



SAP Innovation Awards 2019 Entry Pitch Deck

KANTARU for digital order process management

bsc solutions GmbH & Co KG



<https://youtu.be/YAZ0hTkBVn4>

Kantaru - Digital order process management

bsc solutions GmbH & Co KG



“Quote”

“Smooth and transparent communication, synchronization and orchestration between different plants”

Challenge

Various components of the manufacturing plant are manufactured in various plants and countries. The individual components must be completed in time for final assembly.

Solution

The individual quality gates of the manufacturing process were mapped in digital order boards. A cross-plant view allows orchestrating the individual part production. At the same time, a KANBAN board was implemented, in which occurring disturbances and actions can be recorded and tracked. The Stage Gate process has been harmonized with the Shopfloor Management System in the cascade.

Outcome

Reduced manual effort, global availability of information (vertical and horizontal), reduction of error rate, possibility of task allocation, selection of orders (by status, locations, project), task selection of measures-responsible, possibility of escalation of measures, direct visibility in the action list, Implementation work on your own desktop / workstation, KPIs along the cascade and quality gates

Transparent Quality Gate Process

Met and overdue Milestones

Real-time tracking



Business Challenge & Objectives

Various components of the manufacturing plant are manufactured in various plants and countries. The individual components must be completed in time for final assembly.

Missing parts and unfinished components prevent final assembly and delivery. The prioritization and orchestration of partial examinations across national borders represent a high communicative effort with a high error rate.

The key objective was to create a transparent process with a real time tracking. Missing parts must be detected early and measures must be derived. The direct feedback on the degree of completion and any faults should be clearly visible. The status for the next Quality Gate must be visible for all orders at a glance.



Project / Use Case Details

There are two technically linked boards: the order board to keep track of the current status of the orders and the action board to process the errors that have come up during order processing. It is possible to look at the current status of the measures on the order board and to include new points in the action board.

The order board visualizes the individual production steps as a column. Each column represents a quality gate.

Based on configurable criteria, e.g. Material number or plant, customer orders created in SAP are automatically displayed on the board.

For each stage gate, the planned and actual dates can be viewed and tracked via the reporting.

Depending on configurable criteria a new Card will be created automatically to represent subprojects or QC cards.

For each Quality Gate, a checklist with criteria can be maintained. Each criterion is checked and set accordingly. Only when all criteria for the Quality Gate have been fulfilled can the order be transferred to the next status.

The action board process and track the disruptions that have come up during order processing.

It has three statuses: Open, In Work, Done. Between the phases, a task can be moved manually, the current status is also displayed in the order board. If a task is completed, it will also be closed on the order board.



Benefits and Outcomes

Business / Social

Actions for non-satisfied Quality Gate criteria or for escalation.

Actions assigned directly to orders.

Grouping - possibility to assign certain action and activities to several orders

Assignment of activities to departments or specific MA

Cascading measures on the order board

Task distribution of the action points in added value level

Selection and feedback of one's own tasks at one's own workplace

Issues with origin and types of issues (info, missing part, quality, ...) classified.

IT

Common database

Single Point of Entry (Fiori Launchpad)

Cloud access for non-SAP Users / Supplier

Human Empowerment

All participants on board; MA, who work in the phases of the secondary process; Executives of Secondary-Line

Orchestration of plants, real-time tracking and synchronization

Reduce manual effort

Global information availability (vertical and horizontal)

