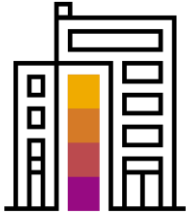




SAP® Innovation Awards 2020 Entry Pitch Deck

Shop floor management system by SAP Intelligent Technologies

Sigma



Company Information

Headquarters	Sigma Monterrey / Mexico - Sigma in Europe, Madrid / Spain
Industry	Consumer products
Web site	https://www.sigma-alimentos.com/

We are a global company dedicated to bringing local favorite foods to communities everywhere. Within 18 countries, we offer quality branded food at a range of price points and across diverse categories.

Our Purpose : To bring communities everywhere favorite foods to love.

Global Diversified Food Company

- We are one of the largest refrigerated packaged food companies with operations in 18 countries and a diversified portfolio of product categories.
- We have a relevant position in most of the markets in which we participate.

Solid Brand Portfolio

- We have a broad portfolio of value-added food products with highly recognized brands that are constantly considered “top-of-mind” household names.

Hams production on plant by SAP Leonardo

everis



an NTT DATA Company



Innovative project to replace the old plant software with high maintenance costs and difficult to add any improvement according to industry or/and business needs.

Challenge

The business challenge was improve IoT data acquisition from PLCs at the edge making information globally accessible and ready to be analyzed and reported in real time, making easier the daily plant operation and tightly connected with the whole plant processes through mobile application even with off-line functionality and with SAP Business Suite.

Solution

An application based on SAP Edge Services as “Supervision” layer in order to manage work orders with data collected at the Edge from the shop floor to SAP Business Suite, simplifying users experience with multiple devices types inside the plant to review and control the hams salting, drying and hardening processes.

Outcome

Application to manage all processes related to production, real-time information, mobility, communication with PLCs and automation of daily processes. Usability and simplicity of processes for all activities included on this production





Participating Partner Information



everis

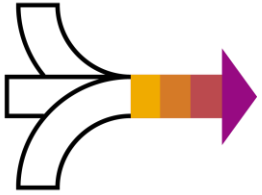
Implementation and development new solutions using SAP Intelligent Technologies



- Established in 1996, everis is a multinational consulting firm that provides business, strategy, technology application development/maintenance and outsourcing solutions.
- everis has proven expertise in identifying business benefits and change processes as well as the management decisions required to achieve these objectives. This focus provides a methodological framework that guarantees that investments and projects are evaluated in line with business results. Our professionals are experts in applying this approach to the whole range of services we offer to our clients.
- everis, as a multinational consultancy, provides its clients with global business solutions covering all aspects of the value chain of any organization, from business strategy and reengineering, to implementation of technological solutions.



an NTT DATA Company



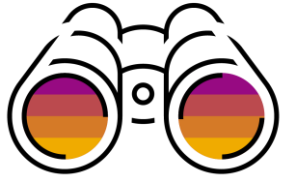
Business Challenges and Objectives

- Set a model plant platform with SAP Intelligent Technologies to enroll all its plants in a digital transformation based on the shop floor processes.
- Elda2SAP goal is to guarantee an easy maintainability, scalability and modularity for the system developed to guide salting process in Aoste plant.
- To re-design the architecture and get back all the PLC on the same layer. They will handle the physical process and the supervision will communicate to each one of them in order to gather and transfer information from and between PLCs to the supervision, finally the Supervision will communicate with SAP Business Suite to create the work in progress production orders movements.

- Build a robust edge system to cover dry ham processes business needs at the shop floor reducing production issues.
- System scalability based on time reduction for similar production business processes implementation
- Enhance capabilities like mobility, process simplification, IoT connectivity, cloud and local, SAP native integration, user experience...
- Harmonize, standardize, homogenize the business process.
- Setup SAP Intelligent Technologies as a Digital Engine, and fully aligned with the SAP roadmap in the digital transformation



an NTT DATA Company



Project or Use Case Details

The solution implemented provides the following functionality in the different production processes:

Management of the entry and the exit of the storage racks: through logic define on the application based on the information received from the PLCs integrated.

Monitoring of Work in Progress in the resting room: through a graphic map of the resting room with logic in order to manage both the input and output of the storage racks, users can track in real time the position and situation of each rack with all the necessary information when selecting each rack.

Traceability of each rack outside the resting room: label printing and printing with the information of each rack, ***integration*** with the different PLCs.

Mobility within the plant included off line mode: the users can manage all activities and daily tasks related to processes production with mobile devices. They can load, move and produce the racks where the hams are stored during production.

All the ***information*** managed with this application is sent to backend system (SAP Business Suite) on ***real time***.



Benefits and Outcomes

Business or Social

This project means another step in the digital transformation of one of our ham production plants, being a solution model for the rest of our plants due to its success in the future.

IT

Replacement of an old software, avoiding risks and costs in the maintenance of the old application.

With the shop floor application, user experience of IT operation is significantly improved.

