

FINANCIAL ANALYSIS



Created by Thomas Sangala

Running Total of Credit Card Transactions

```
1 running total = CALCULATE(sum('credit_card'[Total_Trans_Amt]), FILTER(all(credit_card),'credit_card'[Week_Start_Date]<=max('credit_card'[Week_Start_Date])))
```

Calculate the 4-week moving average of the creditLimit for each client.

```
1 MOVING_AVERAGE =
2
3 var weeks = DATESINPERIOD('calendar'[Date], max('calendar'[Date]), -28, DAY)
4 var sales = CALCULATE(sum('credit_card'[Credit_Limit]), weeks)
5 var dis_week = CALCULATE(DISTINCTCOUNT('calendar'[weeknum]), weeks)
6 RETURN DIVIDE(sales,dis_week)
```

Calculate the mom% growth on transaction amount.

```
1 mom% growth =  
2 var prev_month = CALCULATE(sum(credit_card[Total_Trans_Amt]),  
3 DATEADD('calendar'[Date], -1,MONTH))  
4  
5 return DIVIDE(sum(credit_card[Total_Trans_Amt])-prev_month,  
6 prev_month,0)
```

Calculate the wow% growth on transaction amount.

```
1 wow% growth =  
2 var prev_week = CALCULATE(sum(credit_card[Total_Trans_Amt]),  
3 DATEADD('calendar'[Date], -7, DAY))  
4  
5 return DIVIDE(sum(credit_card[Total_Trans_Amt])-prev_week,  
6 prev_week,0)
```

Calculate Customer Acquisition Cost (CAC) as a Ratio of Transaction Amount.

```
1 CAC Ratio =  
2 DIVIDE(sum(credit_card[Customer_Acq_Cost]),  
3 SUM(credit_card[Customer_Acq_Cost]))
```

Calculate the yearly average of avg_utilization_ratio for all clients.

```
1 avg utilization rate =  
2 AVERAGE(credit_card[Avg_Utilization_Ratio])/  
3 DISTINCTCOUNT(credit_card[current_year])
```

1.00

CAC Ratio

0.27

avg utilization rate

Calculate the percentage of Interest_Earned compared to Total_Revolving_Bal for each client.

```
1 Interest Earned to Total Revolving Bal =  
2 DIVIDE(SUM(credit_card[Interest_Earned]),  
3 SUM(credit_card[Total_Revolving_Bal]),0)  
4
```

Calculate Top 5 Clients by Total Transaction Amount.

```
1 Top 5 clients by total transaction amt =  
2  
3 TOPN(5,SUMMARIZE('credit_card','credit_card'[client_Num],"total amount",  
4 SUM('credit_card'[Total_Trans_Amt])),[total amount],DESC)
```

Identify clients whose Avg_Utilization_Ratio exceeds 80%.

```
1 Avg_Utilization_Ratio_Exceed_80% =  
2 IF('credit_card'[Avg_Utilization_Ratio]>0.8,  
3 TRUE, FALSE)
```

Customer Churn Indicator: Create a KPI that flags clients who have not made any transactions (Total_Trans_Amt = 0) in the last 6 months.

```
1 No_Trans_in_last_6_months =  
2 var six_month = CALCULATE(SUM(credit_card[Total_Trans_Amt]),  
3 DATESINPERIOD('calendar'[Date],MAX('calendar'[Date]),-6,month))  
4  
5 RETURN(if(ISBLANK(six_month),TRUE,FALSE))
```

Delinquency Rate: Calculate the percentage of clients with Delinquent_Acc > 0.

```
1 Delinquency Rate =  
2  
3 var delinquency_acc = CALCULATE(COUNTROWS(credit_card),  
4 credit_card[Delinquent_Acc] > 0)  
5  
6 var total_acc = COUNTROWS(credit_card)  
7  
8 RETURN DIVIDE(delinquency_acc, total_acc)
```

6.06%

Delinquency Rate

Credit Risk Score: Create a score for each client based on their Avg_Utilization_Ratio, Delinquent_Acc, and Total_Revolving_Bal.

```
1 Normalize_Revolving_Bal_to_no_0-1 =  
2  
3 var min_value = MIN(credit_card[Total_Revolving_Bal])  
4 var max_value = MAX(credit_card[Total_Revolving_Bal])  
5  
6 RETURN DIVIDE(credit_card[Total_Revolving_Bal]-min_value,  
7 max_value,0)
```

```
1 Credit_Risk_Score =  
2  
3 0.5*credit_card[Avg_Utilization_Ratio]+  
4 0.3*credit_card[Delinquent_Acc]+  
5 0.2*credit_card[Normalize_Revolving_Bal_to_no_0-1]
```

Income vs Credit Limit Correlation: Show the correlation between Income and Credit_Limit for all clients.

Quick measure ➞

Calculations Suggestions with Copilot

Correlation coefficient

Calculate the correlation coefficient between two values over a category. Originally suggested by Daniil Maslyuk in the quick measures gallery. [Learn more](#)

Category ⓘ Client_Num X | >

Measure X ⓘ Income X | >

Measure Y ⓘ Credit_Limit X | >

Add

Average Customer Satisfaction Score by Credit Card Category: Calculate the average Cust_Satisfaction_Score by Card_Category.

```
1 Avg_Score_by_card_category =  
2  
3 SUMMARIZE(credit_card,credit_card[Card_Category],"Avg Score",  
4 ROUND(AVERAGE(customer_csv[Cust_Satisfaction_Score]),2))
```

Card_Category	Avg Score
Blue	3.19
Silver	3.22
Gold	3.04
Platinum	2.72

Loan Approval vs Credit Limit: Analyze how Credit_Limit affects Personal_loan approval by calculating the average credit limit for clients with and without loans.

```
1 Loan_Yes =  
2 CALCULATE(AVERAGE(credit_card[Credit_Limit]),  
3 customer_csv[Personal_loan] = "Yes")
```

8.53K
Loan_Yes

```
1 Loan_No =  
2 CALCULATE(AVERAGE(credit_card[Credit_Limit]),  
3 customer_csv[Personal_loan] = "No")
```

8.65K
Loan_No

High Risk Clients Flag: Create a flag for clients whose **Total_Revolving_Bal** exceeds 90% of their **Credit_Limit** and who have a high **Avg_Utilization_Ratio**.

```
1 Exceeds_90%_credit_limit =  
2  
3 var cl_90 = credit_card[Credit_Limit]* 0.9  
4  
5 RETURN IF(credit_card[Total_Revolving_Bal] > cl_90 &&  
6 [Avg_Utilization_Ratio] > 0.5, TRUE, FALSE)
```

Thank You.

Hopefully, this year's analysis can help to
make your Bank even profitable