

Analytics for 2020 Rockbuster Strategy

Prepared for Rockbuster Stealth Management

Agenda

- Objective & Approach
- Executive Summary
- Background: Data at a Glance
- Analytical Insights:
 - Regional Trend
 - Popularity
 - Opportunity
- Recommendations

Objective & Approach

Key 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?

Approach:

- A multiple pieces of information, including but not limited to film, inventory, customer, and payment data were queried using SQL to address the key questions
 - Source: Rockbuster internal database

Executive Summary

Key Questions Answered

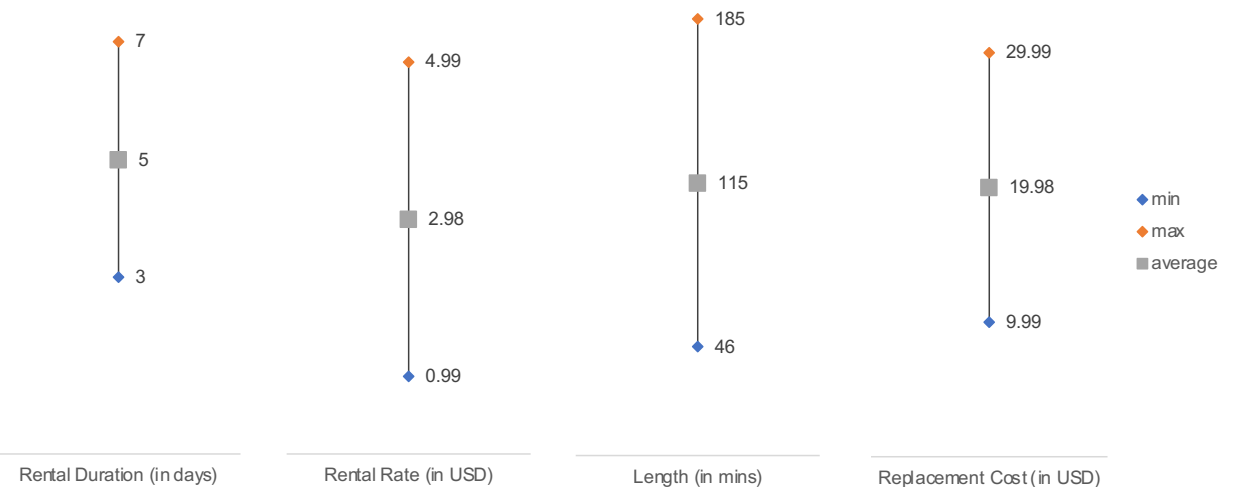
- **Movies with most/least revenue contribution:**
 - Most Revenue (\$215.75): Telegraph Voyage
 - Least Revenue (\$5.94): Duffel Apocalypse, Oklahoma Jumanji, and Texas Watch
- **Average rental duration for all movies:** 7 days
- **Rockbuster customer base:**
 - 599 customers located globally in 597 cities from 108 countries.
 - Top countries and customer counts: India (60)China (53), United States (36)
- **High lifetime value customer and location:**
 - Hightest: Eleanor Hunt from Runion, \$211.55
 - Top 10 highest lifetime value customers are spread out globally
- **Regional variations of sales figures:**
 - Sales figures vary across regions
 - Of the total revenue of \$61K, Asia Pacific contributed the most revenue of \$24K (39% of the total)

Background: Data at a Glance

Key Facts:

- Number of unique titles: 958
- Total inventoried copies: 4,581
- Number of customers: 599
- Total rental revenue: \$61,312.04
- Number of rentals: 16,044
- Most common film (modal value)
 - Rating: PG-13
 - Language: English
 - Release Year: 2016

Key Quantitative Facts Over Inventoried Films:



Analytical Insights

Key Focus Areas

- **Revenue Generation:** Identify the films that contributed the most and least to revenue gain. Also identify any factors or drivers such as rental duration, rating, category that may impact on the revenue generation.
- **Customer Base:** Identify the Rockbuster customer base, including their global presence. Additionally identify where the high lifetime value customers located.
- **Regional Sales Trend:** Evaluate and highlight any differences in regional sales contributions

