

COMPANY STRATEGY FOR 2020



Data Analysis Project

Prepared by Ana Lazarevska, July 2024

Business Questions

Requested by the Business Intelligence (BI) Department

.....
Project's Aim
.....
To help with the
launch strategy for
the new online video
service.
.....

Initial 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?

Data Overview

There are several data limitations to mention:

- There is only one Thriller film on offer
- The real rental duration is different than the rental_duration variable in the data set
- The rental rate is not proportional to rental duration
- Yugoslavia split into seven state, so for ease of calculation I allocated the data for Yugoslavia only to Serbia

Customers	Customer countries	All customers profiles created on	Stores	Customers per store	Rental duration	Rental rate
<ul style="list-style-type: none">• total 599• active 584• inactive 15	<ul style="list-style-type: none">• 109	<ul style="list-style-type: none">• 14 Feb 2006	<ul style="list-style-type: none">• 2	<ul style="list-style-type: none">• s1 active 318• s1 inactive 8• s2 active 266• s2 inactive 7	<ul style="list-style-type: none">• min 3 days• max 7 days• avg 5 days	<ul style="list-style-type: none">• min \$0.99• max \$4.99• avg \$2.98
Films	Film length	Film copies per store	Most common special features	Most common film rating	All last updated	Replacement cost
	<ul style="list-style-type: none">• min 46 min• max 185 min• avg 115.27 min	<ul style="list-style-type: none">• s1 2270• s2 2311	<ul style="list-style-type: none">• Trailers,Commentaries,Behind the Scenes	<ul style="list-style-type: none">• PG-13	<ul style="list-style-type: none">• 26 May 2013, 14:50	<ul style="list-style-type: none">• min \$9.99• max \$29.99• avg \$19.98

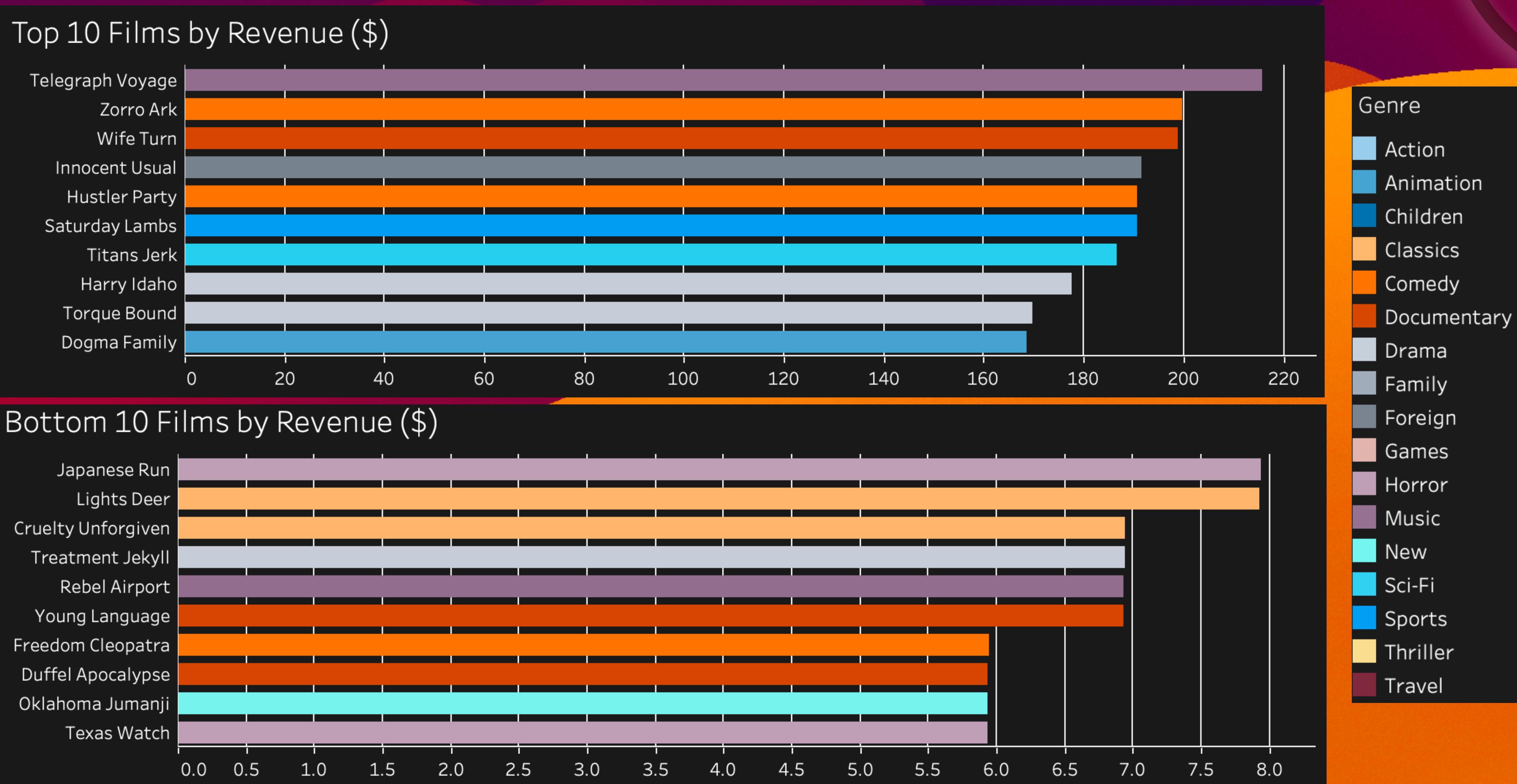
Question 1

Which movies contributed the most/least to revenue gain?

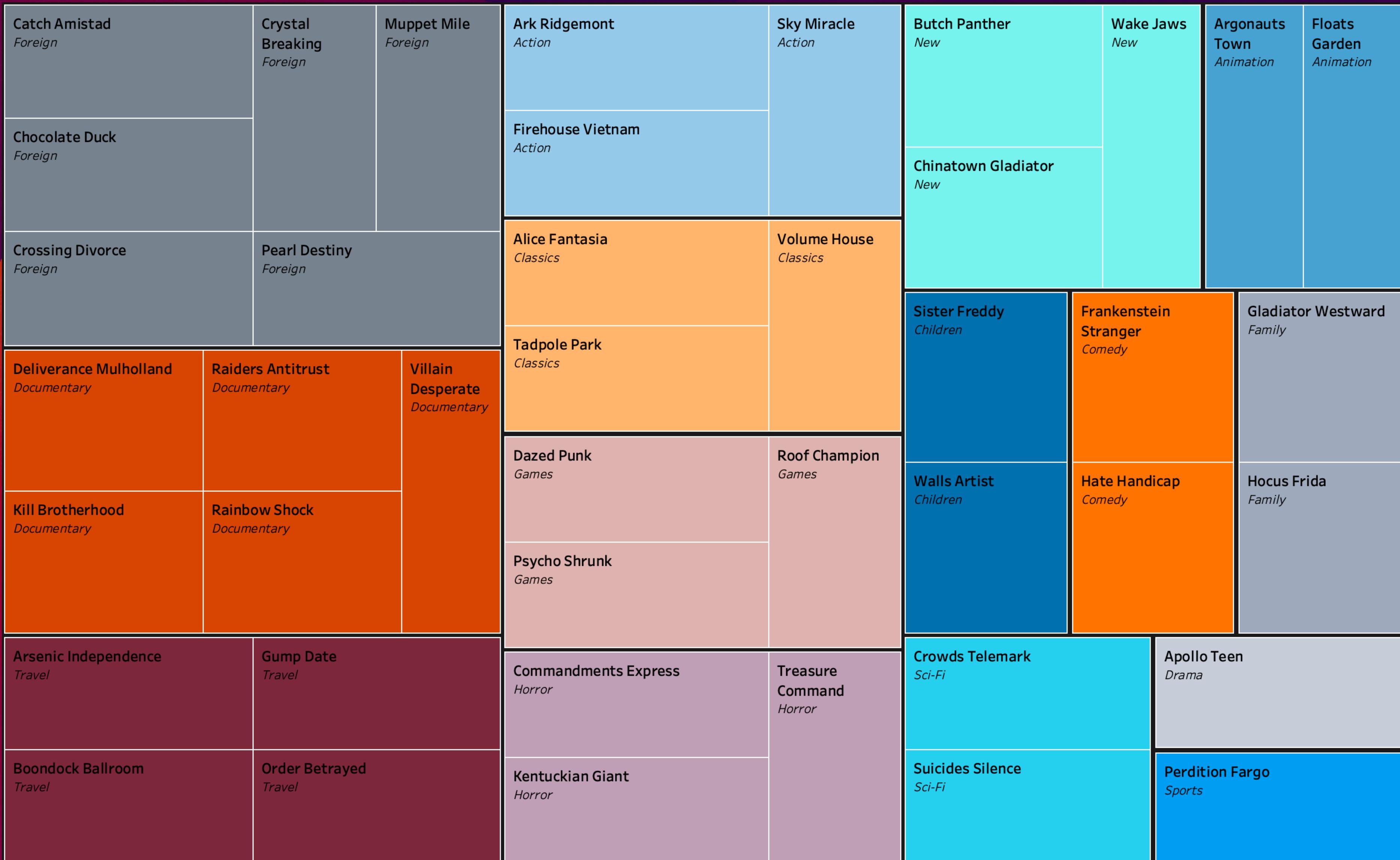


Which movies contributed the most/least to revenue gain?

The top and bottom 10 films show that Horrors are less preferred than Animation, Sci-Fi, and Sports films.



