

CASE STUDY TITLE

Tableau Reporting Dashboard Implementation in Hospitality Industry

CLIENT OVERVIEW

Company: A mid-sized hotel chain company with properties across Canada

Industry: Hospitality

Operations: Canada

Services: Providing full service hotel, resort and fast-food restaurants

Size: 80+ hotels and 200+ restaurant chains

BACKGROUND & BUSINESS CHALLENGE

A mid-sized hotel chain with properties across Canada struggled with fragmented reporting systems. Operational data was siloed across property management systems (PMS), customer relationship management (CRM), booking engines, and finance software. The hotel chain lacked a consolidated reporting system that could provide actionable insights for:

- Occupancy and revenue optimization
- Customer satisfaction analysis
- Marketing campaign effectiveness
- Operational cost tracking

Challenge	Impact	Solution Approach
Multiple heterogeneous data sources	Data inconsistency and integration complexity	Built ETL pipelines for data cleansing and integration
Data latency issues	Delayed reporting and decision-making	Implemented near real-time data refresh strategies
User adoption	Resistance to new tools and processes	Designed intuitive dashboards and conducted training
Complex KPIs with domain-specific calculations	Difficult to standardize and automate reports	Collaborated with domain experts to define clear KPI formulas
Scalability	Growing data volume and reporting needs	Leveraged Tableau Server and optimized data models

PROJECT OBJECTIVES

- Develop an interactive, centralized **Tableau reporting dashboard** consolidating data from multiple sources
- Provide real-time visibility into key performance indicators (KPIs) such as occupancy rates, Average Daily Rate (ADR), Revenue Per Available Room (RevPAR), guest satisfaction scores, and cost metrics
- Enable granular drilldowns by property, region, customer segment, and time
- Empower decision-makers with data-driven insights to optimize pricing, marketing, and operations

- Automate report generation to reduce manual work and errors

SOLUTION ARCHITECTURE

DATA INTEGRATION

- Extracted data from PMS (Opera), CRM (Salesforce), booking platforms (Booking.com, Expedia), and financial systems using Talend ETL
- Created a centralized data warehouse using Amazon Redshift
- Data cleansing and transformation applied to standardize formats and enrich data (e.g., geo-tagging).

TABLEAU DASHBOARD DEVELOPMENT

- Designed interactive dashboards tailored for different roles: General Managers, Revenue Managers, Marketing Teams, and Executives
- Incorporated filters for date ranges, properties, room types, and customer segments
- Developed KPIs including:
 - Occupancy Rate
 - ADR (Average Daily Rate)
 - RevPAR (Revenue per Available Room)
 - Guest Satisfaction Score (from post-stay surveys)
 - Marketing ROI
 - Operating Costs vs Budget
- Utilized Tableau features such as parameter controls, calculated fields, and level-of-detail (LOD) expressions for complex metrics

SECURITY & DEPLOYMENT

- Role-based access configured on Tableau Server ensuring data confidentiality
- Automated dashboard refresh scheduled hourly
- Enabled mobile access for on-the-go decision-making

RESULTS

- **Data Consolidation:** Unified reporting system reduced time spent gathering data by 70%
- **Improved Revenue Management:** Real-time visibility into RevPAR and ADR enabled dynamic pricing strategies, increasing revenue by 12% year-over-year
- **Enhanced Customer Insights:** Analysis of guest satisfaction trends led to targeted service improvements, raising NPS scores by 15%
- **Operational Efficiency:** Automated reports reduced manual errors and freed up staff time
- **User Adoption:** Over 90% of target users actively used the dashboards within 3 months

KEY TAKEAWAYS

- Early involvement of end-users ensures dashboards meet real-world needs
- Clean, standardized data is critical for trust in analytics

- Training and change management help overcome resistance
- Performance optimization in Tableau is essential with large datasets

CONCLUSION

The Tableau reporting dashboard transformed the hotel chain's data landscape, enabling data-driven decision-making across departments. By integrating diverse data sources and presenting actionable insights through interactive visualizations, the hotel improved revenue, enhanced guest satisfaction, and streamlined operations—strengthening its competitive position in the hospitality market.

