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

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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

Efficient facilities
Safer, more available, and greener resources

Resilient supply chain
Manage complexity and improve visibility

Agile manufacturing
Boost manufacturing flexibility & efficiency

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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

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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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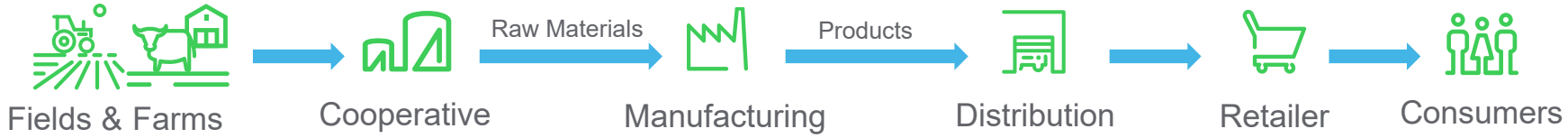Life Is On | Schneider Electric

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

Reinforce your Food Defense

Protect your facilities from any unauthorized physical or cyber access

- ## Enhance facilities security

  Protect your facilities occupants and assets with an integrated, role-based physical access control and intrusion detection solution that unifies your building's security infrastructure and building management systems.

- ## Ensure the right defense in-depth for your IT/OT systems

  Identify and mitigate risks by applying standards and good practices throughout the whole line of defense which must integrate people, processes, and technology.

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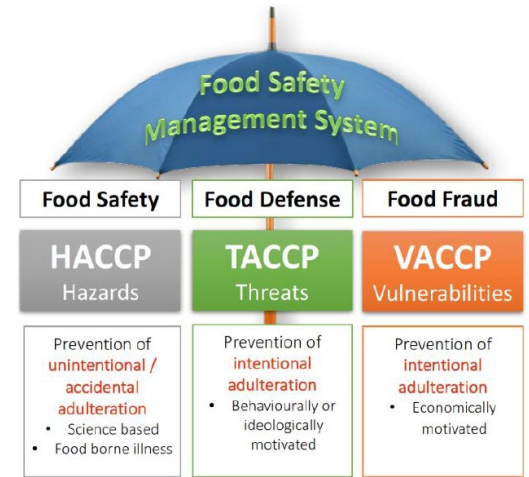
Food Defence & Cybersecurity

Protect your facilities from any unauthorized access and ensure the right defense in-depth for your IT / OT systems

Protection of food products from contamination or adulteration intended to cause public health harm or economic disruption.

Process to ensure the security of food and drink from all forms of intentional malicious attack including ideologically motivated attack leading to contamination.

Food Defence Programs shall be developed to reduce the risks from both internal and external threats in order to protect your customers. Food Defence assessment is based on 3 basic types:

- Threat assessment (TACCP) of critical areas in the Food Supply Chain. This includes also reviewing cybersecurity risks
- Vulnerability assessment (VACCP)
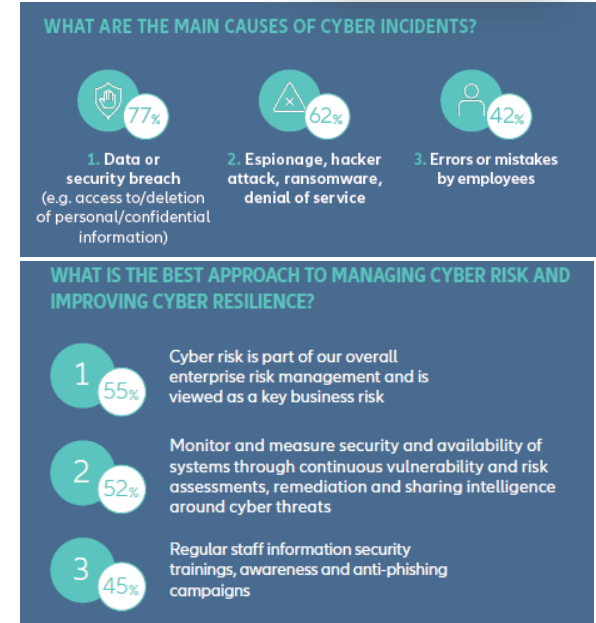- Likelihood of the threat assessment and its impact.

