



# SAP Innovation Awards 2019 Entry Pitch Deck

FrontlineAI: Better customer service experiences through  
digital humans

intelligence

# FrontlineAI: Better customer service experiences through digital humans



## “Quote”

“Staff are so busy. It’s difficult to get qualified assistance when I visit a store.”

“FrontlineAI helped me choose a present and also told me exactly where to find it!”

## Challenge

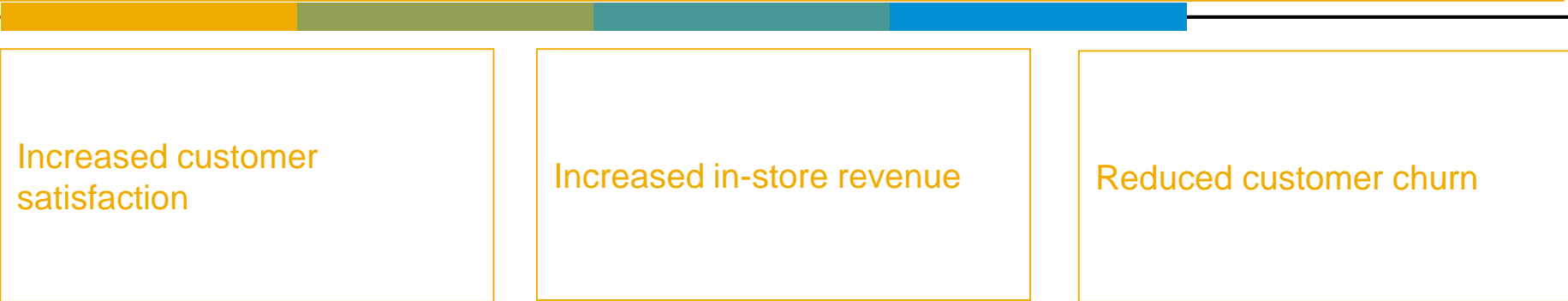
The availability of personal assistance in retail stores is drastically decreased by strong competition, especially from on-line stores, which is driving staff reductions. At the same time, the need for constantly changing product assortment and placement makes it difficult for staff to stay updated.

## Solution

Our speech driven life-like avatar combines the ease of natural language interactions with complete up-to-date knowledge of stock, trends, etc. to provide the best information for customers while maintaining the experience of personal assistance.

## Outcome

Better customer experiences by combining the best elements of the on-line and in-store retail worlds.





## Partner Information

itelligence

Tech innovators and user experience designers



“Our customers’ backend systems know almost *everything* about their products, and the internet knows the rest; stock status, sales, trends, you name it. Sadly all this data is impossible to squash into the brains of the in-store clerks who are expected to help shoppers with questions related to this – but we can squash it all into an artificial brain! This is exactly what we have done with the FrontlineAI, while preserving the face-to-face customer experience as much as possible. Stores win, in-store clerks win, shoppers win – what’s not to like!”



## Business Challenge & Objectives

The availability of personal assistance in retail stores is drastically decreased by strong competition, especially from on-line stores, which is driving staff reductions. At the same time, the need for constantly changing product assortment and placement makes it difficult for staff to stay updated.

The objective is to combine the ease of use of speech based, natural language interaction with a life-like avatar with the business knowledge about stock level and location, consumer trends, seasonal and holiday variations, etc. to provide the most personable and qualified customer experience.

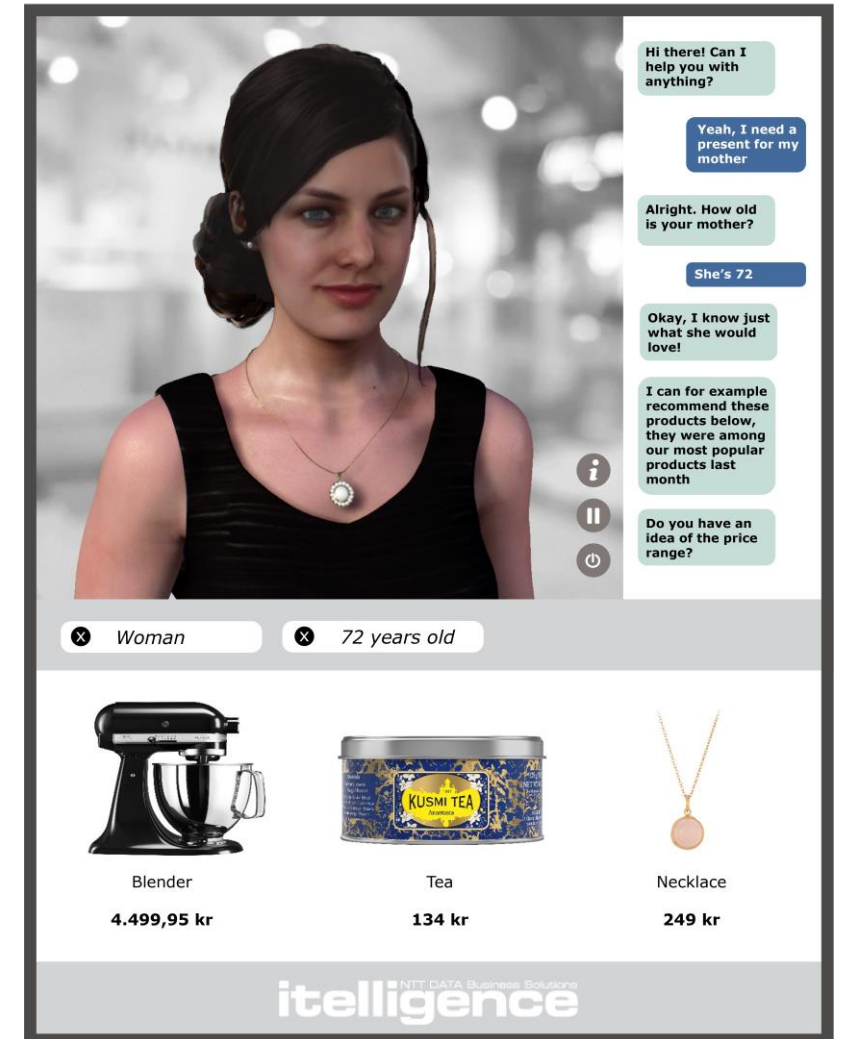
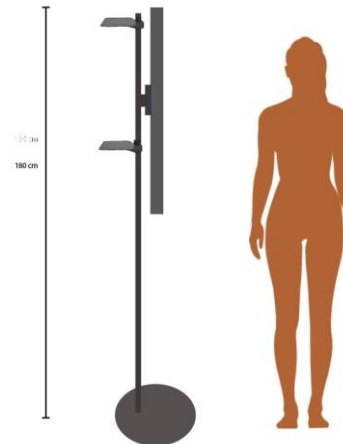


