



Justification the Maintenance Planner/Scheduler Position

This is one of my favorite maintenance management functions and positions... the full-time Maintenance Planner Scheduler. If you have attended one of my classes or heard any of my speeches on the world class maintenance processes and practices have heard me talk about the maintenance planning and scheduling function and its importance to the overall success of the of any well managed maintenance organization.

One of the keys to the world class maintenance label is to put in place the elements of work order planning for 80% of all the departments work each week. This seems like a daunting task, especially if you are currently doing none at all. Next to performing preventive maintenance on all of your critical assets and systems the work order planning function is critical if you have aspirations of reaching the 80% level for planned work which will ultimately lead you to the world class level for asset performance and reliability.

Before we can get to the meat of this month's tip about how to justify the full time position for a planner/scheduler we need to talk about the importance of the planner/scheduler function. The typical method for performing maintenance work is to assign the work tickets or work orders to technician on a daily basis the leave it up to them to review the request, visit the job site, interview the requester, search for parts, schedule the work, and hopefully complete the work in a reasonable amount of time. In most organizations that have never experienced the beauty of professional planning and scheduling, this process seems to work well and be a natural part of maintenance work. The problem with this approach is that the cost to complete the work ticket from generation to completion is normally 4-6 times the cost when compared to work tickets that have been planned and scheduled. The reason for this is we use high dollar technicians (normally in pairs, [*that is another tip to discuss later*]) spend the time performing the planning and scheduling function. Your travel time is higher, the ability to procure the right part is lower, the scheduling is limited, the quality is typically lower, customer satisfaction is lower and often the potential for injuries is higher. A simple example to illustrate the planning and scheduling function is to think about cooking recipes. Imagine if you had to make a cake for your child's birthday and you started on the day of the party and you are unsure of the supplies needed, parts (stuff from the pantry), tools (pans, measuring devices, etc), how to mix the components, how to set the oven, and on and on... It will take a lot more time and probably not turn out as well and on time compared to having a well written recipe that you reviewed in time to go to the store to get the ingredients before you started the whole cake baking process. Maintenance work is the same way. Professional planners are the ones who create the recipes, obtain the parts, determine when to start the cooking process, and how to test the finished product.

So let's all agree the planning and scheduling process is a great idea. So the question is now: **How do we justify the position, or the function?** The first thing to use during the justification process is the labor costs. Most of the 4-6 times increase in overall work order costs is labor costs. If you can reduce labor costs, which is a direct result of labor hours, you will be able to do one or maybe both of the following items: reduce your labor staffing levels, or accomplish more work with the same labor staffing level. In small organizations, it is difficult to justify a full time position for the planning/scheduling function but you should be able to justify the function. Assign the planning task to one of your existing technicians so each Thursday or Friday they spend time planning and scheduling work for the upcoming week. Trust me, you will see an immediate improvement in the quality, on time performance, and cost of your maintenance work.



The other method to justify a full-time planner/scheduler, especially if you have a larger organization with 15 more technicians, is to think about "wrench time". Wrench Time is the amount of time technicians spend in the act of fixing, troubleshooting, inspecting, or turning wrenches. The North American average for wrench time is 25-30% and the world class wrench time is closer to 40%. What makes the difference? The biggest component to the improvement is the planning and scheduling function. The two calculations below will illustrate how you can remove one of your 15 technicians from the crew and training them to be a planner/scheduler. You now have a crew of 14 and with the improved planning and scheduling you will accomplish more work than you did with the crew of 15. As you review the calculations you will see that the wrench time with 15 crew members was 30%, when you convert one of the crew members into a planner/scheduler and properly train them the wrench time increases to 33% which covers for the missing crew member.

Existing Maintenance Crew Without Planning and Scheduling	Weekly man-hours	Current Wrench Time	Total Man-hours per Week
15 Craftsmen at 40 Hrs per Week =	600 man-hours	30%	180 man-hours
Reduce Maintenance Crew by 1 Craftsman and Add 1 Maintenance Planner	New Weekly man-hours	New Wrench Time	New Total Man-hours per Week
14 Craftsmen at 40 Hrs per Week =	560 man-hours	33%	185 man-hours
14 Craftsmen at 40 Hrs per Week =	560 man-hours	35%	196 man-hours

It actually is pretty simple, the more organized and efficient the work function is the more you can do with less people or the more you can do with the same labor complement.

The key is if you can find the time, and hopefully the manpower, to establish the planner/scheduler function you can easily do more with less or accomplish much more with the same manpower. The important thing to remember is that if you have hopes of improving the organization's performance, lowering costs, and improving quality you must add the planning and scheduling function to your organization.

Good luck and remember the cooking recipe, if you work orders resemble that you will do well.