# Food Safety & Traceability

EcoStruxure™ enables trust in the Food & Beverage, Household and Personal Care industries

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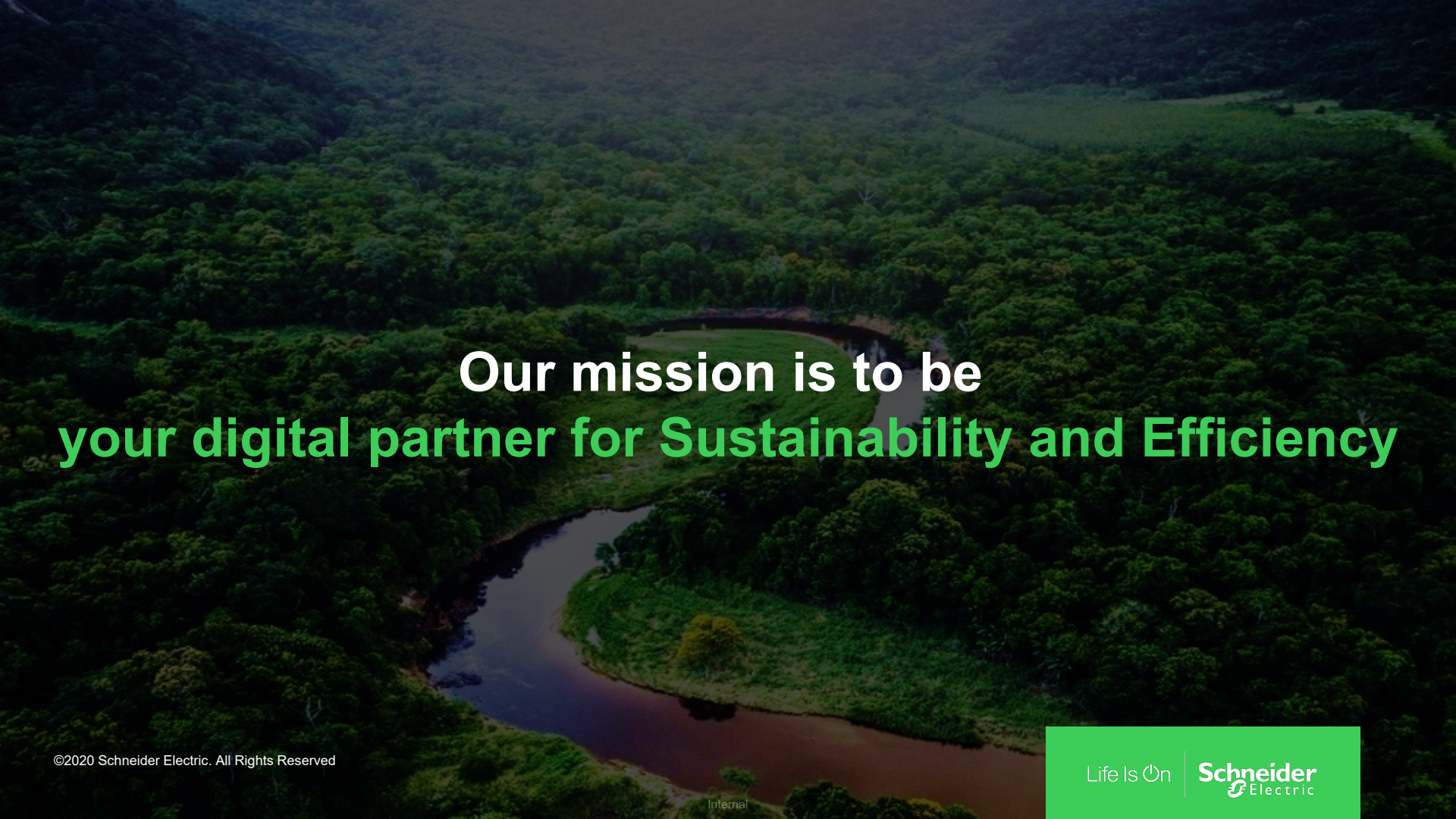






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# Rethinking next generation industries:
# business resilience and sustainability performance for lifecycle integrated management