Films Generating No Revenue

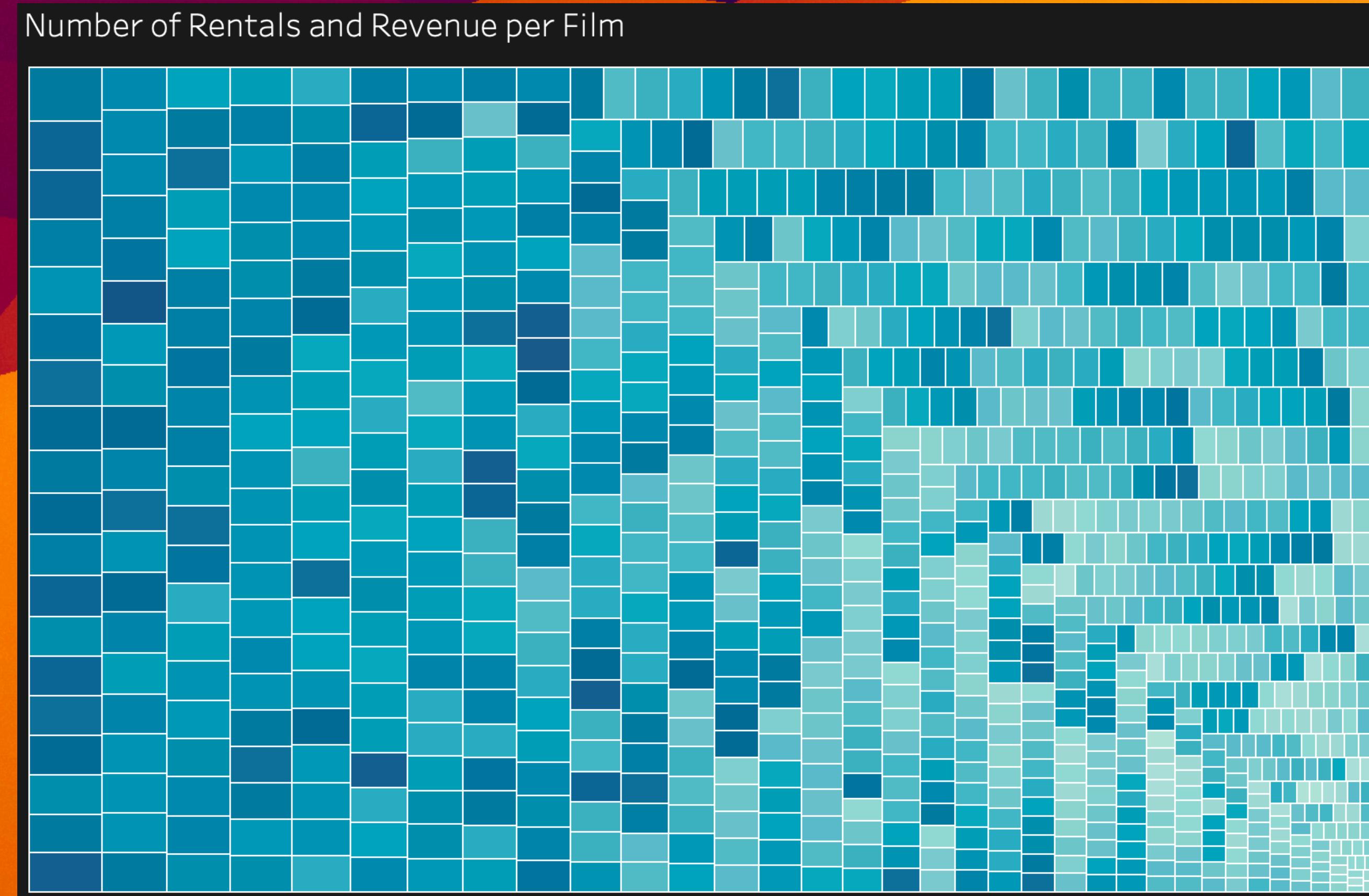
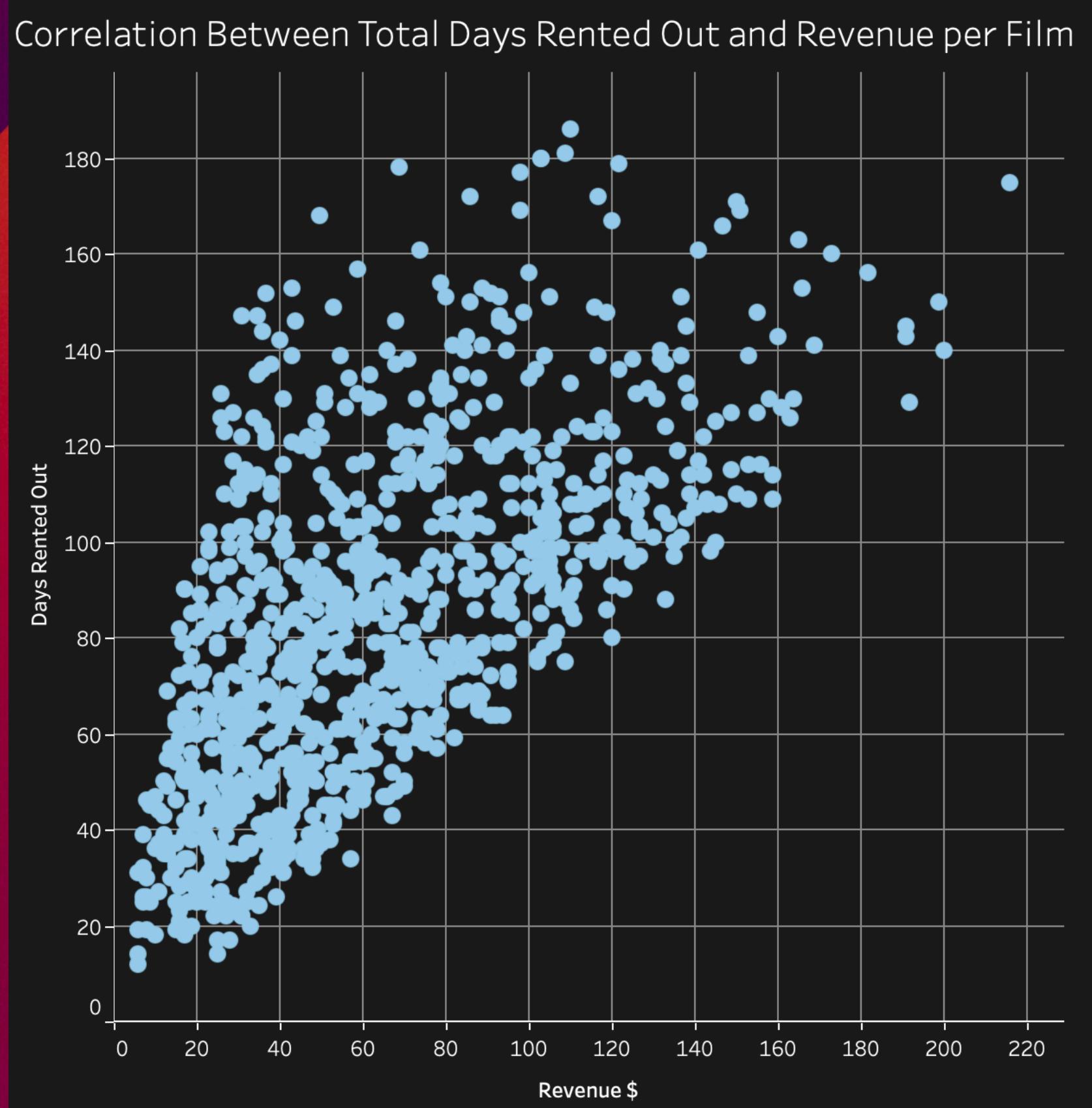


42 films did not generate any revenue, 6 from Foreign category, followed by 5 from the Documentaries.

All the thrillers and music films generated some revenue.

Rental Duration vs Revenue

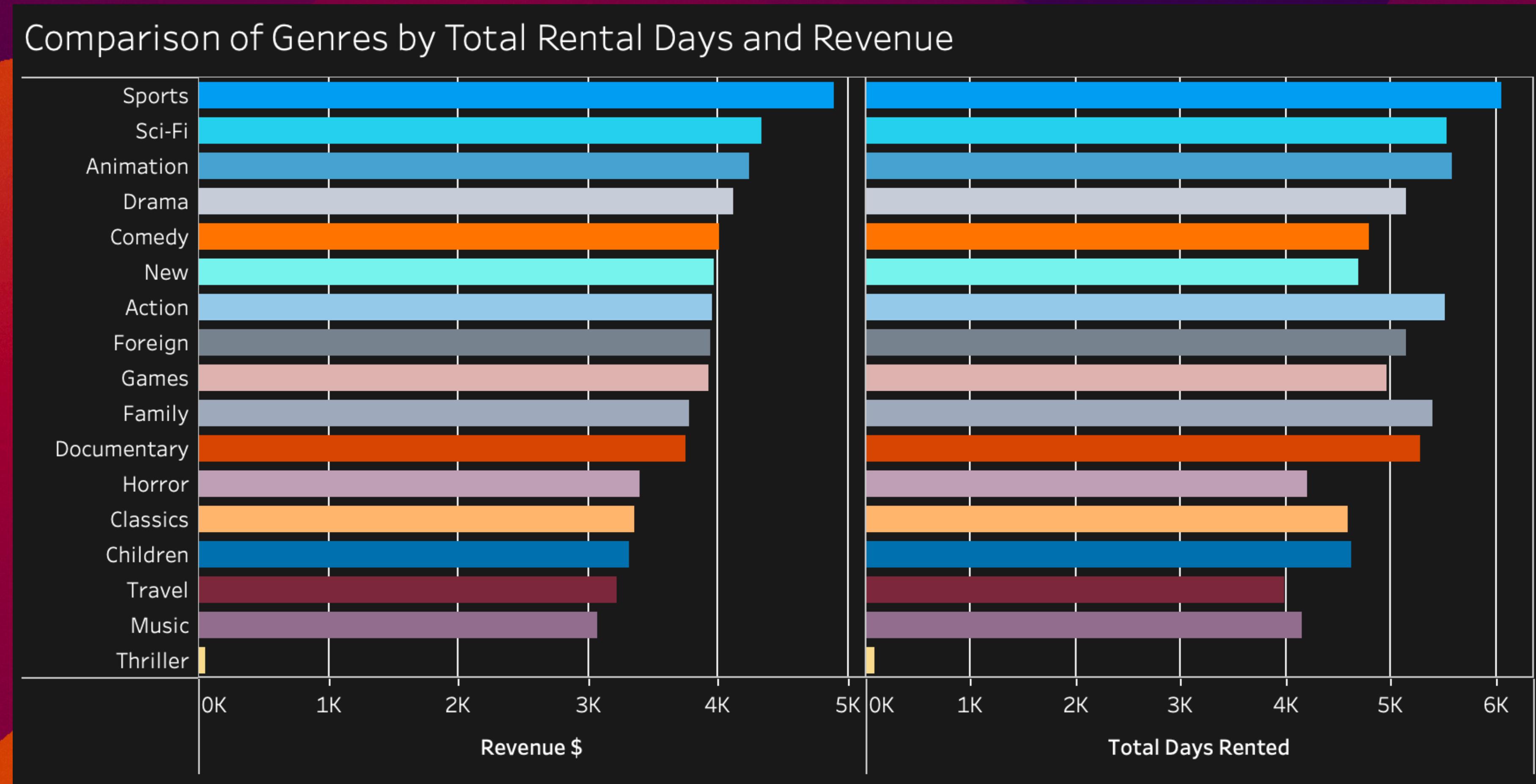
Positive correlation between revenue generated by a film and the total number of days it was rented out. Note: the longest rented film isn't the highest grossing, which might mean that not all rentals are being paid for.



