



Case Study

Rockbuster Movie Rentals

Problem: Rockbuster (a fictitious company) is gearing up to launch a new online streaming service in order to stay competitive in the movie rental industry.

Goal: Perform strategic analysis of movie rental data to assist with the roll out of the new streaming service.

Role: Data Analyst

Key Questions:

- **Current Situation:** What is the average rental duration for all videos?
- **Products:** Which movies contributed to the most/least revenue gain?
- **Marketing:** Which countries are Rockbuster customers based in?
- **Customers:** Where are customers with a high lifetime value based?
- **Sales:** Do sales figures vary between geographic regions?

Tools Used:



Data

- Dataset provided by CareerFoundy and can be accessed through [Github](#).

SQL Skills

- Relational databasis
- SQL (PostgreSQL)
- Database querying
- Filtering
- Cleaning and Summarizing
- Joining Tables
- Subqueries/Common Table Expressions

Rockbuster

Objective:

Perform strategic analysis of movie rental data for business intelligence department to assist with the launch of the the online streaming service in order to stay competitive in the industry.

Getting Acquainted with the Data

Create ERD (entity relationship diagram) and Data Dictionary in Word

Database querying using PostgreSQL

Cleaning & Summarizing Data

Check and update records for accuracy and consistency

Filter data

Calculate descriptive statistics

Answer Business Questions

Conduct descriptive analysis to help answer business questions

Visualizations

Utilize Tableau to create visualizations

Presenting Results

Present findings with Powerpoint

Tools Used:

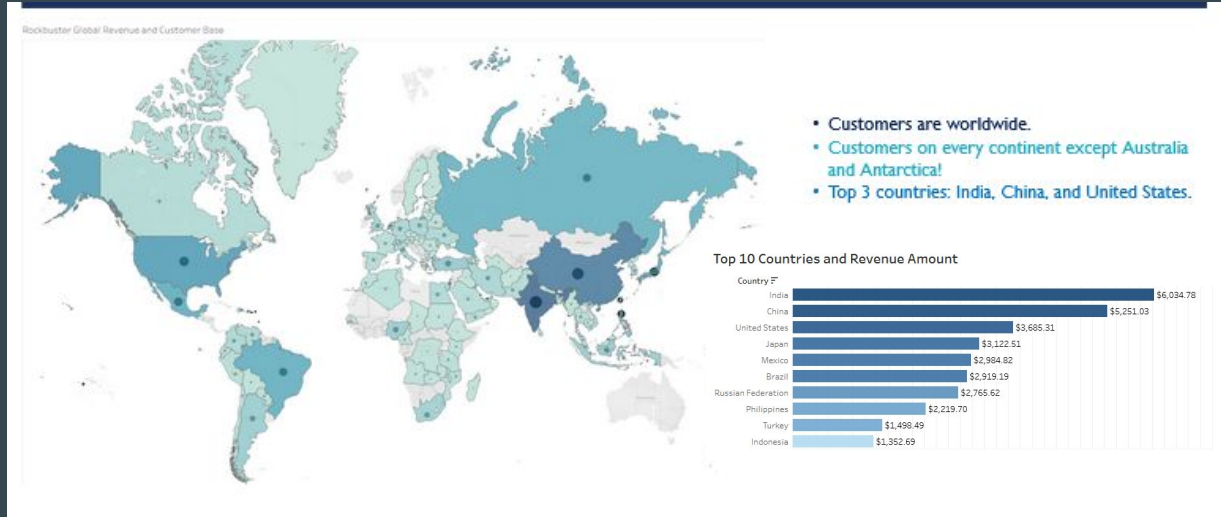


Exploration: Movies Rental Information

Movie Count: 1,000		Release Year: 2006		Language: English	
	Minimum	Average	Maximum		
Rental Amount	\$0.99	\$2.98	\$4.99		
Rental Length (Days)	3 days	5 days	7 days		
Replacement Cost	\$9.99	\$19.98	\$29.99		

Average Rental cost \$2.98 and was rented out for 5 days

Exploration: Geography



- Customers are worldwide, but the highest revenue producing countries are: India, China, and United States.