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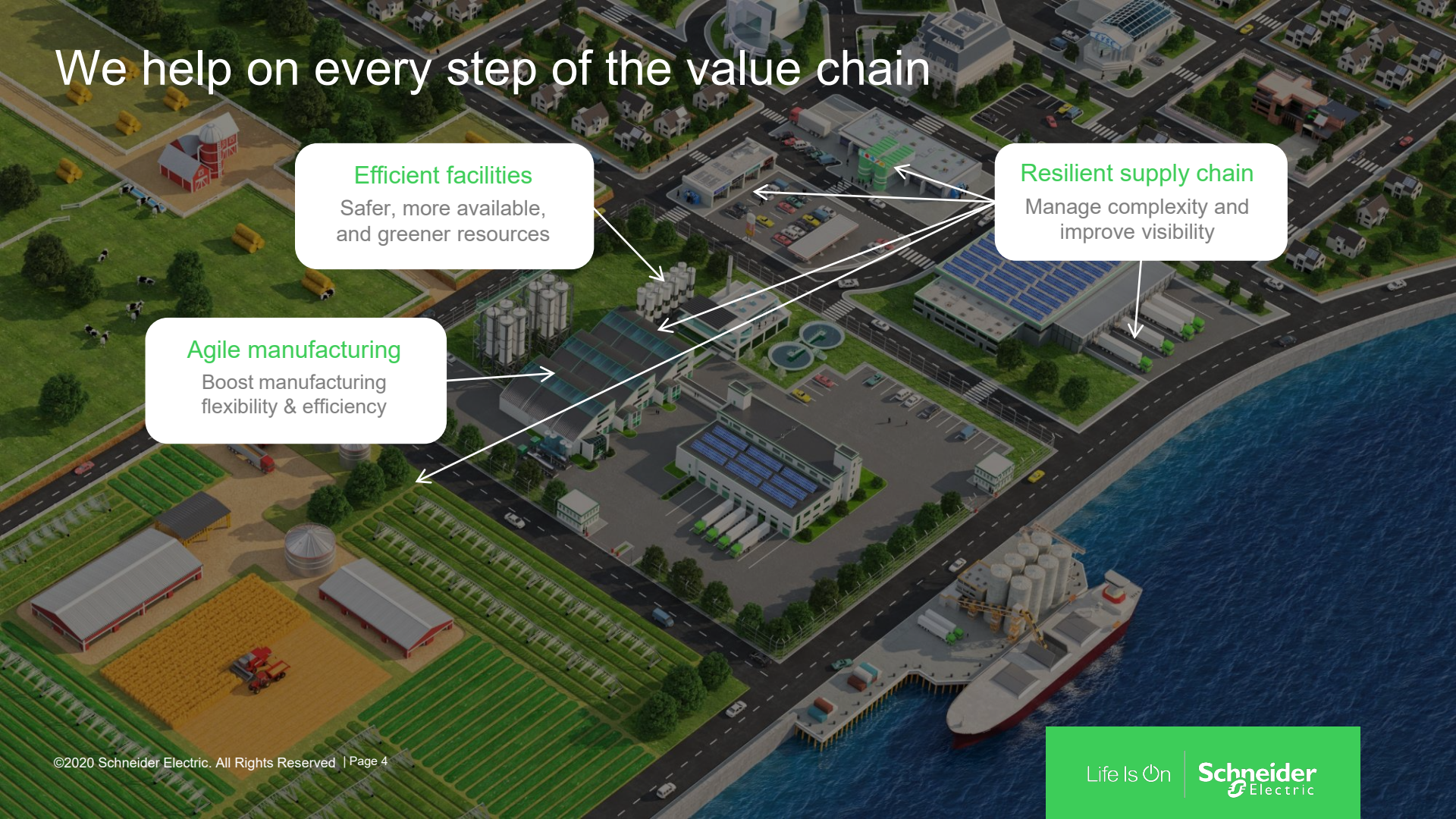
# We help on every step of the value chain