Number of rentals per film were high for some films generating small revenue. The size of the field represents total revenue.

Genre by Revenue and Rental Duration

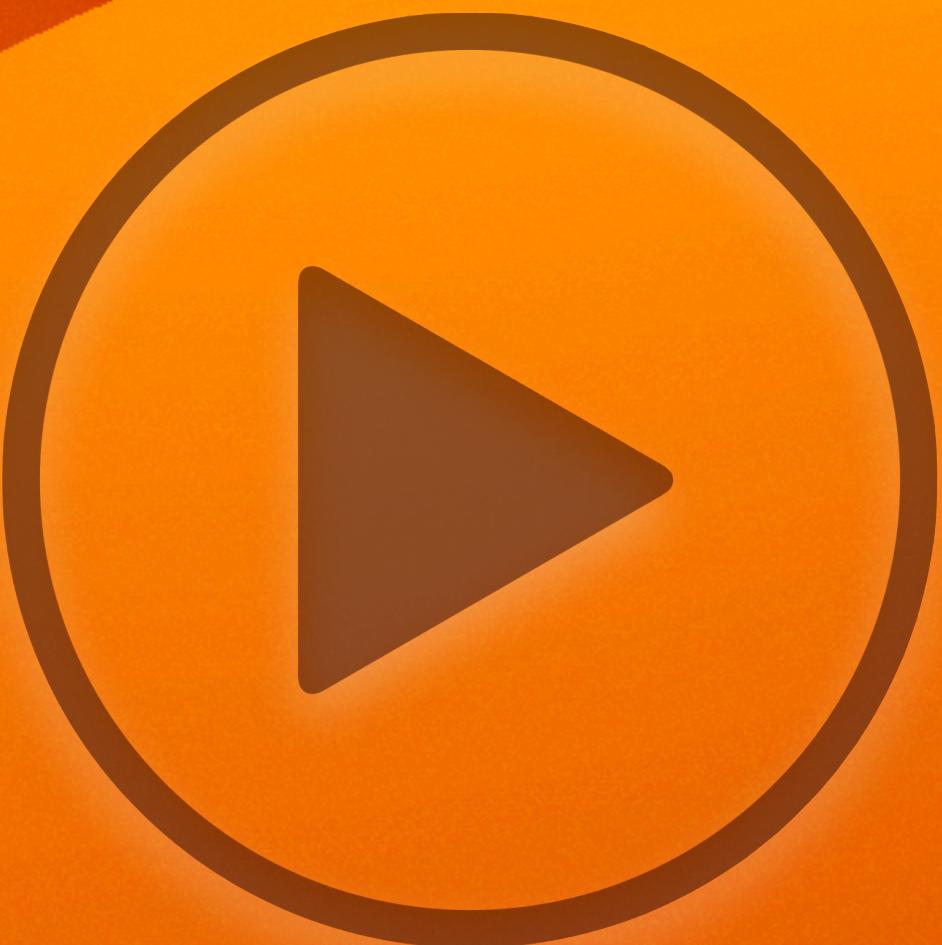
The genre generating the most revenue was Sports, way ahead of Sci-Fi, Animation, and Drama. However, longest rented films are from the Sport genre, followed by Family and Foreign.



Note: There is only one Thriller film on offer, therefore, the low revenue and rentals.

Question 2

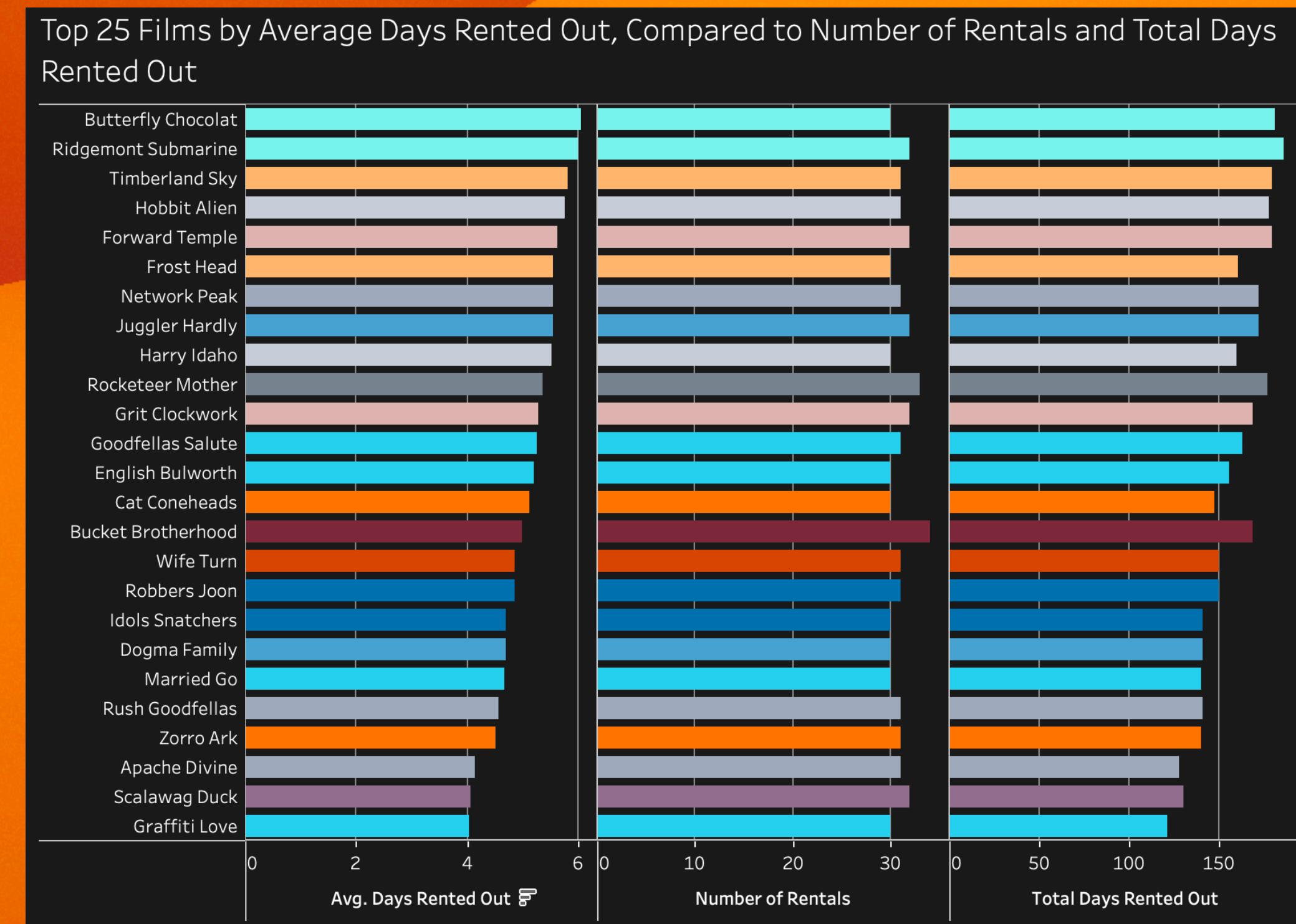
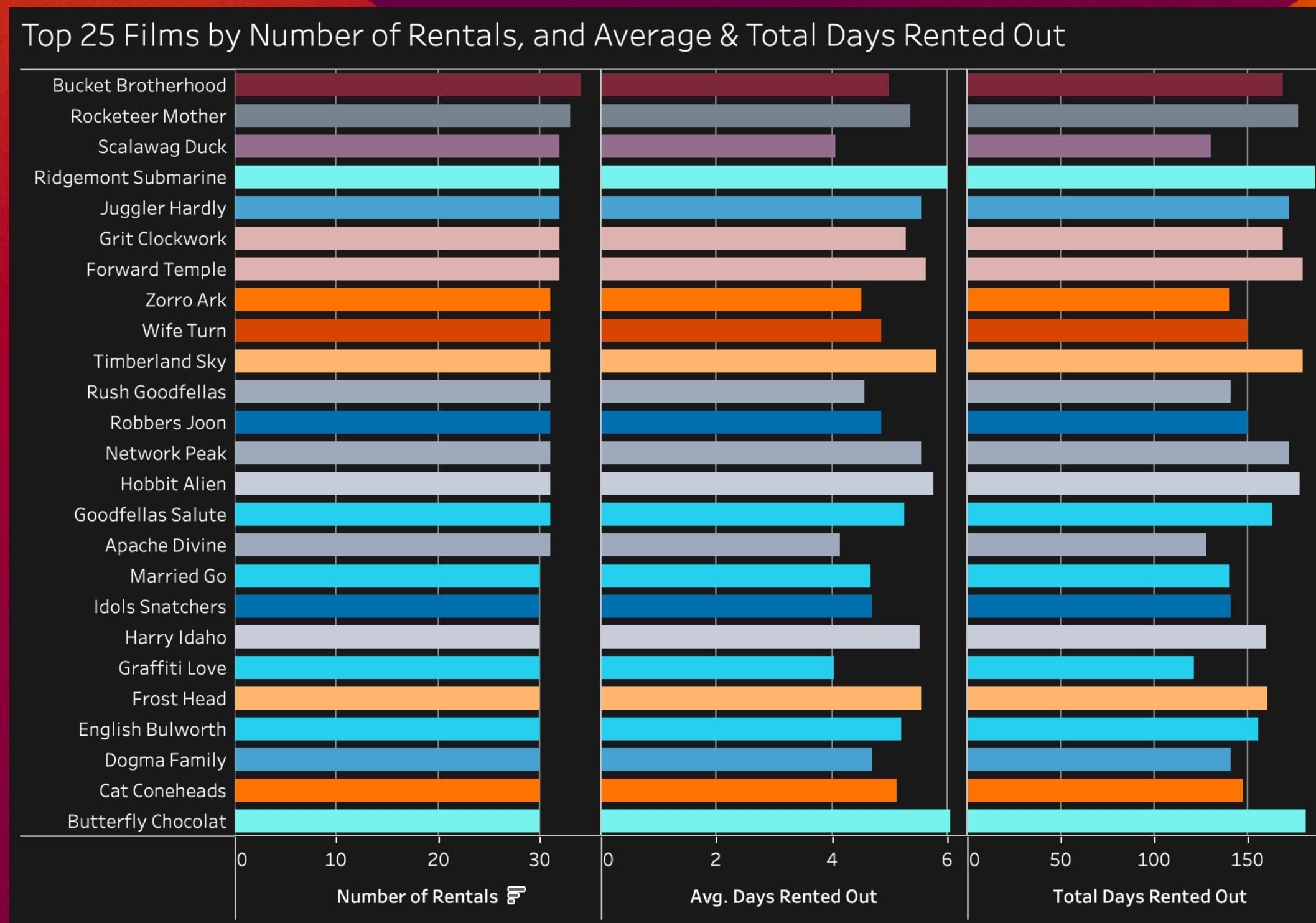
What was the average rental duration for all videos?



