Leveraging Data from More Than 20 Applications Built on Ignition

Wireless Company Sees Benefits in Manufacturing, Testing, and Reporting

JMA Wireless designs and builds in-building and outdoor mobile wireless systems, delivering technologies that enable LTE, 5G, and other services on mobile operator networks around the world. Based in Syracuse, New York, JMA has manufacturing, R&D, and sales operations in more than 20 locations worldwide.

As a global leader in wireless communications, JMA has systems deployed in numerous industries, including transportation, manufacturing, health-care, real estate, and sports & entertainment. JMA has products in nearly every NFL stadium, NBA and NHL arenas, Major League Baseball parks, numerous college stadiums, and soccer stadiums around the world.

With a growing business and worldwide demand for its solutions, JMA wanted to increase the efficiency of its manufacturing operations. That's why it began using the Ignition software platform in 2017. Ignition by Inductive Automation® is an industrial application platform with numerous tools for building solutions in human-machine interface (HMI), supervisory control and data acquisition (SCADA), and the Industrial Internet of Things (IIoT).

"I use Ignition every day," said Greg Jasek, manufacturing engineer at JMA. "I look at how our manufacturing processes are doing, our test results, our build logs. Are there any issues that could come up soon? Are there any issues that are already happening that we need to take action on? We use it for all our troubleshooting in the manufacturing area. It gives us a lot more agility when looking at problems and issues, and it gives us a faster response time."

JMA Wireless gets numerous benefits out of Ignition's speed and flexibility.

Easy Expansion

JMA has built more than 20 applications on top of the Ignition platform, and plans to create even more in the future. The flexibility of Ignition allows JMA to quickly design whatever it needs. The software also gives JMA numerous options when it comes to absorbing data and analyzing it. The result has been a rise in productivity.

At its manufacturing facility in Syracuse, JMA uses Ignition for data acquisition, historical analysis, overall equipment effectiveness, product testing, part tracking, and reporting. JMA collects more data than it ever has before, which improves analysis of root causes and trends, and helps employees make faster, better decisions.

Data analysis provides valuable insights. "We can track each person who has touched a particular antenna," said Jasek. "So if something has gone wrong, we can go back to that operator and correct things. Maybe they need more training,

or maybe they need a tool. Ignition gives us a lot of power on that. And we can compare measurement data to our build log, and see that particular operators maybe have a higher average test yield than other operators. Ignition makes my job much easier. It allows me to look at data much quicker, compile data much quicker, and take action much quicker and more effectively. It's much better than looking at paper and asking people what their opinion is, or trying to form theories without having data to back them up."

Connor Maynes, an automation engineer with JMA, said he had a very positive reaction to Ignition the first time he used it. "I was completely blown away, by both the simplicity and the power," said Maynes. "Ignition's WYSIWYG editor makes it extremely easy to build HMIs. It takes no time at all. There's no programming every single button, no making each component individually. It's just drag and drop. And then write the code. It's very, very simple. And making changes is a breeze."

Better, Faster

The software has brought increased efficiency on several fronts. "With our jumper cables, we decreased our testing time by 30 percent, which is fantastic," said Maynes. Francis Blanchard, automation manager at JMA, said the company

has also been impressed with the software's interoperability. "One of the reasons we like Ignition is that it's really easy to integrate with a database system," said Blanchard. "And it's also easy to exchange data with PLCs. We do a lot of data acquisition on the factory floor. We have over 30 PLCs, so we collect a lot of data on a daily basis."

Prior to Ignition, data was compiled on paper. The amount of paper was even causing a space issue. The digital transformation is cutting down on paper, and will continue to do so. It's part of the company's desire for constant improvement. "Ignition is really the foundation of our manufacturing improvement process," said Jasek. "We have to collect the data first, to be able to analyze it and then take actions. Without data collection, we'd be guessing."

Reporting is also easier with Ignition. JMA built a program to create numerous options for users of reports. People can use a variety of filters, can merge reports in different ways, schedule reports, and send them out to the right people, quickly and easily. "We can create different reports every single day," said Jasek.

The plan is to use Ignition even more in the future. "The longer that we've used Ignition, the more powerful it has become for us," said Jasek. "We use it for continuous improvement operations more and more frequently now than we did to start off with."

JMA also plans to leverage Ignition's mobile capabilities soon, so service technicians in the field will be able to see test data while doing installations. It's all part of keeping pace. "The wireless industry is moving fast, so it's really helpful to have Ignition; it helps us easily deploy new applications," said Blanchard.

Watch the video online at:
bit.ly/JMA-ia