

Integrated Information Core Script Script

Manufacturers create more than products. Manufacturing processes produce significant amounts of raw data every day, making data mining and management crucial to manufacturing companies. Even with a strong intelligence system, enabling real-time collaboration between manufacturing and operations to ensure optimal service, warranty and quality is a major challenge.

Designed to bridge applications between operations and intelligence systems, the IBM Integrated Information Core facilitates data management for manufacturing companies. In addition to speeding decision-making across an enterprise, the Integrated Information Core optimizes processes, increases production quality and decreases warranty costs while reducing risk.

Based on Service-Oriented Architecture, the IIC integrates operations and manages assets to pinpoint problems before breakdowns occur. Analyzing equipment relationships and production events, IIC helps collect data, visually predict consequences and mitigate asset troubles. If an assembly area begins to experience failures, the IIC reports the operational impact immediately, allowing operators to adjust the process and equipment and minimize production loss.

The IIC also leverages a reference semantic model for integrating information from multiple objects. This single enterprise mesh model uses sensors and tags to track data in context from both individual objects, such as a single product, to production equipment like test areas. Actionable intelligence can be created for the entire warranty lifecycle, including both traceability and genealogy. Both traceability and genealogy involve tracking origins and transformations of each potentially at-risk component and operation. Traceability involves individual history, while Genealogy is tracking shared history of a part, including introduction, creation/sourcing, assembly, delivery, service and disposal.

To further support enterprise communication for manufacturers, IIC provides a myriad of analytic and automation features. The IIC graphical interface visualizes sensor and machine data, facilitating planning by displaying key performance indicators and measurements in context. In addition, intelligent alerts and event management automate detection, evaluation and response to production incidents. Providing actions to human and system participants, this event management system speeds resolution in a high data environment.

The end result of this enhanced visibility and automation is superior enterprise connectivity between asset management, resource planning, and production systems. This supports the expert collaboration needed to respond to business imperatives.

Besides boosted efficiency, IIC can also help ensure greater quality and safety for the end consumer by close monitoring of processes, assets and products. Guarding against sub-standard components in manufacturing equipment and the final assembly process, IIC's analytic tools assist in tracking critical components through the entire warranty lifecycle.

Promoting enterprise collaboration, production consistency, and product quality while managing massive data streams is a principal challenge for manufacturing organizations. The IBM Integrated Information Core provides the focused and enterprise-wide information access needed to ensure operational efficiency, boosted production, product quality and reduced costs.

For more information on the IBM IIC solution for manufacturing, please visit us online.