Top 10 Films by Rental

The film rented out the most (34 times) wasn't rented out for the longest time.

The film that in average was rented out the longest (6 days) was 25th by the number of rentals.



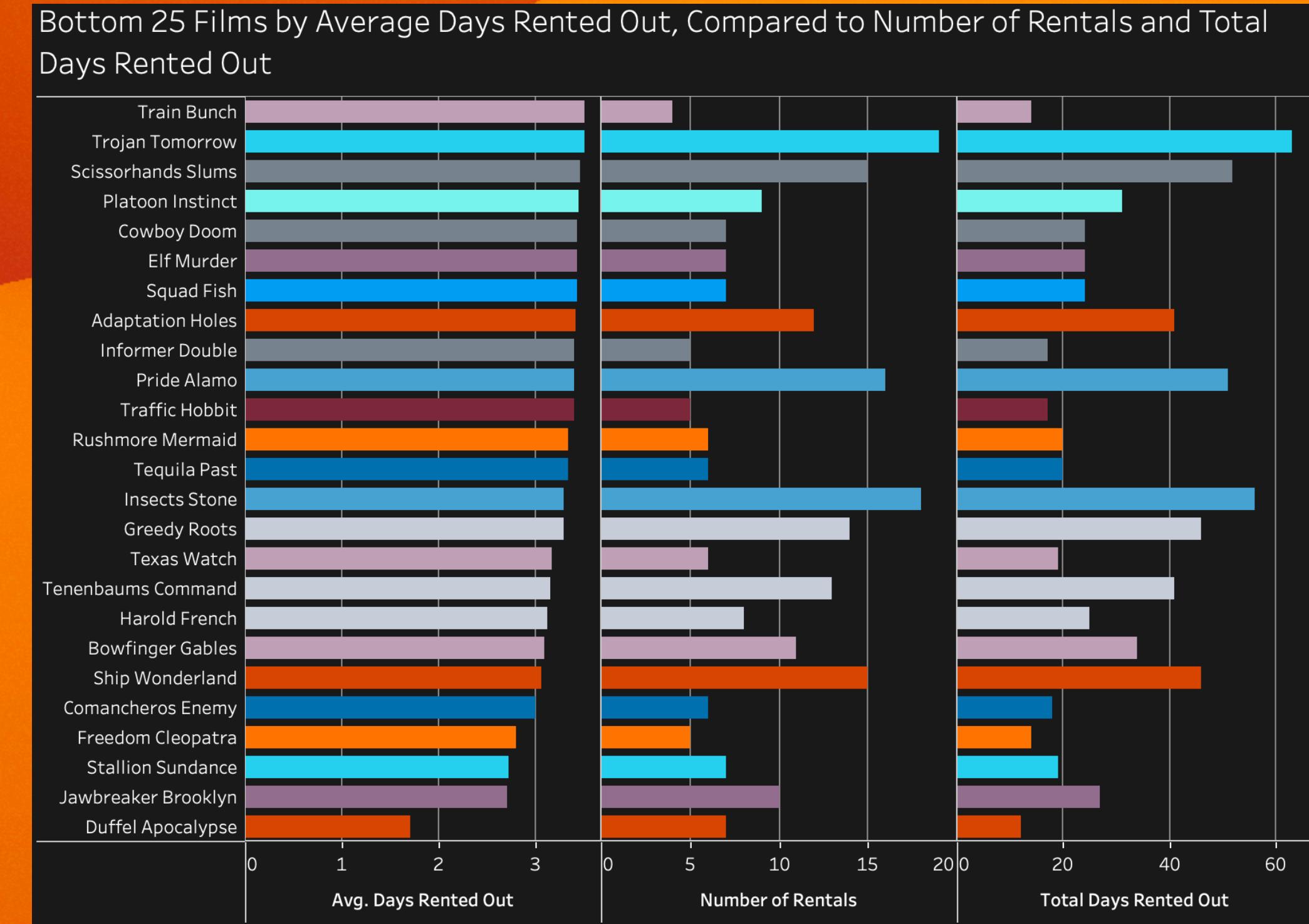
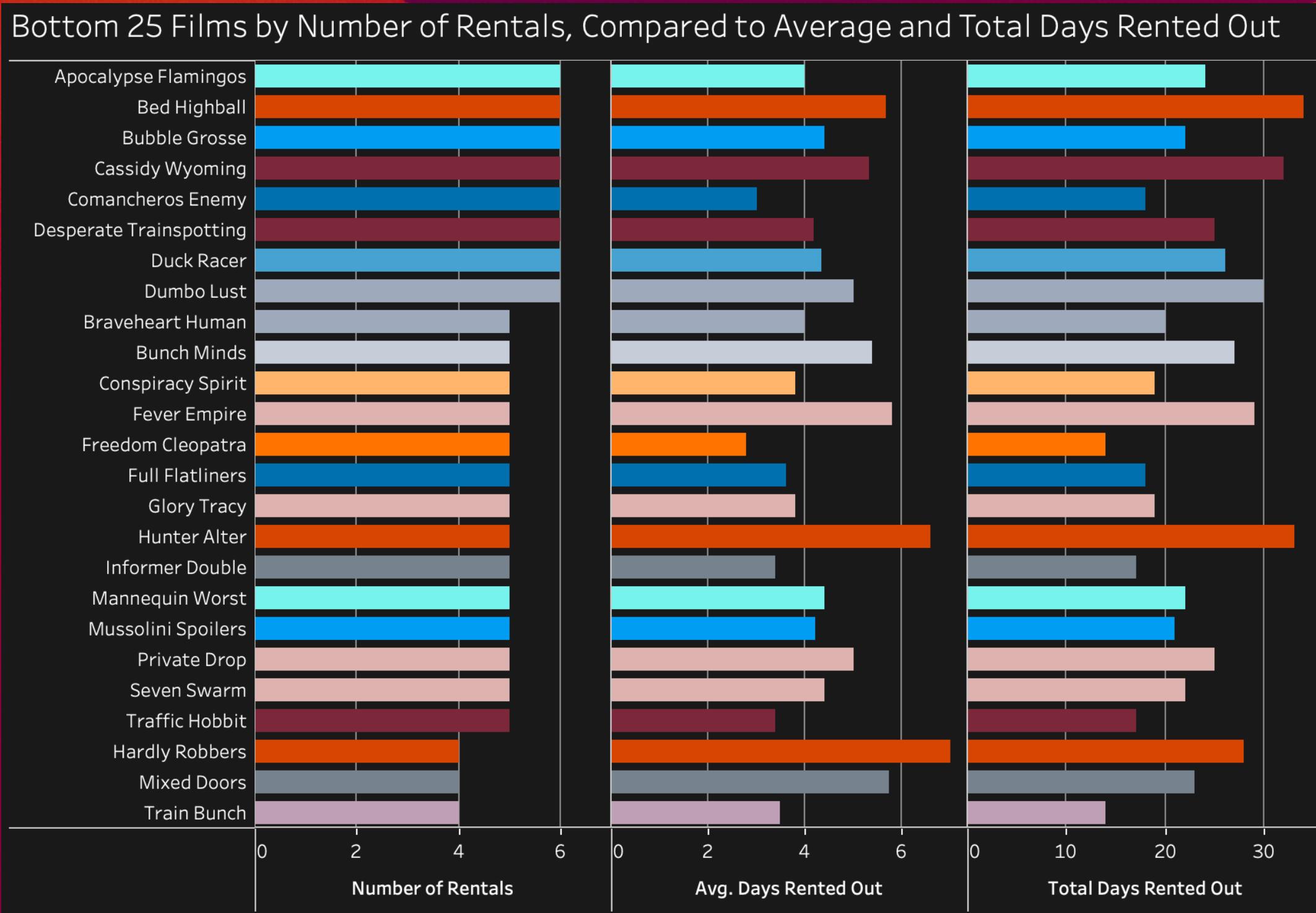
- Genre
- Action
 - Animation
 - Children
 - Classics
 - Comedy
 - Documentary
 - Drama
 - Family
 - Foreign
 - Games
 - Horror
 - Music
 - New
 - Sci-Fi
 - Sports
 - Thriller
 - Travel

Bottom 10 Films by Rental

Great variation in rental duration for the bottom films in terms of number of rentals.

The least rented films were rented out only 4 times.

The film rented out the shortest time in average (only 1.7 days, and 12 days in total) was rented out 7 times.

