Jaguar TCS Racing Case Study

IDOL’s AI Analytics and Professional Services

Placing Jaguar TCS Racing in the best position for success.
At a Glance

**Jaguar TCS Racing**
The team competes in the ABB FIA Formula E World Championship, an all-electric street racing series that showcases what sustainable mobility technology can do. ABB FIA Formula E interactively involves more than 300 million fans, and the championship contributes to pushing electric vehicles to the forefront for a better, cleaner future.

**Challenge**
Navigate stringent regulatory restrictions while thinking outside of the box to showcase what sustainable mobility is capable of in a competitive race environment.

**Products and Services**
- Micro Focus IDOL
- Micro Focus Professional Services

**Success Highlights**
- IDOL’s AI analytics capabilities accelerate solution development.
- AI and machine learning create actionable alerts.
- Real-time intelligence influences race strategy.
- Effective partnership between Professional Services and Jaguar TCS Racing team.
Formula E brings racing technology to the road. With some of the biggest automotive manufacturers going head-to-head, it is more than just a racing series—it’s a battle for the future. The race cars, powered purely by electricity, pave the way for our road cars of tomorrow. The development of all Formula E cars is governed by a stringent set of technical regulations, so how do teams create the competitive edge needed to get ahead in the race? One of the key differentiating factors to the teams is data, and in particular unstructured data such as radio communications, broadcast footage, and social media coverage.

Leveraging data as competitive advantage

During every practice, qualifying run, and the actual races, 24 drivers and team engineers share energy status, conditions of the car and track, strategy instructions, tire status, encouragements, and frustrations with each other through public radio channels.

At the same time, broadcast media provides an eagle-eye view of the cars’ positions on track while a plethora of social media channels give insight into ‘behind-the-scenes’ work of the teams. When performance is measured in milliseconds, every bit of information is potentially valuable in determining our own race strategy, but you can imagine the challenge in trying to filter meaningful information from this constant stream of data.

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Performance Engineer
Jaguar TCS Racing
“All communication is public and therefore most teams have developed a short-hand or code when exchanging strategy-sensitive information, which means when anyone else hears the radio communication not all of it will make sense,” continues the Performance Engineer.

“We have the added challenge that our race regulators have limited the number of people who can support each team, so we needed a scalable, agile solution to manage the quantity of available, but unstructured data.”

Data-Driven Racing

Micro Focus increases prediction speed and accuracy.

328M
Global fans

700+
Key parameters to optimize
“The success of this project is the result of a collaborative combination of the right product, the right Professional Services team, and the right expertise at Jaguar TCS Racing. Together we've created the optimum environment to compete for success.”

Performance Engineer
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Enter Jaguar TCS Racing’s technical partnership with Micro Focus. Micro Focus Professional Services experts in data analytics worked with the Jaguar TCS Racing team to fully understand the race environment and worked hand-in-hand to create a solution. Micro Focus recommended IDOL, an Artificial Intelligence (AI)-driven platform providing text, audio, video, and image data analytics to cut through the noise and extract maximum and real-time value from unstructured data. IDOL converts speech to text and prioritizes it into an AI-based workflow solution providing actionable insights.

“Micro Focus Professional Services became an extension of our own team as we worked on the IDOL-driven app and user interface,” says Performance Engineer, Jaguar TCS Racing. “We had so many things to take into consideration: recognition of different accents (as of course drivers and race engineers speak different languages), how to reduce background noise, interpret common messages, and how to present and interact with the data in the most user-friendly way. And of course, all this information needs to be presented in real-time.”

We have so many variables contributing to our racing success, we often compare it to playing chess at 280 kilometers an hour. IDOL’s AI capability helps us determine our next move because we have real-time strategic insights as well as the changing track and car conditions that influence our decisions.”

—

Performance Engineer
Jaguar TCS Racing
AI and machine learning were instrumental in creating the IDOL model. With the expert guidance of Micro Focus Professional Services, the app is now capable of ingesting a large body of unstructured data from a variety of sources, providing real-time insights based on energy and tire strategy from practice and qualifying sessions. This provides vital input to Jaguar TCS Racing’s own race strategy across the race weekend.

“With our IDOL-driven real-time intelligence, the team is able to harness unstructured data in the critical time windows across a race weekend,” concludes the Performance Engineer. “Having this information in real-time is crucial to our racing strategy. The success of this project is the result of a collaborative combination of the right product, the right Professional Services team, and the right expertise at Jaguar TCS Racing. Together we’ve created the optimum environment to compete for success.”
Hear what James Barclay, Team Principal, Jaguar TCS Racing, shared with us at the beginning of our technical partnership.

Watch now

Learn more about our partnership