

Digital Experience Analytics

(Cosmetics Manufacturer)

Built data pipeline infrastructure using **Azure Databricks & SQL** in a Sandbox environment for an **AI-Powered Virtual Makeup Application** to provide analytics dashboard hosted on **Tableau** server

DIGITAL EXPERIENCE ANALYTICS FOR COSMETICS MANUFACTURER

ABOUT THE CLIENT

Client is one of the largest **Cosmetics Manufacturers** with a global presence

SITUATION



- Client launched an **AI-powered Virtual Try-On Application** in all their stores all over the world but lacked visibility into the customer engagement with the product application
- Merilytics partnered with the client to **build a structured data pipeline, set up automated reporting suite and built self-serve Tableau dashboards** to track customer engagement on the Try-On application

VALUE ADDITION



- Identified all the major **Click To Action (CTA) events** and the associated measure / parameter on the application to **track the customer journey** and suggested **KPIs** which would help understand the customer behavior.
- Conducted comprehensive **User Acceptance Testing** post the application development team configuring the analytics tags for a user journey
- Setup an automated data pipeline infrastructure to ingest the data from SFTP to SQL server using a python script and stored procedures executing in Azure Databricks which ensured the **tracking of KPIs** on a daily basis
- Built a robust automated **self-serve dashboard on the client tableau server** to track the KPIs at a Store/Region/Application/Time period level

IMPACT



- The streamlined analytics & testing process helped the client roll out any new feature faster in the Virtual Try On Application leading to **shorter deployment time**
- **Implemented and automated Tableau dashboard** that enabled the client to **arrive at key business decisions** by leveraging the key metrics related to customer behavior/engagement

METHODOLOGY/ APPROACH

Visualization Phase

- Created multiple views & charts in the Tableau worksheets **capturing various key metrics**
- Published the dashboard to the Tableau server which **automatically refreshes on a daily basis**

Data Transformation Phase

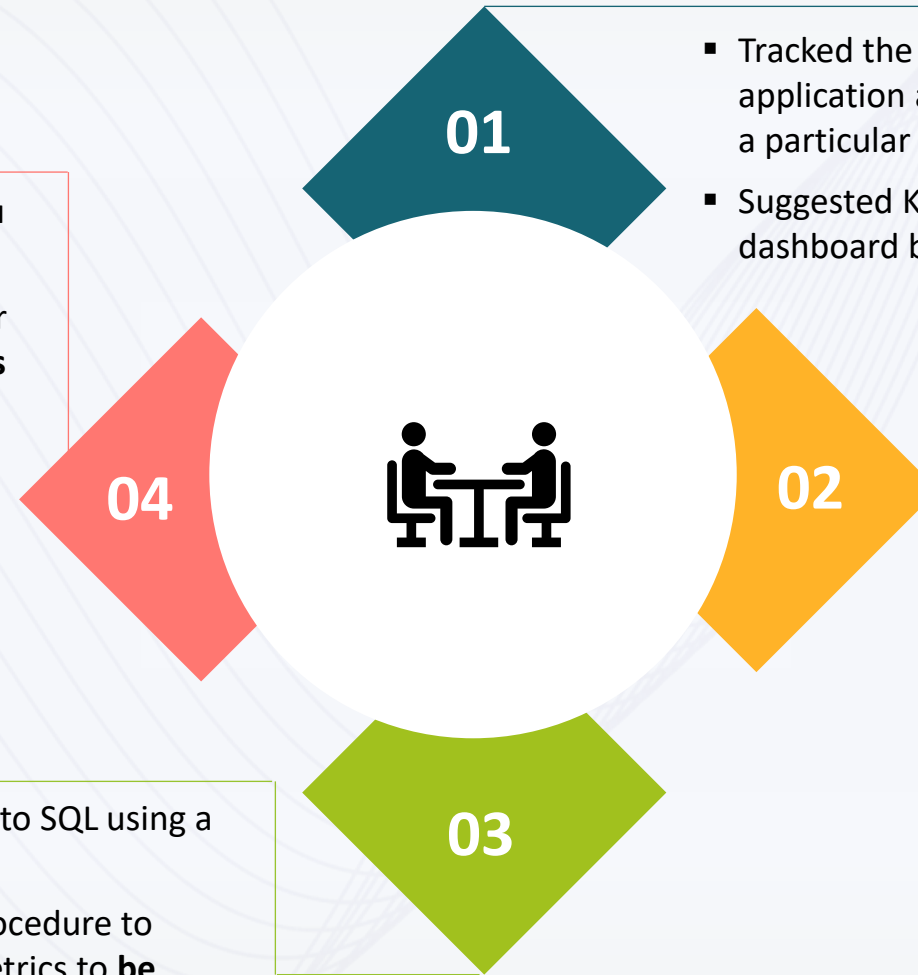
- **Setup an automated data pipeline** from SFTP to SQL using a Python script in Azure Databricks
- Developed multiple SQL scripts as a stored procedure to process the raw data and calculate the key metrics to **be visualized in Tableau dashboard**
- Scheduled **SQL stored procedures** to automate the calculations daily