Revenue Generation: Top & Bottom Contributors

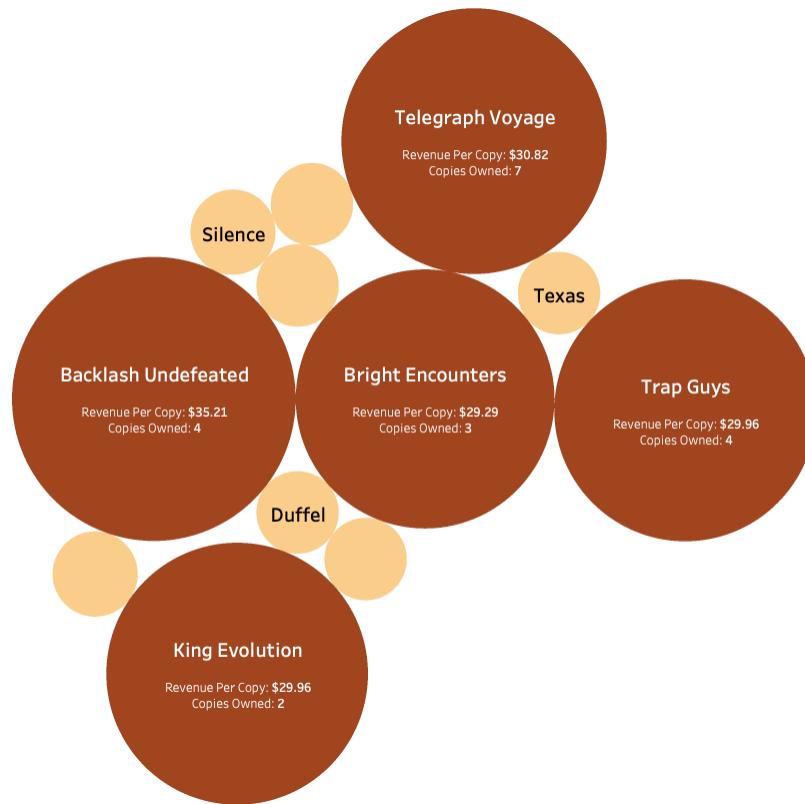


Title	Copies Owned	Total Rental Revenue
Telegraph Voyage	7	\$215.75
Zorro Ark	8	\$199.72
Wife Turn	8	\$198.73
Innocent Usual	8	\$191.74
Hustler Party	8	\$190.78
Saturday Lambs	8	\$190.74
Titans Jerk	8	\$186.73
Harry Idaho	8	\$177.73
Torque Bound	8	\$169.76
Dogma Family	8	\$168.72
Lights Deer	2	\$7.93
Cruelty Unforgiven	2	\$6.94
Treatment Jekyll	2	\$6.94
Rebel Airport	2	\$6.93
Young Language	2	\$6.93
Freedom Cleopatra	2	\$5.95
Duffel Apocalypse	2	\$5.94
Oklahoma Jumanji	2	\$5.94
Texas Watch	2	\$5.94

Telegraph Voyage was the film that generated the **most revenue with \$215.75** followed by **Zorow Ark with \$199.72**. Rockbuster has 8 copies each for the top 10 best renting films, except for Telegraph Voyage with 7 copies.

Duffel Apocalypse, Oklahoma Jumanji, Texas Watch were the films that generated the **least amount of revenue of \$5.94 each**. Rockbuster mostly has 2 copies each for lower revenue generating films.