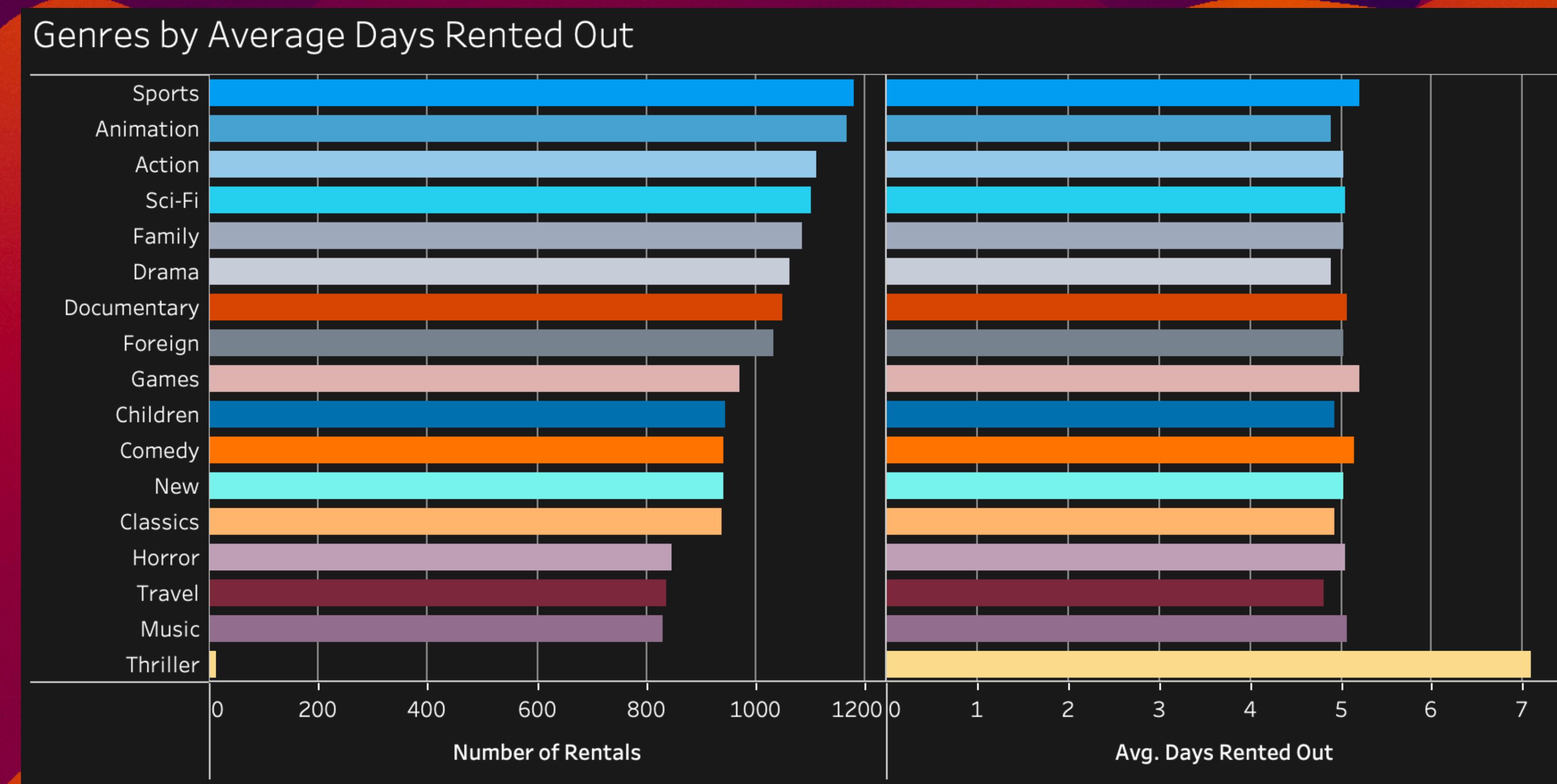


- Genre
- Action
 - Animation
 - Children
 - Classics
 - Comedy
 - Documentary
 - Drama
 - Family
 - Foreign
 - Games
 - Horror
 - Music
 - New
 - Sci-Fi
 - Sports
 - Thriller
 - Travel

Genres by Rental Duration

Film genres had almost equal time being rented out (4.8 - 5.2 days in average).

However, Sport and Animation films were more popular than Music, Travel, and Horror films (Sport films were rented out 1179 times vs 830 for Music films).



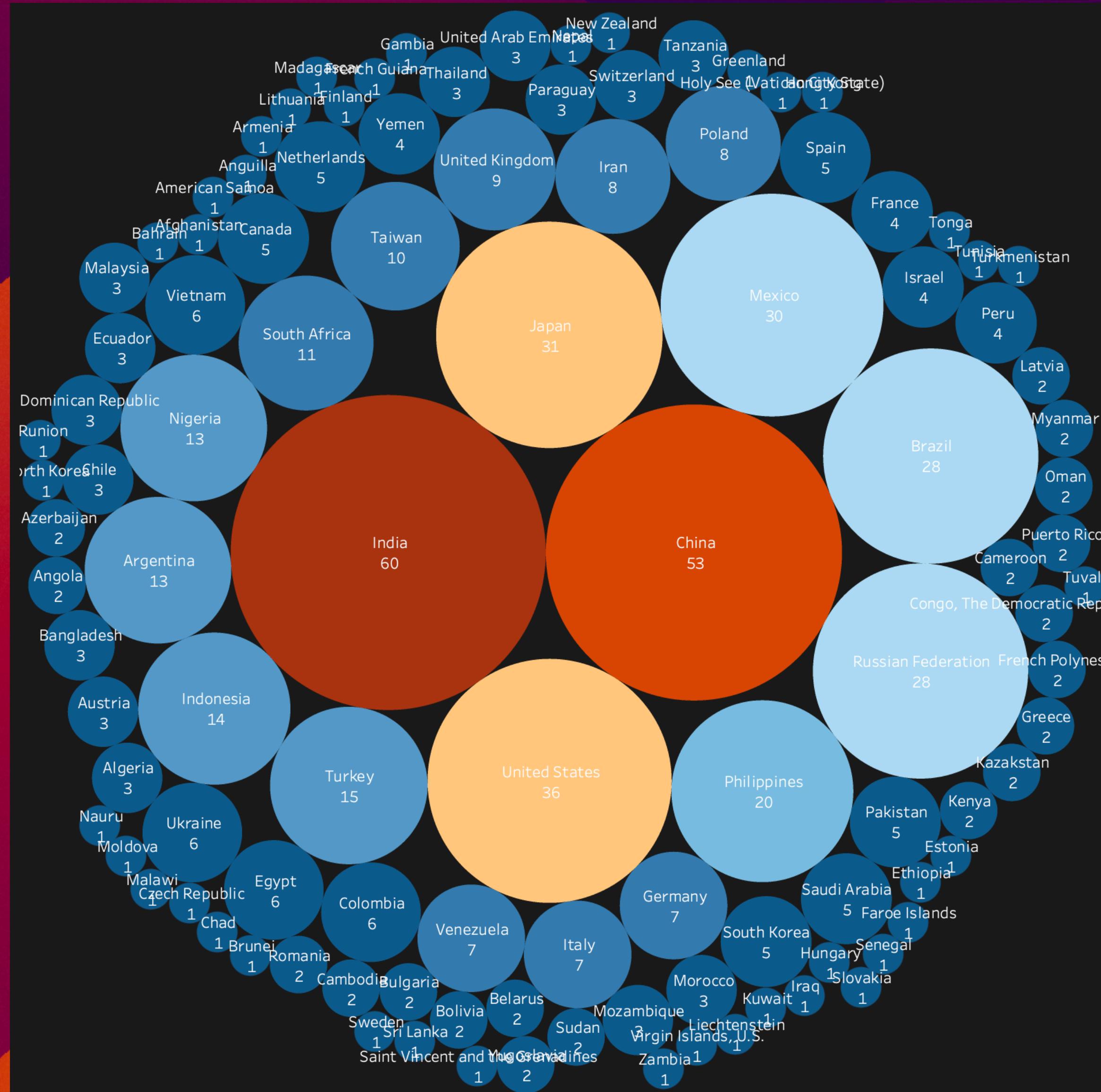
Note: Rockbuster should consider purchasing more thrillers, because the only Thriller was rented out 12 times and for 7 days in average.

Question 3

Which countries are Rockbuster customers based in?

