

mySAP All-in-One in Formula 1:

The Stuff of Myths

The world of elite Formula One racing is high-speed drama played out on the world stage, complete with heroes and legends of epic proportions. It is also big business. Mercedes-Ilmor, the engine supplier for Team McLaren Mercedes, turned to mySAP Special Expertise Partner itelligence for its it.automotive solution, a certified mySAP All-in-One solution, to fine-tune their operation and help them reduce costs and collaborate better.

Mercedes-Ilmor, in Brixworth, Northamptonshire, UK – a major player in Formula One and IndyCar racing since it was founded by racing legends Paul Morgan, Mario Illien and Roger Penske in 1984 – has grown dramatically, as has the sport. Gone are the days when one visionary and a small team of engineers could work together closely and synergistically, managing the flow of information effectively among themselves. Today, large teams of designers and engineers working on multiple projects have very different needs for managing information.

The challenges increase with each year's technological innovations and the global expansion of Formula One competition. In addition, the International Automobile Federation, the sport's governing body, continues to change technical regulations to improve the racing spectacle and reduce costs.

"There is enormous pressure on the Mercedes-Ilmor team to stay on top of technical and timescale challenges," comments Ola Kaellenius, Mercedes-Ilmor Managing Director. "For instance, as of March 1, 2005, engines will be required to last for the duration of two Grand Prix weekends, rather than just one, effectively doubling the number of miles an engine must run powerfully and reliably. Then in 2006, engine capacity will be reduced from 3 liter V10s to 2.4 liter V8s. This, and further regulations, will place considerable new restrictions on the materials, dimensions, construction, weight and systems of the engines." it.automotive, a mySAP All-in-One solution from itelligence, would prove to be invaluable in helping Mercedes-Ilmor navigate the road ahead.

Guts and glory

Consummate competitors that they are, Mercedes-Ilmor executives set a priority to budget for a solution to help them sharpen their ability to meet these new challenges and those to come in the future. After all, going for the glory in the pursuit of championships requires quick, agile decision making based on integrated real-time data to exhibit their most brilliant engineering and technology.

"We turned to itelligence for its expertise in the automotive industry and with the midmarket," says Mr. Kaellenius. "We asked them to help us integrate all engine design, development and production data in a single, enterprise-wide system and improve collaboration among our project groups. What is more, itelligence was willing to work within our budget and time constraints to deliver the it.automotive solution at a fixed cost and predictable timeline."

Mercedes-Ilmor specified the need to provide management, engineering and trackside teams with reliable, real-time information on the life-cycle status and performance of its more than 5,000 engine components. Their goal: To achieve the best possible performance of each engine and more quickly deploy engineering innovations.

Race weekend engine decisions

Currently, on any given racing weekend across the global circuit, Team McLaren Mercedes runs six engines, each expected to endure 800 kilometers over a strenuous two days of test laps, qualifying rounds and racing. For Mercedes-Benz, success hinges on quickly making the best decisions on which engine parts to reuse, replace, rebuild or scrap.

In order to exchange engine life cycle data between the design and production teams and racing crews more quickly and reliably, Mercedes-Ilmor needed to replace the various legacy systems it had accumulated during its 20-year growth from a company of 25 employees to an international organization with a staff of 500. It also needed to ensure integration with Mercedes-Benz's Formula One Technical Team based in Stuttgart.

"Team McLaren Mercedes' success depends on our ability to quickly and consistently develop, assemble

and deliver our products from the workshop to the racetrack in the best possible quality," says Mark Mathieson, Head of Program Management for Mercedes-Ilmor. "With itelligence's integrated mySAP All-in-One solution, we will gain more time to act on information, rather than spending time accessing it. With greater transparency and availability of essential information, our project teams are best equipped to bring peak-performance engines and product innovations to the race track more quickly, improving the competitive edge for the Team McLaren Mercedes Formula One racing team."

Fine-tuned solution

The it.automotive solution for Mercedes-Ilmor is enhanced with itelligence's tailored applications for automotive and engineering companies and draws on product and project management functionality from mySAP Product Lifecycle Management (mySAP **PLM**).

"From development and production in the workshop to testing and delivery at the various race locations around the globe, the mySAP All-in-One solution will provide Mercedes-Ilmor project teams with faster access to a single, integrated data source on the life cycle of parts for its engines," declares Uwe Bohnhorst, itelligence Managing Director Western Europe. The entire track-record of each component – test results, production status and stock and shipment status – will be accessible in near real-time from anywhere in the world, enabling reliable analyses of cycle time, durability, performance and need for repair, replacement or engineering optimization. The software's integration with the company's computer-aided design (**CAD**) applications will help ensure high availability and consistency of parts lists, CAD drawings and technical documentation used internally and shared with Team McLaren Mercedes.

Project teams will manage their data and documentation with cProjects, a collaboration tool in mySAP PLM. The tool will enable tighter coordination among the various teams in fitting parts together for each engine, supporting the continual core tasks of race preparation, mid-term optimization and long-term development for the next generation of engines.

The mySAP All-in-One it.automotive software will maintain master data on part specifications and automatically link bills of materials to capacity planning and back-office financial processes. By mapping its procurement processes to the SAP software, Mercedes-Ilmor will also be able to better shortlist its best-quality suppliers, control costs and clearly define quality standards and delivery times.

As part of the solution, itelligence is consulting with Mercedes-Ilmor on change management, helping to continually align internal processes and improve collaboration.

"it.automotive is a comprehensive and unique system that will give all team members visibility into the data they require, when they require it. It's perfect for Mercedes-Ilmor, which is not so much an auto company but a racing company, an engineering company," affirms Mr. Mathieson. "We race nearly every weekend somewhere in the world, and we're out to win. The itelligence it.automotive solution gives us the inside track."

To learn more about Mercedes-Ilmor, visit:
<http://www.mercedes-ilmor.com>

To find out more about itelligence solutions for the automotive industry go to:
<http://www.itelligencegroup.com/us/industries/146.php>

For more information about itelligence, visit:
<http://www.itelligencegroup.com>

For more information about mySAP All-in-One solutions for the midmarket, visit:
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