

Automating Financial Oversight with GenAI: A Proof-of-Concept in Hospitality

ARTISAN STUDIOS

EXECUTIVE SUMMARY

A major hospitality portfolio manager, overseeing dozens of branded hotels across the U.S., was burdened with a manual, error-prone monthly financial review process. Artisan Studios built a proof-of-concept tool, the **Automated Financial Report Analyzer**, to automatically flag key anomalies, generate intelligent explanations, and deliver insights via an intuitive dashboard. The result: better oversight, faster reporting, and time saved for finance leadership.

THE CHALLENGE

This hotel management group was constrained by:

- **Manual Financial Reviews:** Key leaders spent hours poring over each property's P&L.
- **Limited Anomaly Detection:** Outliers often went unnoticed or unprioritized.
- **No Real-Time Insight:** Financial performance trends weren't easily visible.
- **Data Inconsistencies:** Input data varied significantly across hotels and systems.

PLATFORM

AWS

Services Implemented

- GenAI-Powered Variance Detection
- AWS Architecture: Bedrock, S3, EKS, RDS
- QuickSight Dashboard & Visualization
- Financial Data Modeling and Cleanup
- Executive Report Design and Automation Roadmap

CFO, Client

"With the AI-powered Automated Financial Report Analyzer that Artisan helped us build, we're now able to automate the previously most manual and time-consuming part of our monthly Financial Reporting Analysis process, freeing up resources in the process and reducing costs, and providing more thorough analysis results."

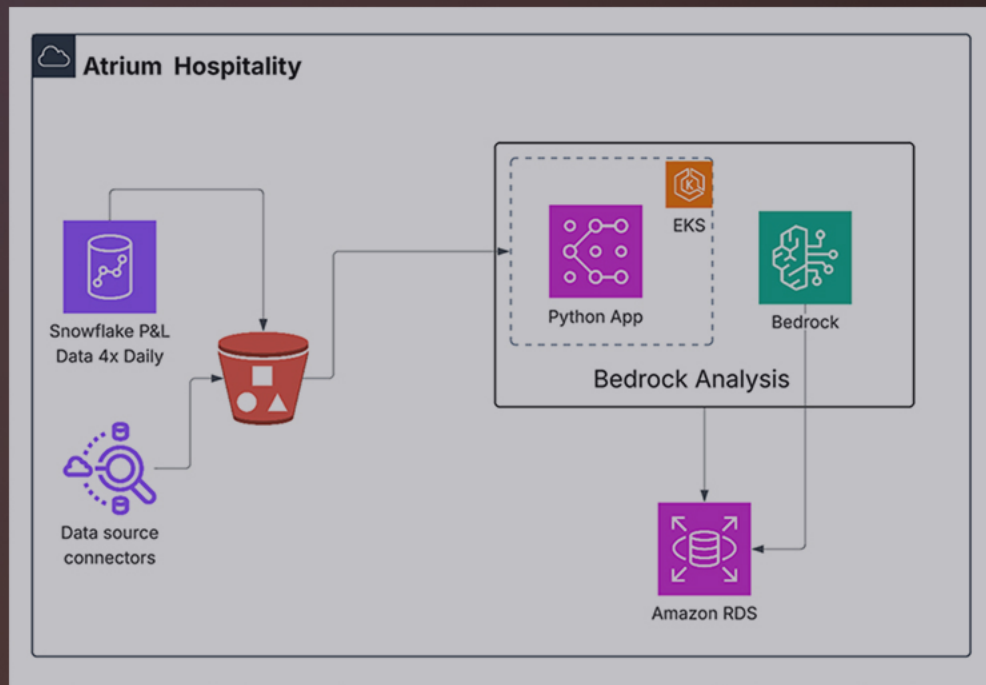


THE SOLUTION

Artisan Studios developed a GenAI-powered Proof of Concept that ingests, analyzes, and explains significant financial variances across the client's portfolio.

Key Components:

- Normalized disorganized data from the client's financial system (ProfitSword).
- Used AI to surface only the most extreme positive/negative anomalies.
- Built a dashboard in Amazon QuickSight to display actionable insights.
- Delivered variance explanations using Amazon Bedrock.



Technology Stack

- **AWS Services:**
Amazon Bedrock,
Amazon EKS, Amazon S3,
Amazon RDS
- **Visualization:**
Amazon QuickSight
- **Data Source:**
ProfitSword P&L exports

IMPLEMENTATION APPROACH

- **Hands-On Collaboration:** Artisan worked closely with the client's CFO and VP of Finance.
- **Data Structuring:** Converted incomplete and inconsistent data into usable formats.
- **Financial Logic Mapping:** Captured how financial leaders manually detected anomalies to replicate and automate it.



RESULTS

- **Sharper Financial Focus:** Client teams could skip irrelevant noise and zero in on what mattered.
- **Time Savings:** Significant reduction in time required for month-end reporting.
- **Proof of Value:** Client confirmed interest in expanding to a fully operationalized version.

By the Numbers

- **72 Hotels** Included in Monthly Analysis
- **100% Automation** (for Proof of Concept)
- **Manual Review** Replaced with Real-Time AI Insights

72 Hotels

Monthly Analysis

100%

Automation

WHY ARTISAN STUDIOS

Artisan Studios partners with forward-thinking brands to solve hard problems with strategy, technology, and design. Our teams bring deep expertise in user experience, cloud-native architecture, and AI-driven transformation.

High Quality Solutions

Artisan delivers fully responsive, beautifully designed, and highly available applications at scale.

Customer-Centric Expertise

We focus on user behavior, product-market fit, and digital performance—not just features.

Trusted Advisors

Beyond delivery, we serve as hands-on partners who align technology with measurable business goals.

