Case Study

# Rockbuster Stealth Data Analysis Project

27. March 2022, Viktoria Dyk

### PROJECT DATASET

- Relational Database
- Including 14 Tables of film inventory, customers, payments etc.

### SKILLS USED

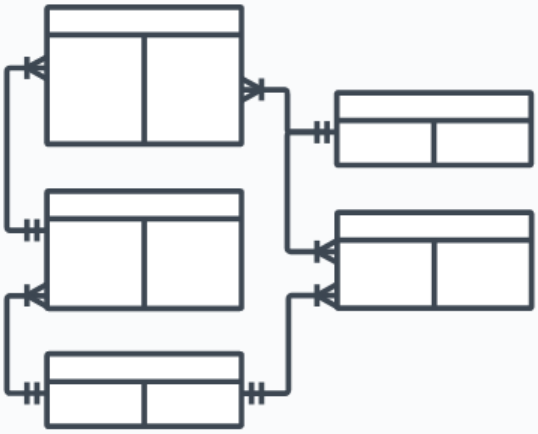
- Cleaning data
- Joining tables
- Filtering
- Writing subqueries and CTEs
- Creating visualizations

## Project Scenario

Rockbuster Stealth LLC is a movie rental company that used to have stores around the world. Facing stiff competition from streaming services such as Netflix and Amazon Prime, the Rockbuster Stealth management team is planning to use its existing movie licenses to launch an online video rental service in order to stay competitive. To help with the launch strategy for the new online video service, various questions need to be answered and results presented to the management.

## Tasks Performed

- Loading all of Rockbuster's data into a relational database management system
- Creating a data dictionary with dimension and fact tables including an Entity Relationship Diagram (ERD)



## TOOLS USED

- PostgreSQL
- DB Visualizer
- Tableau
- MS Office

## PROJECT OUTPUT

(click on item for viewing)

- PowerPoint presentation for management with visualizations
- Excel file with SQL code used for the analysis
- Data dictionary of the dataset

## RECOMMENDATIONS FOR A SUCCESSFUL STRATEGY

- Expand the library to include films from additional years and with additional languages
- Include Australia as target region
- Create promotions for encouraging existing customers to switch to the online services
- Focus on popular film categories generating the most revenue (e.g. Sc-Fi, Sports, Comedy)

- Using SQL to analyze the data and summarize key metrics
- Answering the following business questions:

✓ Which movies contributed the most/least to revenue gain?
✓ Which countries are Rockbuster customers based in?
✓ Where are customers with a high lifetime value based?
✓ Do sales figures vary between geographic regions?

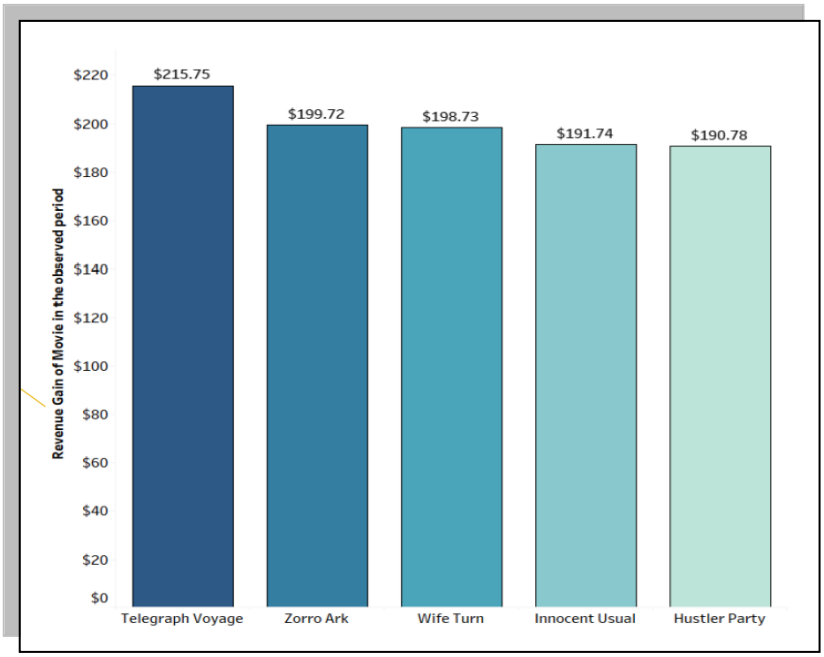
- Creating visualizations (spatial, bar chart, table) in Tableau to make the answers easily understandable for the presentation's audience
- Preparing the presentation of the answers with visualizations

