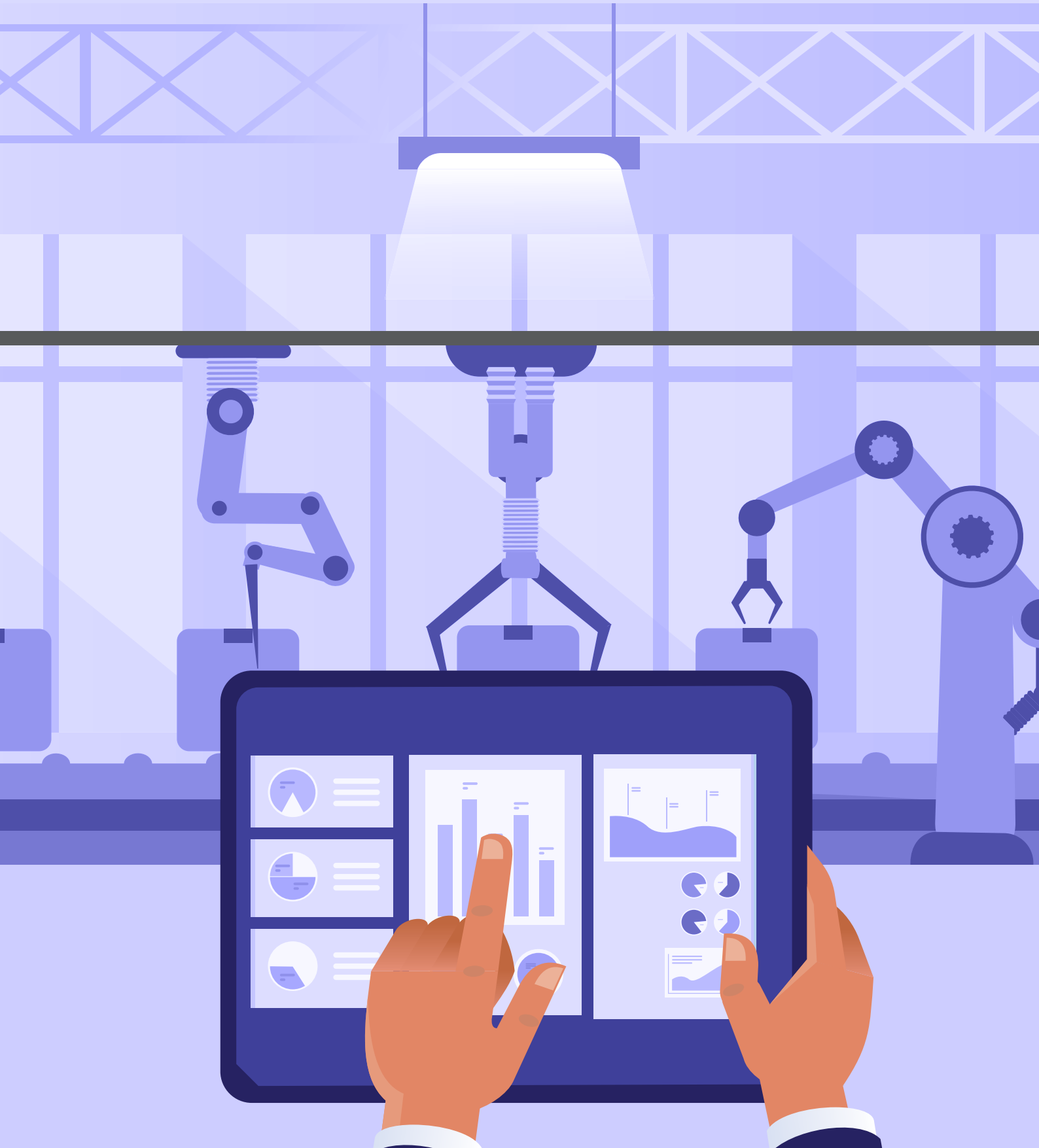
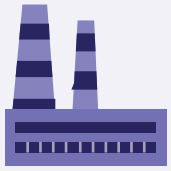
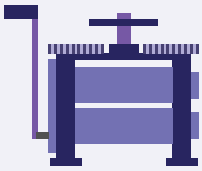
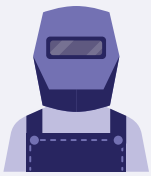
SmartGate+

