## 🧾 Basic Measures (Foundational Calculations)

**DAX FORMULAS – POWER BI (MILESTONE 2 PROJECT)**

### 1.NET SALES

NET SALES = SUM (shopify\_sales [Subtotal Price])

**Purpose:** Calculates total sales revenue by summing all order subtotals.

### 2.TOTAL QUANTITY

TOTAL QUANTITY = SUM (shopify\_sales [Quantity])

**Purpose:** Total quantity of products sold.

### 3.TOTAL CUSTOMER

TOTAL CUSTOMER = DISTINCTCOUNT (shopify\_sales [Customer Id])

**Purpose:** Counts unique customers who made purchases.

### 4.NET AVG ORDER VALUE

NET AVG ORDER VALUE = AVERAGE (shopify\_sales [Subtotal Price])

**Purpose:** Finds the average order value by averaging the subtotal price.

### 5.HOUR

Hour = HOUR (shopify\_sales [Invoice Date])

**Purpose:** Extracts the hour (0–23) from each invoice date for hourly trend analysis.

## 📊 Customer Behavior Metrics

### 1.LIFETIME VALUE

LIFETIME VALUE = [NET SALES]/ [TOTAL CUSTOMER]

**Purpose:** Average revenue generated by each customer over time.

### 2.PURCHASE FREQUENCY

PURCHASE FREQUENCY = DISTINCTCOUNT (shopify\_sales [Order Number])/ [TOTAL CUSTOMER]

**Purpose:** How often customers purchase, calculated as distinct orders per customer.

### 3.REPEAT CUSTOMERS

REPEAT CUSTOMERS =   
CALCULATE (  
 COUNTROWS(VALUES (shopify\_sales [Customer Id])),  
 FILTER (  
 VALUES (shopify\_sales [Customer Id]),  
 CALCULATE(DISTINCTCOUNT (shopify\_sales [Order Number])) > 1  
 )  
)

**Purpose:** Counts customers who placed more than one order (loyal customers).

### 4.REPEAT RATE

REPEAT RATE = [REPEAT CUSTOMERS]/ [TOTAL CUSTOMER]

**Purpose:** Shows the percentage of customers who returned to buy again.

### 5.SINGLE ORDER CUSTOMERS

SINGLE ORDER CUSTOMERS =   
CALCULATE (  
 COUNTROWS(VALUES (shopify\_sales [Customer Id])),  
 FILTER (  
 VALUES (shopify\_sales [Customer Id]),  
 CALCULATE (DISTINCTCOUNT (shopify\_sales [Order Number])) = 1  
 )  
)

**Purpose:** Counts customers who made only one purchase.

## 🧠 Dynamic Titles and Visualization Controls

### 1.Select Measure Table

Select Measure = {  
 ("NET SALES", NAMEOF ('shopify\_sales'[NET SALES]), 0),  
 ("TOTAL QUANTITY", NAMEOF ('shopify\_sales'[TOTAL QUANTITY]), 1),  
 ("TOTAL CUSTOMER", NAMEOF ('shopify\_sales'[TOTAL CUSTOMER]), 2),  
 ("REPEAT CUSTOMERS", NAMEOF ('shopify\_sales'[REPEAT CUSTOMERS]), 3)  
}

**Purpose:** A disconnected table to use as a slicer for dynamic visuals.

### 2.Dynamic Title

Dynamic Title =   
IF('Select Measure'[Select Measure Order] = 0, "Net Sales",  
IF('Select Measure'[Select Measure Order] = 1, "Total Qty",  
IF('Select Measure'[Select Measure Order] = 2, "Total Customers",  
IF('Select Measure'[Select Measure Order] = 3, "Repeat Customers", "Other"))))

**Purpose:** Maps slicer selection to readable titles.

### 3.Gateway Title

Gateway Title = SELECTEDVALUE ('Select Measure'[Dynamic Title]) & " by Gateway Payment Method"

**Purpose:** Dynamic visual title combining selected measure with payment method context.

### 4.Product Title

Product Title = SELECTEDVALUE ('Select Measure'[Dynamic Title]) & " by Gateway Payment Method"

**Purpose:** Same as above, likely used in another visual focused on products.

### 5.TreeMap Title

TreeMap Title = "Regional Overview Province & Cities by" & SELECTEDVALUE ('Select Measure'[Dynamic Title])

**Purpose:** Used for regional maps showing dynamic metric.

### 6.Trend Title

Trend Title = SELECTEDVALUE ('Select Measure'[Dynamic Title]) & " Trend Over Time"

**Purpose:** Used as a dynamic title for a trend line or time series visual.