

SUCCESS STORIES - SUMMARY


Project Name	Client	Brief Description	Services	Impact
Property Management System (PMS) Integration	Hospitality Company	Built Data Lake and Data Warehouse infrastructure to include data from a Property Management System into the existing reporting suite	Data Management	<ul style="list-style-type: none"> Enabled revenue & business on the books (BOTB) reporting for the new properties being acquired/partnered by the client The client charges reporting fee from their partner properties for having enabled them with PowerBI reporting of their respective properties, thus generating additional revenue
Industry	Sub-Industry	Domain	Functional Area	B2B/B2C
Others	Others	Data Management	Data Infrastructure - Development	B2B & B2C

PMS DATA INTEGRATION FOR HOSPITALITY COMPANY


ABOUT THE CLIENT

Client is a **hospitality company** that provides short and long-term stays across multiple properties in the U.S.


SITUATION

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- Client licensed a new PMS system for the upcoming set of properties being hosted by them. Existing Power BI reports were to be updated with the data from the new PMS system to ensure undeterred visualization experience for the end-users
 - Merilytics partnered with the client to **build cloud ETL pipelines using Microsoft Azure and Power BI to facilitate data integration and reporting respectively**

VALUE ADDITION

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- Designed and built a solution on **Microsoft Azure** to serve as a **single platform** that holds all the bookings related financial information
 - PMS system posts data as **messages through Webhook** and these messages **were intercepted by Azure Functions**. The message (JSON file) was flattened and ingested into database.
 - Developed a methodology **to combine data from HotelKey (PMS System) with the pre-existing data from SkyTouch (PMS system) and consolidate into a single structure to be shared for benchmarking**. Benchmarking data was reloaded into the database for further processing and sharing with a third-party aggregator
 - **Calculated key metrics** such as revenue, length of stay, occupancy for current and future bookings and competitor occupancy, and deployed through Power BI reports, for easier tracking and monitoring

IMPACT

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- **Removed the manual step of sharing and receiving benchmarking data** by automating the end-to-end process
 - **Setup of Power BI dashboards eliminated the need to export reports** from POS portals and manually copy data daily across Excel files for building reports
 - **Provided insightful reports by merging the data from the new PMS systems with the existing systems** thus enabling a unified reporting experience for the end-users

METHODOLOGY/ APPROACH

Step-1: Retrieve data

- Ingested point in time reservation data into the database as a one-time activity
- Captured live additions or modifications to the reservations on PMS from Webhook API

Step-2: Transform Data

- Created history of changes to a reservation capturing the change and the time of change
- Maintained the latest status of the reservation and provided information at a point in time

Step-3: Provide Reporting

- Retrieved reservation information for each point in time
- Calculated metrics such as Length of Stay (LOS), occupancy and revenue from booking information

PMS 1

- Captures live data from bookings for the pre-existing properties.
- Exported via a Webhook which pushes data to the pipeline based on booking activity
- Ingested using Azure functions

PMS 2

- Captures live data from bookings for the upcoming properties.
- Exported via a Webhook which pushes data to the pipeline based on booking activity
- Ingested using Azure functions

APPLICATION ARCHITECTURE

