



SAP
Innovation
Awards 2019



SAP Innovation Awards 2019 Entry Pitch Deck

Logistics Bridge: trigger business processes based on real-time inventory localization

itelligence AG

THE BEST RUN



Logistics Bridge : trigger business processes based on real-time inventory localization



https://youtu.be/_taTrUicsaM

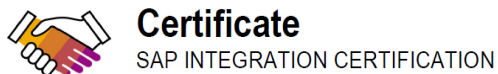
Logistics Bridge – trigger business processes based on real-time inventory localization

itelligence AG

“Quote”

“Logistics Bridge helps me automate my goods movement processes and track my handling-units and transportation assets”

SAP® Qualified
Partner-Packaged Solution



Challenge

The increasing need for automation and transparency of end-to-end supply chain forces companies to optimize their logistics flows and processes short term.

Solution

Increase productivity of your inventory processes by automation of booking processes based on real-time sensor information, reduction of inventory search and manual effort. Track & Trace inventory and asset flows also outside the company, managing the transport equipment or delivery as digital twin.

Outcome

Increase productivity of your inventory processes by automation of booking processes based on real-time sensor information, reduction of inventory search and barcode scanning. Increase productivity of your asset fleet. Direct integration of the technology in the processes, transparency of stock in real-time.

Transparency of inventory in real-time (inside and outside company)

Automated inventory posting by location changes recognized by sensors – reduction of effort

Product and Logistics safety



Partner Information

itelligence AG

IoT innovator and business process integrator to build the intelligent enterprise



Our customers are running their logistics processes in SAP in the best and optimized way. But they have an increasing demand on automation of goods movements and tracking, also on transports outside the company. Motivation enough for us to build a solution which can be used as an industry accelerator for different industries using the latest IoT technologies as Leonardo IoT, SAP Cloud Platform and merge them with the existing customer logistics flow helping them to become an even more intelligence company.



Business Challenge & Objectives

- The increasing need for automation (demands of OEM, lack of specialized workforce) and transparency of end-to-end supply chain forces companies to optimize their logistics flows and processes short term.
- Full transparency of the holistic logistic network (7+“R“ (right product, right time, right location, right quantity, right cost/price, right quality, right information))
- Tracking of different conditions, as temperature, humidity, light, shakes
- Intra- and extra logistics as one holistic unit

- Increase productivity of your inventory processes by automation of booking processes based on real-time sensor information, reduction of inventory search and barcode scanning
- Track & Trace inventory and asset flows also outside the company, managing the transport equipment or delivery as digital twin
- Document critical information from sensors (as cold chain information) at digital twin level, optional integrate Blockchain



Project / Use Case Details

- Solution which can be used in various industries, as Manufacturing, Agriculture, Health Care, Chemicals, Mining, Transportation and Warehousing
- Handling units in SAP are paired with sensors (i.e. bluetooth tags)
- Use sensors and gateways to track the current location of goods and automatically register these movements in your SAP system
- Turn physical flow to events and events into action with end-to-end process visibility by using sensors(tags) and gateways
- Automated posting of inventory flows in SAP IM/WM/EWM (ECC/S4HANA) based on location changes, recognized by sensors (tags), transmitted by gateways. Rules framework manages the automatic postings within SAP ERP
- Track & Trace inventory and asset flows also outside the company, managing the transport equipment or delivery as digital twin in Leonardo IoT
- Document critical information from sensors (as cold chain information) at digital twin level, optional integrate Blockchain
- Hardware (tags, gateways) agnostic – flexible integration of different partners



Benefits and Outcomes

Business / Social

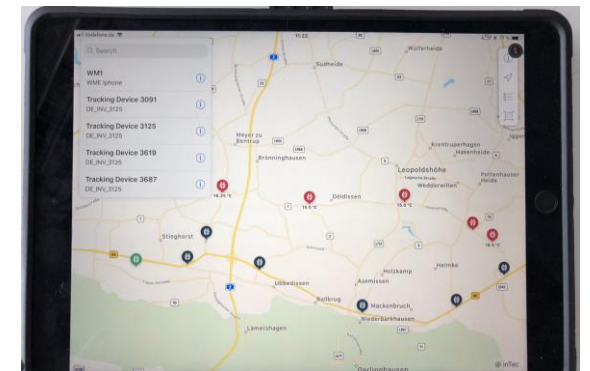
- Transparency of inventory in real-time (inside and outside company)
- Automated inventory posting by location changes recognized by sensors – reduction of effort
- Product and Logistics safety
- Document critical information from sensors (as cold chain information) at digital twin level, optional integrate Blockchain

IT

- Technology partner agnostic
- SAP SCP, SCI and Application Enablement
- SAP ECC and/or S4HANA
- Integrate SAP core components as well as third-party products
- Optional: Blockchain

