

CASE STUDY

Capmation's IoT expertise drives Park Industries' industry leading software.



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Industry:
Manufacturing & industrial

Expertise:
IoT (Internet of Things)



CHALLENGES

Park Industries wanted to develop a digital solution that allows its customer to make the most of their fabricating machines. The solution, called Park IQ™, would provide real-time visibility into the workings of these machines so users could operate more efficiently and productively.

“We wanted to leverage data from the machines and present it to the customer in a way that allows them to make decisions based on what’s happening within their business or on a specific machine,” said David Lloyd, Director of Information Technology at Park Industries. “It’s something our customers have asked for, and it’s the first product on the market with its comprehensive capabilities.”

Creating the solution would mean capturing vast amounts of data from individual machines throughout the country; pushing that information up into a customer-segregated, cloud-based data lake; segmenting and analyzing the data per machine and user; and then displaying it on an intuitive and user-friendly dashboard instantaneously.

Instead of purchasing a hardware device from a third-party vendor that would pull data from the fabricating machines, the company chose to build the IoT services into the computers already housed on the company’s machines. Park Industries wanted a development team who could work side-by-side with its internal team to build the IoT services, which David said was the most critical and complicated portion of the project.

Benefits

- Allows customers to retrieve, analyze and improve their shop’s performance in real time
- Custom IoT development prevents reliance on expensive third-party product
- Reliable IoT expertise drives early product releases and brings positive market validation

Park Industries chose Capmation, in part, because of the company's expertise in pulling, moving, and analyzing data. In this case, the real-time data was coming directly from the company's machines and being pushed to the cloud as part of IoT services that were custom developed for Park IQ™.

"Within our industry there are vendors that provide some of that. But the big difference in what Capmation helped us create is that it didn't require an additional expense on the hardware side. So instead of having a dependence on another device, we're leveraging the computer that's on the machine," said David.

Extracting data from the fabricating machine turned out to be the biggest challenge in the entire project, because the data needed to be collected and analyzed very quickly.

"This was new technology for Park Industries, and it's the most critical component of the whole project. If there's an error code that comes off the machine, that data needs to be displayed very quickly. To find out even five minutes later may be too late for our customers and could lead to costly mistakes and defective products coming off of their machine," he explained.

To ensure the data moved as quickly as possible from the fabrication machine to the end user's dashboard, the Capmation team redesigned the IoT services to analyze and push

the data into the cloud within sub-seconds of the machine producing the data. As a result, the IoT services were a success.

Besides alerting the machine operator about any performance issues, the system also helps fabricators identify bottlenecks and efficiency opportunities, as well as track and schedule machine maintenance.

"For example, customers can set goals if their target is to have a machine uptime be at 80 percent. And they can do that for several different types of data," David explained.

The time frame from prototyping to market-ready release exceeded expectations.

"We developed this solution faster than expected. Capmation's team played a really big part of that with their understanding of technology and their ability to very quickly understand our desired end state. Because they were able to ramp up quickly, it allowed us to get to market much faster," said David.

Market validation at the beta stage has been extremely positive, and David attributes much of the project's success to the strong partnership with Capmation.

"Their commitment and their ability to bring the talent that they did was a big part of it. They have a lot of specialized expertise in data analytics, web application development, DevOps, and IoT that was extremely beneficial to our team," he concluded.



To learn more about Capmation,
log on to [Capmation.com](https://www.capmation.com) or call **866.374.7639**.