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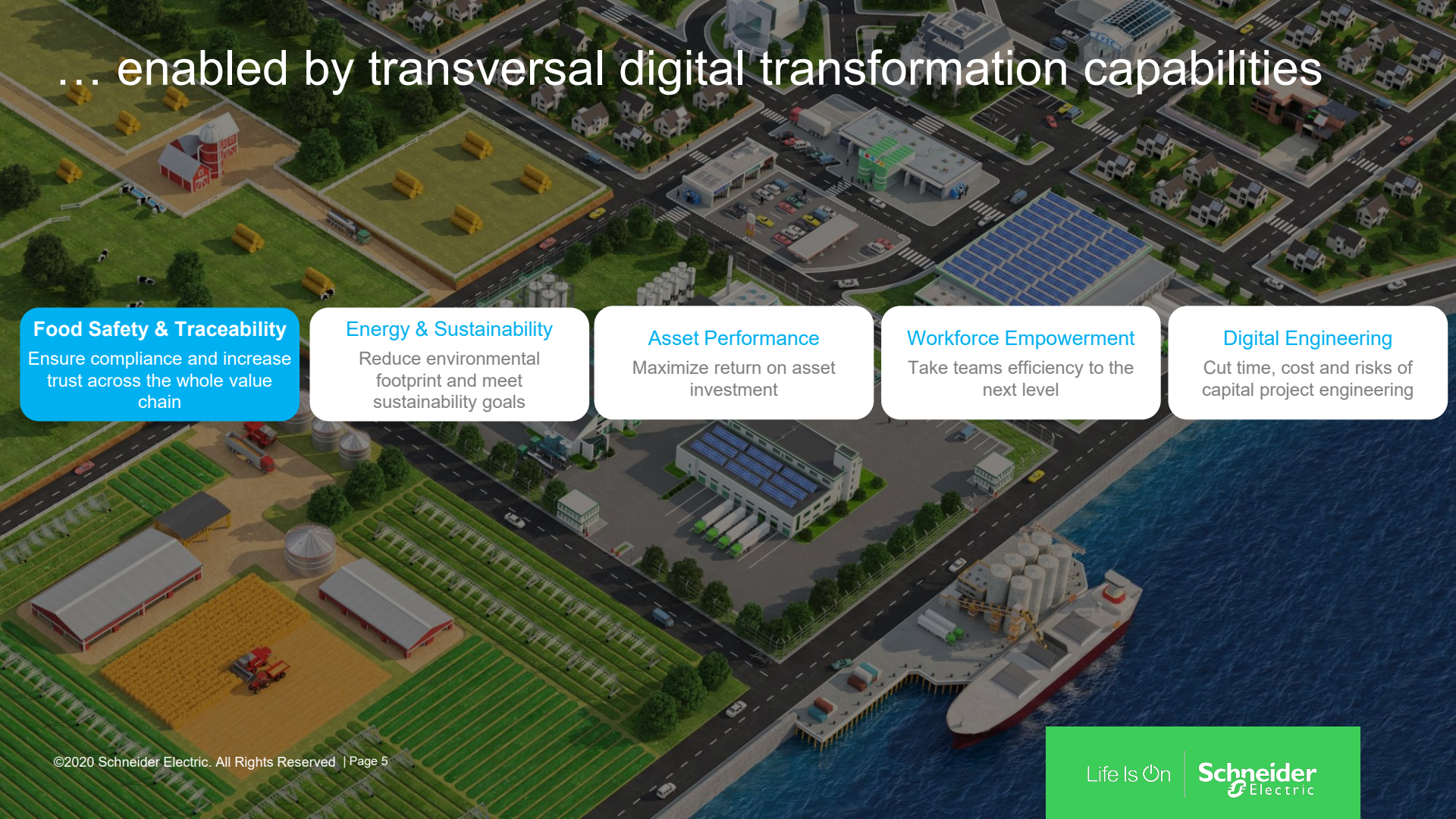
# … enabled by transversal digital transformation capabilities



**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

# Ensure compliance and trust across the product life cycle

## Manage your suppliers

Get visibility into your entire suppliers's network, check their compliance and identify your risks

Build a **credible** Value Chain

## Digitize your compliance

Automatically document evidence of proper operation using digital tools and workflows

Up to **75%** time reduction in compliance

## Reinforce your Food Defense

Protect your facilities form any unauthorized physical or cyber access

Achieve Best-in-class **defence in depth**

## Monitor down-stream logistics

Track and trace products and critical control points to guarantee product safety and protect your brand image.

Up to **100%** first time good quality

## Achieve End to End traceability

Increase visibility across your entire Value Chain, from raw materials to finished goods to improve transparency and trust for your end-consumers.

Ensure **consumer trust**

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# Food Safety & Traceability

## Ensure compliance and trust across the product life cycle

### End to End Traceability
Increase visibility across your entire supply chain to build a sustainable Value Chain

### Digitize your compliance
Automatically document evidence of proper operation using digital tools and workflows


### Suppliers Information Management
Get visibility into your entire suppliers' network, check their compliance and identify your risks

### Food Defense & Cybersecurity
Protect your facilities from any unauthorized access and ensure the right in-depth defense for your IT and OT systems

### Monitor downstream logistics
Manage efficiently your assets tracking, performance and maintenance to optimize your supply chain logistics

 

# Monitor downstream logistics

Track and trace products and critical control points to guarantee product safety and protect your brand image.

- **Enhance your brand protection and increase your visibility into your supply chain**

  Serialize and track your products all along your supply chain to reduce counterfeiting or grey market, enable digital tax verification, comply with regulations or increase consumer experience.

  Get a real-time visibility into your inventories and increase your agility, reduce risks with fulfilment and simplify your recall procedures

- **Ensure that the right product information is send to all your distribution channels**

  Centralize and check consistency of your product data across your organizations.

