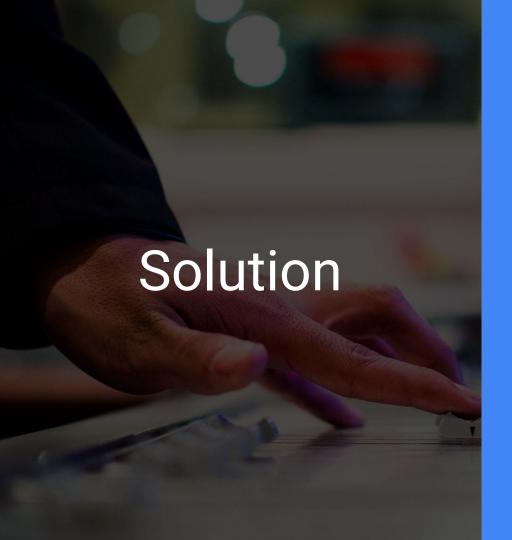


# RFM Customer Analysis

**Author: Joaquin Bembhy** 

**Problem:** we had a dataset containing 300,000 unsegmented customer transactions and we didn't have any information that described, summarized or explained the behaviours of these customer.





An analysis of the transactions done by the customers was conducted, resulting in a RFM model segmentation of all customers.



### What is an RFM segmentation model?

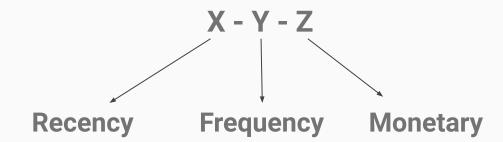
We divide customers into quartiles and we assign a score ranging from 1 to 4 for each recency, frequency and monetary values, where 1 is the highest/best score and 4 is the lowest/worst. Then we compute a final score by combining the four scores assigned to each RFM feature

	Recency	Frequency	Monetary
Definition	Days since last purchase		Total money spent
High value interpretation	Long time since customer last purchased	High quantity of purchases	High total expenditure
Low value interpretation	Customer has recently purchased	Low quantity of purchases	Low total expenditure



# How is the RFM score computed?

Each final score will consist of a 3 digit number. The first position (X) refers to the recency score, the second (Y) to the frequency, and the third (Z) to the monetary.





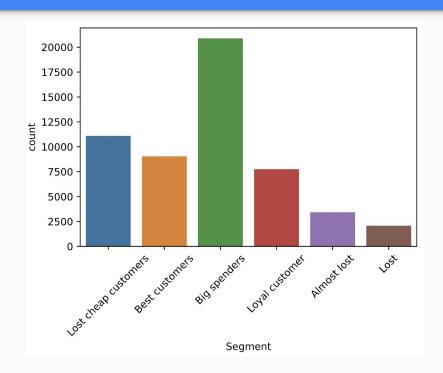
# Segmentation

Segment	RFM Score	Description	
Best customer	111	Best score in all 3 categories	
Almost lost	311	Have bought and spent a lot, but haven't bought in a while	
Lost	411	Have bought and spent a lot, but haven't bought in a very long time	
Lost cheap customers	444	Worst score in all 3 categories	
Loyal customers*	X1Z	Customers who have bought a lot of times	
Big spenders*	XY1	Customer who have spent a lot	

<sup>\*</sup>This segments can be further segmented by changing two positional values



### Distribution of segments:



- Most customers are big spenders
- Most of the lost customers are cheap customers
- Few customers which are of important have been lost ('Lost" segment)
- We have a relatively important number of "Best customers" and "Loyal Customers"





## Best customers (111)

- No further monetary incentives since these customers are already comfortable with prices and are frequently buying
- Introduce a loyalty program to keep them retained and active
- Introduce an affiliate program
- Introduce new products so that they can keep spending



### Almost lost customers (311)

- Target with aggressive price incentives
- Must make them buy ASAP before losing them
- Find out why they are not buying any more to take corrective actions in the future



### Lost customers (411)

- As these are customers that have bought a lot of times in the past and have spent a lot too, it is extremely important to put specific focus on trying to reacquire this customers over others.
- Introduce them with aggressive price incentives
- Try to reacquire them by sending promotional discounts, expiring coupons, etc.
- Find out why they are not buying any more to take corrective actions in the future



# Lost cheap customers (444)

- Not as important to reacquire this customers as they didn't spent much or bought very frequently.
- Try to reacquire them but without spending too much effort/money in it.
- Find out why they are not buying any more to take corrective actions in the future



# Loyal customers (X1Z)

- Introduce loyalty program
- Introduce affiliate program
- Introduce new products
- Keep sub-segmenting them to target them specifically based on their behavior

EXAMPLES	Sub-segment	Description	Action
	413 - 414 - 313 - 314	Loyal customers who haven't spent that much and haven't bought in a long time	Try to reacquire them without too much effort
	211 - 212 - 112	Loyal customers who spent a lot and recently bought	Try to keep them engaged and active



# Big spenders (XY1)

- Target them with expensive products as they are people who spend a lot of money
- For those with recency 1 & 2, send aggressive acquisition marketing campaigns
- Introduce new products
- Keep sub-segmenting them to target them specifically based on their behavior

EXAMPLES	Sub-segment	Description	Action
	431 - 421 - 331 - 321	Big spenders who haven't haven't bought in a long time	Aggressive reacquisition marketing
	131 - 141 - 231 - 241	Big spenders who didn't buy a lot of times, but did buy recently	Probably new users. Try to retain them and keep buying



## Tool for further analysis

In order for the marketing team to further segment the customers and take their own decisions, a dashboard in Google Data Studio has been created where anybody can get further information on each segments and their behaviour.

Access it by clicking in the following link:

Access dashboard