Rockbuster Stealth LLC
Movie Rental Analysis

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June 2022

Agenda / Topics

- Objectives and Tools
- Business Questions
- Analysis
- Key Findings/Results
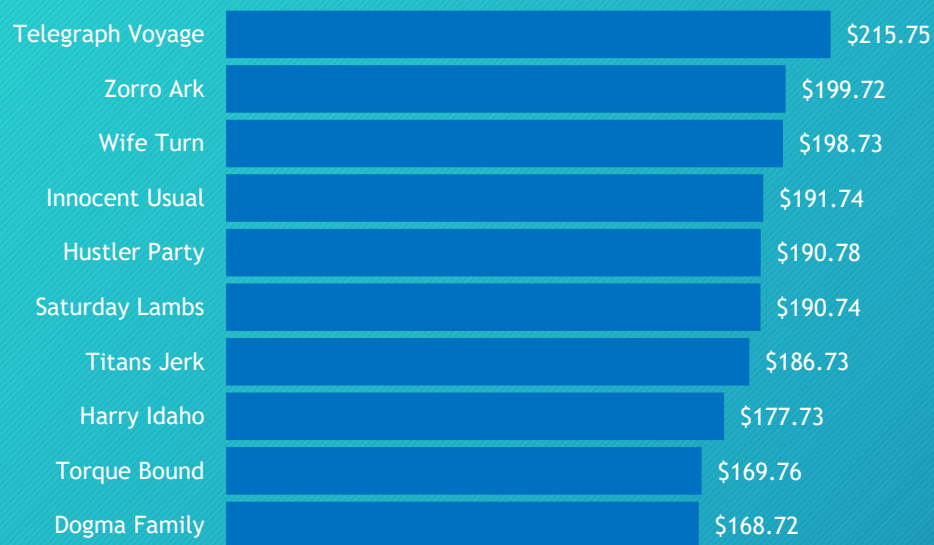- Recommendations

Objectives and Tools

- Glean insights to support Rockbuster Stealth LLC with the launch of an online video rental service

- Provide Rockbuster Stealth LLC with data-driven answers to business questions in order to develop a new business strategy

- The following tools have been used:
    - PostgreSQL: relational database management system (RDBMS)
    - Tableau: data visualization software
    - Excel: data analysis and data visualization software
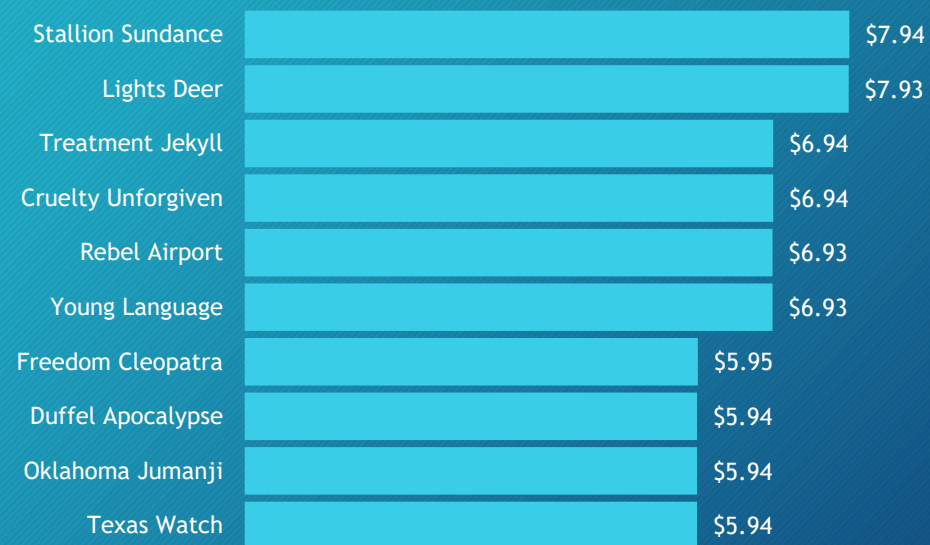
Business Questions

- Which movies contributed the most/least to revenue gain?
- What was the average rental duration for all videos?
- Which countries are Rockbuster customers based in?
- Where are customers with a high lifetime value based?
- Do sales figures vary between geographic regions?

