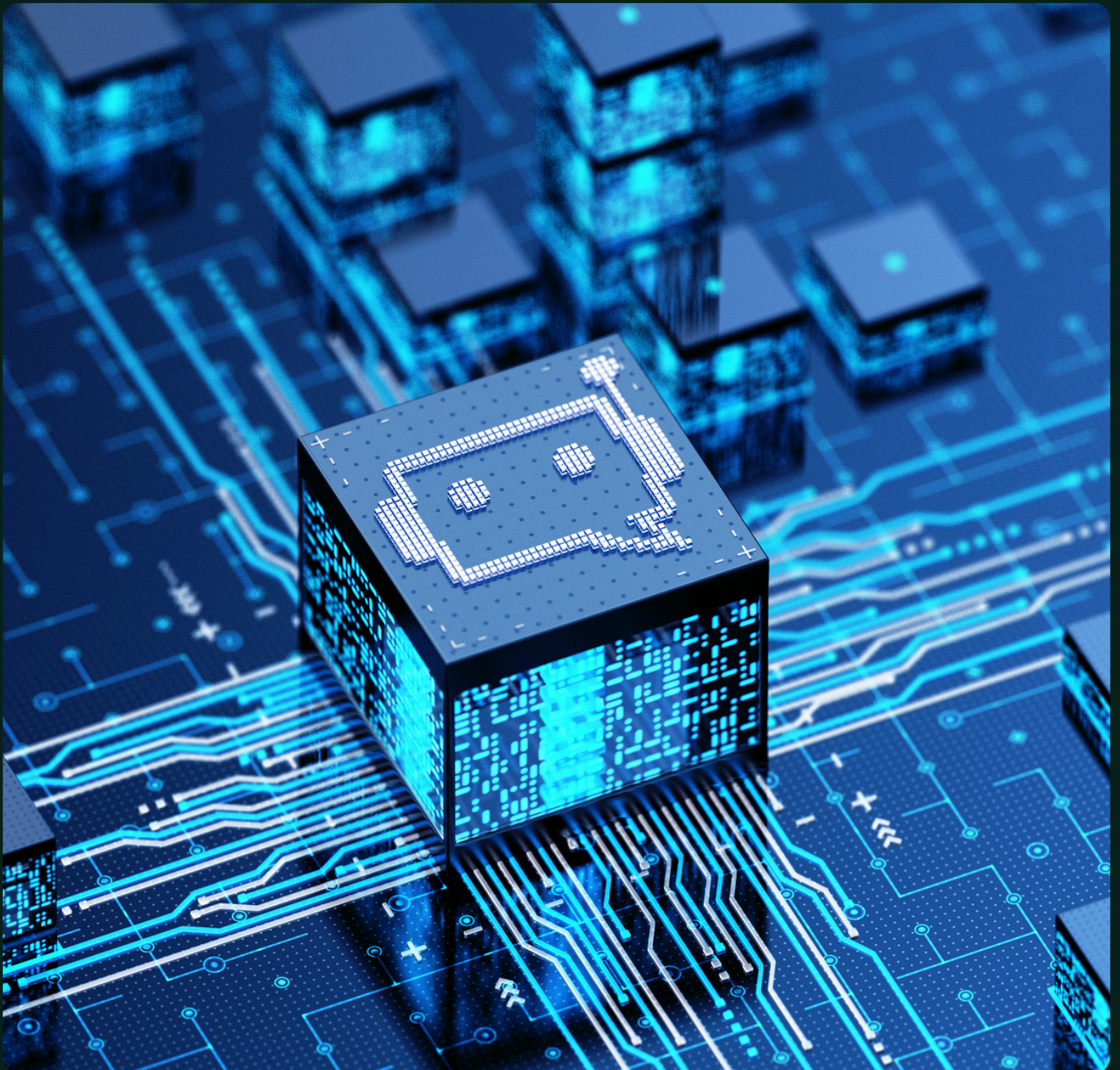


CASE STUDY 2025

Empowering Businesses with **Advanced Analytics, Dashboarding, and AI/ML**





Technology Expertise

- Snowflake, DBT
- Spark, Hive, PySpark, Hadoop Scala/Java
- AWS RDS, RedShift,
- Apache Airflow,
- SQL & NoSQL Databases
- Big Query, PowerBI, Tableau, QuickSight, Excel, Metabase.

