



SAP
Innovation
Awards 2019



SAP Innovation Awards 2019 Entry Pitch Deck

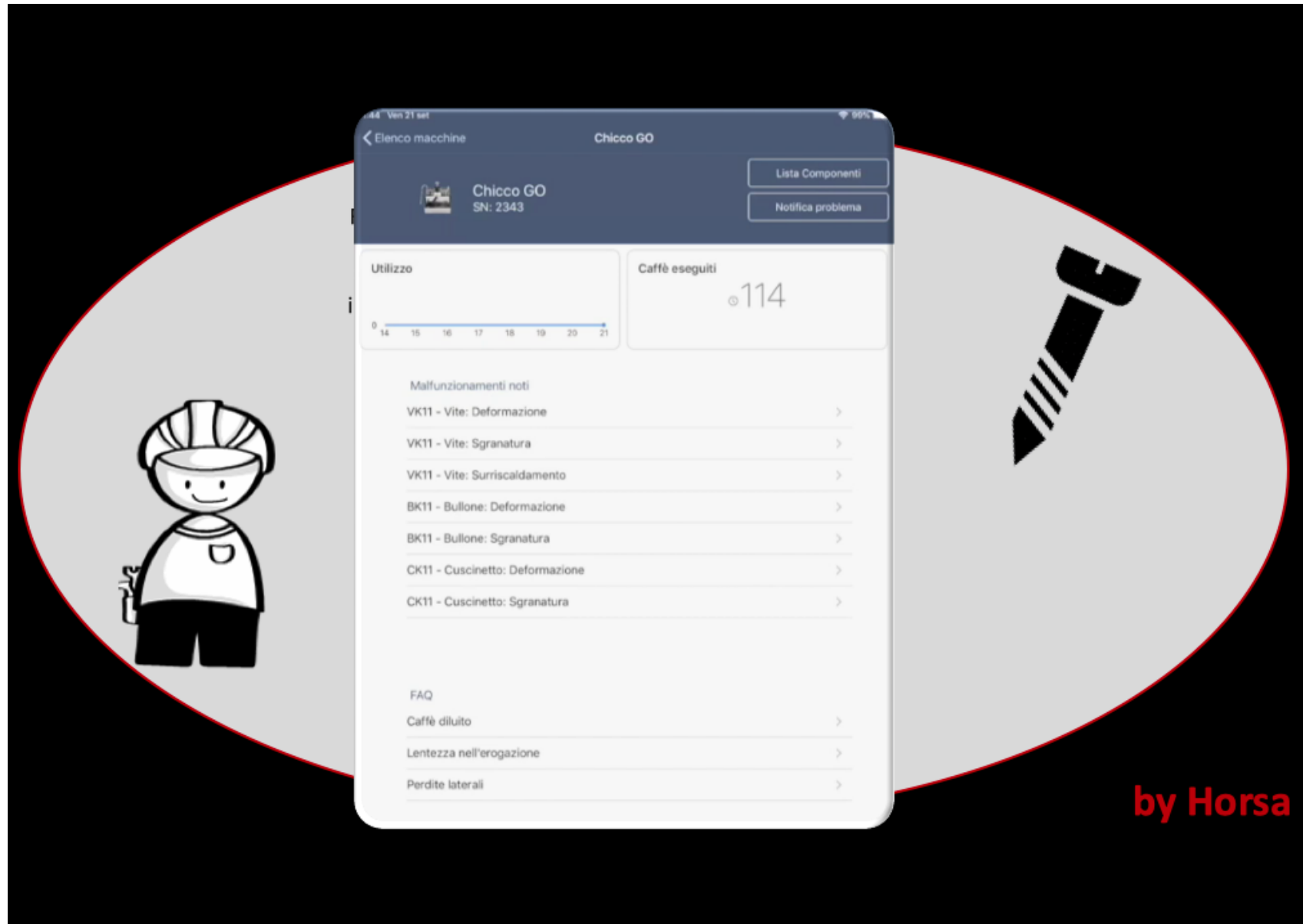
Intelligent Maintenance with iOS devices

Horsa Spa

THE BEST RUN



<https://youtu.be/Ak-LVmf4oNg>



Intelligence Maintenance

HORSA



“Quote”

“From now, intelligent maintenance is as easy as having a coffee”

Challenge

Simplify maintenance activities of a coffee machine by providing information and creating automation services integrated with SAP ERP.

Solution

Use IoT, Machine Learning and Augmented reality technologies to speed up the maintenance steps. Recognize items and materials with a phone camera, and use IoT to keep products under control.

Outcome

The maintenance center can be notified about a machine's problem in real time or in advance. The maintainer, during his work, will be helped and guided by application insight indicators. The maintainer can send all the data about his work throw the app directly to Sap ERP

Reduction of 20% for maintenance service time

Maintenance works data increased in SAP ERP of 70%

Failure time at customer's place decrease of 18%



Partner Information

Horsa spa
Sap Partner



We never stop exploring new technologies



Business Challenge & Objectives

Provide a maintenance and quality service built in the product.

Make easier the maintainer's work increasing efficiency and provide to SAP ERP more detailed data than before.

Automate as more as possible all the maintenance work steps.

Use IoT in order to provide real-time data for predictive and analysis purpose.

Show data with augmented reality technologies in order to provide information efficiently.

Recognize object and spare parts framing the smartphone's camera to simplify the maintainer job.



Project / Use Case Details

In this use case we have a Smart Coffee machine. We connect this coffee machine with IoT and in case of machine failures or working on below quality standard the smart core of the machine can notify by itself at the maintenance center with statistics or messages.