Revenue: Best and Worst Movies
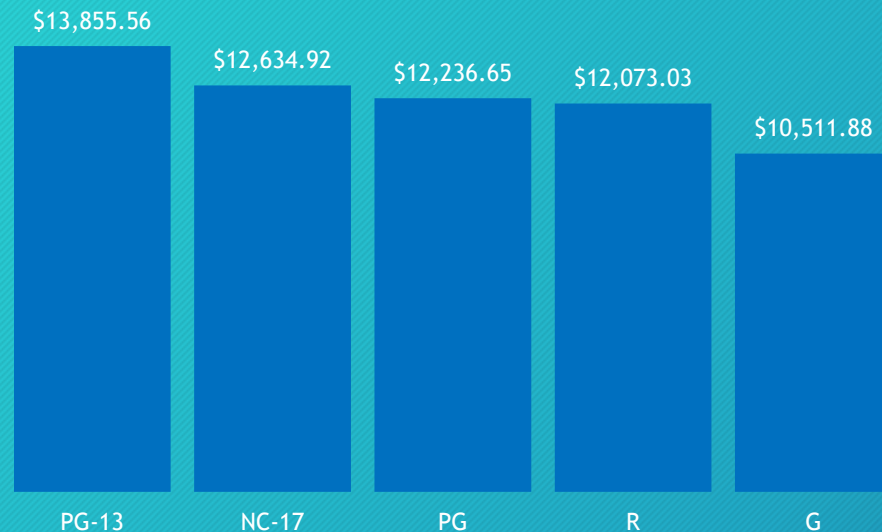
Top 10 movies by revenue

Movie	Revenue
Telegraph Voyage	$215.75
Zorro Ark	$199.72
Wife Turn	$198.73
Innocent Usual	$191.74
Hustler Party	$190.78
Saturday Lambs	$190.74
Titans Jerk	$186.73
Harry Idaho	$177.73
Torque Bound	$169.76
Dogma Family	$168.72

Bottom 10 movies by revenue

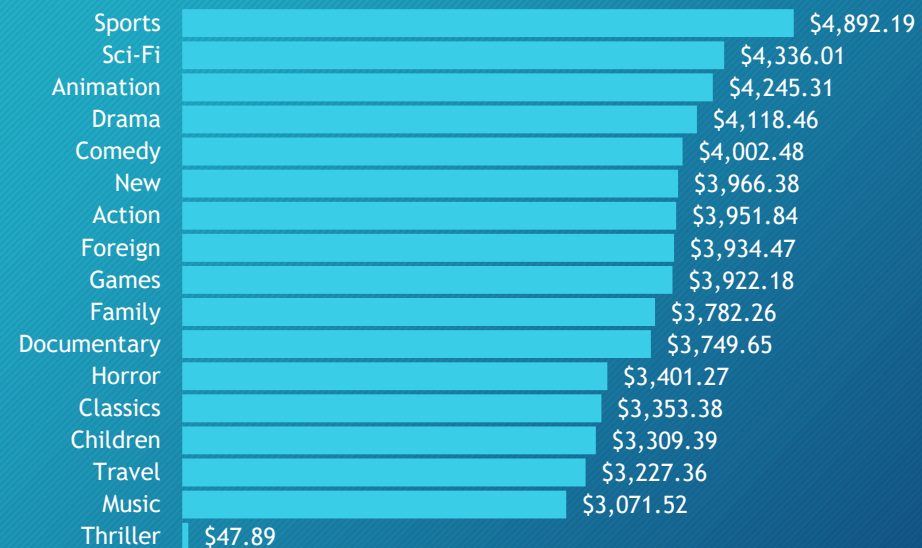| Movie	Revenue
Stallion Sundance	$7.94
Lights Deer	$7.93
Treatment Jekyll	$6.94
Cruelty Unforgiven	$6.94
Rebel Airport	$6.93
Young Language	$6.93
Freedom Cleopatra	$5.95
Duffel Apocalypse	$5.94
Oklahoma Jumanji	$5.94
Texas Watch	$5.94

