### **Customer Segment**

Q.1. Which are top 5 countries with no of customers?

Country	No of
	customers
India	60
China	53
United States	36
Japan	31
Mexico	30

Insight: Also data shows top 15 Countries have 59 % of the customers. Rest 95 Countries have 41 % of the customers.

Q.2. Which are top 5 Countries with highest sales and no of rentals?

Country	Sales	No of Rentals
India	6577.23	1572
China	5985.79	1426
<b>United States</b>	4155.32	968
Japan	3400.75	825
Mexico	3281.07	796

Insight: Top 14 Countries contribute to 60 % of the sales and 60 % of the rentals.

Q.3. What is distribution of the customers with respect to stores?

Store ID	No of	
	customers	
1	326	
2	273	

Insight: Store 1 has more significant more customers almost 20 % more.

Q.4 Who are the top 10 customers by sales?

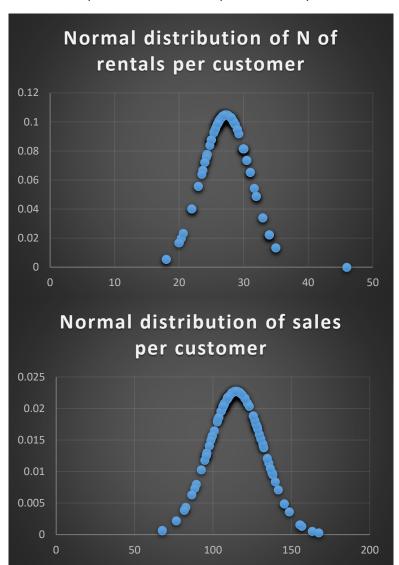
<b>Customer Name</b>	Country	City	Sum of	Count of
			Amount	rental_id
MARCIA DEAN	Philippines	Tanza	189.58	42
RHONDA KENNEDY	Netherlands	Apeldoorn	178.61	39
TOMMY COLLAZO	Iran	Qomsheh	177.62	38
MARION SNYDER	Brazil	Santa Brbara dOeste	176.61	39
MARSHA DOUGLAS	Mozambique	Beira	171.63	37
TAMMY SANDERS	Taiwan	Changhwa	170.59	41
JUNE CARROLL	Algeria	Skikda	169.63	37
KARL SEAL	United States	Cape Coral	169.55	45
SUE PETERS	China	Changzhou	168.6	40
GERTRUDE CASTILLO	Greenland	Nuuk	167.65	34

Insight: Top 10 customers are spread across all the region. These customers are doing high number of rentals as well.

Q.5. What are your analysis on sales per customer and rentals per customer with respect to country?

Statistics	Sales per	Rental per
	Customer	customer
Mean	114.8925	27.28749
Standard	1.68933	0.36632
Error		
Median	112.235	26.952830
Mode	125.7	27
Standard	17.55605	3.8069
Deviation		
Sample	308.2149	14.4929
Variance		
Range	99.83	28
Minimum	67.82	18
Maximum	167.65	46

Insight: The curve of sales per customers and no of rentals per customers country wise have similar properties.



### **Countries and Cities**

Q.1 Which are Top 5 countries by sales?

Country	Sales
India	6577.23
China	5985.79
United States	4155.32
Japan	3400.75
Mexico	3281.07

Q.2 Which are top 5 countries by no of rentals?

Country	No of Rentals
India	1572
China	1426
United States	968
Japan	825
Mexico	796

Q.3. Which are top 5 cities by sales?

Country	Sales
Apeldoorn	178.61
Aurora	222.5
London	198.52
Qomsheh	177.62
Tanza	189.58

Q.4. Which are top 5 cities by no of rentals?

Row Labels	Count of
	rental_id
Aurora	50
Cape Coral	45
London	48
MolodetÅino	42
Saint-Denis	46

# Category

Q. What is no of rentals, sales, average duration, average rental rate category wise?

Category	No of Rentals	Sales	Average of rental_duration	Average of rental_rate
Sports	1179	4918.2	4.72	3.13
Animation	1166	4885.34	4.89	2.81
Sci-Fi	1101	4641	4.89	3.22
Family	1096	4602.01	5.17	2.76
Action	1112	4553.85	4.95	2.65
Foreign	1033	4454.68	5.11	3.10
Documentary	1050	4408.51	4.76	2.67
Drama	1060	4339.42	5.08	3.02
Games	969	4102.31	5.07	3.25
New	940	4091.6	4.75	3.12
Comedy	941	4026.6	4.93	3.16
Classics	939	3934.62	5.07	2.74
Children	945	3898.54	5.03	2.89
Horror	846	3588.53	4.86	3.03
Travel	837	3543.63	5.35	3.24
Music	830	3421.72	5.24	2.95

Q2. How many distinct films available category wise?

Category	No of Distinct
	Films
Sports	74
Foreign	73
Family	69
Documentary	68
Animation	66
Action	64
New	63
Drama	62
Sci-Fi	61
Games	61
Children	60
Comedy	58
Travel	57
Classics	57
Horror	56
Music	51

#### Store

Q. What is inventory distribution store wise?

Store ID	No of Inventory
1	2270
2	2311

Q2. How many rentals given by each store during the given period

Row Labels	Count of rental_id
1	7923
2	8121

Q3. How much sale done by each store in the given period?

Row Labels	Sum of	
	Amount	
1	33256.79	
2	34153.77	

## **Films**

Q. How many distinct ratings wise films available in both the stores?

Ratings	No of distinct films available
G	178
NC-17	210
PG	194
PG-13	223
R	195

Q. How many distinct films have been rented out yet ratings wise?

Ratings	No of distinct films rented out
G	171
NC-17	202
PG	183
PG-13	213
R	189

Q. How many distinct films available and rented out yet special feature wise?

Special Feature	No of distinct films available	No of distinct films rented out
{'Behind the Scenes'}	70	68
{'Commentaries', 'Behind the Scenes'}	70	70
{'Commentaries'}	62	61
{'Deleted Scenes', 'Behind the Scenes'}	71	68
{'Deleted Scenes', 'Commentaries', 'Behind the Scenes'}	66	65
{'Deleted Scenes', 'Commentaries'}	65	62
{'Deleted Scenes', 'Trailers', 'Behind the Scenes'}	49	46
{'Deleted Scenes', 'Trailers', 'Commentaries', 'Behind the Scenes'}	61	55
{'Deleted Scenes', 'Trailers', 'Commentaries'}	64	60
{'Deleted Scenes', 'Trailers'}	66	65
{'Deleted Scenes'}	61	57
{'Trailers', 'Behind the Scenes'}	72	67
{'Trailers', 'Commentaries', 'Behind the Scenes'}	79	76
{'Trailers', 'Commentaries'}	72	67
{'Trailers'}	72	71

Q4. What are top 10 films by sales?

Film name	Sales	Rentals
GREATEST NORTH	156.71	29
CAT CONEHEADS	150.7	30
FORWARD TEMPLE	148.68	32
BUCKET	145.66	34
BROTHERHOOD		
DANCING FEVER	143.73	27
VIDEOTAPE ARSENIC	142.71	29
WIFE TURN	139.69	31
APACHE DIVINE	139.69	31
GILMORE BOILED	137.72	28
ROCKETEER MOTHER	137.67	33

## **Actors**

Q.1. Who are the top 10 actors with highest number of film appearances?

Row Labels	Count of
	film_id
13	35
23	37
37	35
60	35
81	36
102	41
106	35
107	42
181	39
198	40