An IIoT Offering



Challenges of
Traditional Manufacturing Companies

Level	Systems	Challenges
 Enterprise and Design (Firm Level)	ERP CRM	1. Enterprise software layer not connected consistently to plant, line or machine level. 2. Data available in isolated pockets.
 Operations management (Plant Level)	MES 1 MES 2	1. No MES or multiple MES from different vendors resulting in no or minimal interconnectivity.
 Control and supervision (Line Level)	SCADA SCADA	1. No visibility of process data beyond shop floor 2. No provision to view reasons for downtime/efficiency loss. 3. No analytics built in. 4. Manual supervision and control.
 Field (Machine Level)	PLC PLC PLC	1. Infrastructure Issues 2. No sensors built in

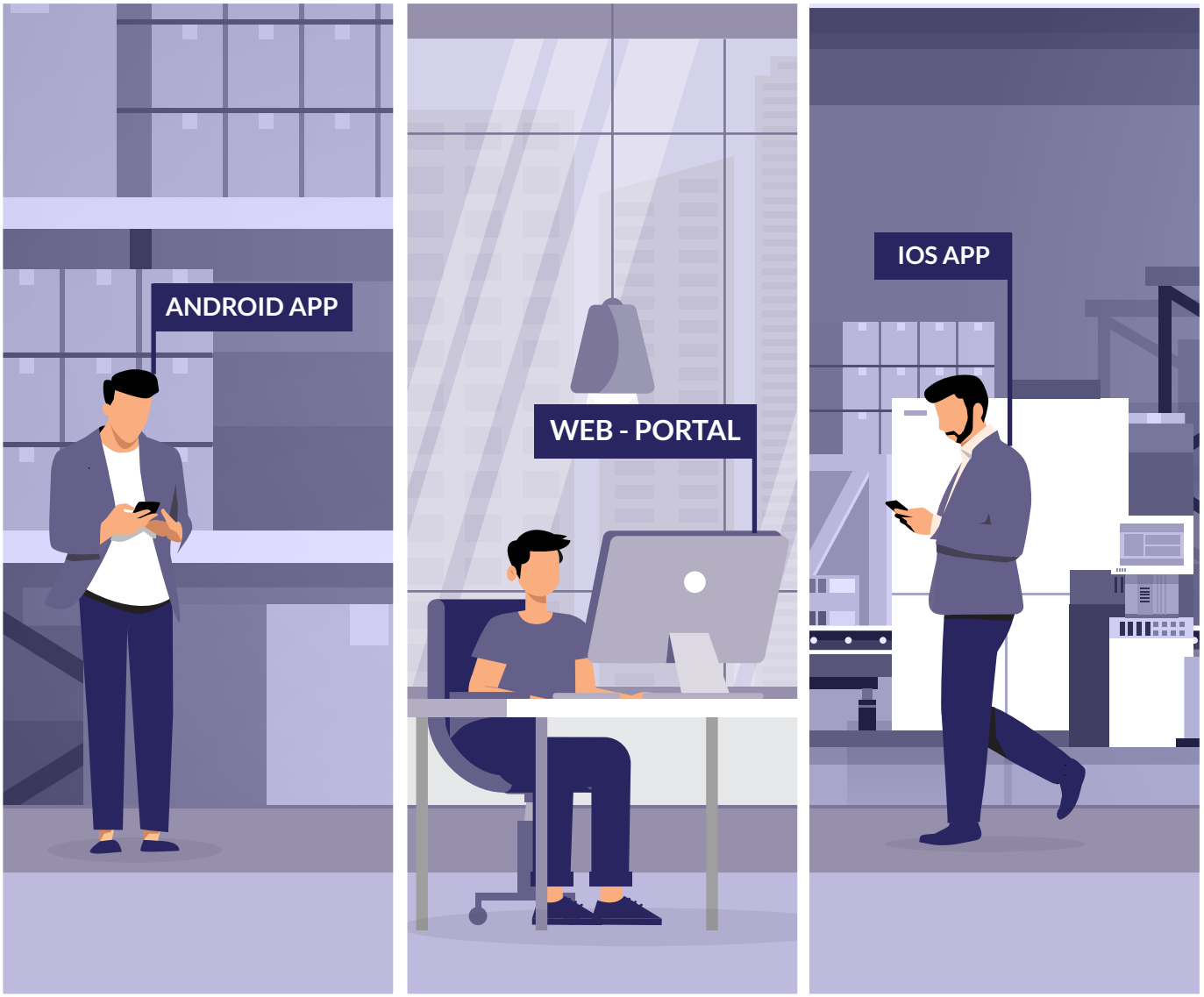
SmartGate+:
An IIoT Offering

SmartGate+ enables high visibility regarding the active production insights and provides remote monitoring of shop floor from any location.

SmartGate+, is a fully managed IIoT application that provides the ability to collect data, analyze and visualize this data in real-time and help you to make operational decisions that impact your business.