- The movie with the highest revenue is "Telegraph Voyage", totalling $215.75
- The movie with the lowest revenue is "Texas Watch", totalling $5.94

Revenue: Rating and Category

Revenue by rating

- PG-13: $13,855.56
- NC-17: $12,634.92
- PG: $12,236.65
- R: $12,073.03
- G: $10,511.88

Revenue by category

Category	Revenue
Sports	$4,892.19
Sci-Fi	$4,336.01
Animation	$4,245.31
Drama	$4,118.46
Comedy	$4,002.48
New	$3,966.38
Action	$3,951.84
Foreign	$3,934.47
Games	$3,922.18
Family	$3,782.26
Documentary	$3,749.65
Horror	$3,401.27
Classics	$3,353.38
Children	$3,309.39
Travel	$3,227.36
Music	$3,071.52
Thriller	$47.89

- The rating with the highest revenue is "PG-13", totalling $13,855.56
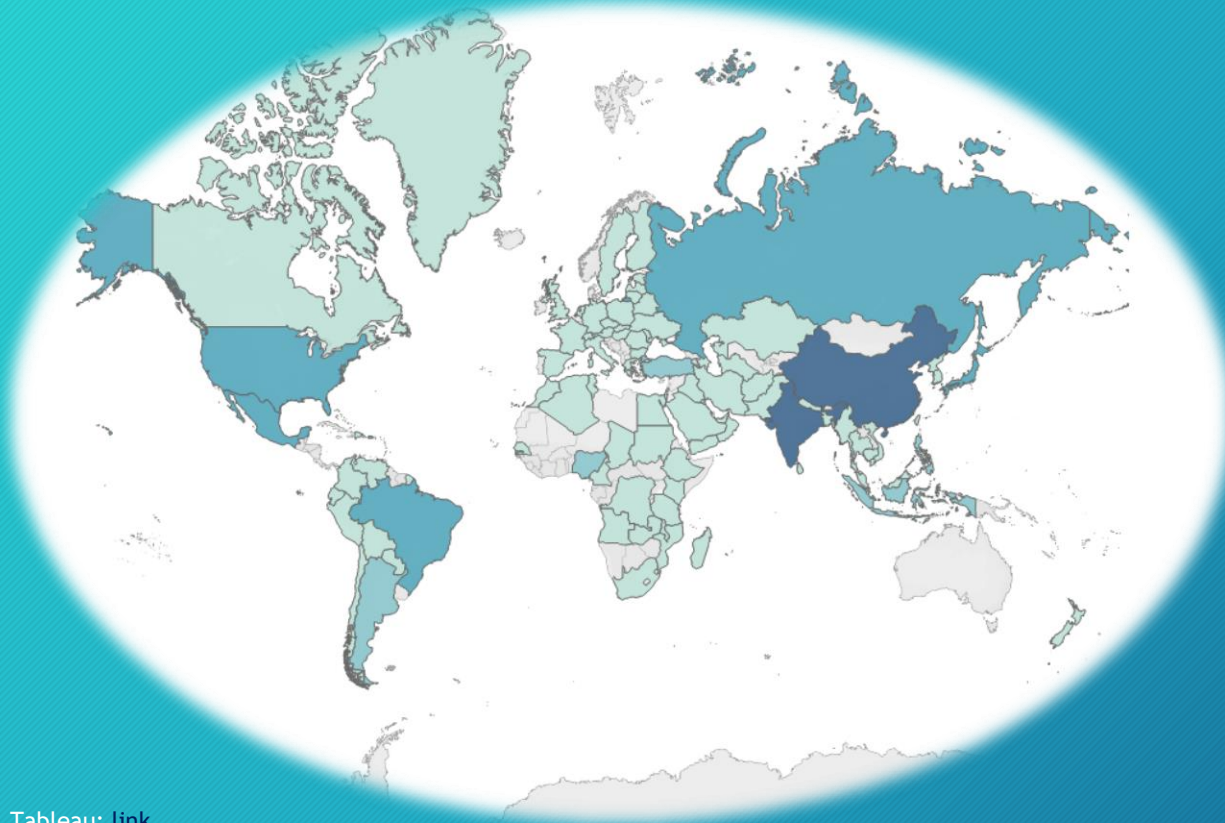- The category with the highest revenue is "Sports", totalling $4,892.19