  Improve data quality and reduce reaction time to answer to your different distribution channels solicitations

- **Monitor cold chain assets**

  Manage distributed cooler performance and optimize their life cycle costs


 

# Track & Trace

## Unique Identification Code for increased brand protection and food fraud avoidance

### Existing drivers:

- Regulation & standard requirements: Infant Formula in China (dairy); sugar tax on soft drinks in Saudi Arabia/Gulf region; Russia Chestny ZNAK on counterfeiting (alcoholic beverages and dairy); tax on alcohol (beer, spirits) in some countries (Africa)
- Food Fraud prevention / Brand Protection (e.g. Opson operation in Europe, China/EU initiative)
- Assure customer trust by ensuring product are authentic and genuine

> *“Operation Opson VIII (Interpol – Europol, 2019)*
> - *33 Million Litres counterfeit alcohol*
> - *16,000 tonnes fake foods*
> - *Cost of €100 Million”*

Food Fraud
**$50Bn/y**

Cost of one incident
**2 – 15%**
annual revenues


 



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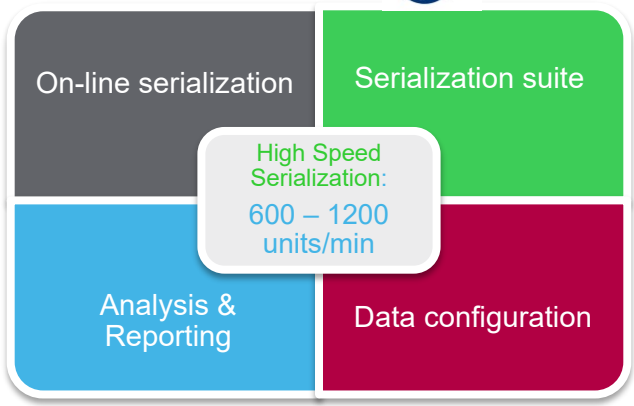
# EcoStruxure™ Traceability Advisor – Track & Trace

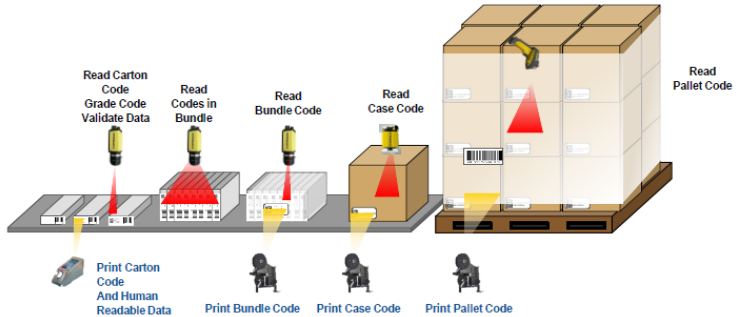
## Serialization, Aggregation and Track & Trace solution for increased brand protection and food fraud avoidance

Compliant with GS1




### The solution

- Flexible solution (comply with specific country regulations)
- Hardware: on-line printing solutions and on-line vision system
- Software: Serialization suite
- Patented technology for data aggregation (Level 1 to Level 5) & compression
- Supply Chain tracking system: App and web portal for product localization and tracking
- Web portal for query results within seconds




### Use Cases

- Supply Chain Tracking & Monitoring
- Authentication
- Counterfeiting
- Grey Market avoidance
- Digital Tax Verification
- Volume Control
- Recall at Pallet / Unit Level
- Mobile app connector (Consumer Experience)

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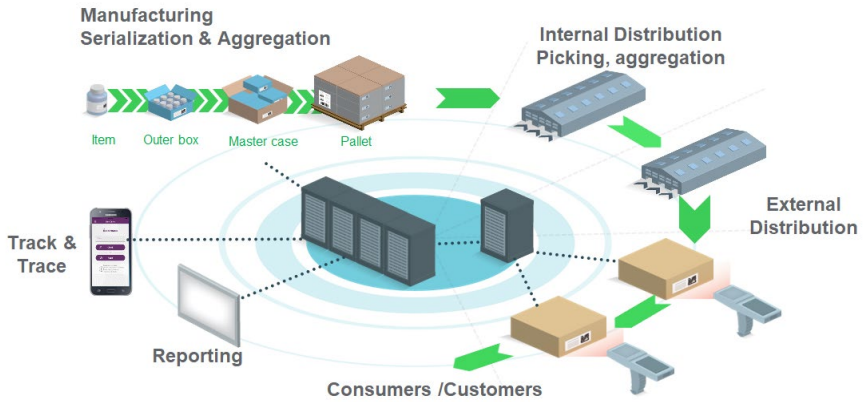
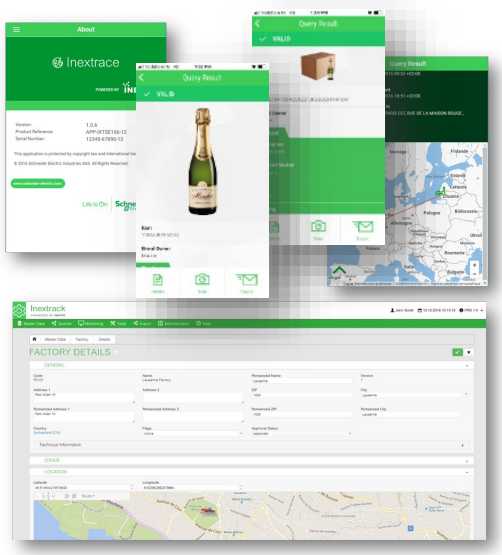
# EcoStruxure™ Traceability Advisor – Track & Trace

