Agile Manufacturing

EcoStruxure™ boosts manufacturing flexibility & efficiency
in the Food & Beverage, Household and Personal Care industries

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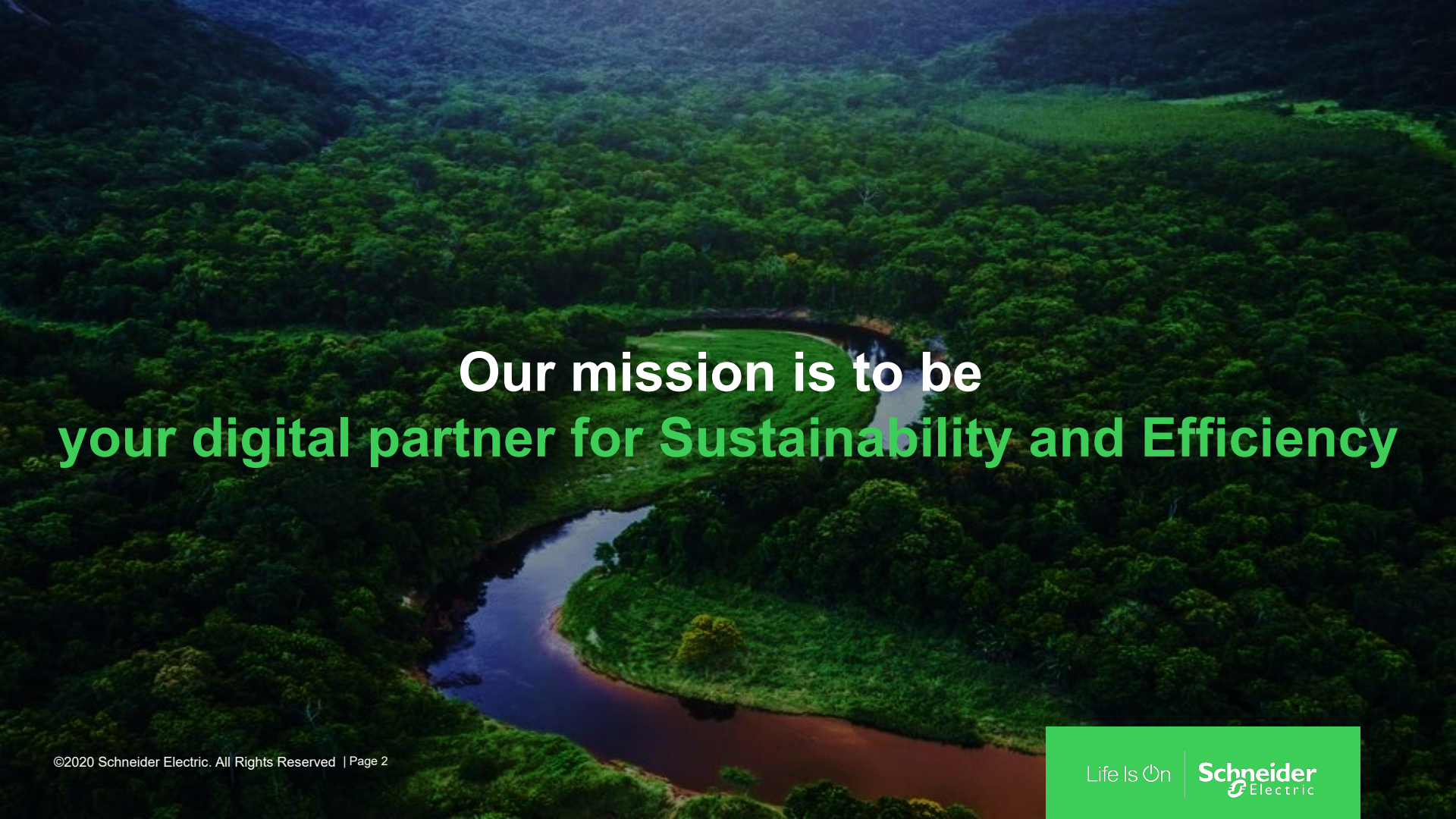