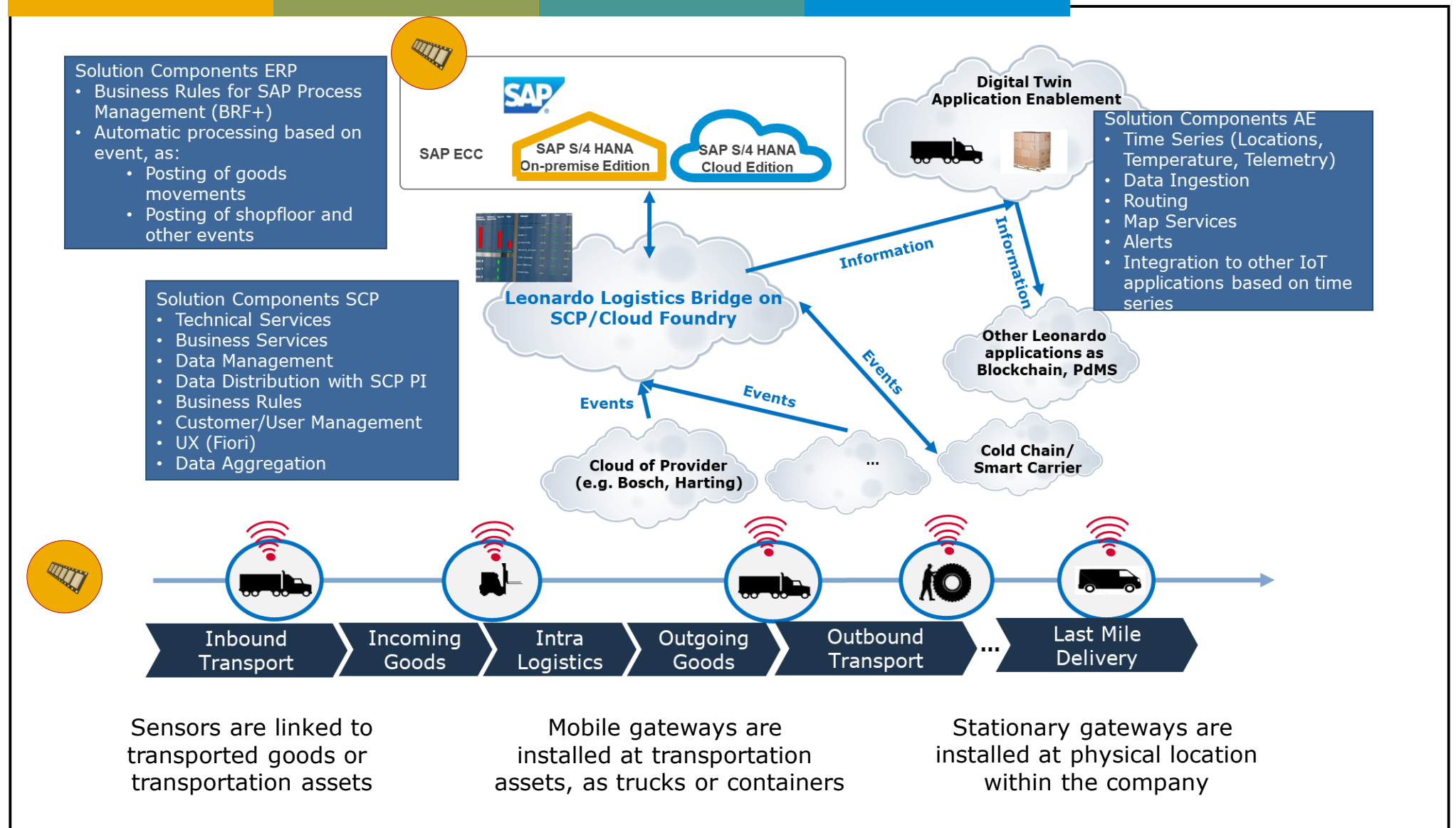
Human Empowerment

- Reduction of manual postings and scanner activities
- Visualization with WebIDE and Apple App





Architecture





Deployment

Date of Deployment or POC: 10.12.2018

Number of live users: Customer cases in progress

SAP Technologies Used:

| | |
|------------------------------------------------------------------------------|------------------------|
| SAP IoT Applic Enabl, Applicat. Services (8005118) | Productive in solution |
| SAP IoT Appl Enabl, Time Series Event Store / Archive (8005317/8005120) | Productive in solution |
| IoT Services 4.0 (8005404) | Productive in solution |
| Application Runtime on SAP Cloud Platform (8005365) | Productive in solution |
| SAP Cloud Platform Web IDE (8003103), SAP Cloud Platform Bandwidth (8000351) | Productive in solution |
| SAP CP Integration for SAP cloud app (optional) (8000800) | Productive in solution |
| Blockchain (optional) | Productive in solution |
| SAP ECC / SAP S/4 HANA (on premise) | Productive in solution |
| Predictive Maintenance (optional) | Productive in solution |

Server Processor: Unknown - Cloud

Linux Distribution: Unknown - Cloud



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 | yes | Optional, when using additional PdMS |
| 2. | IoT | yes | Application Enablement, IoT Services, WebIDE |
| 3. | 3D printing | | |
| 4. | Blockchain | yes | Based on AE data |
| 5. | API Economy / Integrate the Intelligent Enterprise | yes | Integration in ECC and S/4HANA on premise (future: also Cloud based S/4) |
| 6. | Cloud Native / Event Based Architectures | | |
| 7. | Extending the digital core with SAP CP / ABAP in SAP CP | yes | CP as hub |
| 8. | SAP Leonardo Application (extending SAP application, using Industry Innovation Kits or result of Design Thinking workshop) | yes | PdMS as additional application |