Serialization, Aggregation and Track & Trace solution for increased brand protection and food fraud avoidance

## Benefits

- Improved traceability at a product level along the entire value chain
- Quicker product recall
- Reduced food fraud opportunities
- Logistics and Inventory Management
- Compliance to regulation
- Increased consumer experience




Learn more



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# Serialization to fight counterfeiting in tobacco, India

Indian Company

**Customer Challenges**

- Company loses about ~15% of their volume due to counterfeiting and transport related issues
- Solution able to print unique serial number as per UAE regulations (Tax and Track & Trace) on each SKUs at production lines
- Stringent project timelines.
- Allow central regulation body to get complete track and trace information of each product exported in different packaging level
- Ensure volume control by external agency on production.

**The Solution**

- Schneider Electric Serialization solution suite/ Code printing and aggregation and Track & Trace module
- Schneider Electric Line aggregation Hardware systems

**Customer Benefits**

- Integrated Traceability solution for the downstream supply chain
- Centralized solution covering multiple sites
- Seamless Connectivity with customer's SAP and MES systems.
- Secure access to the UAE regulatory authority for event tracking and production volume control
- Easy hardware retrofit.
- Individual packet Track n Trace information availability

**The Results:** Life Is On with … Compliant solution providing Integrated Traceability with enhanced Flexibility for the Distribution

Indian company with leading businesses in FMCG, Food & Beverage and Tobacco.

EcoStruxure Innovation At Every Level for Food & Beverage

| | |
|---|---|
| Apps, analytics, and services |  EcoStruxure Traceability Advisor – Track & Trace |
| Edge control |  PLC Control |
| Connected products |  Cognex Camera  IPC |

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# Product Information Management

Ensure the right information related to the product is available for omnichannel retail

In average **300** attributes per SKU

## Multiple sources and usages of Product Data

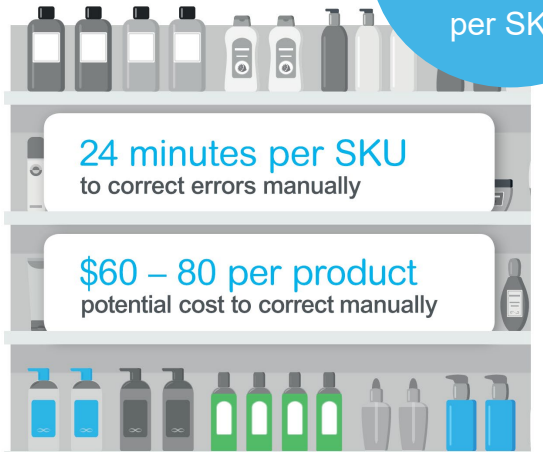
- New product rollouts take in average 4 weeks due to inefficient & error on item attributes.

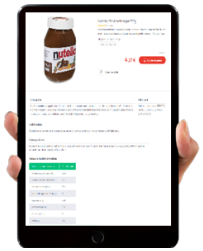
## Omnichannel Retail Strategy

- Retailers want more Product Data in less than 3 days
- Seamless shopping experience for the end-consumers across the different channels
- E-Commerce booming – According to WEF, from 10% today up to 40% in 2027

**30%**

of all product data contains errors in their listing with retailers





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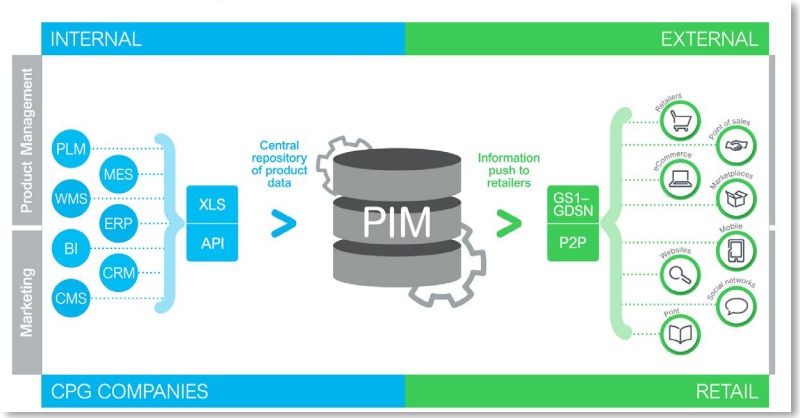
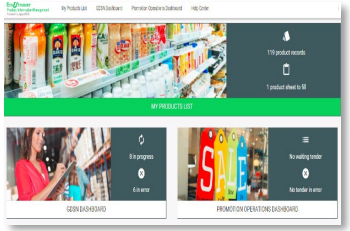
# EcoStruxure™ Traceability Advisor – PIM

