

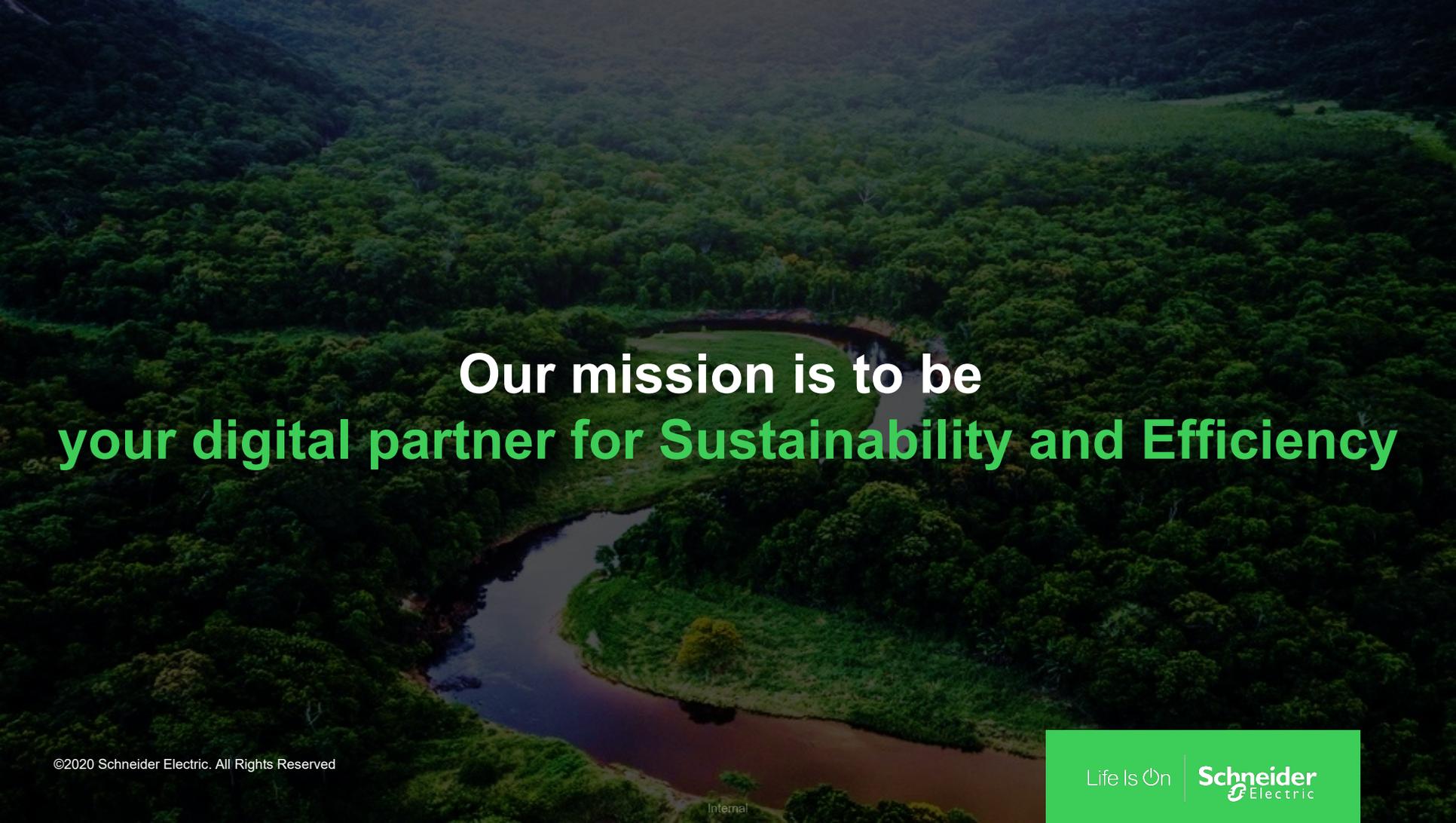


# Food Safety & Traceability

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

Life Is On

**Schneider**  
Electric



**Our mission is to be  
your digital partner for Sustainability and Efficiency**



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

# We help on every step of the value chain

## Efficient facilities

Safer, more available,  
and greener resources

## Agile manufacturing

Boost manufacturing  
flexibility & efficiency

## Resilient supply chain

Manage complexity and  
improve visibility

# ... 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' 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 from any unauthorized physical or cyber access

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



## Monitor downstream 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**

# 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



Fields & Farms



Cooperative



Raw Materials



Manufacturing



Products



Distribution



Retailer



Consumers



## 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

# Digitize your compliance

Automatically document evidence of proper operation using digital tools and workflows

- **Manage calibration requirements**

Plan, perform, approve and centrally manage instruments compliance tests performed by technicians. Be audit-ready with a robust scheduling and testing process.