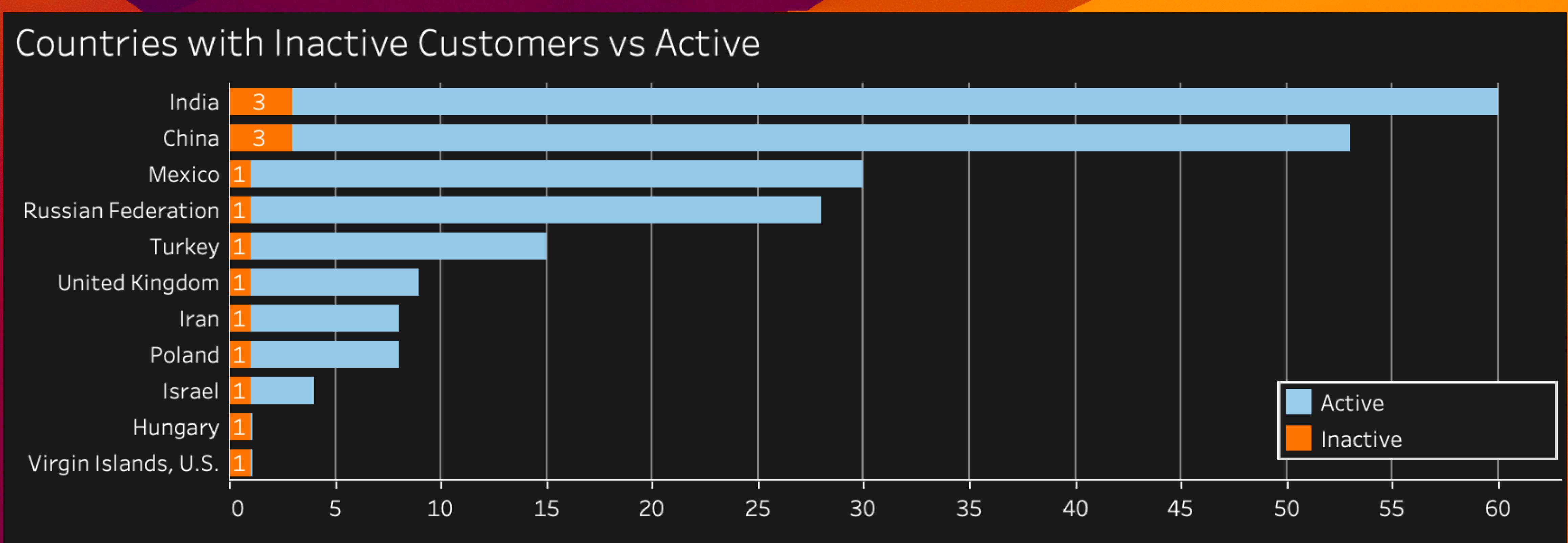


Countries by Number of Customers

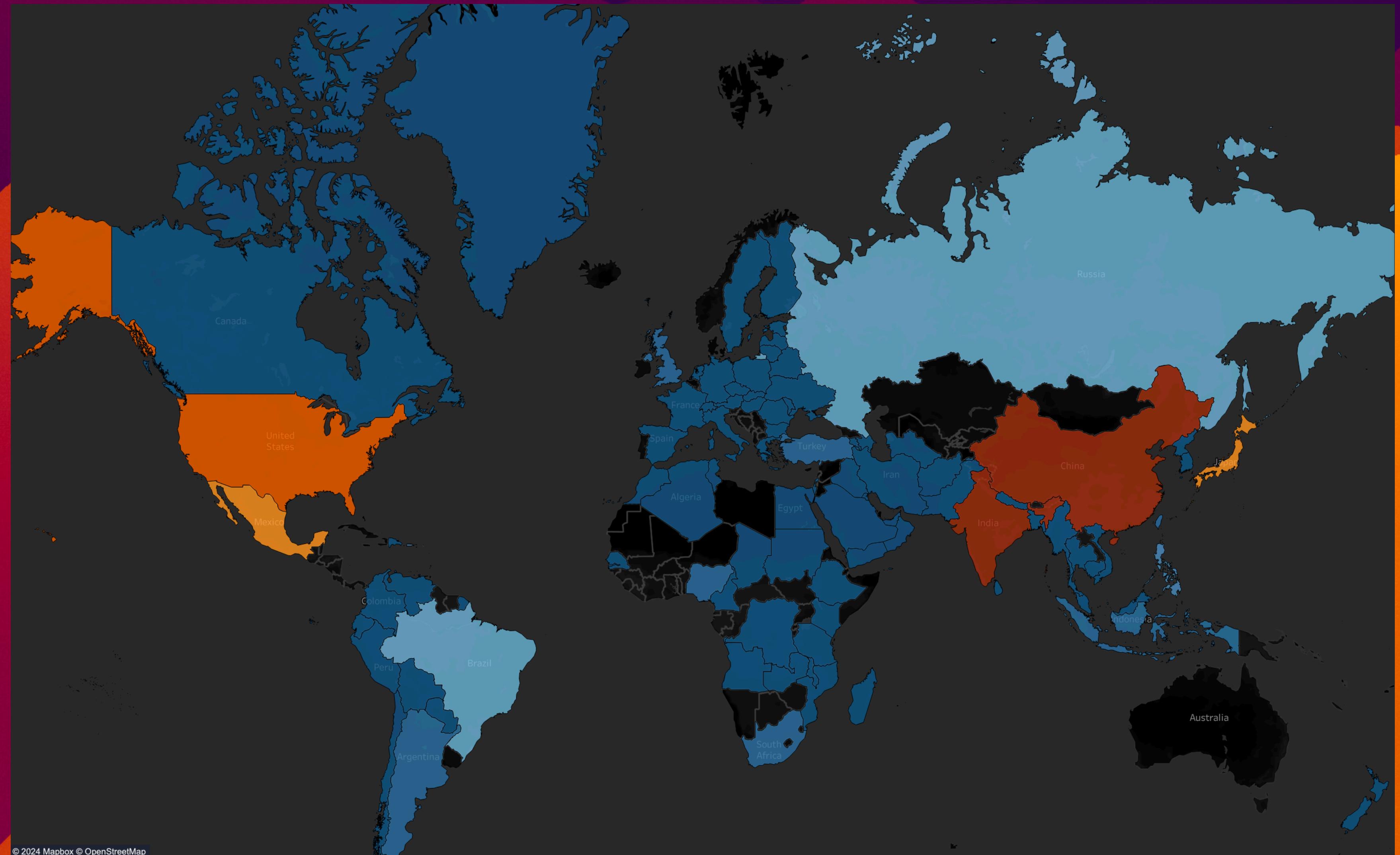


Inactive Customers per Country

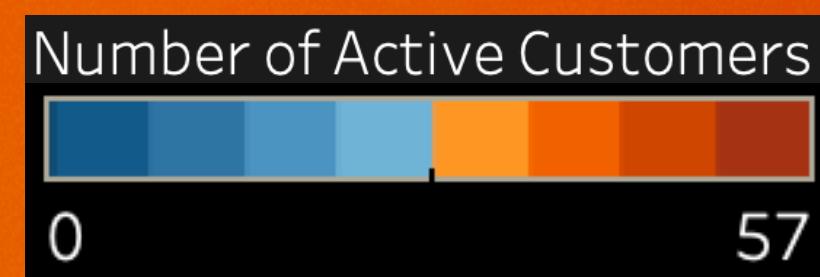
Only 15 customers from all countries were inactive. In Hungary and U.S. Virgin Islands there are no active customers.



Map of Countries With Active Customers



The highest number
of Rockbuster
customers come
from the most
populous countries
in the world.



Question 4

Where are customers with a high lifetime value based?

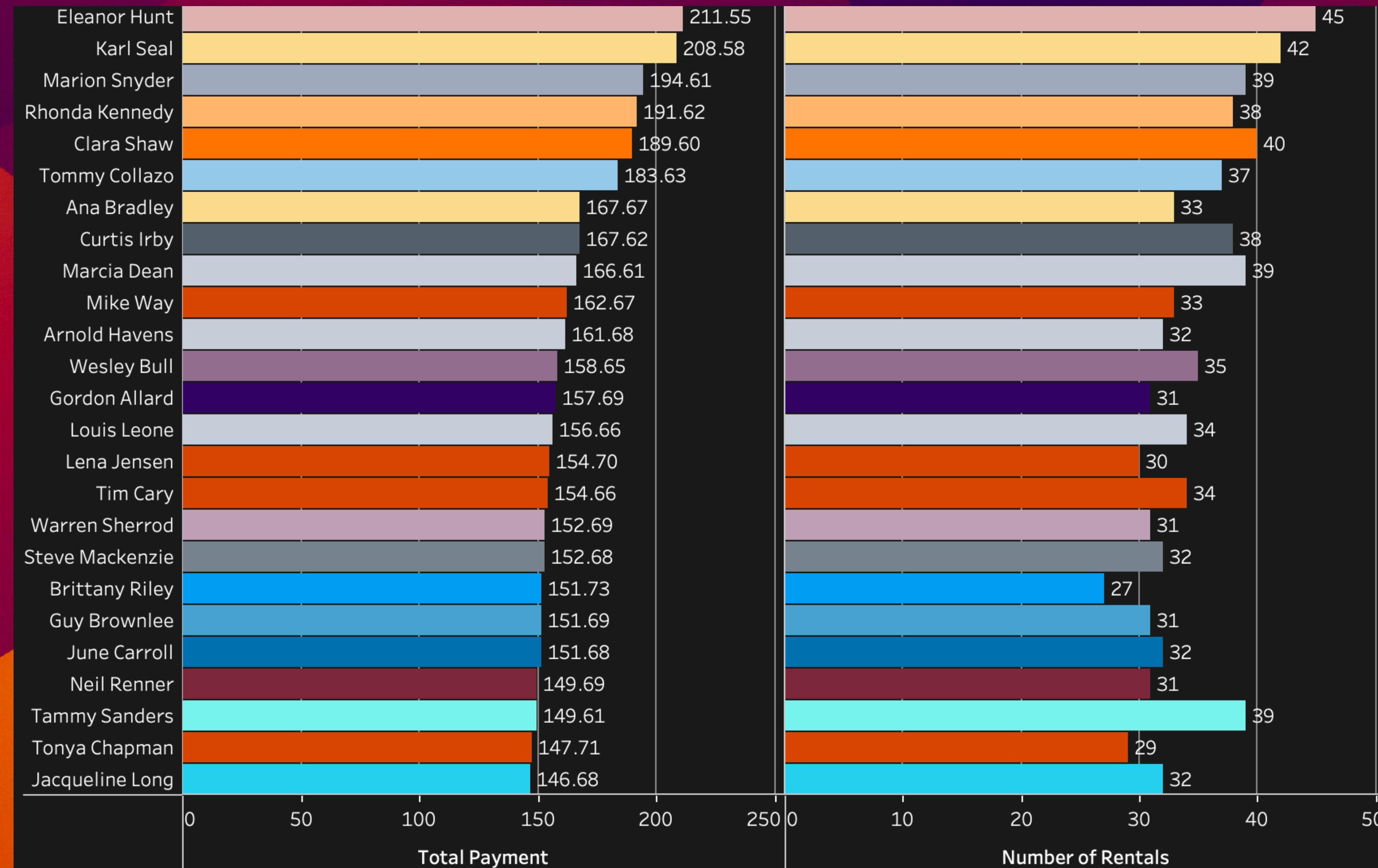


Customers With High Lifetime Value

The top 25 paying customers paid total of \$4142.36.