Revenue Generation: Top & Bottom Contributors



Title	Copies Owned	Revenue Per Copy	Total Rental Revenue
Backlash Undeclared	4	\$35.21	\$140.84
Telegraph Voyage	7	\$30.82	\$215.75
Trap Guys	4	\$29.96	\$119.85
King Evolution	2	\$29.96	\$59.92
Bright Encounters	3	\$29.29	\$87.88
Lawrence Love	5	\$3.17	\$15.87
Silence Kane	5	\$3.17	\$15.85
Freedom Cleopatra	2	\$2.98	\$5.95
Smoking Barbarella	6	\$2.97	\$17.84
Duffel Apocalypse	2	\$2.97	\$5.94
Oklahoma Jumanji	2	\$2.97	\$5.94
Texas Watch	2	\$2.97	\$5.94

In terms of the rental revenue generated per each copy inventoried, while the lowest total revenue generated films generally had the lowest revenue earned per copy, this wasn't the case for the top revenue generators.

Backlash Undeclared had the most revenue generated per copy inventoried of **\$35.21**. Additionally, despite of small total revenue contribution of \$59.92 and \$87.88, **King Evolution** and **Bright Encounters** were two of the top 5 films that had the highest revenue generated per each copy inventoried with revenue per copy of **\$29.96** and **\$29.29** respectively.

Revenue Generation: Possible Drivers

Rental Duration – Background

The average rental duration for all videos: **7 days**

From the individual movie-wise, ***Jungle Close*** had the longest average rental duration of **16.1 days**, followed by ***Entrapment Satisfaction*** and ***Theory Mermaid*** of **14.2 days**.

While no additional statistical analysis were performed, based on the top 10 movies with the longest rental durations, it appears to be there are no cause and effect relations between rental duration and rating or movie length.

What about the rental duration and revenue generation? Do they have any correlations? A statistical analysis was conducted to identify a possible correlation. Refer to the next slide for details.

Jungle Closer Avg Days Rented Per Each Rental: 16.1 Rating: NC-17 Length: 134 mins	Watership Frontier Avg Days Rented Per Each Rental: 14.1 Rating: G Length: 112 mins	Groove Fiction Avg Days Rented Per Each Rental: 13.7 Rating: NC-17 Length: 111 mins	Strangelove Desire Avg Days Rented Per Each Rental: 13.4 Rating: NC-17 Length: 103 mins
Entrapment Satisfaction Avg Days Rented Per Each Rental: 14.4 Rating: R Length: 176 mins	Gilbert Pelican Avg Days Rented Per Each Rental: 14.1 Rating: G Length: 114 mins	Maker Gables Avg Days Rented Per Each Rental: 13.3 Rating: PG-13 Length: 136 mins	
Theory Mermaid Avg Days Rented Per Each Rental: 14.2 Rating: PG-13 Length: 184 mins	Mother Oleander Avg Days Rented Per Each Rental: 13.8 Rating: R Length: 103 mins		
		Newsies Story Avg Days Rented Per Each Rental: 13.2 Rating: G Length: 159 mins	

Revenue Generation: Possible Drivers

Rental Duration vs. Total Rental Revenue

Based on the analysis, it was noted that the total rental revenue generated by a film is **inversely** related with the average days rented per each rental with a **moderate correlation of 0.45**.

This means that it is **somewhat likely that more revenue tends to be generated by the films that are being rented for shorter periods per each rental**