- **Securely collect and analyze operation data on process, product and people**

Visualize full production and process history, identify the equipment of production, recognize the workers and teams and track material usage and genealogy, record measurements, samples, and tests done on products

- **Digitize your Standard Operating Procedures**

Replace inefficient paperwork with a digital user experience and workflow automation and empower workers to execute work and data collection tasks in a more efficient, collaborative and secure way.



# Traceability - Regulation & Compliance

Specific solutions answering regulation and standards requirements

HACCP/Standards Requirements	Schneider Electric & AVEVA Solutions		
Critical Control Points	Process control	Machines & Robotics	Software solutions
Equipment Design & Maintenance	Digital Engineering	Asset Management	
Devices calibration	Connected sensors	EcoStruxure Manufacturing Compliance Advisor	
Documentation record	Digital Recorders for critical data	Software solutions for document record	
Traceability	EcoStruxure Clean-in-Place Advisor	EcoStruxure Traceability Advisor	Software solutions for Plant Traceability
Personnel Training	Operator Training Simulation	Operator of the Future	
Food Defence	Cybersecurity	EcoStruxure Security Expert	

# Eurotherm. Digital Data Management

Easy-To-Use and Versatile Data Recording Solutions,

## The Solution

- Integrated **recording device** and **central process control** system
- Monitor and record data for **critical process parameters** such as pasteurization
- Secure **tamper-resistant data** collection
- Ideal for regulated industries, quality performance, traceable and quality Audited

## Business value

- **Facilitate quality audits**
- Paperless recording with data archiving
- Support PMO (Pasteurization Milk ordinance)
- **Compliant with HACCP** and standard requirements



Watch the videos

# Fage

Natural Greek Strained yoghurt



## Customer Challenge

- Supply of Data recording equipment to meet PMO (Pasteurized Milk Ordinance) regulations

## The Solution

- Eurotherm 6180A fully loaded with batch, screen builder, EthernetIP and full auditor package supplied, installed by our solutions group into stainless steel enclosure, logging from the legal control and external sources

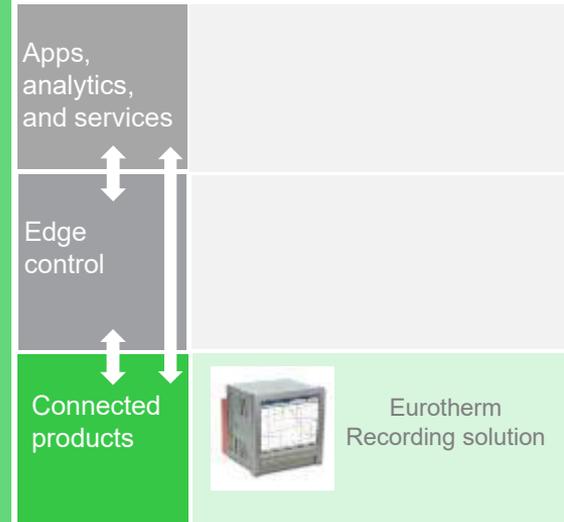
## Customer Benefits

- Partner with regulatory knowledge in a validated environment, understanding of PMO

## The Results:

Life is On with... Safe food production environment

**EcoStruxure** For Food & Beverage  
Innovation At Every Level



# EcoStruxure Manufacturing Compliance Advisor

Manage compliance & calibration requirements more efficiently

## The solution

- A cloud hosted digital services platform, focusing on asset compliance, designed to **reduce testing costs**, increase productivity and be **audit-ready** with a robust scheduling and testing process.
- Agnostic Test Capabilities
- Cross Organization Collaboration
- Defined Workflows
- Actionable Compliance Status

## Business value

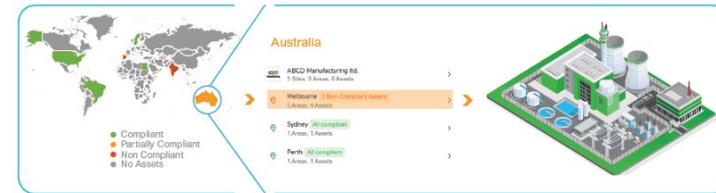
Efficiently manage compliance requirements and enjoy online access to your data.