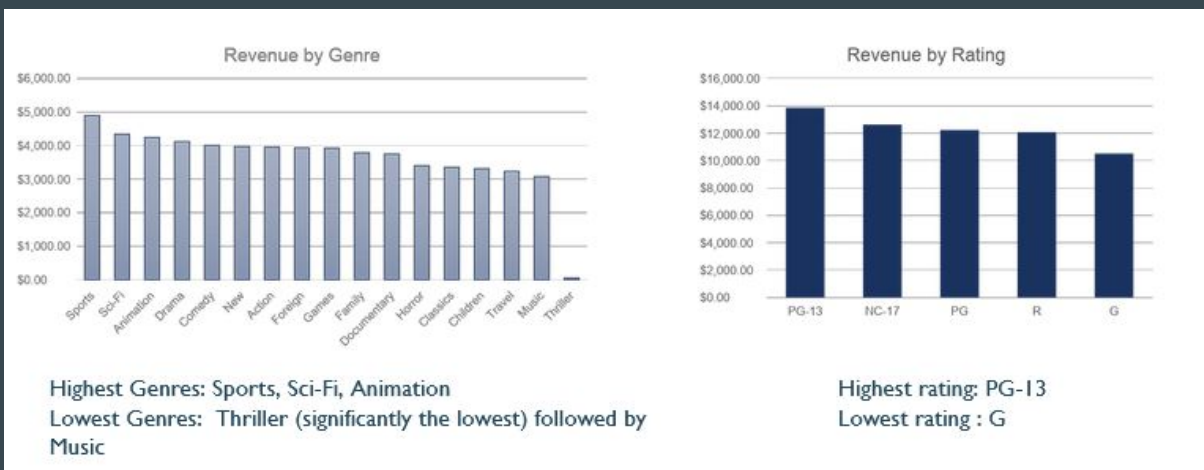
Exploration: Geography and Customer Loyalty

```
--Query for Top 10 countries with the most customers --  
SELECT  
    D.country,  
    COUNT (customer_id) AS customer_count  
FROM Customer A  
INNER JOIN address B on a.address_id = b.address_id  
INNER JOIN city C on b.city_id = c.city_id  
INNER JOIN country D on c.country_id = d.country_id  
GROUP BY D.country  
ORDER BY customer_count desc  
LIMIT 10
```



- United States is the only country to have 2 customers within the top 10.

Exploration: Ratings/Genre



Exploration: Movies

Top 10 Movies

Title	Name	Rating	
Telegraph Voyage	Music	PG	\$215.75
Zorro Ark	Comedy	NC-17	\$199.72
Wife Turn	Documentary	NC-17	\$198.73
Innocent Usual	Foreign	PG-13	\$191.74
Hustler Party	Comedy	NC-17	\$190.78
Saturday Lambs	Sports	G	\$190.74
Titans Jerk	Sci-Fi	PG	\$186.73
Harry Idaho	Drama	PG-13	\$177.73
Torque Bound	Drama	G	\$169.76
Dogma Family	Animation	G	\$168.72

Bottom 10 Movies

Title	Name	Rating	
Duffel Apocalypse	Documentary	G	\$5.94
Oklahoma Jumanji	New	PG	\$5.94
Texas Watch	Horror	NC-17	\$5.94
Freedom Cleopatra	Comedy	PG-13	\$5.95
Rebel Airport	Music	G	\$6.93
Young Language	Documentary	G	\$6.93
Cruelty Unforgiven	Classics	G	\$6.94
Treatment Jekyll	Drama	PG	\$6.94
Lights Deer	Classics	R	\$7.93
Japanese Run	Horror	G	\$7.94

Final Report

Recommendations:

- **Movie Rentals:** Continue charging \$2.98 each rental for 5 day rental.
- **Products:** Focus on adding movies to inventory which generate the most revenue such as PG-13 and NC-17.
 - Avoid Genres that produce the least amount of revenue such as Thrillers.
- **Marketing:** Recommend to start streaming in the top three countries (India, China, and United States).
 - Further research recommended as to why Australia and Antarctica do not have any customers, and if it would be worth marketing in that location.
- **Sales:** There is not a high degree of variability for how much a film generates per rating; however, focusing on genres that generate the highest revenue could be beneficial.
- **Customers:** Look into creating a rewards program to incentivize customer loyalty.

Deliverables

- Github Repository Link
 - Project Brief
 - Data Dictionary
 - Datasets
 - Queries
 - Full Data Analysis Report
- Tableau Dashboards
- Portfolio Website