



Case Study

Williams' next step toward the digital workplace boosts manufacturing integrity, reducing errors and optimizing racecar performance.

Situation

The racecars of Williams Group, the renowned Formula One racing organization, have speed coursing through their DNA—and through their designs. Ensuring that those designs are implemented flawlessly throughout the manufacturing process is the job of Rob Aunins, Senior Quality Engineer at Williams F1.

It hasn't always been easy. The company created a digital tool in 2006 to process non-conformance reports (NCRs) on parts that don't meet design specifications, but the tool didn't help to identify the underlying causes of NCRs, nor ways

to mitigate them in the future. Aunins knew that the failure to optimise the NCR process was costing Williams in additional rework and discards—and, potentially, in the performance of its racecars.

Case Study

Williams adopts digital workplace solution to gain a competitive edge in the race to the checkered flag.

“When we were scoping the app, Avanade kept encouraging us to think big, to dream about what we really wanted, and they would build it. And they did. We have workflows and database flexibility in the app that we wouldn’t have otherwise.”

– Rob Aunins, Senior Quality Engineer, Williams F1

Solution

Williams worked with their strategic technology partner, Avanade, to create an optimal NCR workflow solution. That solution brings together more data, improves tracking and analysis, provides more useful workflows, and helps designers and factory personnel to collaborate around design-for-manufacturing integrity. It’s part of Avanade’s ongoing initiative to help Williams create a [digital workplace](#).

Because the new NCR solution is linked to in-house factory resources, such as manufacturing work order information, data is validated earlier in the process, reducing inaccuracies and catching them when they are easier and less costly to correct. The manufacturing staff review NCRs and participate together with design staff in a streamlined workflow to decide whether, and how, the non-conforming part can be made usable—with each side taking responsibility for its portion of the resolution. Another new workflow step creates accountability for preventative action, with manufacturing or design signing off on the proposed change and the senior quality engineer maintaining oversight of these actions. The solution is also accessible to authorized Williams users from outside the corporate network.

Benefits

- **Reduces errors.** Williams doesn’t yet have metrics on the results but Aunins fully expects the solution to result in fewer nonconforming parts—something the former solution wasn’t designed to do—by helping Williams to understand the root causes of nonconforming parts quickly and efficiently. “Before, we had no way to correlate design and manufacturing changes with the number of nonconforming parts,” Aunins says. “Now, we do.”
- **Increases performance.** Reducing errors is important, but it’s not an end in itself. It’s a means to produce better, faster racecars. Aunins says the NCR solution will support this result, too. “As a result of the NCR solution, we expect to make the manufactured racecar as close to the design intent as possible,” he says. “Mitigating the impact of non-conforming parts is one way to help do this. Preventing non-conforming parts in the first place is another. This solution will help do both.”
- **Boosts agility.** With the NCR solution accessible to engineers, designers, and other authorized users from tablets and other mobile devices even outside the Williams network, the company and its users gain agility, convenience, and speed in reviewing and responding to NCR data and workflows that they never had before. An engineer can make a decision about NCRs from her sofa on a Sunday morning. A designer can address NCRs while he’s on a business trip halfway around the world. “With secure, remote access, we become better at what we do, while making NCR workflow simpler for our users,” says Aunins.



About Avanade

Avanade is the leading provider of innovative digital and cloud-enabling services, business solutions and design-led experiences, delivered through the power of people and the Microsoft ecosystem. Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation and has 29,000 professionals in 23 countries. Visit us at www.avanade.com

©2016 Avanade Inc. All rights reserved. The Avanade name and logo are registered trademarks in the U.S. and other countries. Other brand and product names are trademarks of their respective owners.

North America

Seattle
Phone +1 206 239 5600
America@avanade.com

South America

Sao Paulo
Phone +55 11 5188 3000
LatinAmerica@avanade.com

Africa

Pretoria
Phone +27 12 622 4400
SouthAfrica@avanade.com

Asia-Pacific

Australia
Phone +61 2 9005 5900
AsiaPac@avanade.com

Europe

London
Phone +44 0 20 7025 1000
Europe@avanade.com