- Minimize Testing Costs
- Optimize Test Productivity
- Aid Regulatory Compliance Process
- Help Reduce Operational Costs

Eurotherm<sup>®</sup>



Turn equipment data into useful, actionable and auditable information



Learn more

# Eurotherm Help NSI Drive Growth Through More Efficient Digitization

Neal Systems Incorporated (NSI)  
Pennsylvania United States



## Customer Challenge

- Grow the calibration business by enhancing the value provided to end customers with a more efficient digital solution that minimizes data input error.
- Neal Systems sought improvements to their outdated pen and paper calibration service that required lengthy certification turnaround times leaving their clients more vulnerable during an audit

## The Solution

- EcoStruxure™ Manufacturing Compliance Advisor enables users to efficiently manage compliance requirements and provides an affordable, more reliable and accessible service.

## Customer Benefits

- Elimination of pre and post site work
- Reduced re-work
- Instant access to the documents, via QR code
- Peace of mind for technician as the test workflow guides them through the process
- Ability to scale and expand client base

**The Results: Life is On with... Process efficiency  
at NO cost for end-customers**

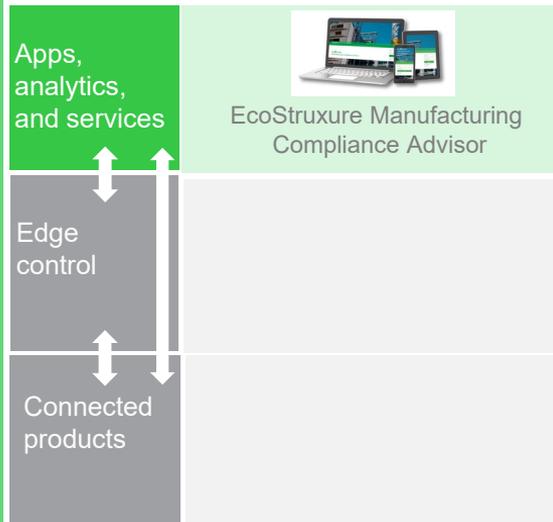
*"It only took seconds to realize that the cost per year was paid back multiple times over in goodwill with the customer and our own time savings in not having to be constantly chasing things."*

[Link to Paper](#)

Stephen Arnold V.P. of Solutions Neal Systems

Neal Systems Incorporated (NSI) is a well-established technical supplier and solutions provider of plant/process automation services and equipment. Through each of their field based technicians more than 1,000 calibration tests are performed per year, plus additional test procedures.

**EcoStruxure™** for Food & Beverage  
Innovation At Every Level



# AVEVA System Platform

Responsive real-time Operations Control Platform for supervisory, HMI, SCADA and IIoT

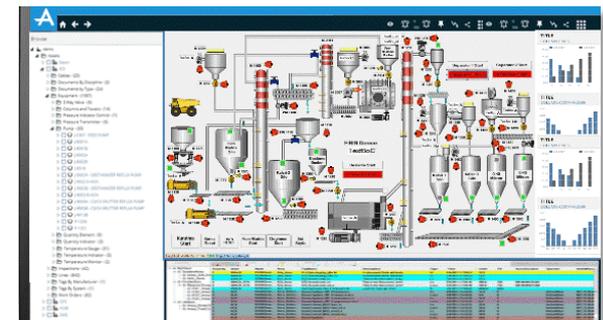
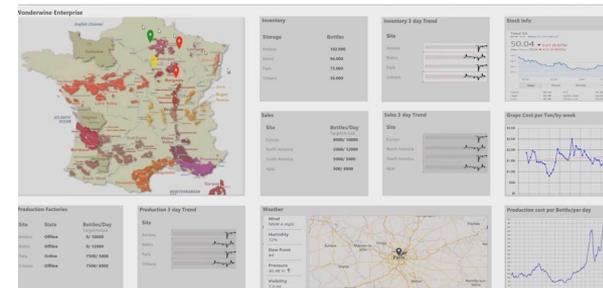
## The solution

