

Fraud Analysis | Report

Month Aug

Fraud Rate
5.16%
▲ +31.6% | +1.24% VS LM



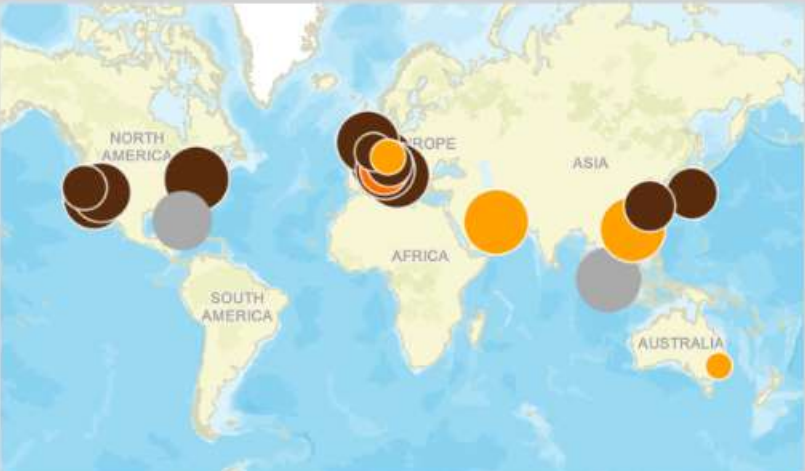
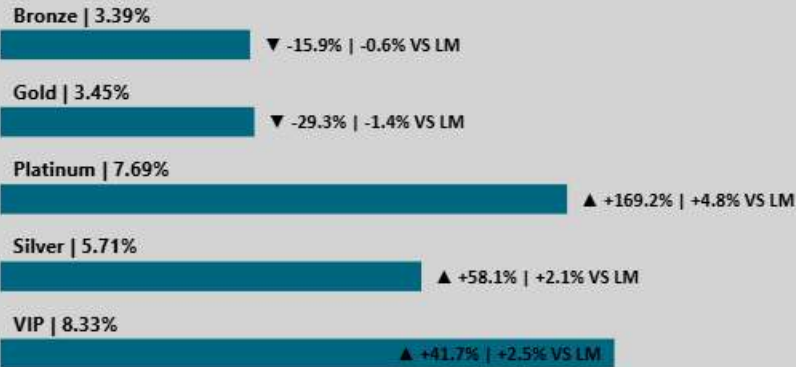
Total Transactions
155
▼ -56.6% | -202 VS LM



Transactions Amount
\$28.1K
▼ -56.1% | -\$35.9K VS LM



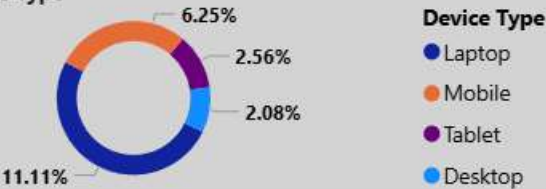
Fraud by Loyalty Tier and MoM Growth



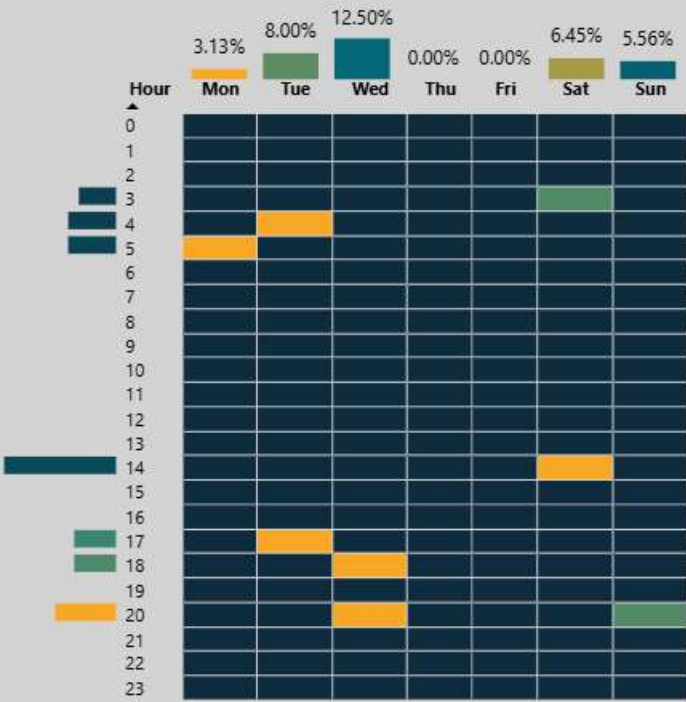
Esri, FAO, NOAA, USGS

Powered by Esri

Fraud by Device Type



Fraud Rate by Day by Hour



Fraud Analysis | Report

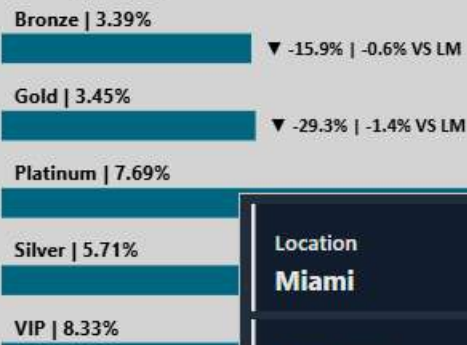
Month Aug

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Total Transactions
155
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Transactions Amount
\$28.1K
▼ -56.1% | -\$35.9K VS LM