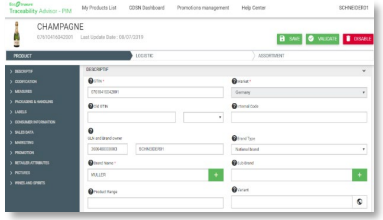
Ensure the right information related to the product is available for omnichannel retail

## The solution

- «Out-of-the-shelf» pre-parameterized solution: a central repository for product information storage and management used by CPG manufacturers and a tool to push product information from multi-source data to different retail channels
- Complete suite of solution: PIM + GDSN + Datapool
- Specific F&B features: Pricing attribute, product Data syndication, Promotion and Call for Tender Management
- Compliant to GS1 standards and GDSN requirements
- Cloud-based solution aligned with latest Cyber Security requirements
- Smart & Flexible, easy to integrate more product attributes on demand (GS1 and/or local regulation/standard)
- Includes Marketing B2C features, thanks to DAM (Digital Asset Management) integrated in a unique solution
- Easy to scale up with a typical ROI << 1 year






***PLM:*** *Product Lifecycle Management*
***MES:*** *Manufacturing Execution System*
***WMS:*** *Warehouse Management System*
***ERP:*** *Enterprise Resource Planning*
***BI:*** *Business Intelligence*
***CRM:*** *Customer Relationship Management*
***CMS:*** *Content Management System*



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# EcoStruxure Traceability Advisor – PIM

Ensure the right information related to the product is available for omnichannel retail

## Business value

- Increased product data accuracy
  Reduction of data redundancy and data storage costs
- Faster time to market
  Fast track new products on standardized templates
- Increased operational efficiency
  Consolidation of information from disparate systems
- Reduction of business risks
  PIM enables data compliance with industry regulations (*e.g.* in Europe, Directive n°1169/2011 – INCO information for labelling of products; and FDA 21CFR part 101)
- Improved shopping experience
  PIM is a central repository with a single up-to-date version of product data enabling a seamless shopping experience for your end-consumers

up to **$80** saved per SKU

**Data transparency**
- Quality and availability
- Improve end-user stickiness
- Reduce business risks **(GS1 compliant)**

between 17 – **56%** increase in online converstion rates

**Operational efficiency**
- Reduce data redundancy
- Reduce data storage costs

up to **67%** reduction in labor costs

**Minimized time to market**
- Optimize data exchange
- Enhanced shopping experience
- Enhanced SEO visibility

up to **17%** increase in data accuracy & consistency

from **24** → **4** mins **reduced** time for updates

Learn more

 



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# Leader in Fruits & Dairy Products, France

**Centralized and Global Source of Truth for Product Data**

## Customer Challenge

- Manage the product references (25,000 products) in a consistent way between the different entities using different ERPs and MES systems in 24 countries.
- Share the product information efficiently with retailers in a multi-channel environment.

## The Solution

- Deployment of EcoStruxure Traceability Advisor - Product Information Management (PIM), internal solution deployed in 24 countries

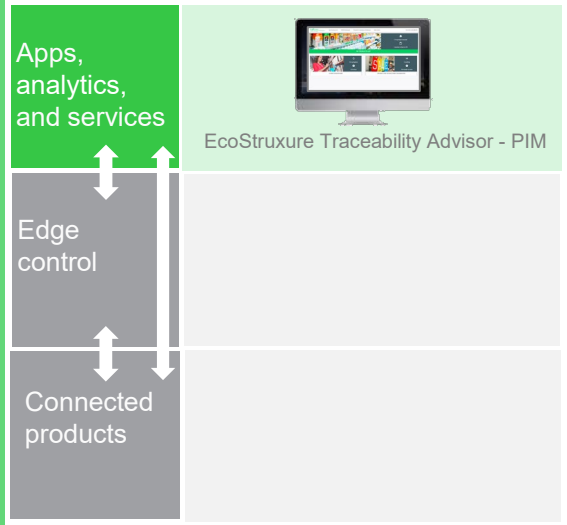
## Customer Benefits

- Central team deploying the solution globally
- Reduction of costs and errors linked to product data management
- Improved data quality & availability: +20% increase in data accuracy
- Reduced time to market: speed-up internal workflow from factories to sales entities and ease data exchange with end-customers
- Process effectiveness: +50% reduction in labour costs

**The Results: Life is On with...** A single source of truth and trust regarding Product Data

**French leader** in fruits and dairy products with strong international presence

EcoStruxure Innovation At Every Level for Food & Beverage

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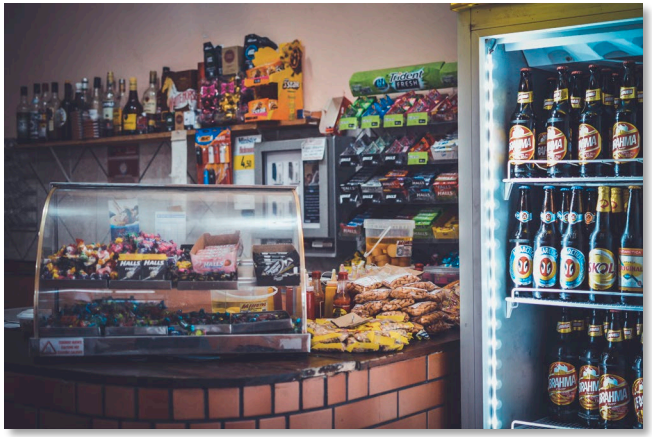
# Delocalized Coolers Management

Manage efficiently your assets tracking, performance and maintenance to optimize your supply chain logistics



Increasing « on-the-go » trend: more and more coolers installed at different Point of Sales (PoS)

How to manage efficiently these delocalized assets?