- Collaborative, standards-based foundation that enables **enterprise-wide standards compliance** across processes, functional teams, and sites.
- **Object-oriented** implementations adding universal context to real-time processes, alarms, events, and archived historical data across disparate business systems
- Advanced graphics & visualization capabilities

## Business value

### Visualize Full Production History

- Provide process history incl. temperatures through product creation
- Identify the equipment the product was made on
- Recognize the workers and teams that worked on the product
- Record measurements, samples, and tests done on products
- Record the complete material and process history of a product



Learn more

# Eker Dairy, Turkey

Significant increases with AVEVA solutions



### Customer Challenge

- Needed a powerful & flexible platform to create templates

### The Solution

- AVEVA System Platform
- AVEVA Historian

### Customer Benefits

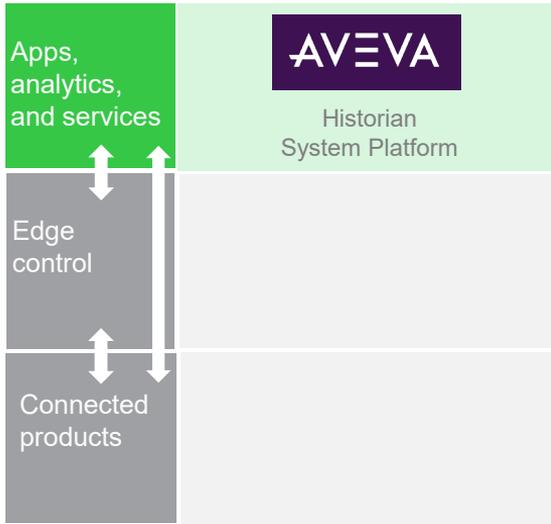
- Flexibility to process data quickly & record them at any time
- Quickly identify the problems that occur during production and fix them within a short time by monitoring the deviations
- Monitoring of equipment and applications allowed an increase of the OEE by improving the machine coordination

The Results: Life is On with... Increased Product Quality & traceability to end-users.

[Link to Web](#)  
[Link to Video](#)

Producer of Yogurt and dairy products: **600 tons per day**

EcoStruxure<sup>®</sup> for Food & Beverage  
Innovation At Every Level



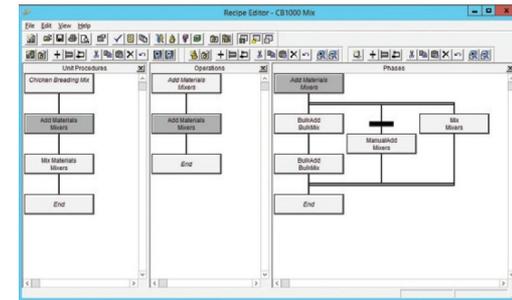
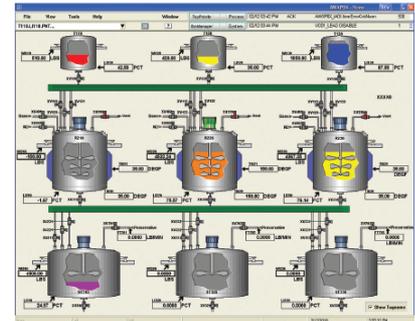
Effectively manages flexible batch operations for increased product quality

## Key Capabilities

- Provides recipe execution management and automatic capture and storage of all batch execution data.
- Associates the batch execution and equipment history with full product genealogy and material traceability.
- Facilitates the design and implementation of Batch Management systems, applications and solutions that comply with regulations such as FDA 21 CFR Part 11
- Built-in security and material management capabilities (incl. material consumption, movements, and inventory levels) contributing to a detailed electronic batch record (EBR) that complies with regulatory requirements.

## Business Value

- **+30%** Quality Improvement
- Consistent quality to recipe specifications, helping eliminate paper records and reduce batch release cycles
- Reduce risk associated with complex products and product variations
- Empower process engineers to create and modify recipes
- Faster time to market for new products introduction
- Reduce cost of regulatory compliance
- Multi-site recipe and batch management standardization



Learn more

# Nigay, France

Evolution of the solution with plant requirements



## Customer Challenge

- Develop an evolutive and flexible solution to integrate future requirements of the plant
- Make data available in order to better monitor the equipment
- Improve the traceability and the repeatability of recipes

## The Solution

- AVEVA System Platform
- AVEVA Manufacturing Execution System (MES)
- AVEVA InTouch HMI
- AVEVA Batch Management
- AVEVA Historian