Descriptive Statistics

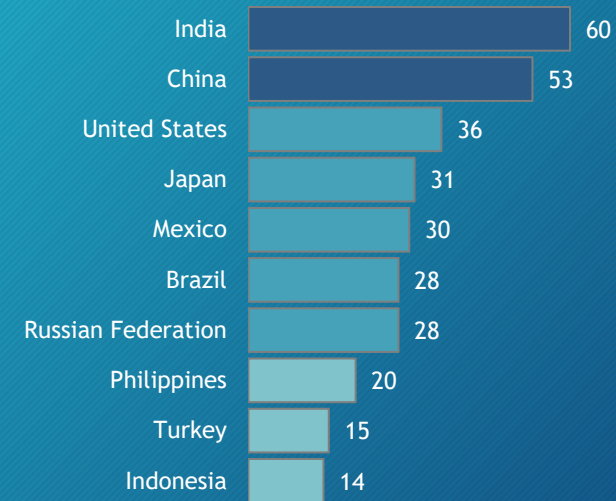|	Minimum	Maximum	Average
Rental duration [days]	3	7	4.99
Rental rate [$]	0.99	4.99	2.98
Length [minutes]	46	185	115.27
Replacement cost [$]	9.99	29.99	19.98

	Mode
Rating	PG-13

- The average rental duration is 4.99 days, with a minimum of 3 and a maximum of 7 days
- The rating that appears the most in the data set is PG-13

Spatial Analysis: Customers Count by Country

Top 10 countries by number of customers

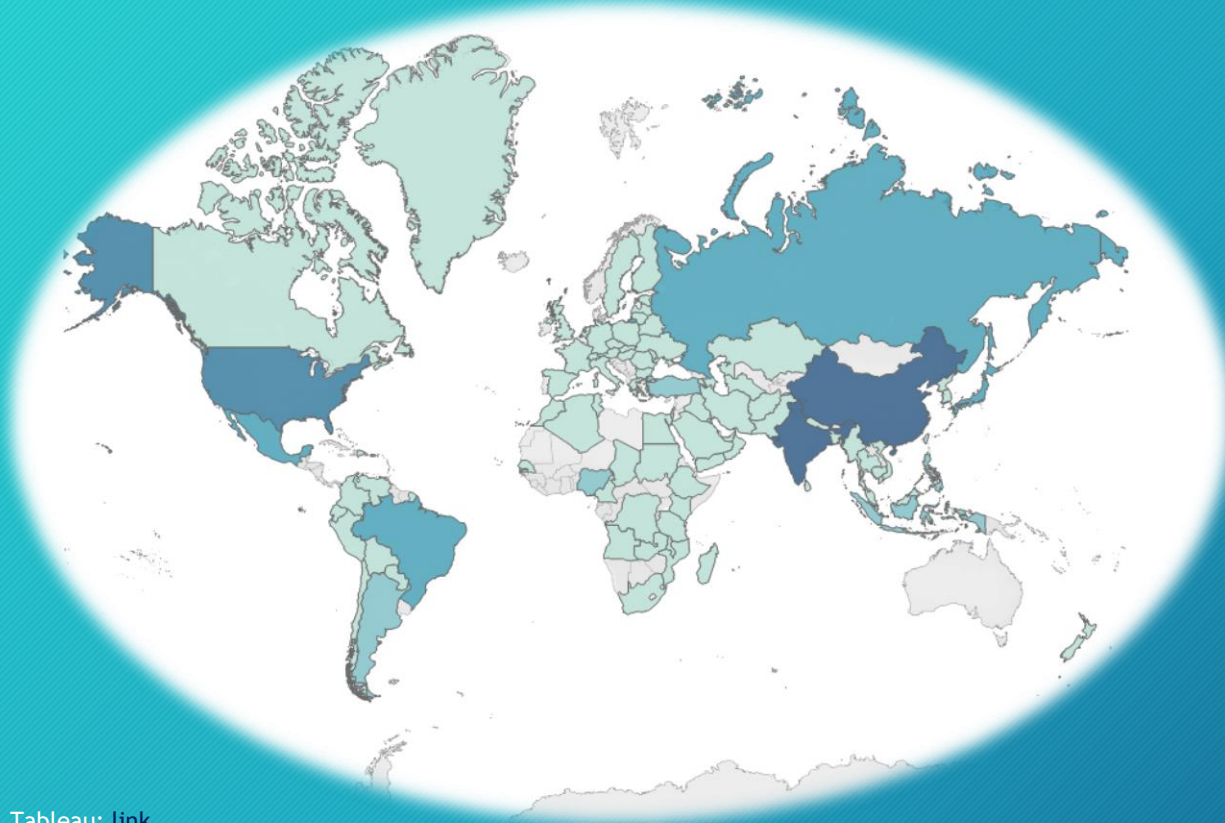| Country	Customers
India	60
China	53
United States	36
Japan	31
Mexico	30
Brazil	28
Russian Federation	28
Philippines	20
Turkey	15
Indonesia	14