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Rethinking next generation industries:
business resilience and sustainability performance for lifecycle integrated management

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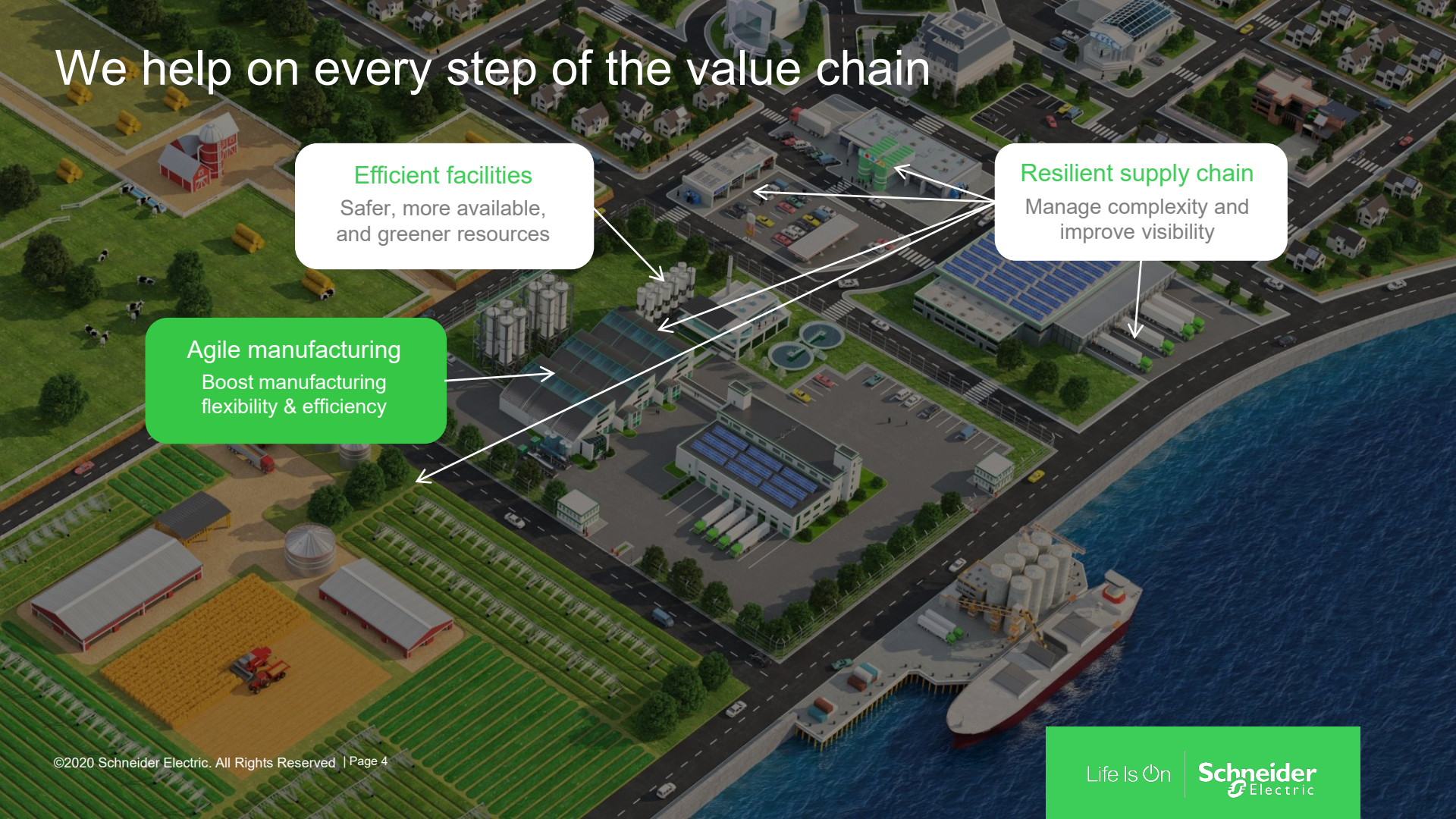
We help on every step of the value chain



