



# Internship presentation

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## My Internship at LTI

- Began familiarizing with SAP BTP Cockpit to learn about SAP Cloud Platform, Cloud Foundry, Command Line Interface
  - Learnt how to push and deploy an application through CF CLI on SAP Cloud Platform

Started looking for offerings provided by SAP on Machine Learning

Found the Document Information Extraction service and started a mission on SAP developer tutorials



### **Document Information Extraction (DOX)**

- To process large amount of business documents in the form of PDFs or JPGs.
- The business documents can be payment advices or invoices.
- It uses machine learning techniques to extract the information and store them in JSON files which can be queried by the users.

#### DOX Trial UI in the cloud foundry environment

- Created a service instance for DOX and a service key.
- Uploaded documents in the trail UI to get the extracted fields.

#### DOX using Swagger UI

- Calls the DOX APIs
- Used the service key to access the Swagger UI and generated an OAuth Access token for authorization.
- Used the several endpoints to create client, upload documents and generate the JSON file.



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#### DOX Trial UI in the cloud foundry environment

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#### Work Ahead

Came up with ideas to utilize the data extracted and found SAP Analytics Cloud (SAC)

Built a regression and time forecast model on SAC using a dummy dataset

 In order to create a live data connection, started working on data integration to SAP HANA DB

 Started working on SAP Business Application Studio to build and deploy tables and calculation views in (HANA Deployment Infrastructure) HDI containers



## An Idea that came onto my mind ...



## SAP Analytics Cloud (Predictive Scenarios)

- We can create predictive models using ML techniques such as Regression, Time Series Forecast and Classification.
- The data can either be uploaded or can be brought from a data source (Live Data from On-Premise and Cloud, Data acquisition from Cloud)

#### Welcome to Datasets

Prepare your raw data using a flexible table format and get started with your scenario analysis.



## Building Predictive Scenarios on SAC



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The Live Data Connection from SAP HANA DB can be used to build stories on SAP Analytics Cloud.

The Live Data Connection from On-Premise systems can be used for predictive modelling (Can be done in Extended Period)

 The tables can be deployed in HDI containers and then exposed to other applications through Odata Services which use REST APIs. This way a connection can be established.

# Building and deploying Calculation views in HDI container using SAP Business Application Studio

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The Story created in SAP Analytics Cloud for Live Data Model that can be used to display in SAP Fiori Analytic Dashboard.

This story was created for Heat Exchanger data.

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#### Work that can be done in an extended period

• On-Premise systems can be used for live data connection and an UI can be built that can be used to control the process of using the DOX service in the SAP Analytics Cloud through HANA DB.

- Stories can be integrated live onto the SAP Fiori Dashboard given a licensed version of SAP Analytics Cloud.
- Odata Services like the Lease management data can be integrated with SAC which can be used to build apps with stories and used for predictive analysis.
  - Robotic Process Automation can be used to automate the process of Document Information Extraction and integration with SAC





## Thank you