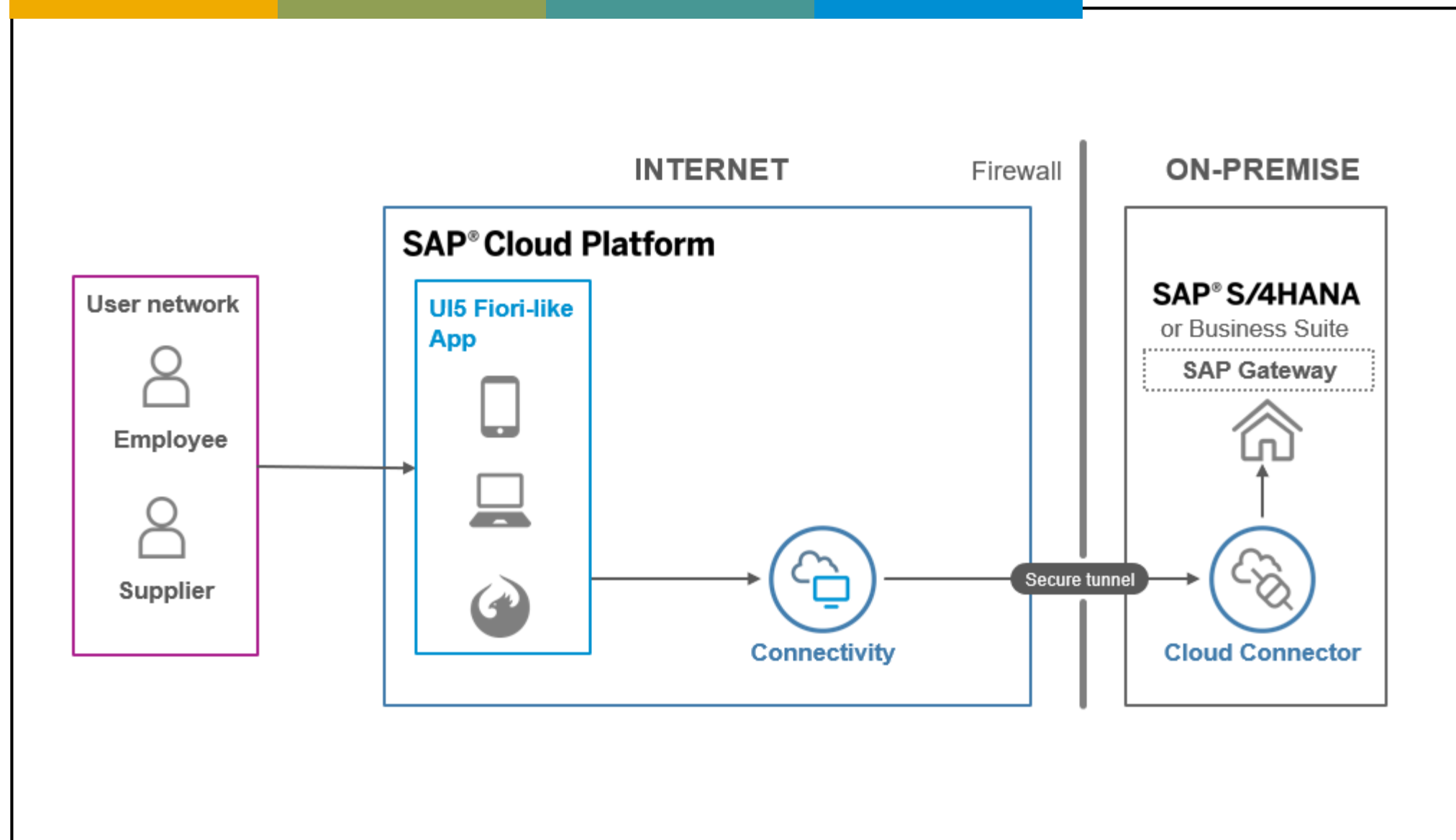
Reduction of the error rate

No multiple data entry

Possibility of task distribution



Architecture





Deployment

Date of Deployment or POC: POC, Go-Live April 2019 with Phase I

Number of live users: Phase I approx 400 users

SAP Technologies Used:

SAP Cloud Platform



SAPUI5



Fiori



ABAP



SAP Gateway



Server Processor:

Linux Distribution:



Emerging Technologies and Use Cases

The following Emerging Technologies and use-cases are part of the project and describe the contribution

	Technology or Use Case	Yes/No	Contribution to Project
1.	Machine Learning / Artificial Intelligence	No	
2.	IoT	Planned	Shop-Floor and Machine integration planned
3.	3D printing	No	
4.	Blockchain	No	
5.	API Economy / Integrate the Intelligent Enterprise	Planned	
6.	Cloud Native / Event Based Architectures	Planned	
7.	Extending the digital core with SAP CP / ABAP in SAP CP		
8.	SAP Leonardo Application (extending SAP application, using Industry Innovation Kits or result of Design Thinking workshop)	Planned	Shop-Floor and Machine integration planned