- Prevent asset from being stolen: direct impact on costs and product sales
- Impact on brand image if cooler not working at the proper temperature – monitoring cooler perfomance
- Lower maintenance asset costs
- Optimisation of geographical distribution of the assets based on sales intelligence data

**Operating Costs**

- Maintenance costs
- Better Asset Life cycle management
- Improved product inventory

**Sustainability**

- Energy usage
- Carbon emission
- Fleet management

# EcoStruxure delivers compliant solution to Food Safety requirements (HACCP)

Global Fast Food player, Pacific Region

**Customer Challenges**

- Need compliance with the global food safety requirements (HACCP) – retrofit and new stores
- Standardization of electrical distribution for all the new stores around the world (1,000/year)
- Drive the adoption of BMS in its international stores
- Drive pilot on new energy landscape initiative
- Standardize simple lighting control solution

**Our Solution**

- EcoStruxure™ for Retail incl.:
- Refrigeration Monitoring (Catalogue ranging from on-premise solution to cloud solution with EWSense sensors from Eliwell)
- Smartlink with PowerTag for Energy Management and Refrigeration Cabinet status
- Review of electrical designs and standardization of electrical panels in targeted geographies (US, China, Australia, LATAM)
- Automation Server for Retail
- Microgrid Advisor
- Clipsal Iconics (in Australia)

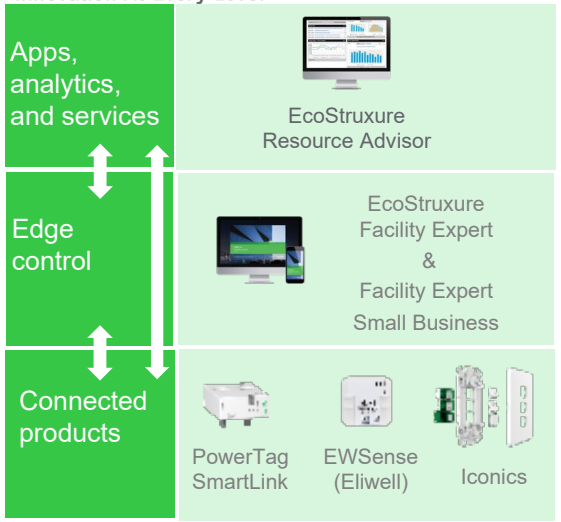
**Customer Benefits**

- Optimized solution value engineered
- Food safety, regulation compliance & food stock protection
- Faster construction compliant to global standards

**The Results: Life is On with...** Compliant solution to Food Safety regulation

**Refrigeration** needs to be monitored **24/7** for food safety and regulation compliance

EcoStruxure™ Innovation At Every Level for Retail

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# Beijing Jingkelun Refrigeration Equipment Co., Ltd.

**Lead the digitization of intelligent cold storage**

## Customer Challenges

- Connected and efficient cold chain storage to guarantee food safety
- Energy efficiency
- Intelligent logistics center
- Seamless information center for e-commerce

## The Solution

EcoStruxure for Industry solution, including hardware & software, helps Jingkelun build an automated, intelligent refrigerated storage that is connected, efficient, and saves energy

## Customer Benefits

- Improved transparency: Automatic data generation, collection, processing and management to share with the company's management system
- 70%~80% reduction in labor compared with traditional cold storage
- Annual power consumption of only 8kwh/$m^3$ meets leading international standards

**The Results: Life Is On with... 70-80%** reduction in labor requirements and **highly efficiency** energy usage

*"Cooperation between Jingkelun and Schneider Electric creates a masterpiece for up-to-date intelligent cold storage and offers infinite possibilities for its fully intelligent and highly effective development in the future."*

**Quanjiang Wang**
**General Manager,**
**Beijing Jingkelun Refrigeration Equipment Co. Ltd**

Link to Video

Cold storage solutions to ensure the **highest quality** of frozen food

EcoStruxure Innovation At Every Level **Machine**

| | |
|---|---|
| Apps, analytics, and services | |
| Edge control |  • Modicon PLC • Citect SCADA* |
| Connected products | • Motion control • Contactors • Push buttons • Sensors |