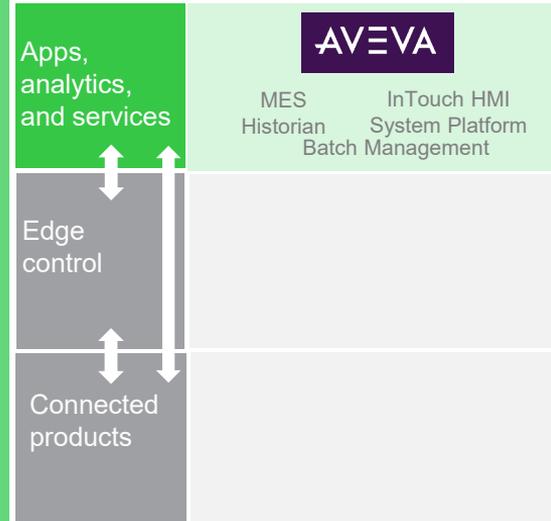
## Customer Benefits

- Improved Total Cost of Ownership
- Progressive implementation of the solutions with the plant evolution (from 2000 to 2016, production triple)
- Centralized solution
- Better maintenance and security of the solution

**The Results: Life is On with... Increased traceability (from paper to automatic)**

European leader in caramels & specialties. 410 references. 58,800 tonnes produced per year in one plant. 62% dedicated to export

**Ecostruxure** for Food & Beverage  
Innovation At Every Level



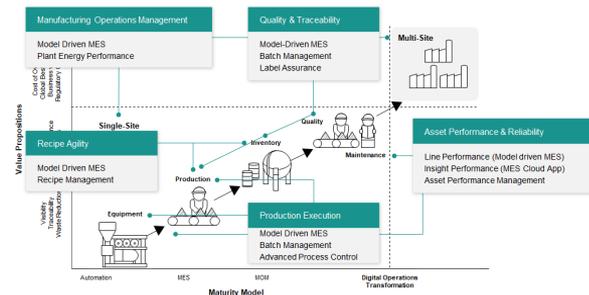
## Raw Material tracking and Product Genealogy

### Key Capabilities

- Paperless Work Order and Product Specification Mgmt.
- Real-Time Visibility to Production and Inventory activities
- Business Rules to secure Quality to Specification
- Comprehensive Electronic Manufacturing Genealogy and Material Traceability

### Business Value

- 20 to 30% Quality Improvement
- Ability to capture full material history
- Record material details
- Understand materials or lots used in specific batches of products
- Empower Supply Chain Applications
- Enforce Compliance & Governance
- Foundation for Agile Production Processes: improved operational performance, optimal regulatory compliance, transparency across your supply chain, and increased plant-to- enterprise interoperability.



***“The most important impact of MES was traceability, visibility, compliance, and data exchange between SAP.”***

Source: Engineer, Fortune 500 Food and Beverage Company – Tech Validate, AVEVA

Learn more

# Mumm/Perrier-Jouet (Pernod Ricard Group), France

Increasing performance and traceability with  
AVEVA MES



## Customer Challenge

- Implement a standard tool to follow the performance and traceability of the “disgorgement” step in champagne production
- Interface solution with ERP and production tools

## The Solution

- AVEVA System Platform
- AVEVA Manufacturing Execution System (MES)
- AVEVA Historian

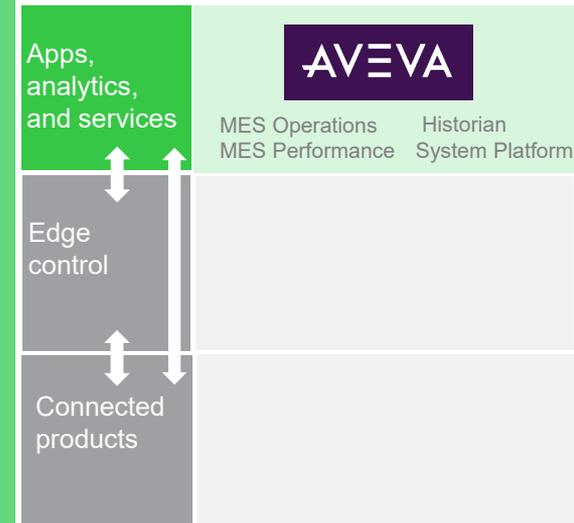
## Customer Benefits

- High level of integration into current information system
- Traceability report in place at batch level
- Performance report allowing follow up of end of production and machine defaults