## Project / Use Case Details

The FrontlineAI solution is suitable for most customer service contexts, where advice through dialog can help increase both the customer experience and revenue.

We have, by combining SAP components, an external digital human provider, an external product displayer, and our own middleware, created a solution that is easily scalable.

Only the conversation flow needs to be adjusted from case to case. In addition, there is of course the possibility to change overall layout and look of the digital human, if the customer wants this.







# Benefits and Outcomes

## Business / Social

The in-store avatar will enable the same kind of upsale, that is currently only a phenomenon in online stores. Furthermore, the promise of always offering counseling will attract customers to the stores who have an avatar solution.

## IT

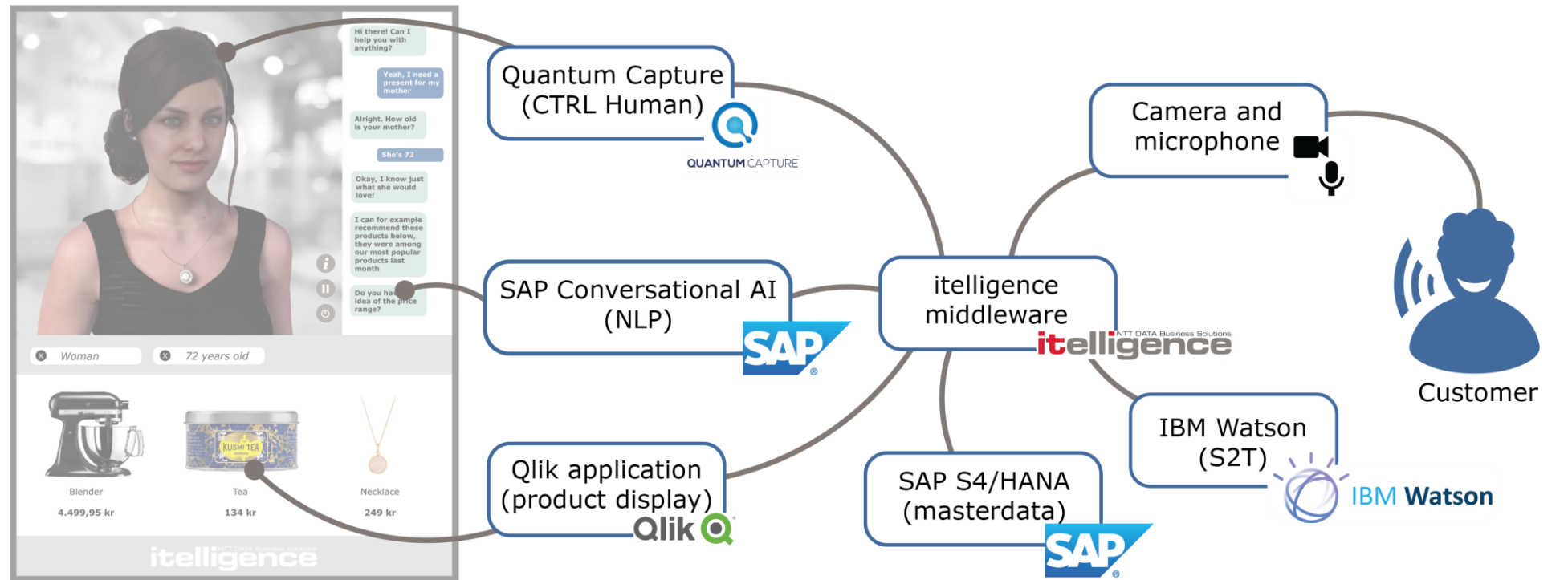
Being generic in its functionality, the FrontlineAI can easily be deployed by different stores who share the same SAP masterdata setup.

## Human Empowerment

In-store shop assistants are no longer interrupted in their practical work tasks by customers asking them questions, which they have neither time nor the knowledge to answer properly.



# Architecture





## Deployment

Date of Deployment or POC: 01-02-2019

Number of live users: 5

### **SAP Technologies Used:**

SAP Leonardo (Conversational AI)

SAP S/4 HANA (master data)

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	Conversational AI (NLP) powers the avatar
2.	IoT	No	
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	No	
8.	SAP Leonardo Application ( extending SAP application, using Industry Innovation Kits or result of Design Thinking workshop)	Yes	Conversational AI (NLP) powers the avatar