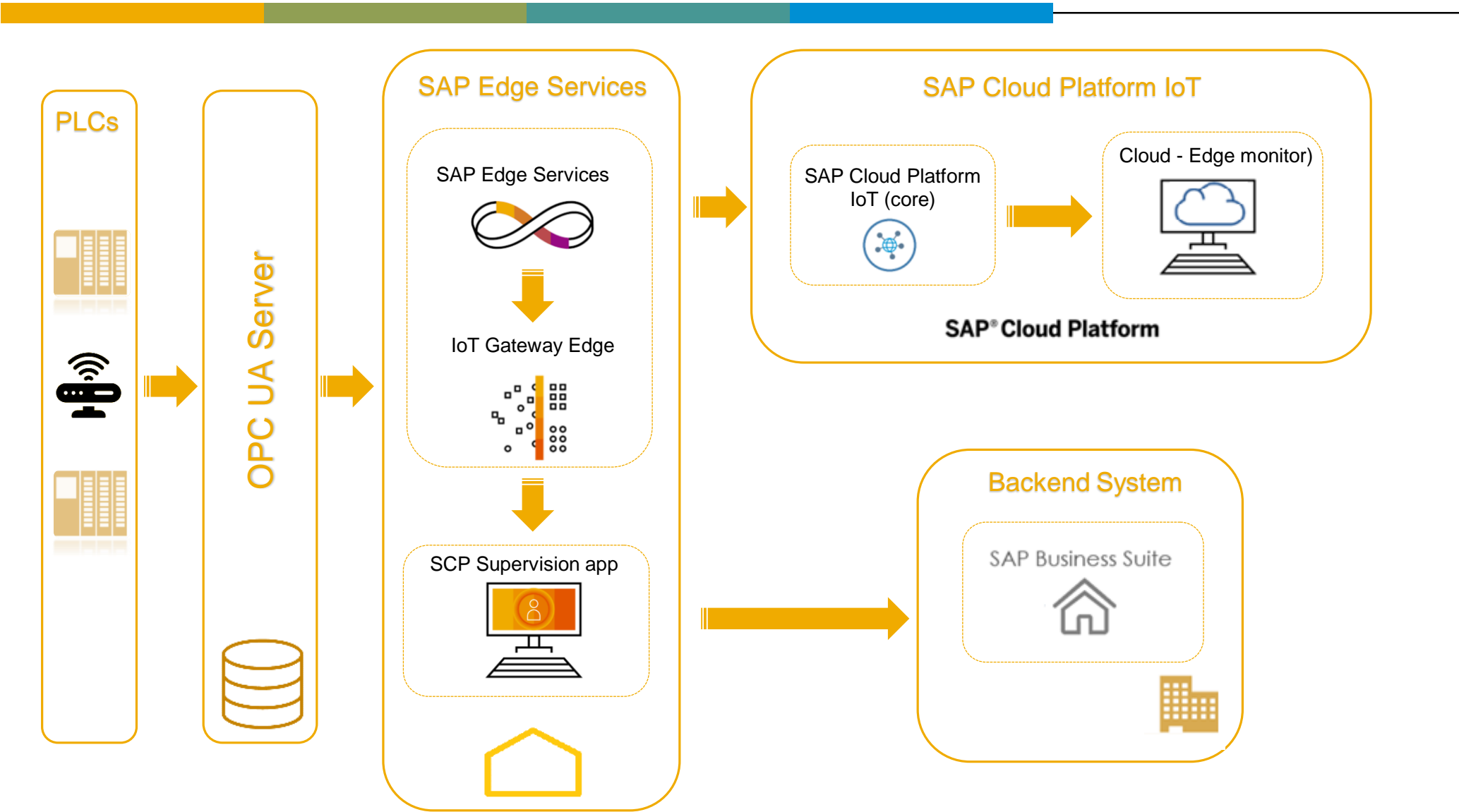
Process automation with mobility and improve response times of production tasks.

Human Empowerment

Friendly application that improves the operators daily tasks in the shop floor with quick and simple steps around the plant.



Architecture





Deployment



Deployment status LIVE

Date 24.10.2019 Number of users 80

SAP technologies used:

	SAP product	Deployment status (live or proof of concept [POC])	Contribution to project
1	SAP Edge Services	LIVE	80%
2	SAP Business Suite	LIVE	10%
3	SAP Cloud Platform	LIVE	5%
4	SAP Cloud Platform Internet of Things	LIVE	5%

If you have used one of the services or support offerings from SAP Digital Business Services during the implementation or deployment phase, please select with ☒ one or more of the following offerings:

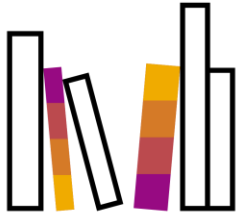
- ☐ SAP MaxAttention™
- ☐ SAP ActiveAttention™
- ☐ SAP Advanced Deployment
- ☐ SAP Value Assurance
- ☐ SAP Model Company
- ☐ Others:
- ☐ SAP Innovation Services
- ☐ SAP Innovative Business Solutions



Advanced Technologies

The following **advanced technologies** were part of the project.

	Technology or use case	Yes or No	Contribution to project
1	3D printing	NO	
2	Blockchain	NO	
3	Internet of Things (IoT)	YES	Bidirectional communication with PLCs and real-time information on production processes in the developed application
4	Machine learning or AI	NO	
5	Conversational AI	NO	
6	Robotic process automation	NO	
7	Data anonymization	NO	
8	Augmented analytics	NO	



Additional Information

■ Production Flow