SmartGate+ offers the leading IIoT capabilities such as asset connectivity, edge technologies, predictive analytics using machine learning and big data processing. It seamlessly connects to your new or legacy devices/data sources using OPC UA principles and effortlessly combines large volumes of data to get the insights at any instant on your disposal. SmartGate+ is available as a platform, Web-portal and Mobile platform such as Android and iOS.

Available in:



Value Proposition

Security

- Secured with Industry standard protocols.
- Built-in authentication and authorization to keep data and devices protected.
- Data movement in completed encrypted form over VPN.
- Firewall inclusion at each layer.

Wide Industry Coverage

- Industry agnostic offering suited industries like Tire, Metals, Fiber etc.
- Asset Health Monitoring for any Machine.

One-Stop Shop

- One stop solution to connect your existing production lines. Makes information available at the click of a button.
- Establish one-stop solution to provide visibility across all plants distributed globally.

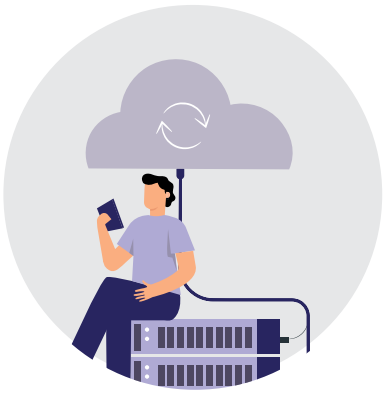
Get straight to work

- Hassle-free integration with your existing production line with minimal configuration.

Scalability

- Completely scalable IIOT platform with ability to support increasing number of connected devices, users, application features, and analytics capabilities, without any degradation in the quality of service.

