SAP Innovation Awards 2019 Entry Pitch Deck

AI, Machine Learning Help SAP Partner move the homeless to safe public housing faster

BoodsKapper

THE BEST RUN SAP®

https://www.youtube.com/watch?v=Xy1wFHhFV3o

AI, ML Help move the homeless to public housing faster

Dallas Housing Authority

"Quote"

BoodsKapper has been a game changer for us. We're able to inspect more properties and, instead of being overtaxed, our inspectors can be more proactive with clients, which helps us manage healthier, safer places to live"

Troy Broussard

CEO

Dallas Housing Authority

Challenge

Public Housing Agencies with the mandate to end homelessness in the USA is grossly understaffed and work under increasing budget pressures.

Solution

BoodsKapper makes virtual AI-based employees that can carry out labor intensive processes.

Outcome

Reduce the time from voucher approval to occupying the apartment from 6 months to few days (Makes an impact on homelessness). Reduces the idle time of the property and loss of revenue for the landlord by several months.

Reduce the inspection wait times from several months to 1-2 days

Reduce landlord and tenant no-shows from around 20% to less than 1%

Reduce fuel costs (miles driven/inspection) by about 25%

Partner Information

BoodsKapper

BoodsKapper is a SAP cloud app

Dallas Housing Authority runs the fourth largest voucher program in the country. We are so glad that they selected us for this transformational program. We are glad to be part of the mission.

Bejoy Narayana

CEO, BoodsKapper

Business Challenge & Objectives

- Given the size of the program not enough housing inspectors to carry out the quality control functions as per HUD regulations
- Not enough case workers to cater to the needs of our clients (program beneficiaries)

Improve our client services

Improve landlord relationships so that our families have more choices in high opportunity areas.

Project / Use Case Details

Deploy a virtual housing choice voucher analyst that will :

- Ensure that the houses are inspected as required by HUD regulations
- Ensure that the right inspector is assigned to the right inspection (Inspectors typically inspect about 8 houses/day. Minimize time spent on the road while all constraints such as customer appointments are taken into account)
- Real time visibility of inspection activities
- A bot for our families and landlords (Avoiding the need to drive to our office or call us)
- SAP news article has more details.

Benefits and Outcomes

Business / Social

Reduce the wait times after voucher approval from 6 months to few days.

Reduce the idle time for land lords- leaving the apartment unoccupied while waiting for the inspections to happen- from about 6 months to few days

Reduce fuel costs by about 25%

IT

Real time visibility of inspection activities

Automate the inspection allocation process

Use AI to converse with landlords and clients. Maintain accurate client and business partner records

Human Empowerment

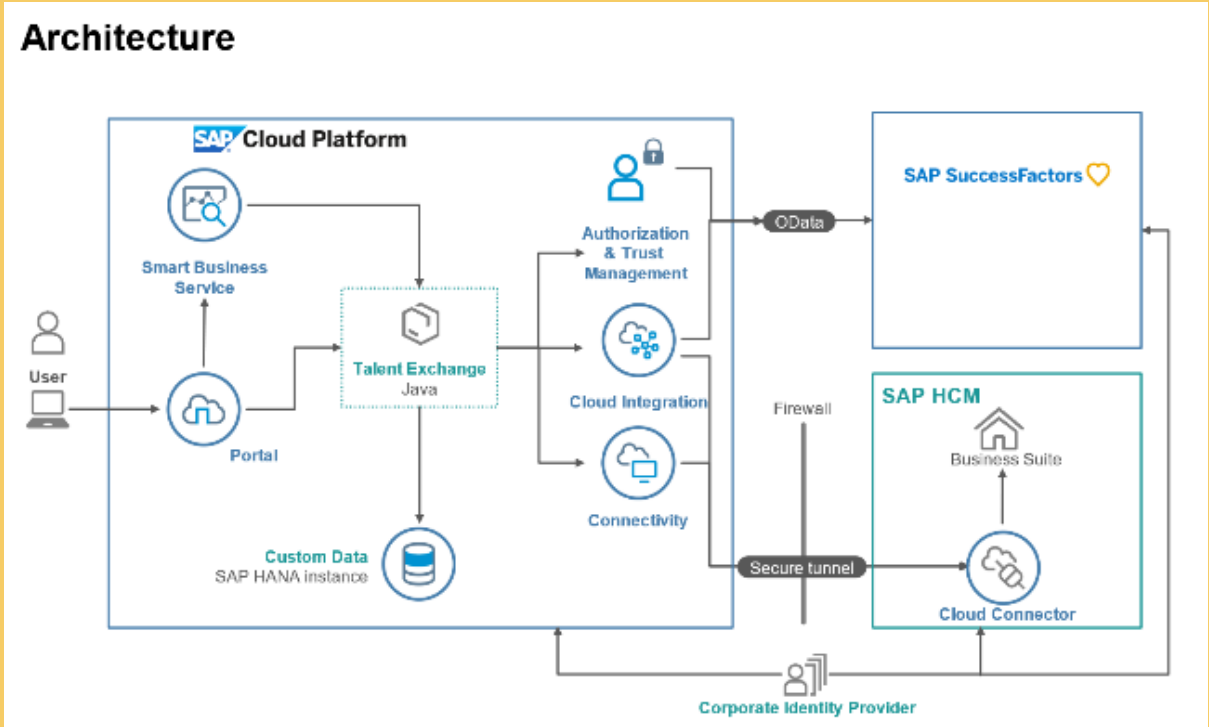
Real time visibility of all aspects of the business relationship for the landlords

Real time visibility of all aspects of the client journey for the DHA families

Families used to drive several miles to ensure that they were in compliance or to ask a question. They can do this by texting with the virtual case worker

Architecture

Example architecture diagram.
Please delete and provide your own. For all entries, especially those involving SAP Cloud Platform, we recommend using the [“SAP Cloud Platform Solution Diagram & Icon Guidelines”] to create your diagram.



Deployment

Date of Deployment or POC:	Application went live for internal users of DHA on Dec 21, 2018. Clients and landlords will go live on the public app on Feb 14, 2019.
Number of live users:	Internal- 24, External – 20,000

SAP Technologies Used:

SAP Cloud Platform	Live in production
HANA Database	Live in production
SDI	Live in production

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	NLP for the bot part ML model for predicting the time it takes to complete inspections
2.	IoT		
3.	3D printing		
4.	Blockchain		
5.	API Economy / Integrate the Intelligent Enterprise		
6.	Cloud Native / Event Based Architectures		
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)		