

SilverHook Powerboats develops a racing app 40 percent faster

IBM software enables real-time data collection and analysis in the cloud to improve decision making.

EXECUTIVE SUMMARY

Powerboat racing is Nigel Hook's passion. Not only is he the founder and president of SilverHook Powerboats, but he also pilots the 48-foot 77 Lucas Oil SilverHook racing powerboat. Working in both capacities, Hook became very familiar with the challenges facing the sport. He knew that racers relied on telemetry data from their boats to make strategy and safety decisions, but that it was difficult for them to keep track of the enormous amount of information they received. Hook also saw that fans struggled to follow the progress of a race out on the ocean, reducing their engagement. "We wanted to capture and deliver the race to the consumer, but there were challenges with camera equipment in this environment," he said.

"IBM has been developing great technology around Bluemix to speed up the development of applications. We can deploy faster, and we also have all these new capabilities. When you combine the two, you've got a whole different ballgame."

- Nigel Hook, president, SilverHook Powerboats



Racers can now get real-time insights during the race, improving their decision making and competitiveness.

THE CHALLENGE

Nigel Hook, president of SilverHook Powerboats, wanted to use sensor data collected from racing boats to improve the decision-making abilities and safety of racers and to enhance the fan experience.

THE SOLUTION

Using IBM Internet of Things Foundation (IoT Foundation) to

stream data directly to the cloud, Hook's team was able to quickly build an application on the IBM® Bluemix™ platform to analyze and deliver insights in a useful format to racers and fans.

RESULTS

With IBM technology, the team completed a prototype in 40 percent less time, delivering a comprehensive analytics solution with data visualization in just three months.

Struggling to make use of telemetry data

Sensors on Hook's racing boat provided over eighty sources of data, but there wasn't a way to collect, distill and deliver insights in a useful format. "We've got telemetry data from the boat, but it was just going to one person," he explained. "We wanted to use IBM technology, the Internet of Things, to get all the team's data into the cloud, then use predictive analytics to look for what's important." Hook's intention to debut a solution at the World Powerboat Championship, only a few months away, imposed a tight deadline on the project.

Collecting and analyzing data in the cloud

Hook leveraged the capabilities of his other company, DataSkill, Inc., as well as the IBM jStart® team and partner company Virtual Eye, a division of Animation Research Ltd., to harness the development speed and scalability of Bluemix. The three groups used IoT Foundation to stream data from the vast array of sensors and GPS trackers directly into the IBM cloud. They then extracted important insights from the flood of data using analytic tools within Bluemix. Virtual Eye, a world leading provider of 3-D sports graphics for television, Internet and mobile devices, used the data to develop a rich visualization, delivering technical information and alerts to the racing team and a real-time representation of the race to fans.

Faster time to application delivery

Because Bluemix provides a scalable cloud infrastructure to rapidly develop, monitor and deploy new applications without time consuming on-premises management, jStart and DataSkill engineers were able to deliver results much faster than before. "There was a 40 percent improvement in development time. That not only translates into financial savings, but also makes this a new opportunity, because it probably wouldn't be possible if it were going to cost more," Hook said. With IoT Foundation simplifying connectivity to the devices, Virtual Eye completed the visualization in just three weeks.

With IBM Bluemix, the team was able to build an application faster than ever before, pulling data into the cloud and distilling it down to important insights. "It changes the paradigm in a lot of different areas if we can develop this type of technology at this speed. It gives other projects a benchmark to live up to," said Nigel Hook, president of SilverHook Powerboats.

Racers can now get real-time insights during the race, improving their decision making and competitiveness. "Nigel's the CEO of that boat. He's sitting there and we're delivering him, in real

time, the data that helps him make decisions fast,” said Ian Taylor, chief executive officer (CEO) of Virtual Eye. Having access to the data also improves the safety of the racers out on the open ocean, Hook explained, “The more time I can spend on where the competition is, what the sea conditions are and how to push the edge instead of looking at all the gauges is a huge safety improvement.” Racers can monitor equipment more easily and identify failures that would otherwise go undetected.

Virtual Eye’s 3-D visualization of the data also provides a new, exciting fan experience. Fans can now see what’s going on in the race as it happens, including boat locations, speed, and leaderboards. As a result, Hook has high hopes for the future of powerboat racing. “It provides all this information and entertainment to the families, which is what we’ve been missing all these years,” he said. “Once people understand what’s going on in this sport, I think that could really transform it, bring more fans, more sponsors, and make it more professional.” The team also sees applications for the solution in other industries. “Let’s start delivering to a CEO the same level of data in real time so he’s able to manage his ship, as it were, as well as Nigel can now manage his,” said Taylor.

For more information

To learn more about IBM Bluemix, please contact your IBM marketing representative or IBM Business Partner, or visit the following website: ibm.com/bluemix

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