Elements of SmartGate+



SmartGate+ Portal & Data Analytics System hosted on Cloud

IOT Gateway System

SmartGate+ Mobile App

SmartGate+ Software

Deployment Models

Part A - Public cloud

- Google Cloud
- AWS
- Microsoft

Part B - Customer data centre/on-premise

Salient Features of SmartGate+

OEE Dashboards

Condition Monitoring

Energy Dashboards

Production Dashboards

Anomaly Detection

Downtime Analysis

Cycle Time Analysis

Predictive Analytics for Quality

Mobile Apps and Web Portals

Cloud or EDGE Deployments

Ad-hoc Reports

Critical Alarm

Product Benefits

Equipment Supplier

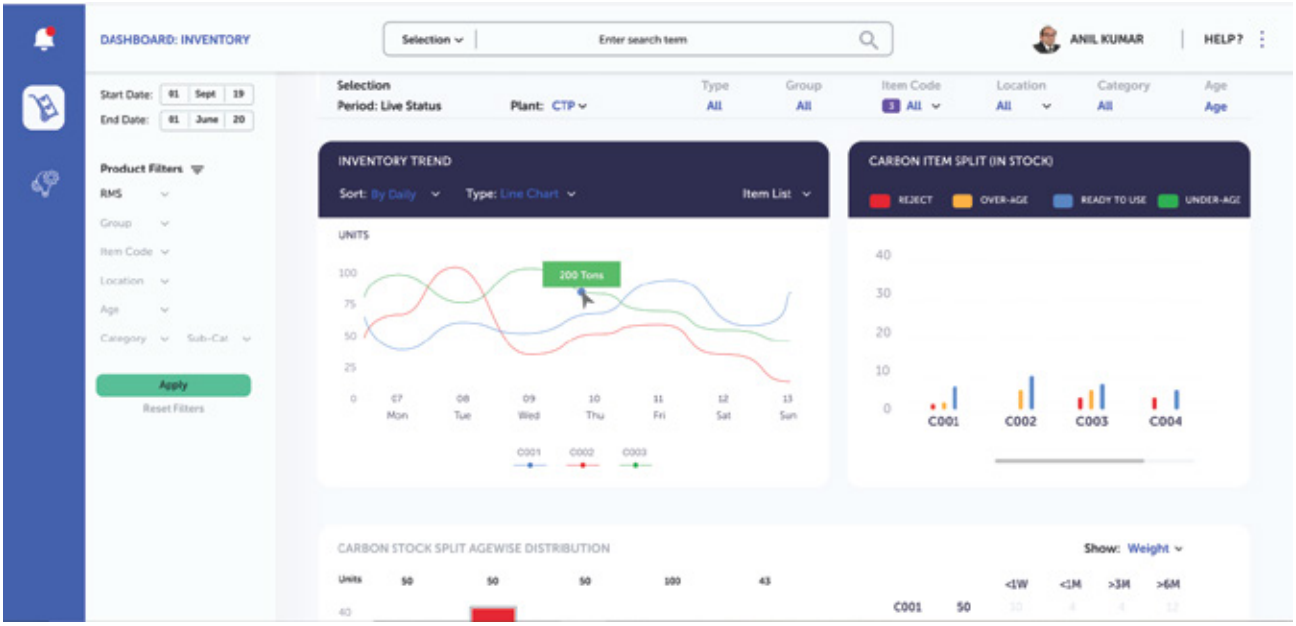
- Increase Service Efficiency/Lower warranty expenses
- Offer additional services and new business models
- Enhance Products via feedback

Equipment Operator

- Increase Uptime/Asset Availability
- Optimize Assets
- Increase maintenance efficiency

Dashboards for
Key Features

With cloud hosting , you can easily remote monitor the plant and get production insights