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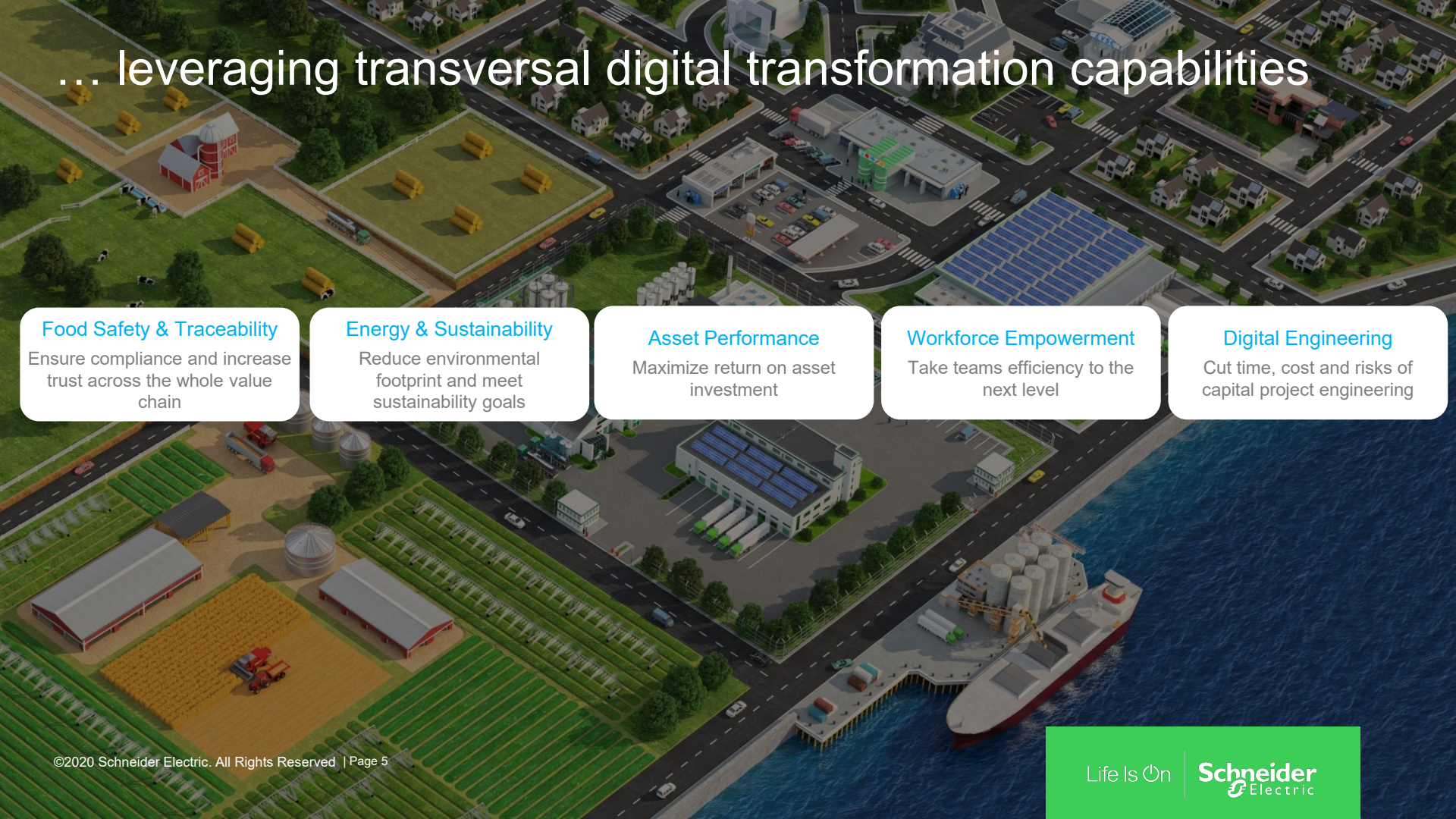
… leveraging transversal digital transformation capabilities



Food Safety & Traceability
Ensure compliance and increase trust across the whole value chain