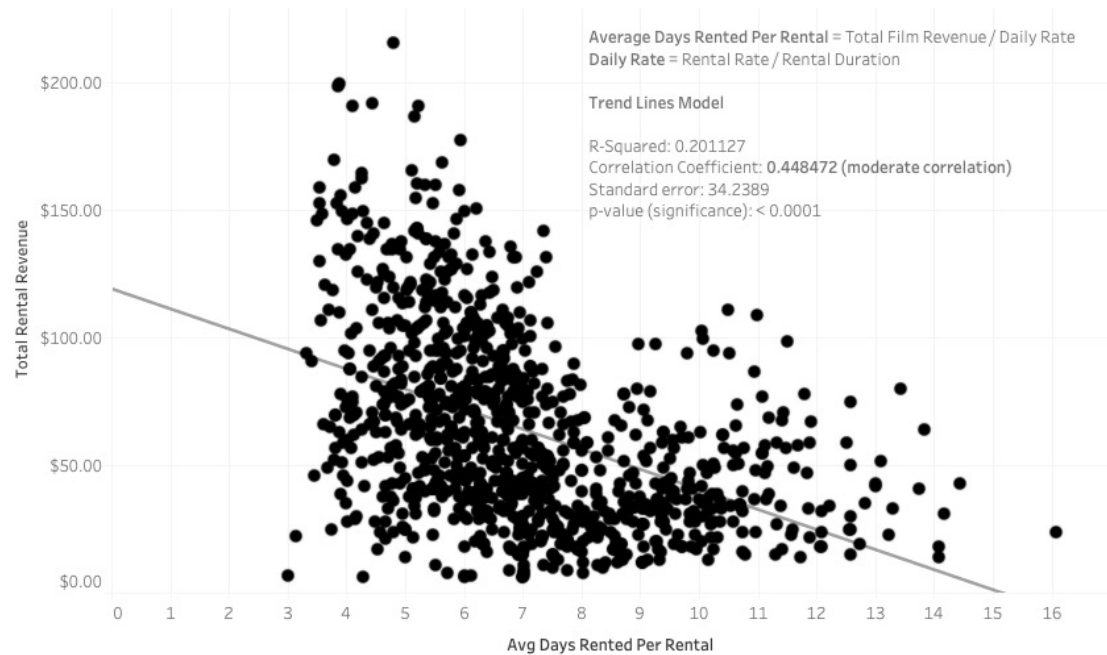
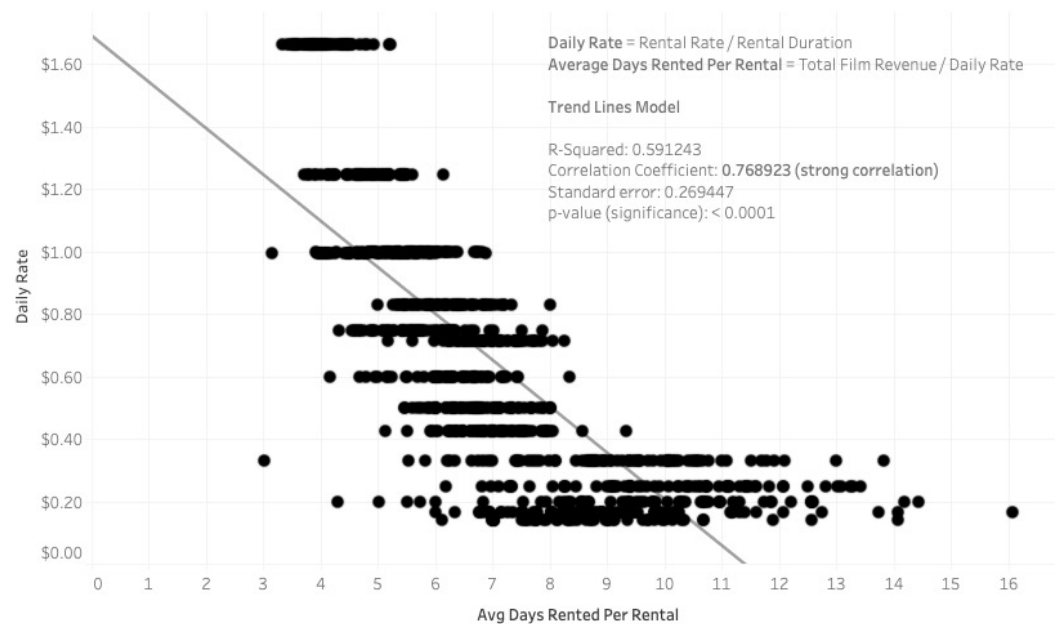


Tableau Link: https://public.tableau.com/views/CF_DI_E310_1/Revenue_vs_Duration?:language=en-US&display_count=n&origin=viz_share_link

