Rockbuster Data Analysis & Insights

In this project, I worked with Rockbuster Stealth LLC's film rental database to analyze customer behavior, revenue distribution, and genre performance, then translated those findings into a manager-ready presentation.

The project began with **data cleaning and profiling** in SQL, where I identified and addressed issues like duplicates and non-uniform data. I then calculated descriptive statistics (minimum, maximum, averages, and modes) to summarize key metrics for films and customers.

Next, I performed **multi-table joins and aggregations** to answer business questions, such as:

- Which countries generate the highest revenue?
- How does customer spending vary across regions?
- Which film genres and ratings bring in the most revenue?

After completing the SQL analysis, I **exported the results into Tableau** to create clear, engaging visualizations. These were compiled into a presentation tailored for business managers, highlighting key insights such as Asia's dominance in customer base, high-value markets by spend per customer, and regional genre preferences.

To ensure transparency and reproducibility, I also prepared an **Excel file for technical colleagues**, containing both SQL queries and result outputs. Finally, I built a structured **data dictionary**, documenting fact and dimension tables, relationships, and unique keys for future analysts working with the Rockbuster database.

This project demonstrates my ability to:

- Write efficient SQL queries for cleaning, summarizing, and joining data.
- Translate raw query results into **visual insights** using Tableau.
- Communicate findings effectively to both technical and non-technical audiences.
- Document databases with a professional data dictionary.