**The Results: Life is On with... Increased  
Batch traceability**

Leading producer of wine  
worldwide

**Ecostruxure** for Food & Beverage  
Innovation At Every Level





## Customer Challenge

- Produce better quality products
- Brand protection
- Focus on quality tools to help make better business decision

## The Solution

- AVEVA Manufacturing Execution System
- AVEVA Work Tasks

## Customer Benefits

- Food Safety Modernization Act (FSMA) support
- Increased reporting and inventory management accuracy
- Increased workforce efficiency through mobile solutions for material receiving, labeling and material consumption
- Efficient withdrawals of items in minutes thanks to lot number traceability and genealogy for ingredients.
- Improved quality and inventory management

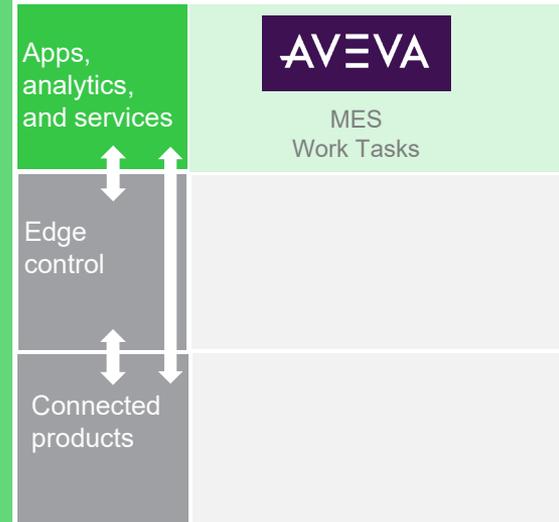
Life is On with... Genealogy tracking/material traceability down from 2.5 hours to 10 minutes

[Link to Video](#)

[Link to on-demand Webinar](#)

Chain of retail convenience stores founded in 1965. More than 500 locations in USA.

EcoTruxure<sup>™</sup> for Food & Beverage  
Innovation At Every Level



# Supporting the Digital Transformation Journey of Danone

Europe



## Customer Challenge

- Accelerate Operations strategy
- Improve efficiency and flexibility of operations globally leveraging digital technologies and solutions
- Build strong foundations: Cybersecurity, MES, Data Architecture & Models, to avoid silos and customization per site
- Drive People Transformation: Operation Excellence maturity level is key

## The Solution

- AVEVA\* Manufacturing Execution System (MES)
- Schneider Electric Digital Transformation Consulting Services

## Customer Benefits

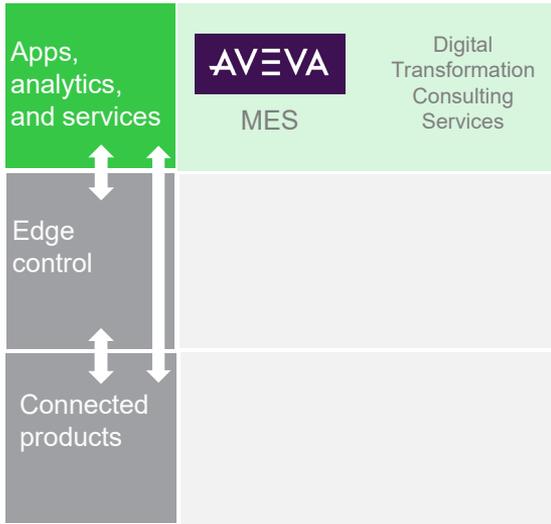
- Build a Core model MES system
- Definition of one standard interface with ERP modules
- Covering 20 Standard functionalities, serving Quality (preserving traceability), Finance (reporting accurate factory usage), Production (measuring true performance), Digital (providing a foundation)
- Roll out planned within next 5 years to the entire operations
- Model-driven template
- Compliance to FDA and Chinese regulation

**The Results: Life is On with...** Supporting the Digital Transformation Journey of global operations

[Link to Video](#)

One of the Global Leading Dairy company.

**EcoTruxure** for Food & Beverage  
Innovation At Every Level



\* 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.