Energy & Sustainability
Reduce environmental footprint and meet sustainability goals

Asset Performance
Maximize return on asset investment

Workforce Empowerment
Take teams efficiency to the next level

Digital Engineering
Cut time, cost and risks of capital project engineering

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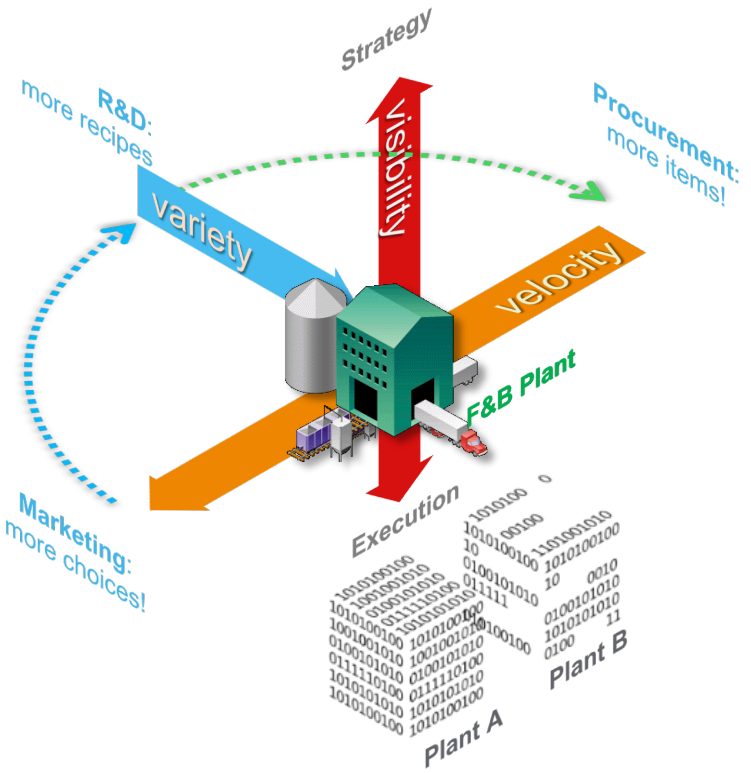
Facing the challenges of a fast-moving Consumer Goods Industry

Increasing real-time visibility to drive performance of flexible operations



Higher Volumes

- Economy of Scale

Increased Velocity

- Reduced Cycle time
- Increase inventory turn

More Variety

- More SKUs (Stock Keeping Units)
- Smaller batch size
- More frequent changeovers

Real-Time Visibility

- Reducing delays in analytics
- Harmonization across sites
- Driving performance

Driver Analogy

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Transforming operations to improve flexibility and profitability

Meet consumer demands

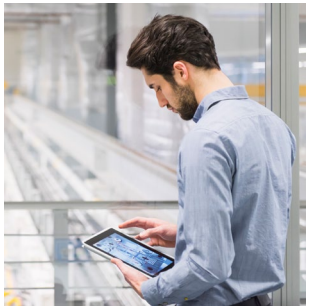
Increase flexibility to deliver the right product at the right time. Easily introduce new products and recipes.

Increase by **10%** shipping efficiency

Manage materials, quality & traceability

Enforce quality inspection, reduce inventory and waste and automatically collect batch records and genealogy

Save **25%** in products give-away



Drive Performance in real-time

Get instant visibility on your machines, process, lines and plants performance to support better decision

Up to **20%** increase plant throughput

Optimize resource usage

Increase throughput and yield with less materials, labour, energy or waste

Up to **2%** reduction in waste

Reduce design and support effort

Simplify design and support tasks bringing experts in your projects or plant teams to solve current issues

Up to **20%** faster time to market

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Meet consumer demands

Increase flexibility to deliver the right product at the right time. Easily introduce new products and recipe.

