Revolutionize production processes, and enhance efficiency by real-time monitoring of production
Smart Manufacturing solutions are designed to help organizations overcome various performance challenges during production. This can include several performance issues and disruptions. The disruptions are caused by the failure of assets contributing to the production processes.

Introducing the Manufacturing Digital Canvas Unified Performance Management Platform:

Manufacturing Digital Canvas (MDC) Platform along with other solution accelerator components are core to Manufacturing Digital Transformation, enables process, operation & business real-time visibility, insights, and optimize procedures globally. These components include:

- **MachineLogix**: Real time Shop floor machines control for Performance Monitoring & Analysis
- **ProdLogix**: Edge and Cloud based Agent Platform Enabling Real time Shop Floor Production Control
- **intelliAsset**: Framework to integrate knowledge base of product/process engineering & business operations to improve Machine Up Time and Predictive Maintenance

It helps customers to design, implement, and deploy quickly use cases POC to check on feasibility, challenges, as well as benefits. Customers can soon finalize the I4.0 landscape and roadmap with a design-based approach, which provides a clear understanding of the benefits. Customers have experienced a 30% reduction in implementation and rollout timelines.
Key Functionalities:

- The Manufacturing Digital Canvas assists by enabling a production analytics workflow based on factory KPI, condition of machines and compliance with guideline.
- The MDC is also responsible for analyzing asset KPI, its performance, and Reliability by considering tool life and the health of the asset.
- Helps monitor OEE in real-time, production rate, machine downtimes, and detection of bottlenecks, which helps proactively control the quality of products.
- Allows users to control all the assets connected to these platforms to change associated variables to prevent production rate and the quality of products.
- This platform allows accurate predictive maintenance to be carried out upon assets to elongate their longevity and enhance profits.
- Digital Twins for breakdown prediction before the occurrence. In case a breakdown is predicted, the MDC can identify and point out the Root Cause behind the issue, which, when addressed, will allow production to resume.
- Reports are presented graphically, which allows the user to understand them in a better way.
- Enhanced decision-making protocols, when defined, allow the rescheduling/ re-configuration of production processes.
- The operation transparency enabled in the processes allows users to ensure that the products and the procedures comply with the standards set by the company.
  In case faulty production of products is observed, the IoT and cloud platform enabled assets can be instructed to recall/rollback products instantly.

Key Benefits

Manufacturing Digital canvas-based solutions provide the following key benefits

- Line/ Machine level bottlenecks identification for throughput improvements
- Unified performance management for real-time insights & closed-loop actions
- Increased resource utilization & plant capacity
- Increased yield & scrap reduction
- Reduced mean time to repair
Birlasoft combines the power of domain, enterprise, and digital technologies to reimagine business processes for customers and their ecosystem. Its consultative and design thinking approach makes societies more productive by helping customers run businesses. As part of the multibillion-dollar diversified CK Birla Group, Birlasoft with its 12,000+ professionals, is committed to continuing the Group’s 160-year heritage of building sustainable communities.