# EcoStruxure™ Clean-in-Place Advisor

Complete solution to track and tune your CIP operations

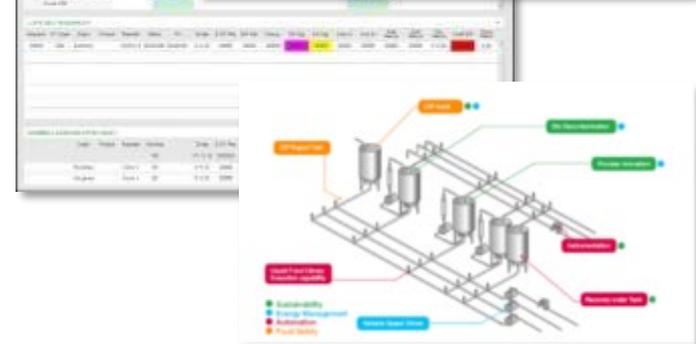
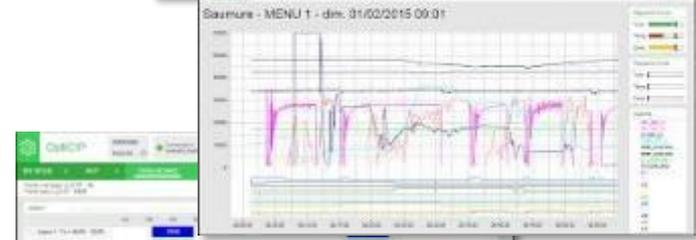
## The solution

- CIP assessment - Optimization tool
- Product loss monitoring tool
- Energy monitoring and reports services
- Typical payback from 6 – 8 months

## Business value

- Reduced environmental footprint: up to **30%** energy, water & chemical savings
- Higher productivity: up to **15%**
- Document evidence of proper cleaning

[Learn more](#)



Life Is On

Schneider Electric

# Nestlé Waters

Improving production with innovative technologies



## Customer Challenges

- Empower workforce with convenient diagnostic tool that's easy to configure & install
- Improve traceability by making it fast & simple to retrieve data on each production batch or cleaning process
- Improve quality by tracking deviations & highlighting abnormal production and Clean-In-Place (CIP) behavior

## The Solution

Nestlé selected Schneider Electric's innovative EcoStruxure Clean-In-Place Advisor solution, including OptiCIP software and services, to optimize their CIP operations, because of its:

- Flexibility to adapt the architecture to their IT and automation constraints
- Efficiency to better track and diagnose the process
- Differentiation from the competition who lack the features for this dedicated activity

## Customer Benefits

- Improved tracking & diagnosis of processes
- Significant reduction in traceability time and savings per CIP line
- 340t CO<sub>2</sub> used in sparkling water process saved in the first year (50% less for specific lines)
- Increased productivity, with 20% CIP reduction for some lines
- Facilitated commissioning of new production line
- Improved maintenance with dedicated custom features related to usage of the valves (like flip counters)

Life Is On with... **20%** less CIP time

*"Thanks to Schneider Electric's EcoStruxure solution we are now able to reduce our production line downtime for CIP by 20%."*

**Bernard Flores**

Spring industrial process department manager

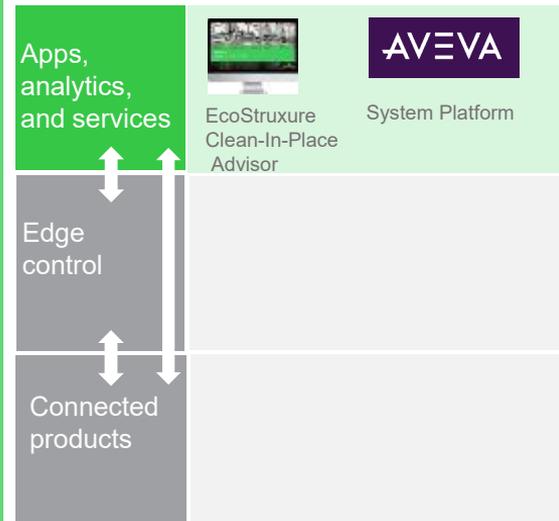
Nestlé Waters, Vergèze

[Link to Video](#)

[Link to Paper](#)

The world's **largest** bottled water company has **11%** of the market share. The Vergèze plant already has **13** equipped production lines, and is a "laboratory" for innovative solutions

**EcoStruxure™**  
Innovation At Every Level for Food & Beverage



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# Label Assurance

Ensure the right product is in the right packaging with the right label

## Regulations evolving:

- USA: Food Allergen Labeling and Consumer Protection Act – **FALCPA** (2004)
- Europe: **Directive n°1169/2011** (2014). Additional nutrition information enforced in December 2016
- Evolving **Packaging Labelling Directive** in some countries: France, Netherlands
- Coming soon - **New labeling requirements**: Nutriscore, Climate-Score, CO<sub>2</sub> footprint, Country-score, Animal welfare, .....
- **Allergens** list from EU changing in 2020: 140 new allergens banned!