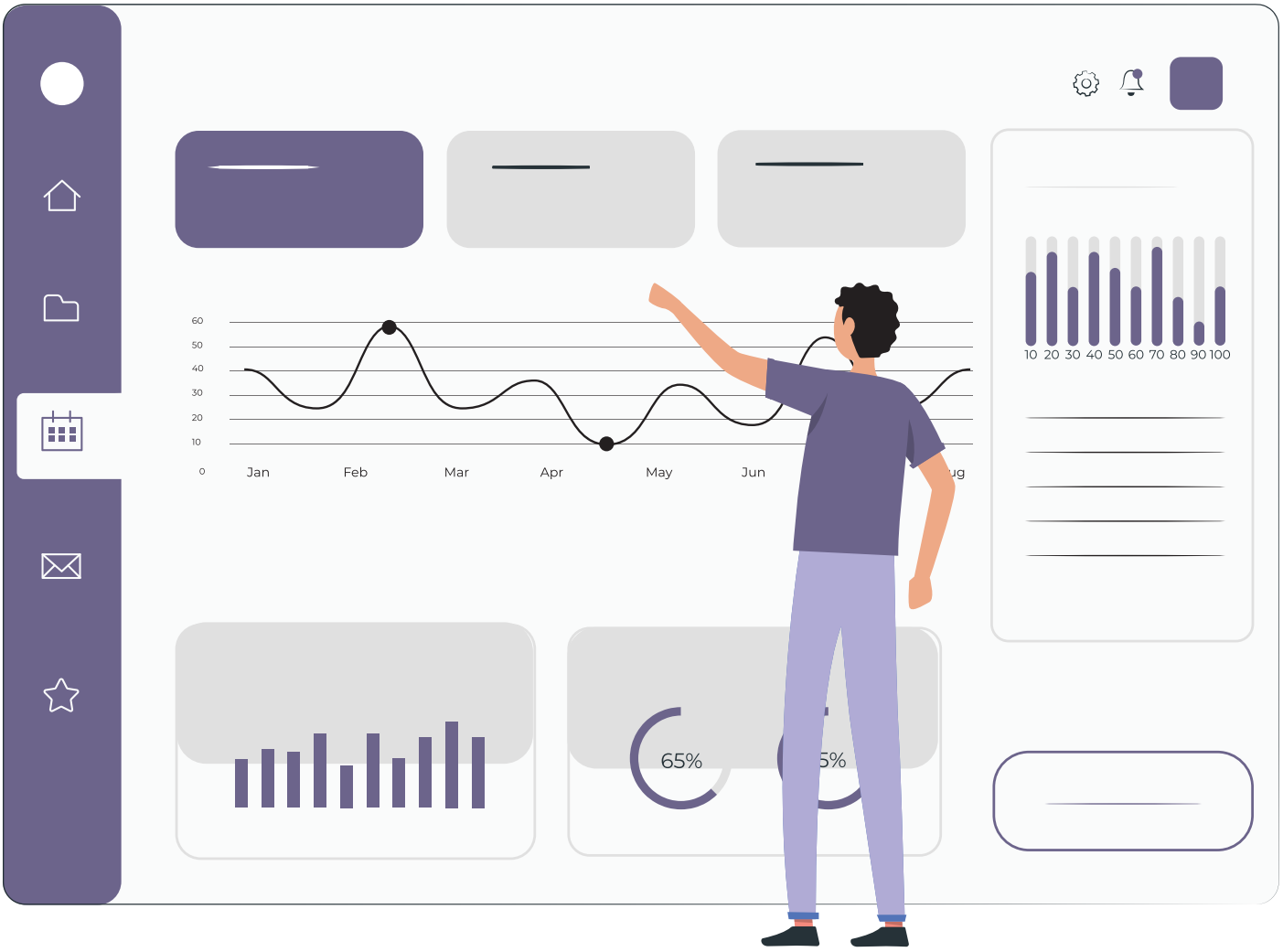


USP of
Smart Controls

Smart Controls has a global presence and a strong product portfolio in many industry verticals such as Rubber and Tyre, Polyester, Metal, Infrastructure and Energy.

Our history as an automation company holds us in a strong position to understand the challenges faced by manufacturing industries.

With this understanding, Smart Controls is in a unique position to drive digital transformation through our IIoT platform “SmartGate+” with a clear objective to optimize manufacturing processes and quality of the products.



Case Study

Objective:

A leading manufacturer of Polyester Staple Fiber (PSF) from South East Asia approached us with a requirement to predict the quality of PSF “online” while it is being produced. Main reason of this requirement was that quality tests of the produced PSF takes about 48 hours while the PSF is required to be dispatched to the customer within 12 hours of production. Online predictions could help them take decisions while the batch is running instead of waiting till the end of batch resulting in scrap reduction.

Solution Proposed:

Smart Controls proposed an Industrie 4.0 based solution approach to the client that involves identifying, acquiring and passing of all possible data from the production line to a Data Analytics engine that can analyse the data, learn from it and then predict the quality of PSF being produced. Challenges: Biggest challenge was to firstly identify all the data from the production line that can affect the quality of the product and then to acquire this data to form the so-called Big Data.

Benefits:

Customer was able to know the quality of product while it was being produced enabling him to control the quality and thus increase the OEE of the production line. This ensured that lower grade product did not reach the customers.

FOR FURTHER INFORMATION, CONTACT

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