Keep your batch under control

- Maintain product quality while processing numerous production orders for various products at a single system efficiently and safely
- Gain maximum flexibility during operation and complete process transparency from the production order to the individual actuator or sensor currently used for processing the order

Increase packaging flexibility

- Use modular hardware and software approach to synchronize activities of tens of machines and robots in the same line and allow fast product changeover and easy line reconfiguration while improving OEE

Optimize Production Planning & Scheduling

- Enable fast and flexible capacity planning, production scheduling, and MRP (material requirements planning) connected to your existing ERP system

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Manage materials, quality & traceability

Enforce quality inspection, reduce inventory and waste and automatically collect batch records and genealogy

Process related material management

- Manage all materials transaction initiated by the control systems to have an accurate view in real-time of all storage tanks and warehouses and synchronize with your ERP.
- Keep track of all transactions and access to complete raw materials to end products genealogy, starting from where you want and in upstream or downstream directions

Quality Operations

- Automate and enforce quality inspection and data collection procedures in alignment with the real-time status of work order and job execution, and in response to shop floor events for reducing giveaway and variance in production results
- Trigger preventive actions based on statistical process control rules for keeping quality under control before it costs time and money.
- Reduce the cost of compliance with data collection automation and electronic record keeping

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Drive Performance in real-time

Get instant visibility on your machines, process, lines and plants performance to support better decision

Visualize, Control and Optimize from Edge to Enterprise

- Use an infinite range of possibilities that can help you best manage your operations, from IIoT architectures and cloud-drive remote edge management to multi-site control
- Use a collaborative, standards-based foundation that unifies people, processes, and assets across all facilities for continuous operational improvement and real-time decision support.

Securely Invite experts to help solving issues

- Use standardised, secure, traceable and controlled approach for suppliers to connect to your assets

Bridge IT / OT gap with tools allowing rapid prototyping in production

- Easily connect secondary sensing to your data repository and get the benefit of advanced analytics and artificial Intelligence

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Optimize resource usage

Increase throughput and yield with less materials, labour, energy or waste

Automate difficult and repetitive tasks

- Implement advanced machines integrating vision, motion and robotic to do complex tasks with better quality, throughput and yields while reducing need for difficult manual tasks.

Optimize complex process

- Reduce key process variability and increase profitability with Advanced Process Control and Artificial intelligence

Uncover hidden potential to achieve optimal performance

- Increase production capacity by reducing stoppages on your packaging and bottling lines
- Reduce energy and water usage by monitoring and displaying resource usage in production context.

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Reduce design and support effort

Simplify design and support task bringing experts in your projects or plant teams to solve current issues

Design “fit for purpose”, save time and reduce risk

- Build from modular, open and tested architectures
- Easily adapt recommended architectures to local market requirements
- Reuse templates to easily deploy complex controls
- Shorten delays with factory pre-tested, pre-commissioned equipment and applications

Modernize existing facilities while protecting your investment

- Transition of installed systems to take advantage of latest technology to avoid manufacturing delays