Legend: number of customers

1   60

Tableau: link

Lifetime Value: Top 10 Customers

Top 10 customers worldwide by number of transactions and total expense over 150$
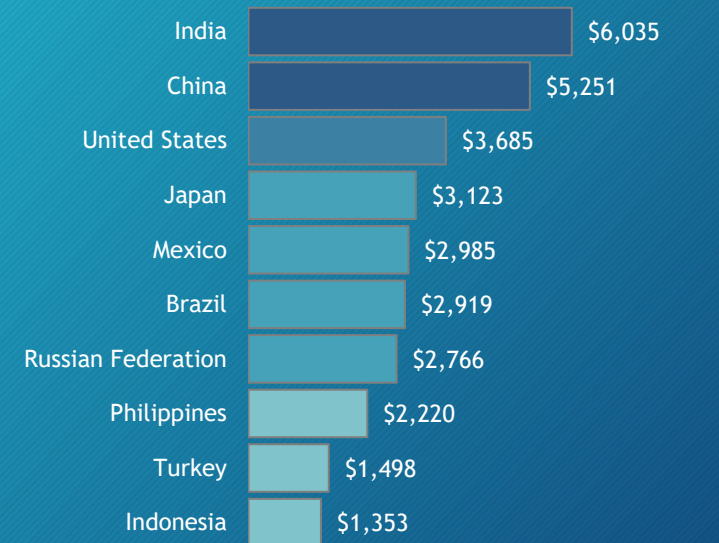
Country	Customer ID	Name	Last name	Total spent [$]	No. of transactions
Reunion	148	Eleanor	Hunt	211.55	45
United States	526	Karl	Seal	208.58	42
Belarus	144	Clara	Shaw	189.6	40
Brazil	178	Marion	Snyder	194.61	39
Philippines	236	Marcia	Dean	166.61	39
Netherlands	137	Rhonda	Kennedy	191.62	38
Canada	410	Curtis	Irby	167.62	38
Iran	459	Tommy	Collazo	183.63	37
Spain	469	Wesley	Bull	158.65	35
Philippines	373	Louis	Leone	156.66	34