Revenue Generation: Possible Drivers

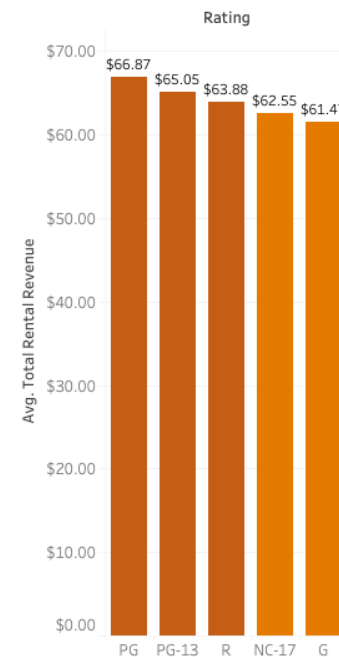
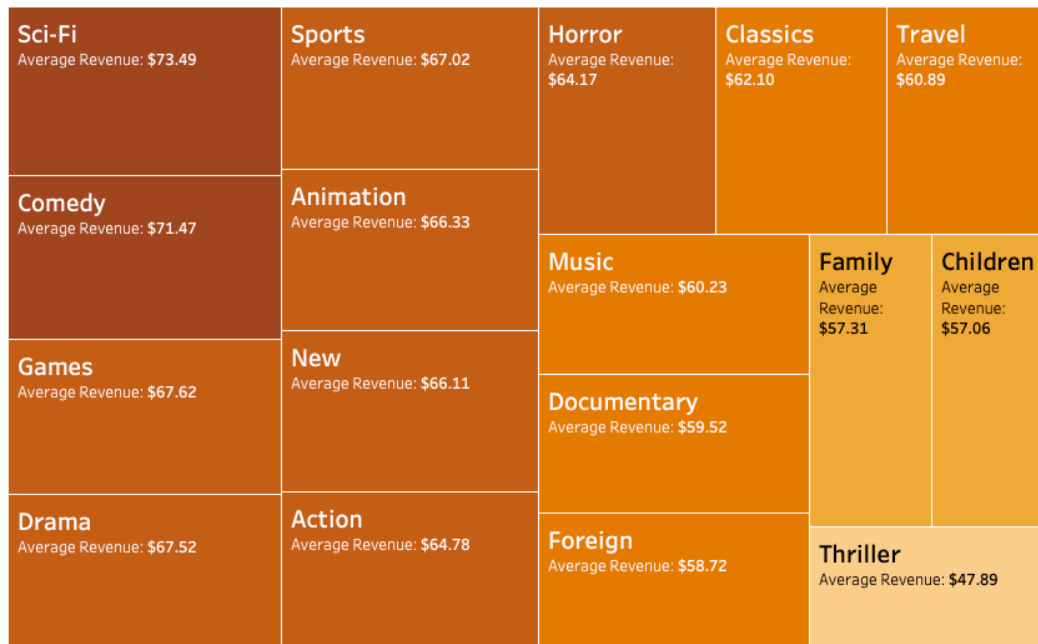
Rental Duration vs. Daily Rental Rate

It was also observed that the rental duration and daily rental rate had a **strong inverse correlation of 0.77**, meaning that the **movies with higher daily rates are being rented for shorter periods** by Rockbuster customers



Revenue Generation: Possible Drivers

Top Category and Rating Contributors



Additionally it was noted that **Sci-Fi** and **Comedy** movies were the **top revenue drivers** with the average revenue of **\$73.49** and **\$71.47** respectively and **Thriller** movies contributed the least with the average revenue of **\$47.89**.

In terms of the movie ratings, while PG rated movies had the highest average rental revenue, but there were **no dramatic differences of revenue contributions amongst different ratings**

Customer Base

Countries and Revenue Contributions



Tableau Link: https://public.tableau.com/views/CF_DI_E310_1/Customer_Base?:language=en-US&display_count=n&origin=viz_share_link

Customer Base

Based on Top 10 Countries: Top Cities and Their High Spenders

Top 10 Cities from Top 10 Countries

Count..	City	
United States	Aurora	2
	Sterling Heights	1
India	Halisahar	1
	Kanchrapara	1
Mexico	Jos Azueta	1
	San Felipe del Progreso	1
Brazil	Luzinia	1
China	Baicheng	1
Indonesia	Ciomas	1
Japan	Shimonoseki	1
		0 1 2 3
		Number of Customers

From the Top 10 countries with the highest number of customer populations, listed above are the cities that had the most number of customers.