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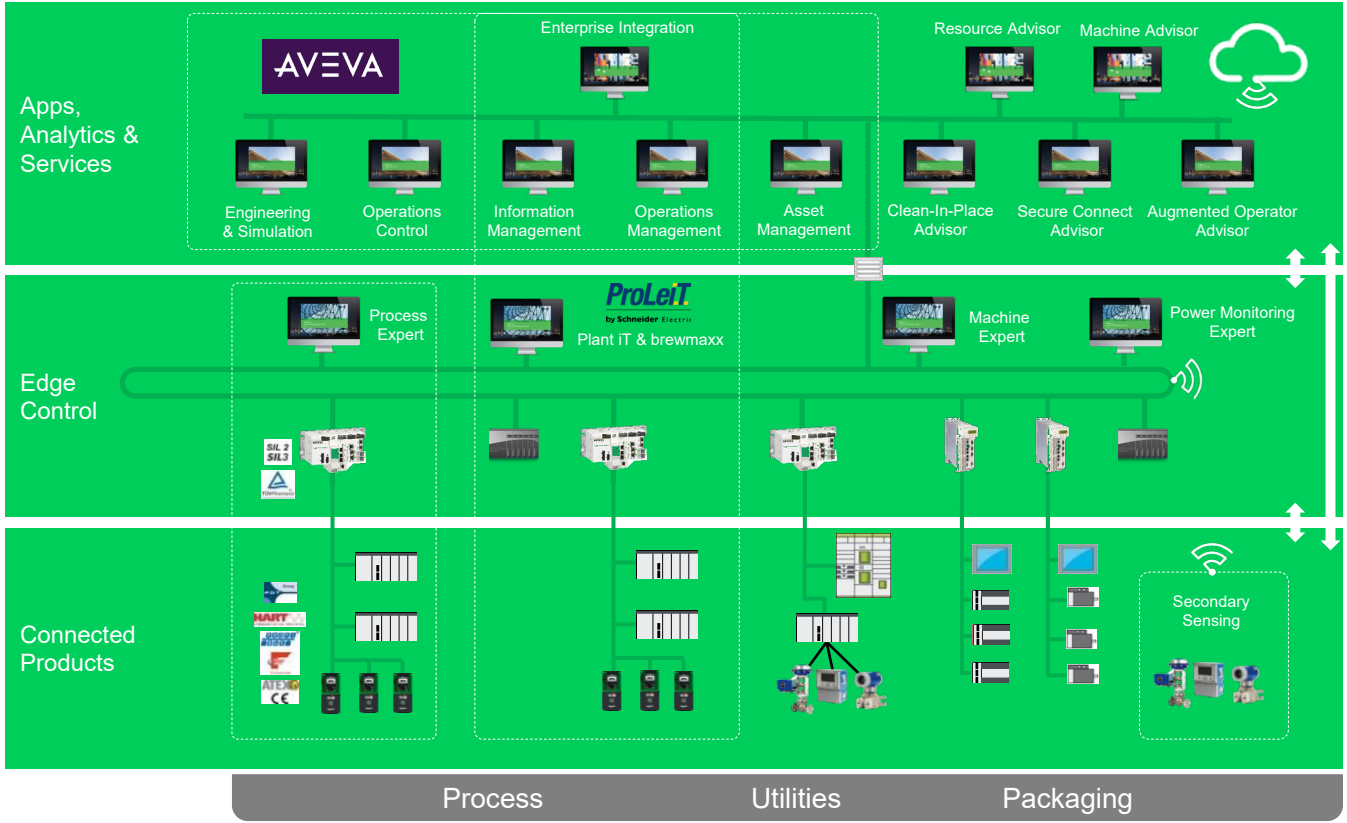
Agile Manufacturing with EcoStruxure™

An open platform to transform manufacturing operations and improve flexibility and profitability



- From field devices to ERP integration
- From connected devices to cloud & analytics
- From simple machine to multi-site management
- From design to operation and maintenance
- Open automation platform designed to manage production flexibility and guarantee business continuity

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design → operation → maintenance → optimize

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Agile Manufacturing

Transforming operations to improve flexibility and profitability

HMI and Data Integration
IoT ready system platform for better collaboration and reduced TCO

