CALCULATION OF RFM VALUES

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**Step 1** **: Segmentation of the Customers :**

I have used Google sheets to perform the segmentation of the customers

The raw data that was given having some drawbacks like negative values in the Quantity column and few blanks in the customer id column . The quantity can never be negative , it has to be either zero or greater than zero hence these values are filtered out .

Post filtering the raw data I deleted the blank values in order to calculate the amount. Formula used to calculate amount = Quantity \* Unit Price and for Country I used “VLOOKUP” function

Now the actual analysis starts . I took two approaches . One by using the pivot table & the other by using conventional methods i.e , by using functions and formulae. In this document I will be presenting the pivot table approach.

I have inserted pivot table for the previous data by considering the Customer ID as the base since customer ID will be unique. From the pivot I took the below values

1. Recent visit date of the customer
2. Total number of visits mad by each customer in a particular duration of time
3. Total revenue generated by each customer in a given duration of time

Now to calculate the three parameters i.e , Recency, Frequency & Monetary , I have copied the values from the pivot & pasted in a different sheets . We have already got the values of Frequency & Monetary parameters from the pivot table. Please find below steps to calculate the Recency values

* I have inserted a new column as “Today’s Date“
* Took the current date as “today()” formula and copied the same date for all the customer ID’s
* Inserted a one more column by naming the header as Day’s Since
* Subtracted the recent invoice date from the today’s date to get the recent visit in terms of Number of days

I have successfully calculated all the three parameters which are required for this analysis.

**Step 2: Segmentation of RFM Scores :**

As I have the RFM Values I calculated the RFM Score based on the criteria given in the data.

Now to calculate the RFM Values I created a table based on Maximum, Minimum, Quartile for Day’s Since , Invoice No & Amount .

* As mentioned there is a criteria for R i.e , maximum to minimum 5,4,3,2,1 lower Recency is better for us to calculate
* And for F,M criteria maximum to minimum 1,2,3,4,5
* Calculated Maximum with” Max()” function , Quartile with “Percentile.inc()” & Minimum with “Min()
* Based on the table I created 3 columns i.e R,F,M and used the “VLOOKUP” function
* After calculating the R,F,M I created RFM Score and calculated with “&” function

Successfully calculated the RFM Score with the requirements

**Step 3 : Customer segmentation on RFM Score :**

For simplicity, we will use Recency and Frequency to segment our customers

* As I already had the R,F values I used the “Concatenate” function
* Based on this I used “VLOOKUP” function and named the column as “category”

Successfully completed the Customers segmentation

In the final output I took Customer ID, Country, Recency, Frequency, Monetary, R, F,M, RFM Score,Category