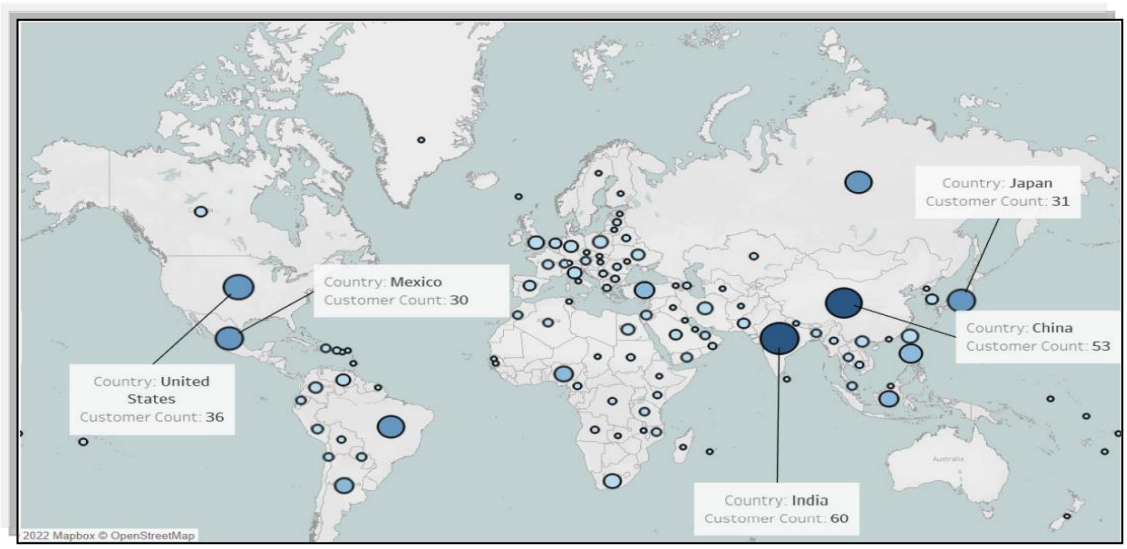
## Challenges

- PostgreSQL does not have a possibility to create visualizations: SQL results need to be imported into the visualization tool: Tableau
- Avoiding hard coding (not using fix parameters in the SQL queries such as top cities)

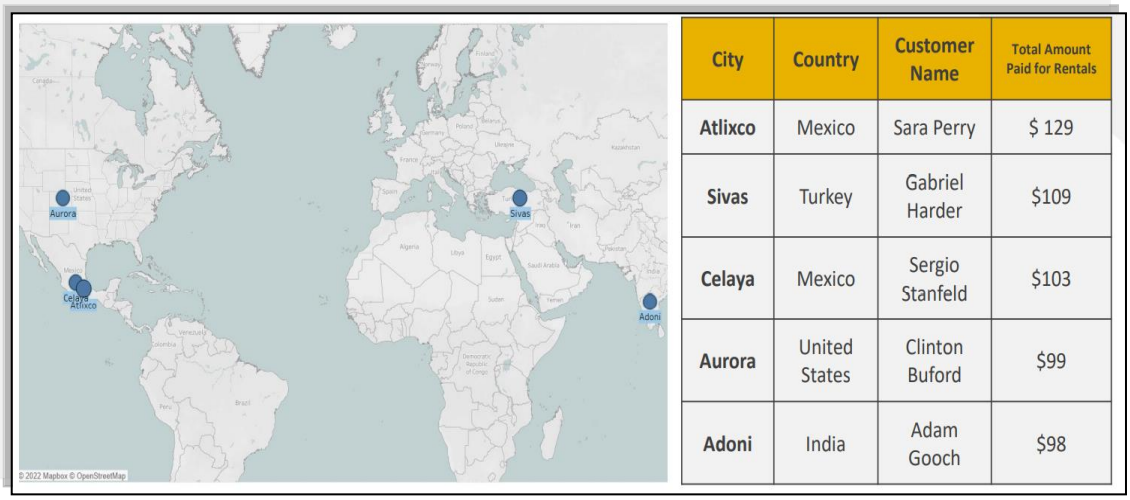
## Results / Answers

✓ Bar chart of top 5 movies with most revenue (42 films have no revenue generated) :



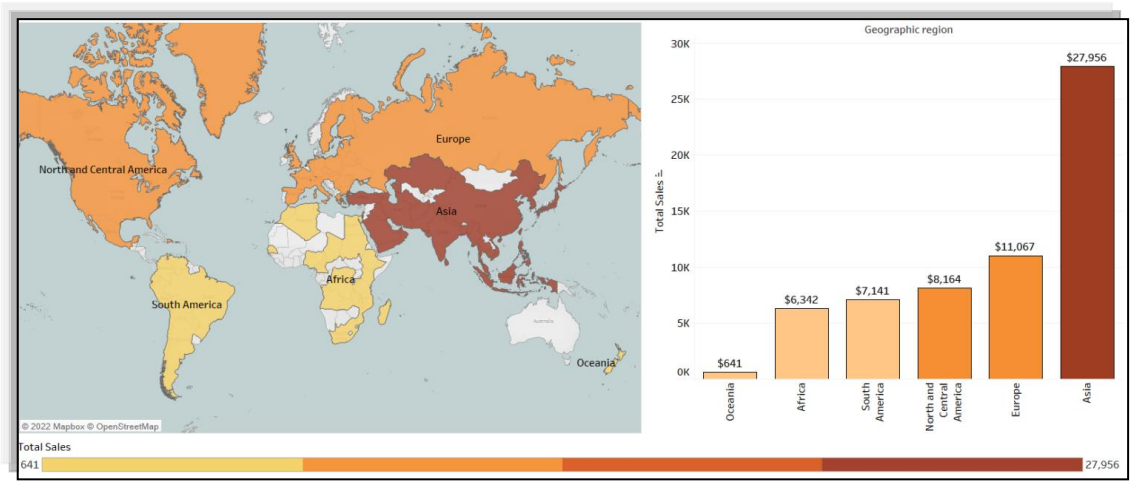



- ✓ Displaying the 108 countries on a world map where Rockbuster is present (highlighting top 5):




| City | Country | Customer Name | Total Amount Paid for Rentals |
|---|---|---|---|
| Atlixco | Mexico | Sara Perry | $ 129 |
| Sivas | Turkey | Gabriel Harder | $109 |
| Celaya | Mexico | Sergio Stanfeld | $103 |
| Aurora | United States | Clinton Buford | $99 |
| Adoni | India | Adam Gooch | $98 |

- ✓ Displaying the 5 cities on a world map where the top 5 customers reside. Table summary of key information of these customers:




- ✓ Visualizing total sales by regional breakdown on a world map and by a bar chart with exact values