

Driving Guest Experience Through Azure-Based Hospitality Analytics

Unified Data with Synapse Warehouse

A leading Singapore-based hospitality and resort chain manages luxury hotels, resorts, and serviced apartments worldwide. With operations in hospitality management, event planning, and customer loyalty programs, the group generates massive operational and customer data, requiring robust digital solutions for efficiency, personalization, and global scalability.

CLIENT BACKGROUND

The client is a Singapore-based hospitality group running luxury hotels, resorts, and serviced apartments throughout Southeast Asia and beyond. They manage everything from daily hotel operations to event planning and customer loyalty programs, gathering valuable customer and business data across their wide range of properties.

BUSINESS VALUE

- Automated transformations **reduced manual intervention** by 70%.
- End-to-end dashboard **refresh time decreased** from 12 hours to under 4 hours.
- Executives and managers gained **real-time access** to KPIs driving better strategic decisions.

TECHNOLOGIES



PROBLEMS

- Multiple Data Sources:** Operational data spread across SharePoint Online, flat files (TXT format), and internal databases.
- Data Inconsistency:** Non-standard formats (tab-delimited TXT files) needing transformation.
- Manual Processes:** Labor-intensive ETL workflows causing reporting delays.
- Reporting Limitations:** Fragmented BI efforts, with no centralized view of hotel operations, occupancy, finance, or guest experience.

SOLUTIONS

- Azure Data Platform Modernization:** Built a centralized data warehouse using Azure Synapse Analytics with Azure Data Lake Gen2.
- Advanced Data Transformation & Modelling:** Applied Synapse Pipelines and Azure Analysis Services for cleansing, enrichment, semantic modelling, and row-level security.
- Interactive Power BI Dashboards:** Delivered executive and operational insights with Power BI, enabling real-time reporting.

Final Perspective

The Azure-based analytics platform transformed reporting, enabling smarter decisions, improved guest experiences, and scalable growth while optimizing efficiency and financial planning for the hospitality group.