



Getting To Problems Before They Get To You



Transcript

Getting To Problems Before They Get To You

Ever since the dawn of modern industry, regardless of how old your plant or assets are or what type of product is made at your plant, it's all about getting to problems before they get to you.

Maximo is the key to making this all happen. First, capture the performance data and import it directly into Maximo. We use that data to recognize alarm conditions before failures occur. When conditions do point towards likely failure, we trigger a response. Automatically, we ensure that the right actions, skills, materials and tools are included in the response. And we get the work to the tradesperson as quickly as possible via their mobile device. They then ensure that the work is completed quickly.

Our scenario starts by looking at how our performance data makes its way into Maximo. Through its linkage with all sorts of smart devices, Maximo is able to leverage critical performance data, data such as engine speed, vibration, temperature and pressure. Now let's see how Maximo deals with and interprets this critical performance data. From this Maximo user start center, let's move to the condition monitoring application. Here we'll see all of the points that are capturing incoming data from smart devices. The record that we've pulled up is one capturing outlet pressure for a centrifugal pump. Here are the warning and action pressure limits, and the job plan that will be carried out when that limit is met. Here's a historical list of past readings, the most recent of which is known to be beyond the alarm point. As such, a work order has been triggered. Due to the alarm, Maximo knows what details need to be included in the work order. Let's go to the work order application and view what was automatically generated as a result of our alarm. We know the work order number from the condition monitoring application. We'll input it here to call the record up. The Maximo work order has a tremendous amount of information, a lot of it copied over from various points in the system that contribute to the work order. Work type, failure class, problem code, these are all important when it comes time to step back and look at how effectively we dealt with the situation.

Our job plan and safety plan also have information that will direct the tradesperson to effectively deal with the problem. Our supervisor and lead technician are included in this, as well as the owner group. The details of the job plan are contained on the Plans tab. The steps that the tradesperson will need to carry out to address this problem are listed here, as is the craft, skill level required to deal with the problem. As well, all materials that are required to deal with this situation are listed here as well. Now let's get the work order sent to our mechanic's wireless device. We'll now leverage our wireless LAN to send this work order out to the mobile technician. They review the work list in their queue and ultimately select Work Order 1184, the one that was generated as a result of our alarm condition. It's important that they indicate for time capturing purposes that they've started their work, so they select the green dial at which point the clock has now started in capturing their labor to be posted against this work order. This change in condition is indicated by the change in color. It's also important that the tradesperson take ownership of the work so that no one else within that maintenance group takes that work order to do as well. Before

getting too deeply into the work, they'll want to have a look at the asset details. These have come over directly from Maximo as part of the work order. They can see the capacity, size, the speed, the pump that's to be worked on, as well, the size of the motor that drives the pump, spare parts that are typically consumed when dealing with any situation with this pump. Now it's time for the mobile technician to correct the problem and provide appropriate feedback. We'll start by selecting work order from our work list on our mobile device. The one in green is the one that's currently in progress. We'll also review the task steps that we've had to complete in order to address this situation, as well as the materials that have been consumed. Critical to effective feedback is providing a failure report.

This allows us to evaluate the effectiveness of some of the decisions that we've made in dealing with this situation. We already have a symptom, we need to identify the cause for this problem. With our mobile device we've linked back to the server to retrieve the possible causes and selected a mechanical assembly failure as the cause for this problem. We also need to identify what it was that we chose to do about this problem. Here, we select Adjust Component, because we found that adjusting the component would be the easiest and most effective way to deal with this particular situation. That may not always be the case. Additionally, we've observed that increasing the frequency of the PM may in fact have an influence on reducing these failures. So we note that as a remark in our failure report. We now need to complete our labor booking. We do that by selecting the red timer at the top of the screen. The end date and time are automatically populated to go with the start date and time that were automatically populated when we hit the start timer. The only aspect really left to do is to change the status of the work order. We do this by selecting Completed from the drop down list. We have one last opportunity to offer any information that may help those that run into similar situations in the future. We can add unlimited text here. After we're done, we can see from our work list that our work is completed, the status changed to complete and we're ready to send the details back to the server. There are four key elements to optimizing the up time of your assets. First, leverage all that data from your smart devices. Secondly, be able to recognize potential issues before they become real problems. Thirdly, respond with an approach that you know is going to work. And lastly, have the experience and information that you gather contribute to a continued improvement strategy. You can meet these goals with IBM Maximo Asset Management and IBM Maximo mobile products.