Product recalls linked to mislabeling issues  
**40 - 60%**



Contains Milk, Soya, **Nuts** and Egg



# Label Assurance solution

Increased protection from product recalls due to label errors

## The Solution

- Ensure the right product is in the right packaging with the right label
- Vision systems (OCR = Optical Character Recognition) and software for tracking and documenting labels
- Non destructive solution, 100% online scanning, automated label check
- Solution easy to integrate into the packaging line
- Flexible deployment as a standalone quality system or integrated with AVEVA System Platform

## Business values

- **Cost reduction** from product waste and rework
- **Reduced product recalls** and **improved consumer confidence**
- **Increased brand protection**



Verifying Date & Lot Code for Traceability



Learn more

# Campbell's Soup, USA

Label Assurance solution supports reduction of Product Scraps



### Customer Challenge

- Cans with missing labels: mislabeling instances and product recalls
- Finished product losses due to manufacturing issues
- Significant inaccuracy in using master data across multiple systems and heterogenous plant environments

### The Solution

- AVEVA System Platform
- AVEVA InTouch HMI
- AVEVA Manufacturing Execution System (MES)
- AVEVA Workflow Management
- Label Assurance module

### Customer Benefits

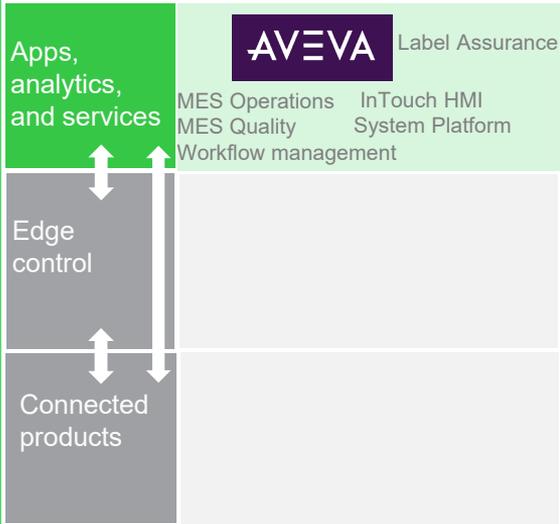
- **3%** Reduction in material costs
- Quality solution with mislabeling module: verifies and validates unit and case level labeling
- Achieves manual, semi-automatic and automatic in- / at-line sampling with validation against specifications

**The Results: Life is On with... 25% Decrease in product give-away**

[Link to Video](#)

Global food company making a range of high-quality soups and simple meals, beverages, snacks and packaged fresh foods.

EcoTruxure for Food & Beverage  
Innovation At Every Level



# 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.

# 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



Fields & Farms



Cooperative

Raw Materials



Manufacturing

Products



Distribution



Retailer



Consumers

## 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

<b>Food Safety &amp; Traceability</b> Ensure compliance and trust across the product life cycle	<b>Energy &amp; Sustainability</b> Reduce footprint and meet sustainability goals	<b>Asset Performance</b> Maximize return on capital expenditure	<b>Workforce Empowerment</b> Improve staff knowledge, productivity and collaboration	<b>Digital Engineering</b> Cut time, cost and risks of capital project engineering
Food Defense	Sustainability Consulting	Assessment and Consulting	Operator Training Simulator	Electrical CAD
Cybersecurity Services	Energy Demand Services	Enterprise Asset Management	Augmented & Virtual Reality	Building Information Modelling
Digital Calibration	Strategic Energy Sourcing	Condition Monitoring	Workflow Management	Integrated Engineering-Design
Raw material traceability	Enterprise data management	Predictive Analytics	Staff Schedule Management	Digital Asset Visualization
Production traceability	Energy as a Service	Line & Process Optimization	Operator Knowledge Sharing	
Product Identification & Tracking		Modernization services		



Let's talk about  
EcoEtruxure™  
for Food & Beverage

Life Is On

**Schneider**  
Electric

Life Is On

**Schneider**  
Electric