

Where IT meets F1



Sport | Technology

The world of high-speed racing relies heavily on an integrated, efficient and sophisticated IT set-up both at the race track and at the factory. We recently featured a short article in the Panasonic Toyota Racing F1 business newsletter ACTIVATE on the importance of IT in Formula 1.

The GM for IT and Facility Management at Toyota F1, Thomas Schiller, explained about the role IT plays in their team performance: "I think it's fair to say it plays a critical role. Ongoing car and component design, alongside analysis and computer simulations for virtual testing, to manufacturing systems are all factory-based but there are also the on track data and telemetry systems at races. So it is essential for us to have an efficient and effective Information Technology infrastructure to support the highly time-critical and demanding processes. You can't even fire up an engine without a laptop! On track we receive information from the car on around 1,300 different parameters from tyre pressures and engine temperature to more complex data. The team needs this information in real time, so telemetry is vital."

"There are around 250 sensors on the car which are very small so do not impede the car performance, but in the back of the garage we have a host of computers screens and storage hardware from our partner EMC. We have around 40 PCs at the circuit plus hard drives capable of storing 1TB of data. We also have valuable support from back at the factory. When it comes to data analysis, we conduct a brief analysis at the track and then we send it back to Cologne where we have the calculation power required to do a deeper analysis. We then send the results back to the track so that the team can make improvements to the car."

A great example of how motorsport and IT don't just meet, they merge.