Introduction ➡

Digit88, over the last 5 years, has helped various product companies in the area of Healthcare, Conversational AI, Energy and Utilities, Cloud Computing and Cost Optimization Platforms to name a few, to bring business intelligence and insights to the forefront with its expertise in Data Engineering, Advanced Analytics and Dashboarding Services.

We bring specialized expertise in handling end-end services: Big Data, ETL Pipelining connecting, different data sources and Integration, Real-time data processing, Data Analytics, Predictive Modelling, Exploratory Analysis, Forecasting, Schema Design, Data Modelling, and Visualization and Dashboarding.

Our Service Offerings ➡

- Data Engineering
- Big Data Analytics
- Advanced Data Analytics & Modelling
- Data Annotation
- Data Modernization
- Data Science, AI/ML

Key Industries Served ➡

- SAAS
- Finance
- Healthcare
- FMCG
- Conversational AI Platforms
- Engery and Utilities

Modernizing Analytics Infrastructure for a Conversational Commerce AI Company

Technologies Used

- AWS Suite
- Python, MySQL
- Tableau, AI/ML

Conclusion

This case study demonstrates our deep technical expertise in modern data warehouse implementation, ETL development, and business intelligence solutions. Our approach combines industry best practices with cutting-edge technology to deliver scalable, enterprise-grade analytics solutions.

About the Client

A leading provider of conversational commerce and AI software solutions.

The Challenge

The client's platform enables businesses to leverage AI-powered conversational commerce capabilities, requiring robust analytics to monitor and optimize performance. The Client needed to modernize their analytics infrastructure to better serve their growing customer base facing the following challenges.:

- Manual and outdated ETL processes
- Lack of a unified dashboard
- Scaling difficulties
- Inability to make timely, data-driven decisions due to fragmented analytics

Digit88 Engineers approached the problem with a detailed gap analysis to understand the underlying challenges, and the following integration areas:

Data Integration Complexity

- Multiple disparate data sources
- High-volume data in convo-commerce
- Real-time data processing needs
- Cross-platform integration needs

Infrastructure Challenges

- Legacy ETL processes causing delays
- Scalability constraints with growing data volumes
- Manual intervention requirements in data processing
- Lack of standardized data governance

The Solution

Digit88 spearheaded the solutioning and comprehensively addressed the business need by implementing the following:

1. **Modern Data-warehouse Implementation**
2. **ETL Framework Enhancement**
3. **Analytics Dashboard Architecture**

Modernizing Rate Design Analytics for a product company that serves multiple fortune-500 Energy/Utility companies

Technologies Used

- AWS Suite (S3, EMR, Athena)
- JupyterLab
- Python
- MySQL
- Amazon QuickSight
- Tableau

Conclusion

The solution successfully addressed the client's initial challenges by providing a scalable, automated, and reliable analytics infrastructure that enhanced their ability to serve utility companies with accurate rate design insights.

About the Client

The client operates a sophisticated pricing and rate design platform that serves energy utility companies. The platform is crucial for helping utility companies manage their complete rate lifecycle, enabling them to make data-driven decisions and optimize their pricing strategies.

The Challenge

The challenge was the large amount of data to be analysed to identify the gaps, correlations, and relationship between the data points, to build robust data models with high accuracy in comparison to the actual utility bills.

- Large data analytics using Microsoft Excel, advanced techniques.
- Data Modelling with complex correlations
- Improve Model accuracy

The Solution

1. Modern Data-warehouse Implementation:

- a. Implemented robust ETL pipelines using AWS S3, EMR, and Athena
- b. Automated data validation checks
- c. Optimized MySQL queries

2. ML Pipeline Automation:

- a. Designed automated ML scripts for model training and deployment
- b. Created validation scripts to ensure forecast accuracy
- c. Implemented automated historical data collection for model training

3. Analytics Dashboard Developed:

- a. Built interactive dashboards in QuickSight and Tableau
- b. Custom filters for all types of users
- c. Developed real-time monitoring