Food Safety	**Food Defense**	**Food Fraud**
HACCP Hazards	**TACCP** Threats	**VACCP** Vulnerabilities
Prevention of unintentional / accidental adulteration · Science based · Food borne illness	Prevention of intentional adulteration · Behaviourally or ideologically motivated	Prevention of intentional adulteration · Economically motivated

Sources: FSIS, 2020; FSCC22000, 2020, FDA, 2020

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Cybersecurity

Ensure the right defense in-depth for your IT / OT systems

- Cyber risks continue to evolve, now listed as n°1 Risk (Allianz Risk Barometer 2020).

- Cyber-attacks are becoming more sophisticated and targeted

- Significant increase in the number of ransomware incidents drive up the frequency of losses for companies.

- Mega breach now costs an average of $42Million, +8% over 2018 (Ponemon Institute)

- For breaches in excess of 50 million records, the cost is estimated to be $388mn (+11% vs 2018).

- Ransomware is the most prominent cybercrime threat.

- Business email compromise (BEC) – or spoofing – attacks are increasing in frequency.

How to protect the most crucial asset of F&B customers, their **DATA**?

Cyberincidents
#1 Risk

WHAT ARE THE MAIN CAUSES OF CYBER INCIDENTS?

77%
1. Data or security breach (e.g. access to/deletion of personal/confidential information)

62%
2. Espionage, hacker attack, ransomware, denial of service

42%
3. Errors or mistakes by employees

WHAT IS THE BEST APPROACH TO MANAGING CYBER RISK AND IMPROVING CYBER RESILIENCE?

1 55% Cyber risk is part of our overall enterprise risk management and is viewed as a key business risk

2 52% Monitor and measure security and availability of systems through continuous vulnerability and risk assessments, remediation and sharing intelligence around cyber threats

3 45% Regular staff information security trainings, awareness and anti-phishing campaigns

Sources: Kaspersky Labs, 2015; Trustware, 2016;; Allianz Risk Barometer 2020
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EcoStruxure™ Security Expert

First defense in building security - Unified access control and intrusion detection

The solution

- **Integrated** role-based physical access control and intrusion detection solution that unifies building's security infrastructure and building management systems.

- Ensure building occupants are safe and assets protected

- **Compliant** with security agency listings & regulations

- **Software & hardware** solution that delivers powerful security features:

  - Access control/Intrusion detection/Video surveillance/Visitor management

  - Identity theft detection & protection/Alarm Management

Business benefits

- **Single integrated platform** for access control and building management solutions

- **Improved efficiency** by simplifying security management

- **Faster decision making** by connecting people to consolidated data

- Best-in-class building visualization & control, from anywhere, at anytime

Learn more

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Oleificio San Giorgio, Italy

Greenfield project – oil mill

Customer Challenge
- Greenfield project: full production traceability with industry food and safety certifications

The Solution
- Traceability (MES system)
- EcoStruxure Process Expert (former Hybrid DCS)
- Electrical distribution
- Uninterruptible power supply for IT (UPS)
- **Building infrastructure (security systems)**
- RFID Antenna system - "call to load" system for trucks

Customer Benefits
- Single supplier for integrated solution
- Reduced costs and increased efficiency
- Remote monitoring for improved safety and optimized operation
- Compliant with international standards

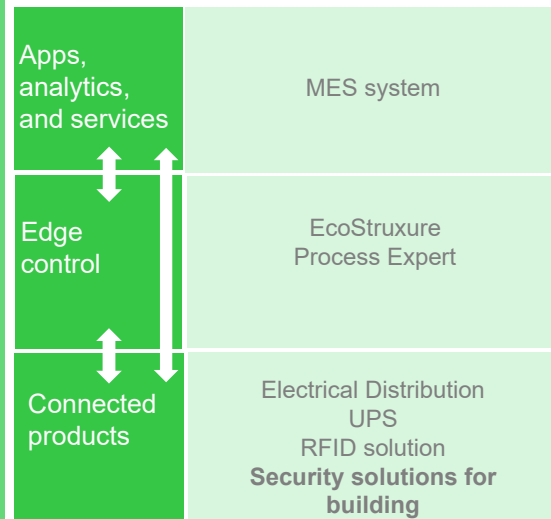## The Results: Life is On with...Automated Food defense and GMO free certified production

"To built a plant capable of processing 1000 tons of seed and hour, 24 hours a day, by totally automating the arrival of raw material and output of finished product in less than a year and a half, we have found in Schneider Electric the right partner for our challenge"
Eng. Nicola Tesser,
Plant Manager,
Oleificio San Giorgio, S.R.L.