It appears that while countries may have large customer bases, customers may be dispersed throughout the country and that is why most cities in the list above show population of only one.

Top 5 Customers from Top 10 Cities

First Name	Last Name	Country	City	
Lena	Jensen	India	Halisahar	\$154.70
Angela	Hernandez	Japan	Shimonoseki	\$138.65
Jamie	Rice	United States	Sterling Heights	\$126.73
Ted	Breaux	China	Baicheng	\$109.73
Minnie	Romero	Indonesia	Ciomas	\$108.72
				\$0.00 \$100.00 \$200.00
				Total Amount Paid

Listed above are the top 5 customers from the top 10 cities referenced in the left table who spent the most. In this list, the top spender was **Lena Jensen** from **Halisahal, India**, who spent **\$154.70 total** with Rockbuster

Customer Base

High Lifetime Value Customers



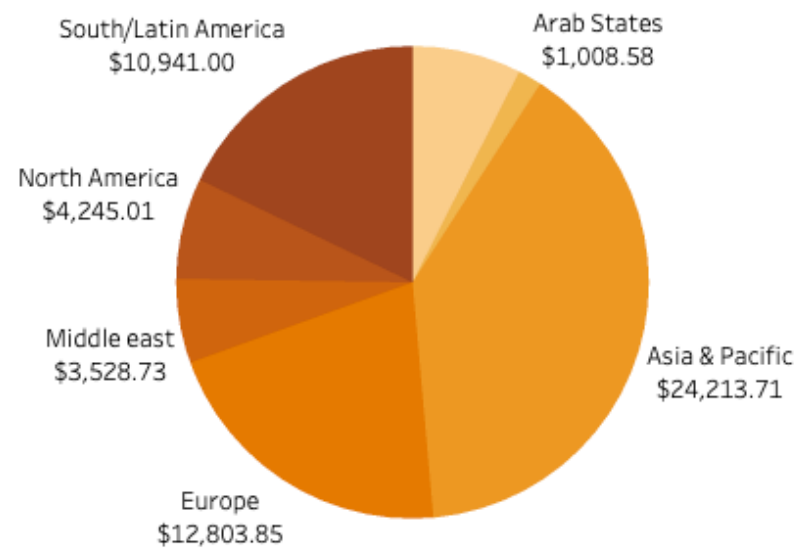
Eleanor Hunt from **Runion** was the customer with the highest lifetime value of **\$211.55**, followed by **Marion Snyder** from **Brazil** with **\$194.61**

The top 10 highest lifetime value customers appeared to be spread out globally with their **presence in all regions**.

Tableau Link: https://public.tableau.com/views/CF_DI_E310_1/High_Lifetime_Values?:language=en-US&:display_count=n&:origin=viz_share_link

Regional Sales Trend

Sales by Region



Of the total revenue of \$61,312, approximately 39% (\$24K) was generated in the **Asia & Pacific** region, followed by 21% (\$13K) in the **Europe** region.

Tableau Link: https://public.tableau.com/views/CF_DI_E310_1/Regional_Sales?:language=en-US&:display_count=n&:origin=viz_share_link

Recommendations

Disclaimer

- Recommendations crafted are based on the insights obtained by analyzing the available Rockbuster internal data. Any inaccuracies and/or incompleteness of the internal data may skew the recommendations raised by the analyst.
- Recommendations are crafted to assist the management team in making informed decisions. They are not mandatory guidelines to be followed.