Country

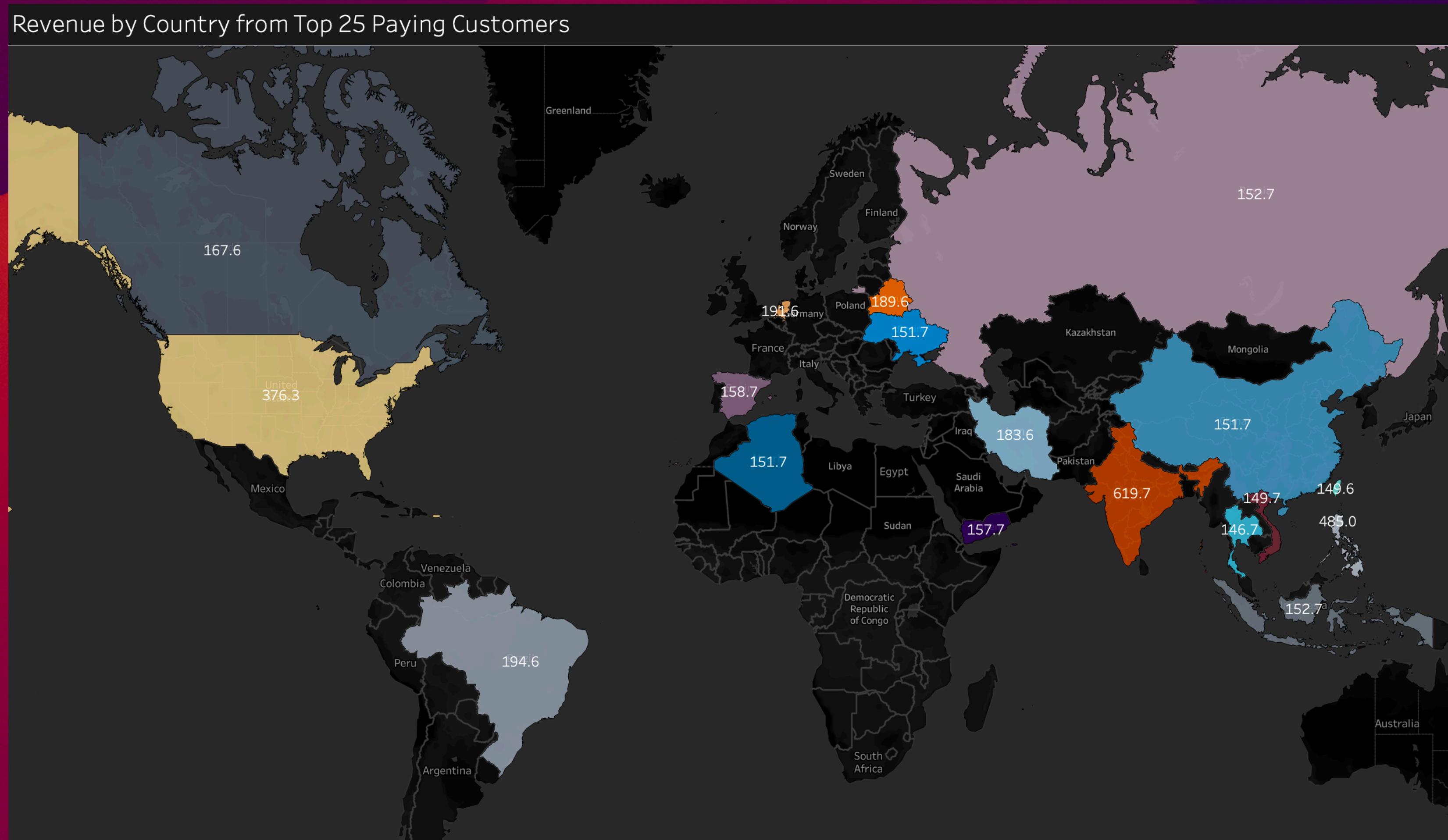
Algeria
Belarus
Brazil
Canada
China
India
Indonesia
Iran
Netherlands
Philippines
Runion
Russian Federation
Spain
Taiwan
Thailand
Ukraine
United States
Vietnam
Yemen



The top paying customer made 45 rentals (more than any other customer).

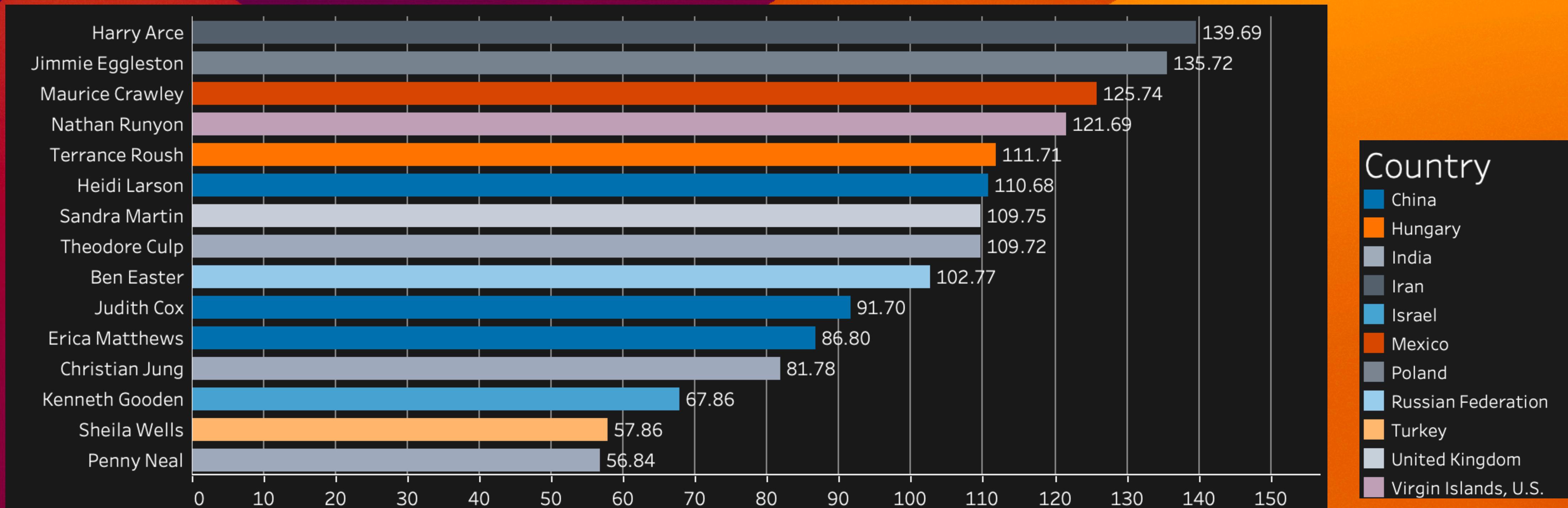
Top Paying Customers by Country

India, Philippines, and USA have 9 of the top 25 paying customers, generating \$1481 in revenue.



Revenue by Inactive Customers

There are 15 customers who are currently inactive but who in the past have paid \$1510.31.

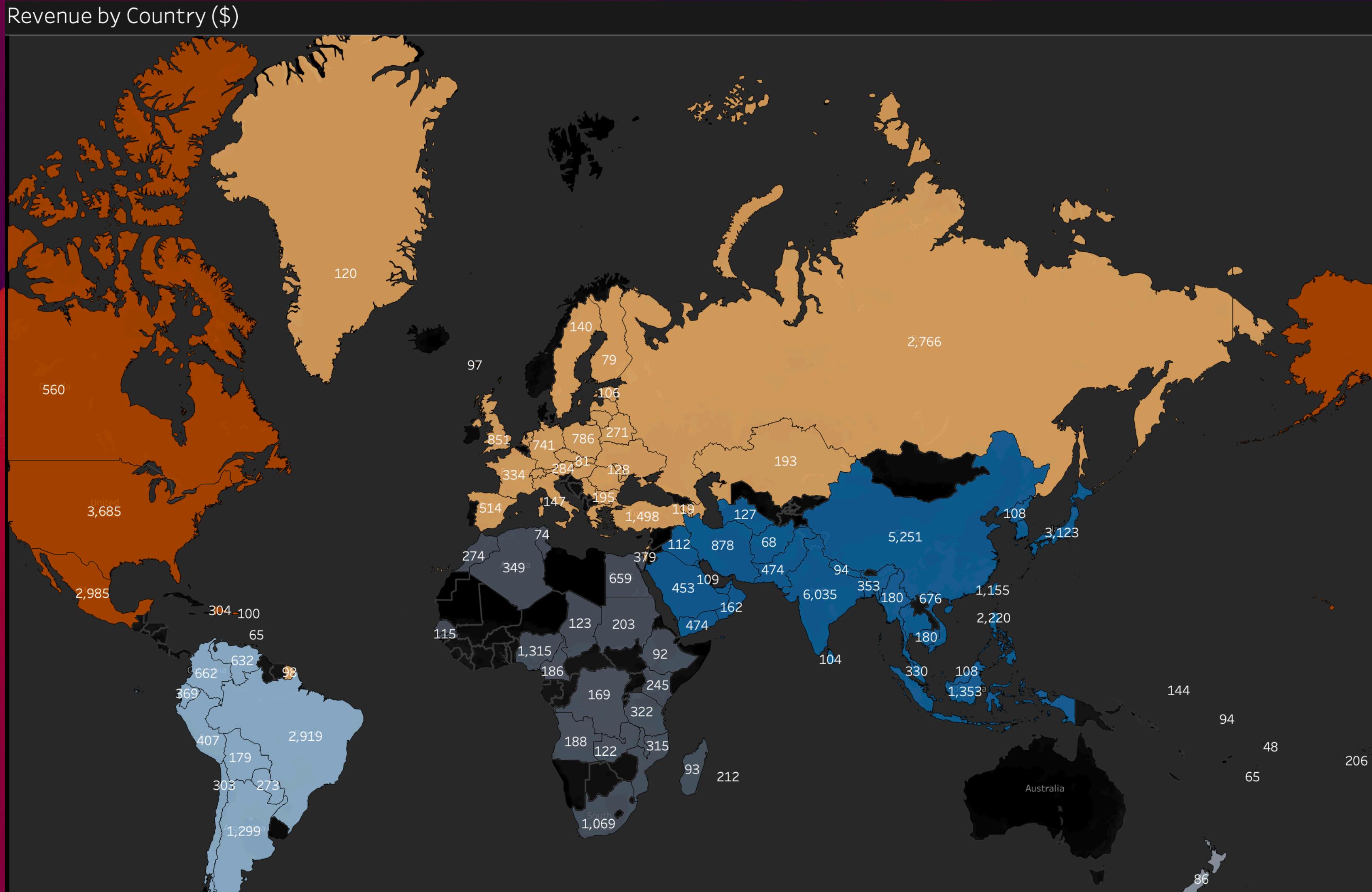


Question 5

Do sales figures vary between geographic regions?