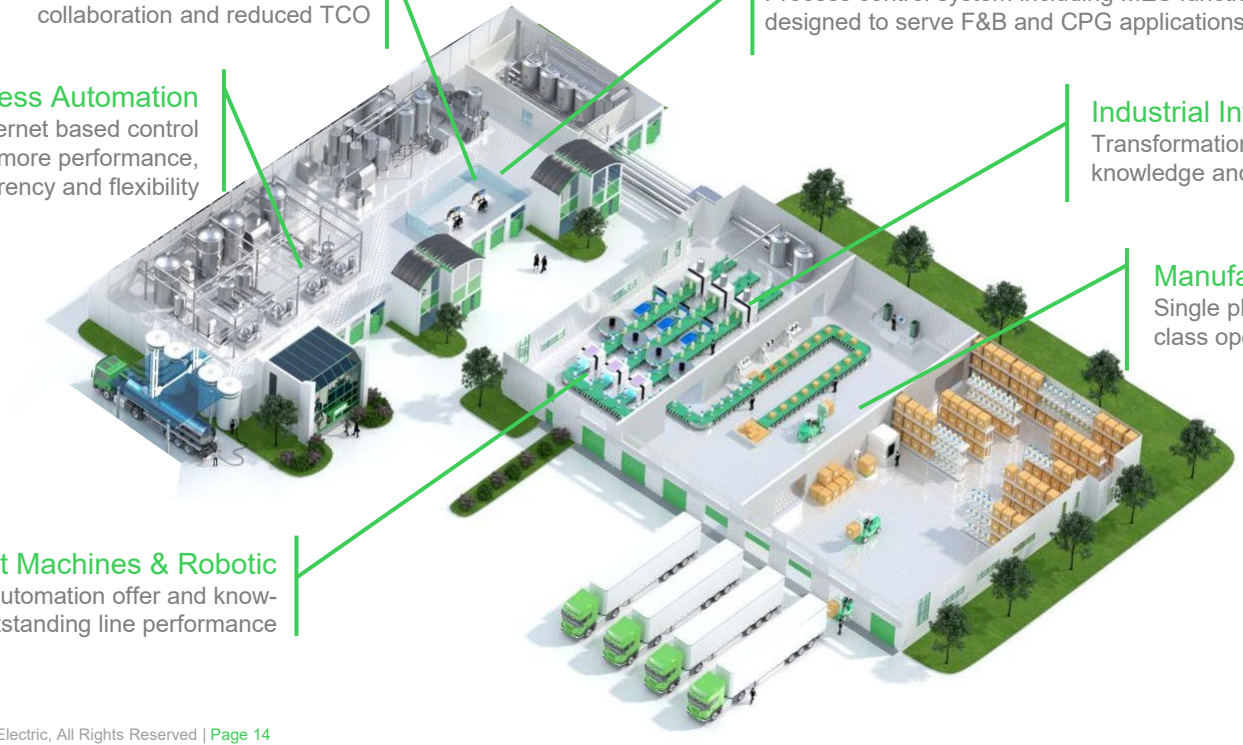
Process Automation
Innovative Ethernet based control platform for more performance, transparency and flexibility

Process Control System
Process control system including MES functions designed to serve F&B and CPG applications

Industrial Information Management
Transformation of your data into actionable knowledge and wisdom

Manufacturing Operation Management
Single plant and Multi-site IT platform for best-in-class operation, performance and quality

Smart Machines & Robotic
Packaging automation offer and know-how for outstanding line performance



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EcoStruxure for Food & Beverage / CPG

Agile manufacturing
Boost manufacturing flexibility and efficiency

- Manufacturing Operation Management
- Industrial Information Management
- Process Control System
- HMI and data Integration
- Process Automation
- Packaging Automation

Efficient facilities
Safer, more available, and greener resources

- Smart Building Management
- Power Safety & Availability
- Power Quality & efficiency
- Renewable Energy & Microgrids
- IT Infrastructure Management

Resilient supply chain
Manage complexity and reduce logistics costs

- Agriculture Efficiency & Sustainability
- Suppliers Management
- Supply Chain Optimization
- Cold Chain Monitoring
- Product Information Management

Food Safety & Traceability
Ensure compliance and trust across the product life cycle

- Food Defense
- Cybersecurity Services
- Digital Calibration
- Raw material traceability
- Production traceability
- Product Identification & Tracking

Energy & Sustainability
Reduce footprint and meet sustainability goals

- Sustainability Consulting
- Energy Demand Services
- Strategic Energy Sourcing
- Enterprise data management
- Energy as a Service

Asset Performance
Maximize return on capital expenditure

- Assessment and Consulting
- Enterprise Asset Management
- Condition Monitoring
- Predictive Analytics
- Line & Process Optimization
- Modernization services

Workforce Empowerment
Improve staff knowledge, productivity and collaboration

- Operator Training Simulator
- Augmented & Virtual Reality
- Workflow Management
- Staff Schedule Management
- Operator Knowledge Sharing

Digital Engineering
Cut time, cost and risks of capital project engineering

- Electrical CAD
- Building Information Modelling
- Integrated Engineering-Design
- Digital Asset Visualization

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