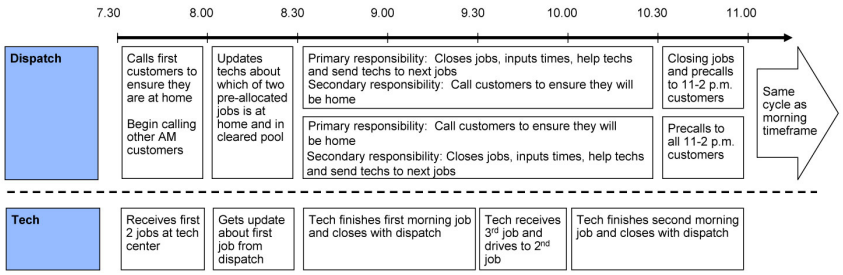

Figure 3: Tech and dispatch working in tandem; 7:30 to 11 a.m. scenario

Routing: where to send them

How can you keep techs from waving at each other as they pass on the same street? How do you keep them routed in a coherent manner?

It is imperative that tech managers or supervisors identify the routing rules for their work force. There are a number of ways to establish routing rules by node, zip code, geography, hub or headend. Once the routing methodology is established, you must provide the dispatch group with the list of the routing boundaries. Then identify the second- and third-best areas to work in, in the event that there is not enough work in the primary schedule area. It is vital you provide this information in language that dispatch understands! If they don't understand node naming, but do understand zip codes, then give them the zip code data. Or educate on the node method.

No more assisting!

Techs throughout the day may decide to "assist" each other, commonly going to the same jobs together. This is not productive. In a dynamic environment, it is the dispatcher's responsibility to determine if one tech should assist another. Assisting should be for the following reasons:

1. A tech is falling behind. The dispatcher provides assistance by re-assigning one of that tech's jobs to another available tech.
2. Safety. A tech needs help with traffic control.
3. Skill. A tech isn't sure how to handle a complex job. A supervisor should be contacted for assistance.

Notice that the dispatcher makes the decision, not the tech.

Closing the jobs

When techs call in to update their work, dispatchers must close the jobs as close to real time as possible. This ensures that billing is current, time stamps are correct, and there will be continuity of service. A job that is not closed leaves opportunity for critical information to be lost. Set-top boxes may time out, billing may be inaccurate, and techs are not awarded the productivity that is reported based on completed jobs.

Dispatch needs to be a "command and control center" for a cable operation. All work flows to and from the field via dispatch. The skills required to be a good dynamic dispatcher are more than a clerk's work. Computer skills, intimate knowledge of your billing platform, provisioning and reporting systems are critical.

Automation is the next step in enhancing dispatch operations. The learning you get from getting dynamic now will make your transition to an automated environment smoother.