Exploration Phase

- Tracked the customer journey in the virtual makeup application and identified the **key Click To Action Events** for a particular use case.
- Suggested Key Metrics to be tracked in the Tableau dashboard based on the business requirements

Testing Phase

- Tracked/Monitored the analytics tags for each use case to support the client's application development team during testing phase
- Reported bugs to the **development team** in case of any deviation from the expected behavior



ARCHITECTURE DIAGRAM

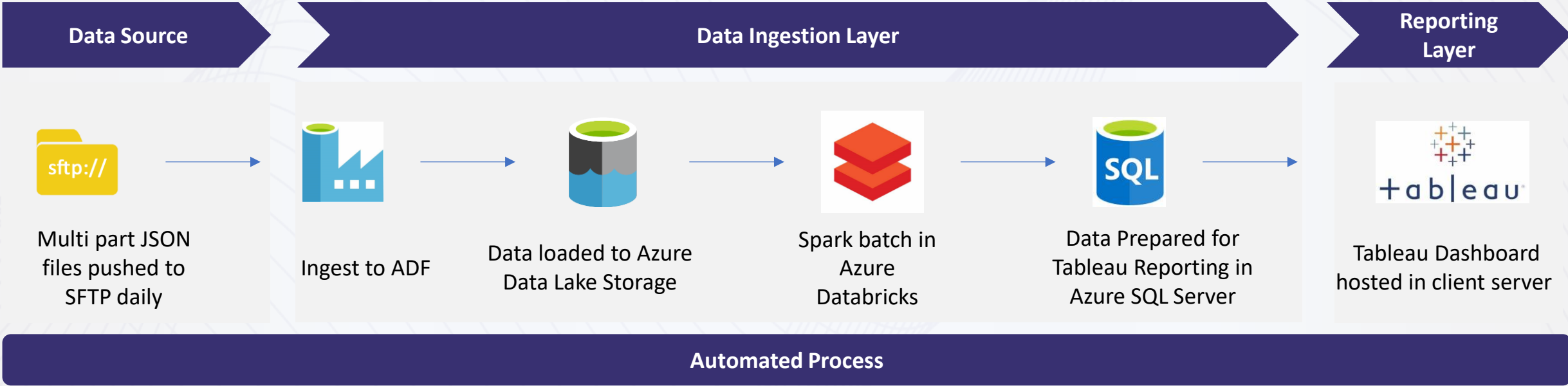
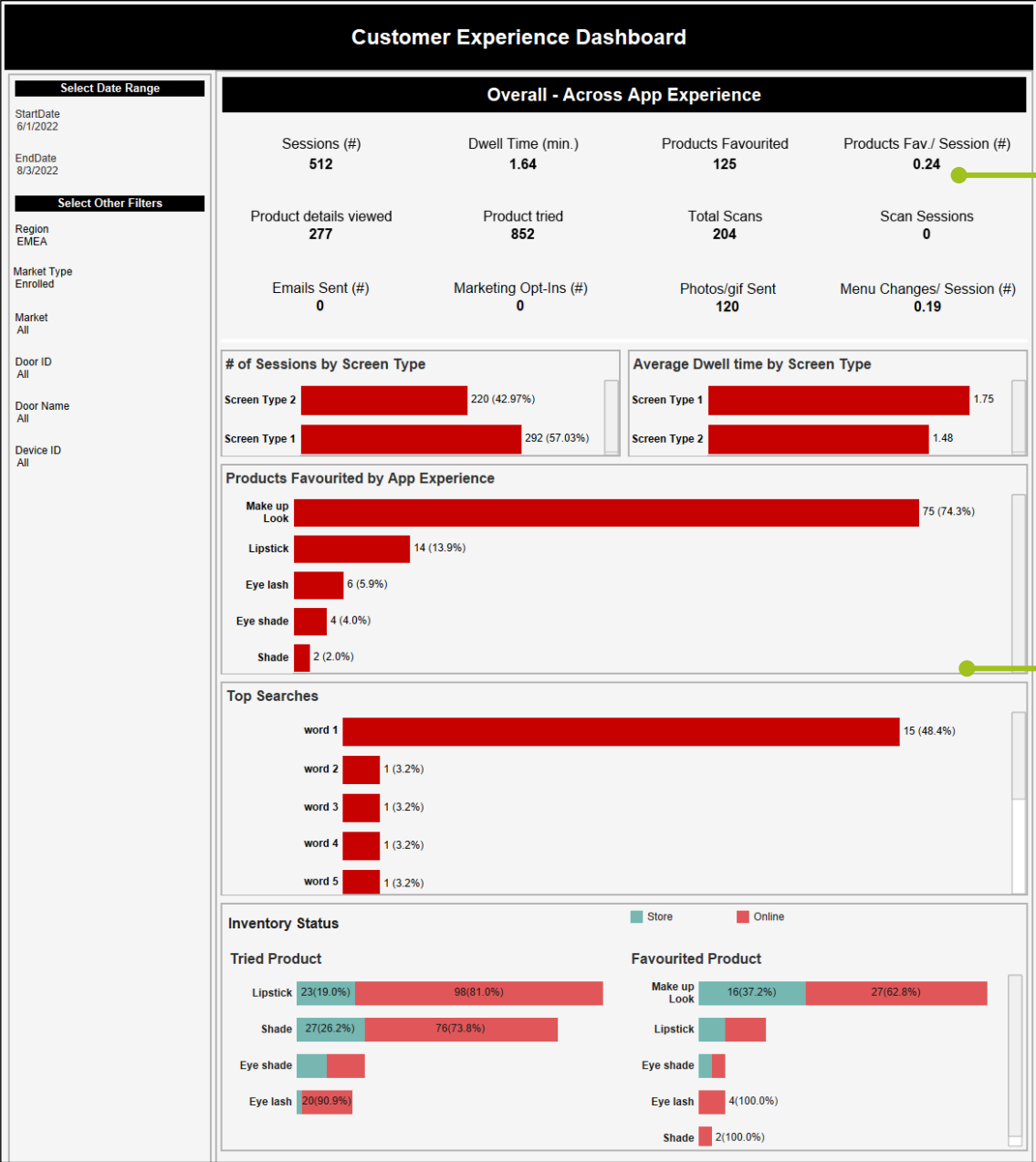


EXHIBIT 1 – CUSTOMER ENGAGEMENT DASHBOARD - OVERALL EXPERIENCE

ILLUSTRATIVE



Tracks Key Metrics around customer experience for **Make up Looks** feature

Bar charts tracking **top-products** based on multiple dimensions