Customers with the highest lifetime value: top 10 customers in terms of number of transactions and total expense over 150$
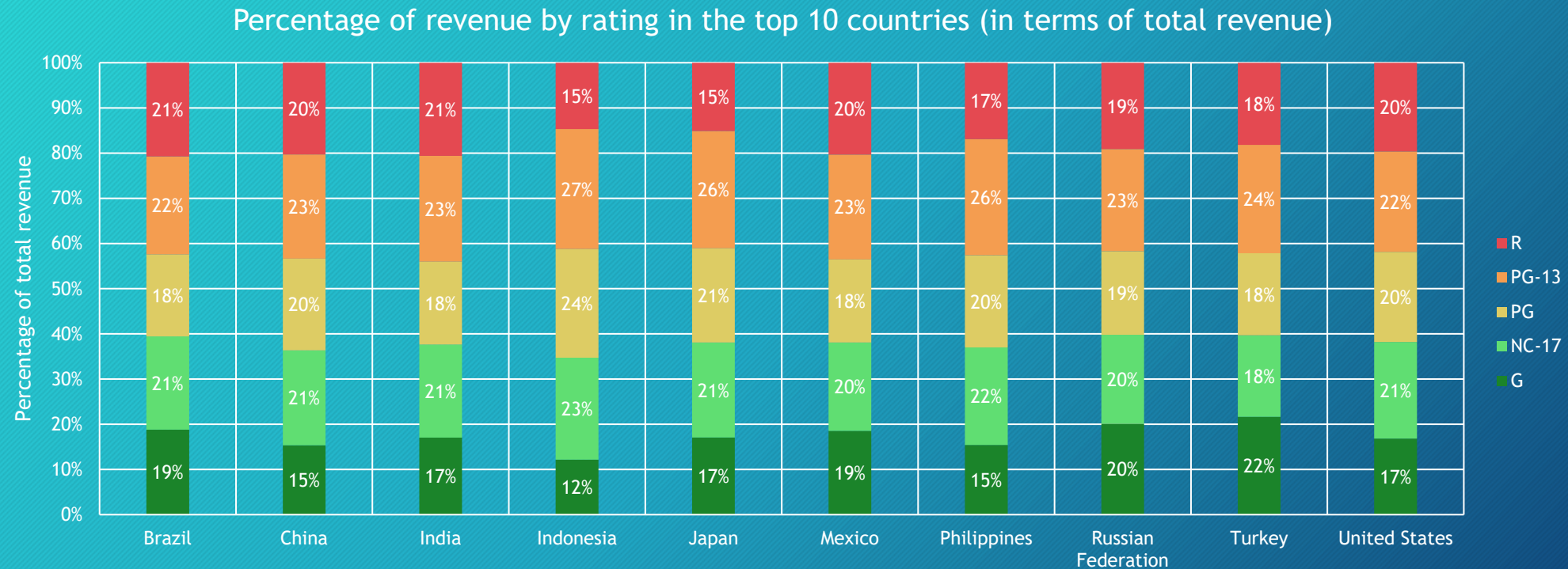
Geographic Regions: Revenue by Country