** The Schneider Electric industrial software business and AVEVA have merged to trade as AVEVA Group plc, a UK listed company. The Schneider Electric and Life is On trademarks are owned by Schneider Electric and are being licensed to AVEVA by Schneider Electric.*

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# Eliwell TelevisAir Solution

Solution for connected coolers

## The Solution

**TelevisAir CLOUD** for:

- Cooler geolocalisation
- Data storage & analytics for cooler performance
- Alarm notification
- Cloud enabled services

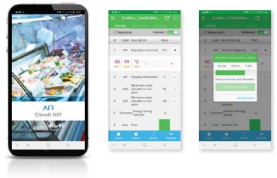
**Eliwell AIR app** for:

- Smart local interface with the controller: verify the status of the controller, the value of operating variables, the complete management of each parameter and the transmission of specific commands
- Easy setting & support: download and upload the full map of the device and share it through the media installed in your device, for example via email or WhatsApp
- Local datalogging management: dump and share the memory of the BTLE Dongle in CSV format for diagnostics or HACCP purposes

Connected controller EWPlus AIR



BTLE AIR dongle



## Benefits

- Efficient asset tracking: detect cooler geoloc changes
- Cooler performance: through data storage & analytics, check cooler performance during warranty period
- Optimized maintenance: alert notification, HACCP reports
- Optimized supply chain logistics: shop visit itinerary, refilling logistics and fleet profitability

Learn more



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# Manage Food Safety & Traceability

Ensure compliance and increase trust across the whole value chain

- Manage your calibration process digitally to streamline operations and ease audits.
- Manage your manufacturing process in a paperless way and document automatically evidences of good manufacturing practices.
- Implement Food Defense with proper access control & cybersecurity protection.
- Track and trace raw materials and products across the whole supply chain to increase transparency and protect your brands.
- Monitor cold chain to guarantee product safety.

Let's engage in this journey!

Up to 99% quality data collection time

Up to 75% time reduction in compliance to regulations.

Up to 97% quality control time reduction.

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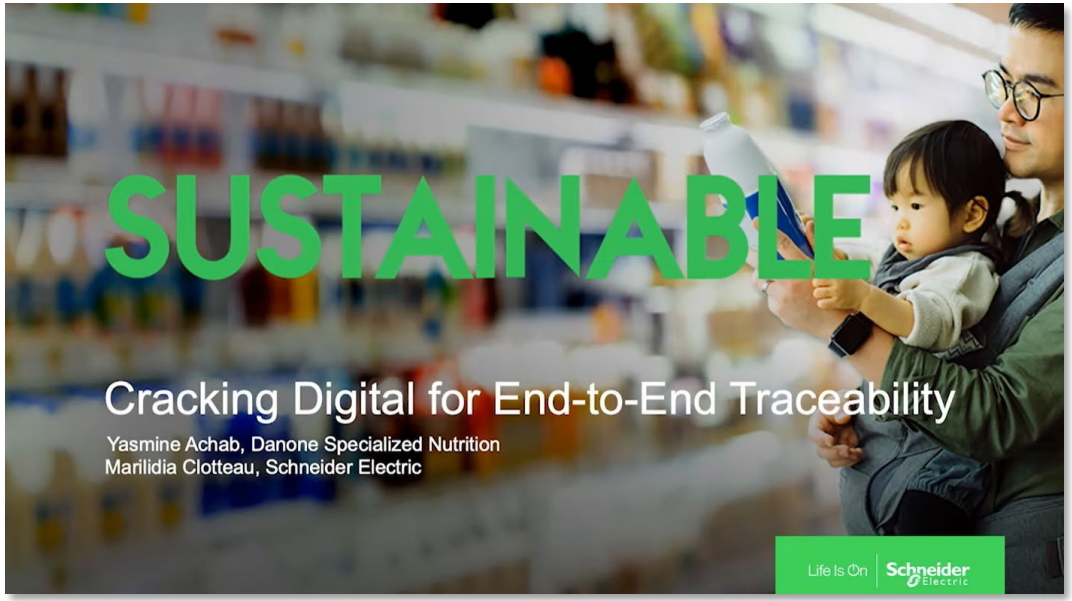
# Discover our customer’s journey to End-to-End Traceability

Cracking digital for An End-to-End
Traceability Journey with Danone




Watch the video

Read the blog

# Food Safety & Traceability

## Ensure compliance and trust across the product life cycle

### End to End Traceability
Increase visibility across your entire supply chain to build a sustainable Value Chain

### Digitize your compliance
Automatically document evidence of proper operation using digital tools and workflows


### Suppliers Information Management
Get visibility into your entire suppliers' network, check their compliance and identify your risks

### Food Defense & Cybersecurity
Protect your facilities from any unauthorized access and ensure the right in-depth defense for your IT and OT systems

### Monitor downstream logistics
Manage efficiently your assets tracking, performance and maintenance to optimize your supply chain logistics

# 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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