The maintainer receive on his phone app:

- KPI in real time
- Statistics KPI about failures from ERP
- Documentation and FAQs.

The app can show in augmented reality the parts of the machine in order to help the maintainer to perform his work.

If some parts of the machine need to be replaced the maintainer can use the app in order to easily recognize the spare parts using the phone camera and send the maintenance report directly to SAP ERP.



Benefits and Outcomes

Business / Social

Reduction maintenance costs.

Customer satisfaction improved about quality of service.

IT

Before the app adoption the maintenances reports were made on papers or excel files. Now all the data are directly saved on SAP avoiding data loss.

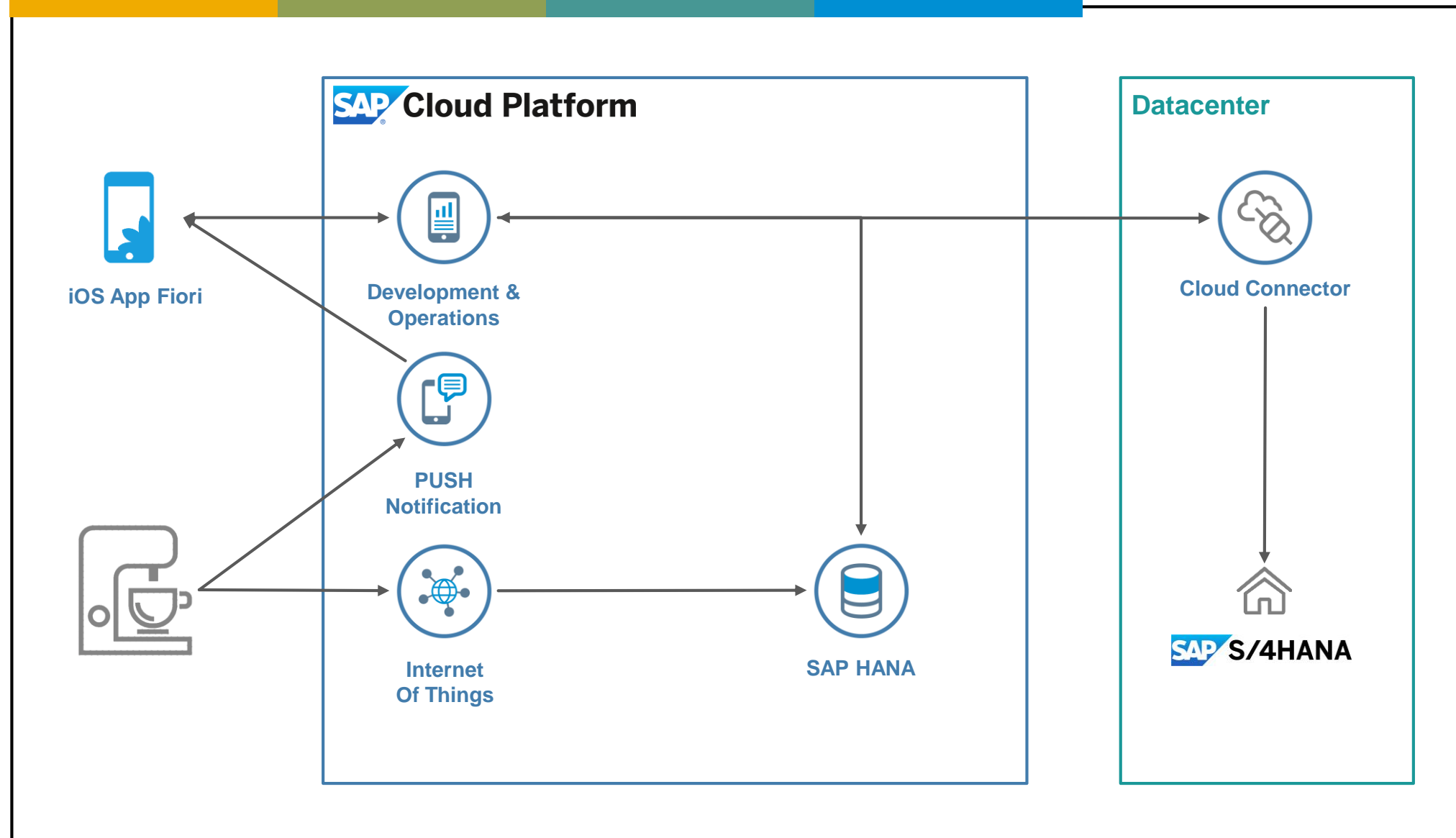
The integrated process in SAP avoids data duplications and allow data input checking.

Human Empowerment

Immediate adoption of the app by maintainers because augmented reality and image recognition technologies bring real benefits during maintenance works.



Architecture





Deployment

Date of Deployment or POC: 20/10/2018

Number of live users:

SAP Technologies Used:

SAP Cloud Platform

POC

S/4 Hana

POC

SAP Hana

POC

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	YES	Used to allow image recognition
2.	IoT	YES	Used to connect the coffee machine
3.	3D printing	No	
4.	Blockchain	No	
5.	API Economy / Integrate the Intelligent Enterprise	No	
6.	Cloud Native / Event Based Architectures	No	
7.	Extending the digital core with SAP CP / ABAP in SAP CP	Yes	Push Notifications, Cloud Connector to get and provide data from the customer ERP.
8.	SAP Leonardo Application (extending SAP application, using Industry Innovation Kits or result of Design Thinking workshop)	No	