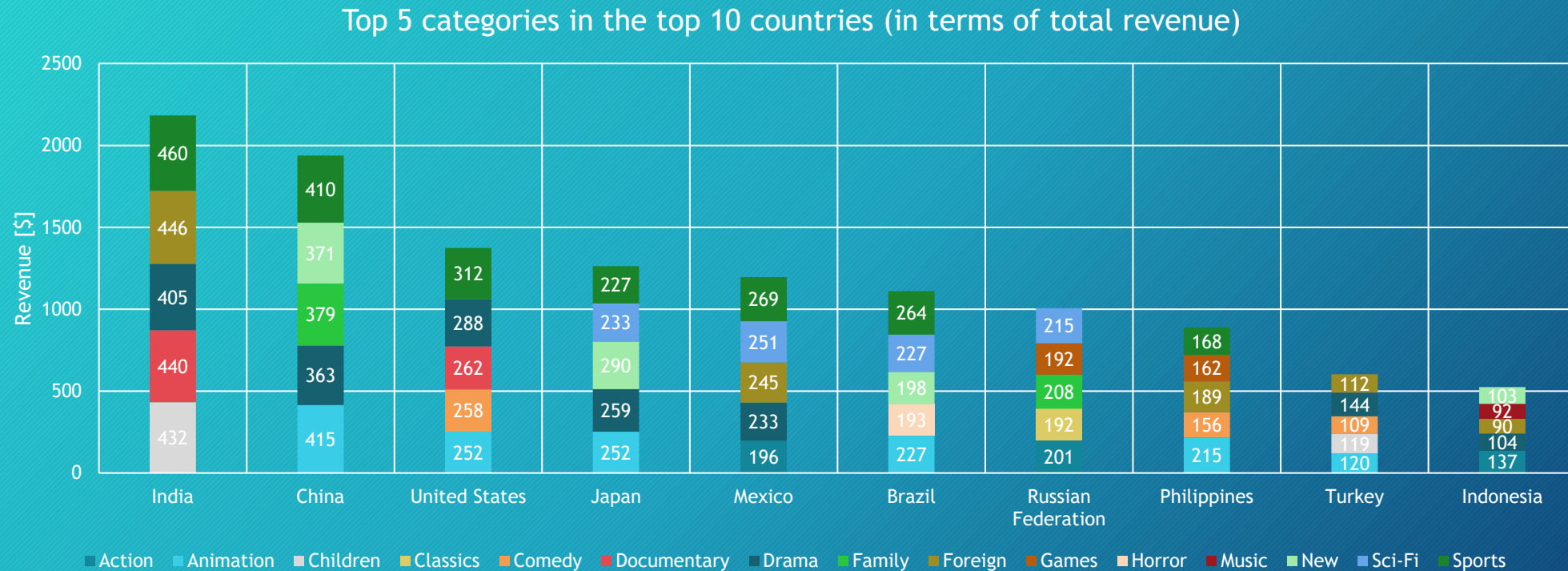Top 10 countries by revenue

Country	Revenue
India	$6,035
China	$5,251
United States	$3,685
Japan	$3,123
Mexico	$2,985
Brazil	$2,919
Russian Federation	$2,766
Philippines	$2,220
Turkey	$1,498
Indonesia	$1,353

Legend: revenue [$]

48 — 6,035

Tableau: link

Geographic Regions: Revenue by Rating

Percentage of revenue by rating in the top 10 countries (in terms of total revenue)

The rating with the largest revenue among the top 10 countries (in terms of total revenue) is PG-13

Geographic Regions: Revenue by Category

Top 5 categories in the top 10 countries (in terms of total revenue)

The category with the largest revenue among the top 10 countries (in terms of total revenue) changes from country to country

Key Findings/Results

- Which movies contributed the most/least to revenue gain?
  - The movie that contributed the most is "Telegraph Voyage" ($215.75)
  - The movie that contributed the least is "Texas Watch" ($5.94)
  - The rating that contributed the most is "PG-13" ($13,855.56)
  - The rating that contributed the least is "G", ($10,511.88)
  - The category that contributed the most is "Sports" ($4,892.19)
  - The category that contributed the least is "Thriller" ($47.89)
- What was the average rental duration for all videos?
  - The average rental duration is 4.99 days, with a minimum of 3 and a maximum of 7 days

Key Findings/Results

- Which countries are Rockbuster customers based in?
  - The top 10 countries by number of customers are: *India, China, United States, Japan, Mexico, Brazil, Russian Federation, Philippines, Turkey, Indonesia*

- Where are customers with a high lifetime value based?
  - The top 10 customers worldwide, by number of transactions and total expense over 150$, are based in: *Reunion* (ID 148), *United States* (ID 526), Belarus (ID 144), *Brazil* (ID 178), *Philippines* (ID 236), *Netherlands* (ID 137), *Canada* (ID 410), *Iran* (ID 459), *Spain* (ID 469), *Philippines* (ID 373)

Key Findings/Results

- Do sales figures vary between geographic regions?
  - The top 10 countries by total revenue are: *India, China, United States, Japan, Mexico, Brazil, Russian Federation, Philippines, Turkey, Indonesia*
  - The top 10 countries by total revenue are also the top 10 countries by number of customers
  - The rating that contributed the most to the revenue in each of the top 10 countries (in terms of total revenue) is "PG-13"
  - The category that contributed the most to the revenue changes from country to country

Recommendations

- The online rental service should initially focus on the biggest contributors to revenue
  - Consider the preferred movie rating and category in each country to better target the interest of its population

- The online rental service should initially be deployed in countries with the largest numbers of customers (and largest total revenue)
  - Gather as much information as possible regarding the service
  - Collect feedbacks from the customers

Recommendations

- Deals could be offered to customers with a high lifetime value that are based in countries where the online rental service will be deployed
  - For example, the first movie rented through the online service could be free

- Rewards could be offered to customers with a high lifetime value that are based in countries where the online rental service will not be initially available, to maintain their loyalty

Questions?

Thank you