

## **DAX Workflow**

This document lists the DAX calculated columns and measures used for the Power BI Credit Card Weekly Status Report.

### **Where to create these**

- Calculated Columns → Modeling → New column (values are stored row-by-row in the table).
- Measures → Modeling → New measure (values are not stored but are calculated dynamically on the fly whenever used in visuals, cards, or reports).

### **1) Calculated Columns – 'public cust\_detail'**

#### **AgeGroup (column)**

Explanation : Categorizes customers into age brackets (20–30, 30–40, etc.) based on their age.

```
AgeGroup =  
SWITCH(  
    TRUE(),  
    'public cust_detail'[customer_age] < 30, "20-30",  
    'public cust_detail'[customer_age] >= 30 && 'public cust_detail'[customer_age] < 40,  
    "30-40",  
    'public cust_detail'[customer_age] >= 40 && 'public cust_detail'[customer_age] < 50,  
    "40-50",  
    'public cust_detail'[customer_age] >= 50 && 'public cust_detail'[customer_age] < 60,  
    "50-60",  
    'public cust_detail'[customer_age] >= 60, "60+",  
    "unknown"  
)
```

#### **IncomeGroup (column)**

Explanation : Groups customers based on income level into Low, Medium, or High segments.

```
IncomeGroup =  
SWITCH(  
    TRUE(),  
    'public cust_detail'[income] < 35000, "Low",  
    'public cust_detail'[income] >= 35000 && 'public cust_detail'[income] < 70000,  
    "Med",  
    'public cust_detail'[income] >= 70000, "High",  
)
```

"unknown"  
)

## 2) Calculated Columns – 'public cc\_detail'

### week\_num2 (column)

Explanation : Extracts the week number from the transaction date to support weekly comparisons.

week\_num2 = WEEKNUM('public cc\_detail'[week\_start\_date])

### Revenue (column)

Explanation : Calculates total revenue by summing annual fees, transaction amounts, and interest earned.

Revenue =  
'public cc\_detail'[annual\_fees]  
+ 'public cc\_detail'[total\_trans\_amt]  
+ 'public cc\_detail'[interest\_earned]

## 3) Measures – 'public cc\_detail'

Measures calculate current and previous week revenue, distinct customers, and week-over-week (WoW) % change.

### Current\_week\_Revenue (measure)

Explanation : Calculates revenue for the latest available week.

Current\_week\_Revenue =  
CALCULATE(  
SUM('public cc\_detail'[Revenue]),  
FILTER(  
ALL('public cc\_detail'),  
'public cc\_detail'[week\_num2] = MAX('public cc\_detail'[week\_num2])  
)  
)

### Previous\_week\_Revenue (measure)

Explanation : Calculates revenue for the week just before the latest available week.

Previous\_week\_Revenue =  
CALCULATE(

```

SUM('public cc_detail'[Revenue]),
FILTER(
    ALL('public cc_detail'),
    'public cc_detail'[week_num2] = MAX('public cc_detail'[week_num2]) - 1
)
)

```

### **Total Customers (measure)**

Explanation : Counts the number of distinct customers.

Total Customers = DISTINCTCOUNT('public cc\_detail'[client\_num])

### **wow\_revenue (measure)**

Explanation : Calculates week-over-week revenue growth percentage.

```

wow_revenue =
DIVIDE(
    [Current_week_Revenue] - [Previous_week_Revenue],
    [Previous_week_Revenue]
)

```