



ENABLE SMART ENGINEERING

GLOBAL AUTOMOTIVE MANUFACTURER VISUALIZES PRODUCTION DATA WITH ALTAIR® PANOPTICON BI™

About the Customer

Mahindra & Mahindra is a global pioneer in the transportation business with extensive automotive, aerospace, and agribusiness offerings. The company's automotive projects utilize up to 100 separate software systems, including systems that control product costs, inventory, and billing, all of which must be interlinked to form a properly functioning parent system. Enterprise resource planning (ERP), customer relationship management (CRM), product lifecycle management (PLM), and tool data management (TDM) systems generate a variety of datasets during the product lifecycle and all that data must be collected, combined, and analyzed to support a fully informed decision-making process.



Panopticon BI is a cloud-based platform that enables business users, analysts, and engineers to build, modify, and deploy sophisticated BI dashboards with a fully drag-and-drop interface. Users can connect to virtually any data source and design visual user interfaces that give them the perspectives they need to make insightful, fully informed decisions based on massive amounts of data.

Their Challenge

Automotive engineering requires the mobilization of multiple IT systems that continuously generate huge amounts of data, including project management, budgeting, inventory control, risk analytics, and many other systems. Implementing a “single pane of glass” view of all relevant data presents a significant opportunity to drive growth in the emerging and evolving connected-machine era. The company needed a system that could access and ingest data from multiple sources and present the right information at the right time to the right people — in an understandable, interactive format — to support its product development cycle.

Our Solution

Altair worked with Mahindra & Mahindra to develop a solution to visualize combined data from multiple systems. They selected Altair due to our knowledge of the automotive design and manufacturing business as well as our data analytics capabilities.

[Altair® Panopticon™](#) BI speeds up data visualization, exploration, and discovery. It collects and aggregates data from various systems and brings it together to view in interactive dashboards. Mahindra & Mahindra uses the Panopticon BI platform as an integral part of the vehicle engineering product development process to automate production planning and engineering, which enables the organization to visualize data and analyze progress at all stages of the process.

Results

Panopticon BI connects directly to Mahindra & Mahindra’s PLM, SAP, ERP and other local system databases and displays key performance indicators (KPIs). This helps product management, vehicle integration, weight/mass balance, and cost management teams assess the implications of design changes on vehicle weight, evaluate risk at all stages, and manage costs. This secure platform enables users to input custom parameters and perform simulations with an intuitive drag-and-drop interface and share their findings with colleagues.

To learn more, please visit altair.com/panopticon