Recommendations

Area	Key Focus Area	Objective Details	Analytical Insights Summary	Recommendation
Revenue Generation	Top and Bottom Revenue Contributors	Identify the movies contributed the most/least to revenue gain	<ul style="list-style-type: none"> Telegraph Voyage was the film that generated the most revenue with \$215.75 Duffel Apocalypse, Oklahoma Jumanji, Texas Watch were the films that generated the least amount of revenue of \$5.94 each It appears to be there are no cause and effect relations between rental duration and rating or movie length based on the top 10 high revenue generating movies 	<ul style="list-style-type: none"> None in particular for this area
Revenue Generation	Rental Duration	Identify the average rental duration of all movies	<ul style="list-style-type: none"> The average rental duration for all videos: 7 days From the individual movie-wise, Jungle Close had the longest average rental duration of 16.1 days, followed by Entrapment Satisfaction and Theory Mermaid of 14.2 days The Total rental revenue generated by a film is inversely related with the average days rented per each rental with a moderate correlation. Also, the rental duration and daily rental rate had a strong inverse correlation. 	<ul style="list-style-type: none"> It may be beneficial for the Rockbuster to increase the movies with higher daily rates to maximize the company's revenue
Revenue Generation	Other Possible Revenue Drivers	Identify other possible revenue drivers	<ul style="list-style-type: none"> Category: Sci-Fi and Comedy movies were the top revenue drivers with the average revenue of \$73.49 and \$71.47 respectively and Thriller movies contributed the least with the average revenue of \$47.89 Rating: while PG rated movies had the highest average rental revenue, but there were no dramatic differences of revenue contributions amongst different ratings 	<ul style="list-style-type: none"> Consider investing more in increasing Sci-Fi and Comedy movie inventories, while being cautious in increasing Thriller movie inventories

Recommendations

Area	Key Focus Area	Objective Details	Analytical Insights Summary	Recommendation
Customer Base	Location, Customer Counts, and Revenue	Identify the top 10 cities from the top 10 countries with the highest number of customers and find out the top 5 customers from those cities	<ul style="list-style-type: none"> Top 10 countries with highest number of customers: India (60), China (53), United States (36), Japan (31), Mexico (30), Brazil (28), Russian Federation (28), Philippines (20), Turkey (15), and Indonesia (14) Top 10 cities from the top 10 countries: Aurora (2), Sterling Heights (1), Halisahar (1), Kanchrapara (1), Jos Azueta (1), San Felipe del Progreso (1), Luzinia (1), Baicheng (1), Ciomas (1), and Shimonoseki (1) Top 5 spenders from top 10 cities: Lena Jenseon (Halisahar, \$154.70), Angela Hernandez (Shimonoseki, \$138.65), Jamie Rice (Sterling Heights, \$126.73), Ted Breaux (Baicheng, \$109.73), and Minnie Romero (Ciomas, \$108.72) It appears that while countries may have large customer bases, customers may be dispersed throughout the country and that is why most cities in the list above show population of only one. Top revenue generating countries were in line with the number of customers that countries have: India (\$6.0K), China (\$5.3K), U.S. (\$3.7K), Japan (\$3.1K), Mexico (\$3.0K), Brazil (\$2.9K) and so on. 	<ul style="list-style-type: none"> Identify any drivers for customer attraction and retention to increase revenue generation
Customer Base	High Lifetime Value Customers	Identify high lifetime value customers and their locations	<ul style="list-style-type: none"> Eleanor Hunt from Runion was the customer with the highest lifetime value of \$211.55, followed by Marion Snyder from Brazil with \$194.61 The top 10 highest lifetime value customers appeared to be spread out globally with their presence in all regions. 	<ul style="list-style-type: none"> Develop a mechanism (e.g. loyalty rewards, incentive programs) to retain high lifetime value customers
Regional Sales	Regional Sales Variation	Identify how the sales figures vary between regions	<ul style="list-style-type: none"> Of the total revenue of \$61,312, approximately 39% (\$24K) was generated in the Asia & Pacific region, followed by 21% (\$13K) in the Europe region. 	<ul style="list-style-type: none"> Consider focusing on increasing customer bases in those regions where movie streaming services (e.g., Netflix) are still not popular

Thank you