Revenue by Country and Region

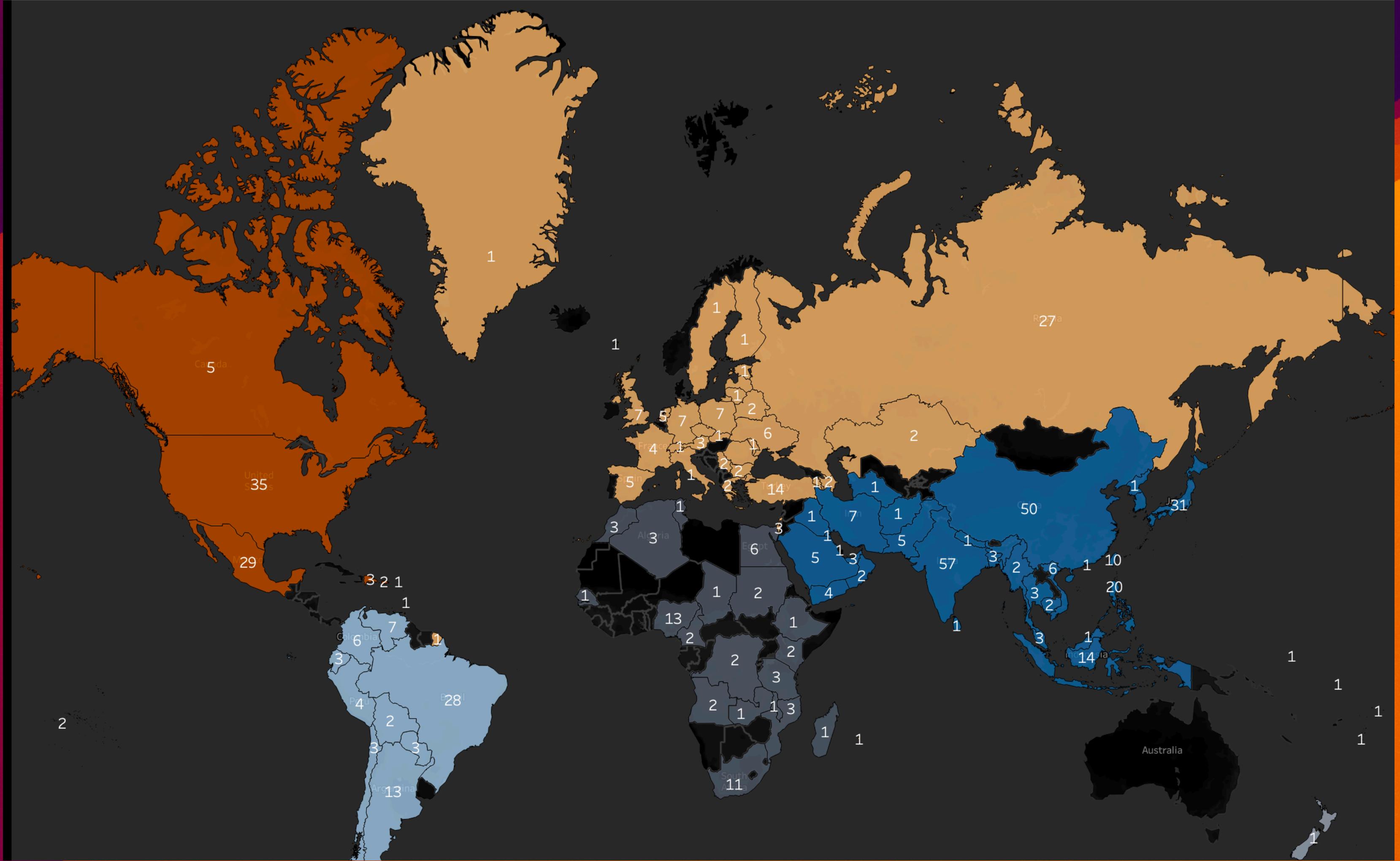


The regions are determined in political, not geographic terms.

The North American countries generate most revenue in average.

Cities Generating Revenue

Number of Cities with Active Customers by Country



The active customer base is distributed in many cities in the countries, with some cities generating more revenue than others.

Regions

Africa
Asia
Europe
North America
Oceania
South America

The top 10 cities by revenue are mostly in Europe, followed by North America. Oceania and Africa have no representatives.

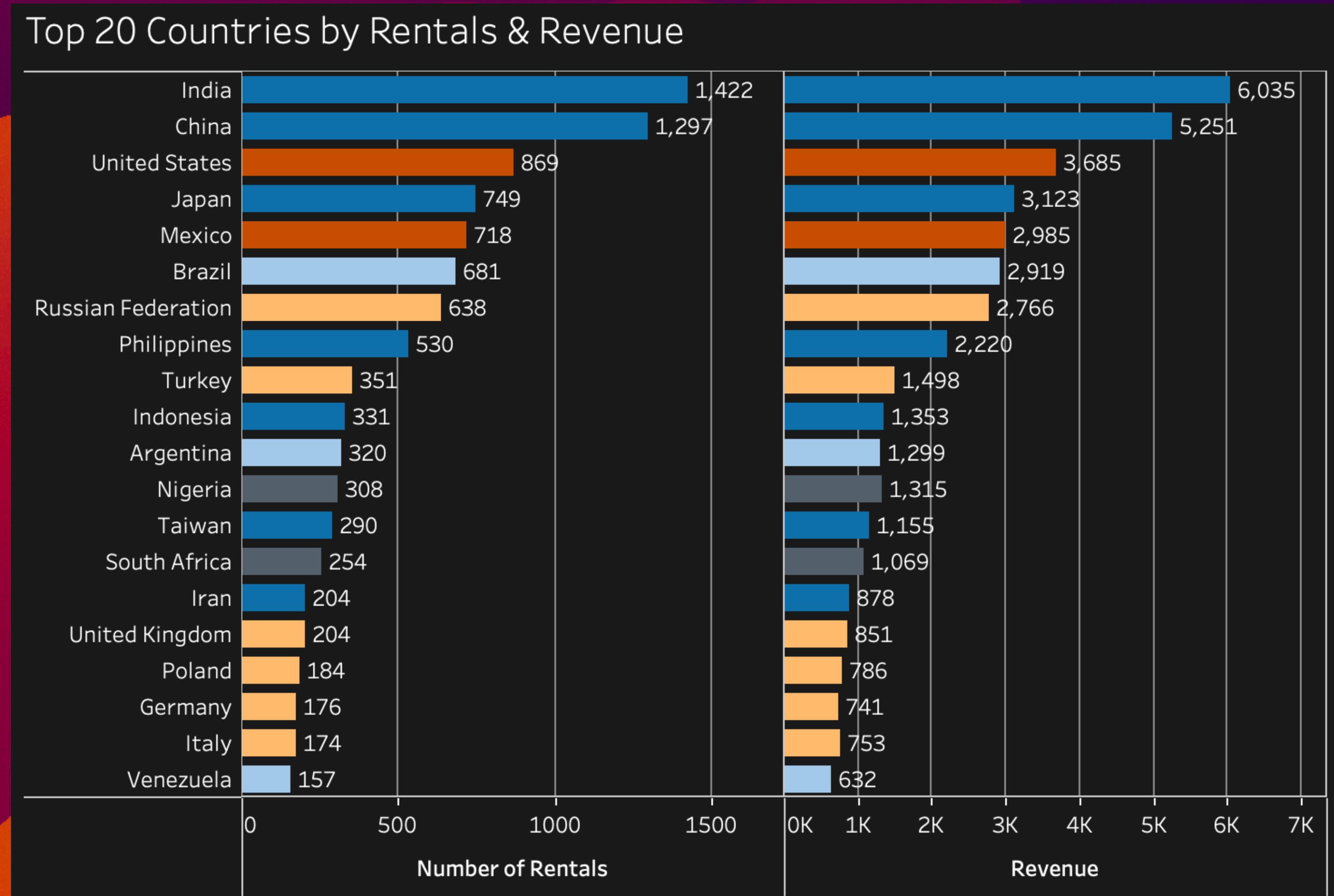
Top 10 Cities by Revenue (\$)

Saint-Denis	211.55
Cape Coral	208.58
Santa Barbara d'Oeste	194.61
Apeldoorn	191.62
Molodetno	189.60
Qomsheh	183.63
London	174.54
Memphis	167.67
Richmond Hill	167.62
Tanza	166.61

Rentals & Revenue by Country

Rental figures show domination of the Asian countries, with Europe close second.

Oceania has no representative among the top 20 countries.



Even though North America has only two representatives among the top 20 revenue generating countries, as seen previously, it has the highest average revenue as a region. This is due to it having 8 countries, as opposed to 29 in Asia and 38 in Europe.

Conclusion

Which movies contributed the most/least to revenue gain?

...•• Telegraph Voyage is the highest grossing film, so it is good to get more copies from it. Texas Watch earned the least revenue, so some copies of it can be sold.

...•• 42 films were never rented out and did not generate any revenue. It is best to remove them from then collection.

...•• There are films that are rented out but generate less revenue then expected. Investigate the cause.

...•• Sport films generate the most revenue, so increase the number of titles in this genre.

...•• Thriller might prove popular, so increase the number of titles in this genre.

What was the average rental duration for all videos?

...•• Bucket Brotherhood was rented out the most times, so increase the number of copies.

...•• All genres were rented out for around 5 days in average.

...•• The sport films were rented out the most times, and the music films the least.

Which countries are Rockbuster customers based in?

...•• India, China, and the U.S. have most number of customers. The most populous countries in the world have the highest number of customers.

...•• 11 countries had inactive customers (15 customers in total). Hungary and U.S. Virgin Islands have no active customers. Increase ads in them.

Where are customers with a high lifetime value based?

...•• Eleanor Hunt from Reunion is the person renting out the most times and paying the highest amount. Consider rewarding the highest value customers so they will continue renting films from Rockbuster.

...•• India, Philippines, and the U.S. have highest number of the 25 top lifetime value customers.

...•• China and India have 3 customers each from the 15 total inactive customers. The inactive customers generated \$1510 in revenue. Consider encouraging their return.

Do sales figures vary between geographic regions?

...•• North American is highest grossing region in average, with Oceania the lowest.

...•• Most of the highest grossing cities are in Europe and North America. Oceania and Africa have no cities among the top 10 cities by revenue. Consider increasing ads in these regions.

...•• North America has only two countries among the top top 20 by rentals and revenue. It has highest percentage of countries with Rockbuster customers.

Questions?

Contact: aplazarevska@gmail.com

Thank you for your attention!



Tableau URL:

https://public.tableau.com/views/Task3_10-PresentingSQLResults_17216173918510/q111?:language=en_US&publish=yes&sid=&redirect=auth&display_count=no&origin=viz_share_link