Producing 200 tons of vegetable oil per day

EcoStruxure for Food & Beverage
Innovation At Every Level

Apps, analytics, and services	MES system
Edge control	EcoStruxure Process Expert
Connected products	Electrical Distribution UPS RFID solution **Security solutions for building**

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Cybersecurity Services

A defense in-depth approach

The Solution

- Identify and mitigate risks by applying standards and good practices throughout the whole line of defense which must integrate people, processes, and technology.

- A certified team of cybersecurity of experts

- A dynamic ecosystem of partnerships and to produce a holistic, security-conscious offering

- •An ISO conformant vulnerability management process that is activated upon external notification, vulnerability disclosure, or customer report

- An advanced global threat intelligence center that actively monitors cyberspace for threats to our products and customers.

360° cybersecurity solutions:

Security Consulting
Policy and procedure
Asset inventory
Gap analysis
Risk and threat
Compliance

Design & Implementation
Defense in depth
Secure architecture
Asset management
Security assurance level
System hardening
Solution integration

Training
Security awareness
Security engineer
Security administrator
Advanced expert

Monitoring
Firewall Security
Device Management
Threat Management
Device Security
OT SIEM Support

Maintenance
System upgrades
Security patches
Incident response

Benefits

- Comprehensive safety and cybersecurity plan tailored to your operations

- Cybersecurity protection without negative impact on day-to-day operations

- Secured control network communications and architecture

- Reduced chance of cybersecurity incidents resulting from human error

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Cybersecurity Solution to secure remote access to networks & operations

World-renowned distillery company, Europe

Customer Challenge
- Requirement for secure remote access to replace existing methods to provide effective and timely support for its operational technology
- Provide remote support and maintenance services
- Provide a method allowing specified users to pass from an outside zone to resources on the production or process network in a secure architecture

The Solution
- Definition of the requirements and develop a solution
- Maintain the availability of the manufacturing control systems.
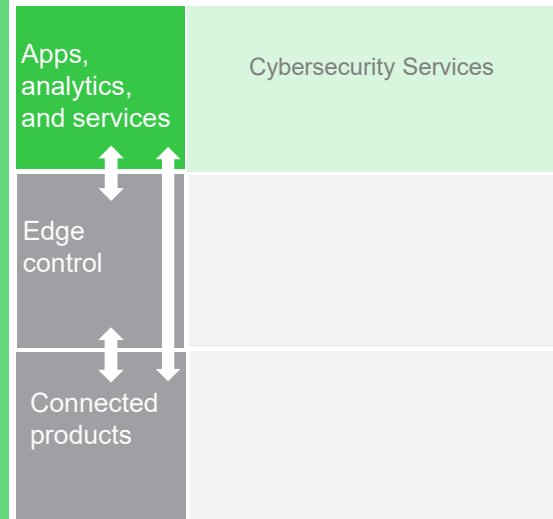- A prototype solution was demonstrated successfully at 2 sites with centralized hubs

Customer Benefits
- Valued Schneider Electric experience in the IT space, expertise and knowledge in the OT environment's
- End to End Security and peace of mind
- Simplified and Scalable system
- Central monitoring and control
- Global Reach & 24/7 Support
- Brand Protection

The Results: Life is On with... Improved resilience and uptime

One of the world-renowned distilled spirits company

EcoStruxure™ for Food & Beverage
Innovation At Every Level

Apps, analytics, and services	Cybersecurity Services
Edge control	
Connected products	

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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.

Up to 99%
quality data collection time

Up to 75%
time reduction in compliance to regulations.

Up to 97%
quality control time reduction.

Let's engage in this journey!

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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

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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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Let's talk about

Eco**struxure**™
for Food & Beverage

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