Fraud by Loyalty Tier and MoM Growth



Location
Miami

Fraud Rate
20.00%

Transaction Amount
\$911.9

Total Transactions
5

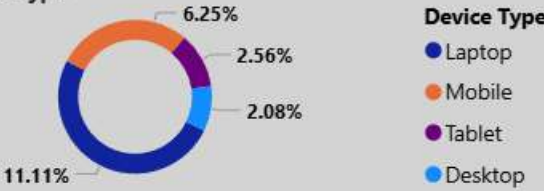
Footfall Count



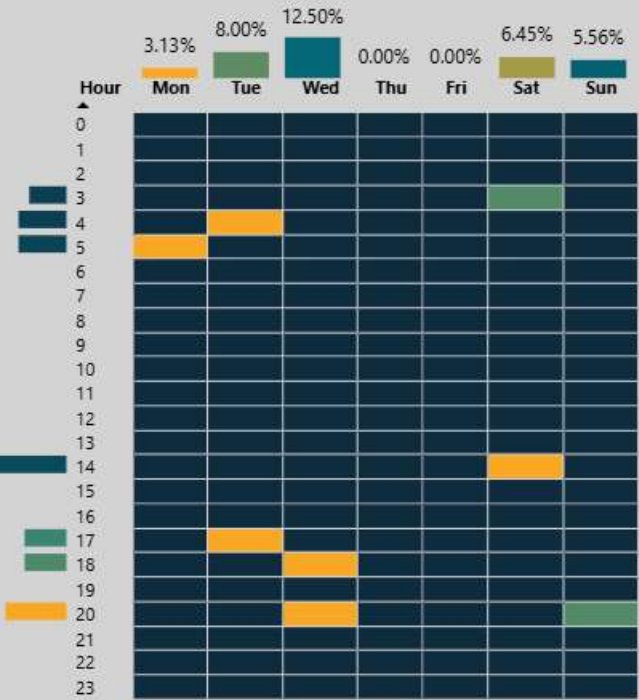
Fraud By Loyalty Tier



Fraud by Device Type



Fraud Rate by Day by Hour



Fraud Report Analysis Dashboard || DAX Functions

- **Fraud Rate**

```
Fraud Rate = (SUM(Data[Fraud_Flag])/COUNT(Data[Customer_ID]))  
Fraud Rate = (SUM(Data[Fraud_Flag])/COUNT(Data[Customer_ID]))
```

- **Current Month To Date (CMTD) Fraud Rate:**

```
CMTD Fraud = VAR selected_month = SELECTEDVALUE('Date'[Month Name])  
RETURN  
TOTALMTD(CALCULATE([Fraud Rate], 'Date'[Month  
Name]=selected_month), 'Date'[Date])
```

```
CMTD Fraud = VAR selected_month = SELECTEDVALUE('Date'[Month Name])  
RETURN  
TOTALMTD(CALCULATE([Fraud Rate], 'Date'[Month  
Name]=selected_month), 'Date'[Date])
```

- **Past Month To Date (PMTD) Fraud Rate:**

```
PMTD Fraud = CALCULATE([CMTD Fraud], DATEADD('Date'[Date], -1, MONTH))  
PMTD Fraud% = CALCULATE([CMTD Fraud], DATEADD('Date'[Date], -1, MONTH))
```

- **Month on Month (MoM) Fraud Rate:**

```
MOM Fraud = ([CMTD Fraud] - [PMTD Fraud%]) / [PMTD Fraud%]  
MOM Fraud% = ([CMTD Fraud] - [PMTD Fraud%]) / [PMTD Fraud%]
```

- **Total Transactions:**

```
Total Transactions = COUNT(Data[Transaction_ID])  
Total Transactions = COUNT(Data[Transaction_ID])
```

- **Current Month To Date (CMTD) Total Transactions:**

```
CMTD Transactions = VAR selected_month = SELECTEDVALUE('Date'[Month Name])  
RETURN  
TOTALMTD(CALCULATE([Total Transactions], 'Date'[Month  
Name]=selected_month), 'Date'[Date])
```

```
CMTD Transactions = VAR selected_month = SELECTEDVALUE('Date'[Month Name])
```

```

RETURN
TOTALMTD(CALCULATE([Total Transactions], 'Date' [Month
Name]=selected_month), 'Date' [Date])

```

- **Past Month To Date (PMTD) Total Transactions:**

PMTD Transaction = CALCULATE([CMTD Transactions], DATEADD('Date'[Date], -1, MONTH))

```

PMTD Transaction = CALCULATE([CMTD
Transactions], DATEADD('Date' [Date], -1, MONTH))

```

- **Month on Month (MoM) Total Transactions:**

MOM Transactions = ([CMTD Transactions] - [PMTD Transaction]) / [PMTD Transaction]

```

MOM Transactions = ([CMTD Transactions] - [PMTD Transaction]) / [PMTD
Transaction]

```

- **Total Transactions Amount:**

Transaction Amount = SUM(Data[Purchase_Amount])

```

Transaction Amount = SUM(Data[Purchase_Amount])

```

- **Current Month To Date (CMTD) Total Transactions Amount:**

CMTD Amount = VAR selected_month = SELECTEDVALUE('Date'[Month Name])

```

RETURN
TOTALMTD(CALCULATE([Transaction Amount], 'Date' [Month
Name]=selected_month), 'Date' [Date])
CMTD Amount = VAR selected_month = SELECTEDVALUE('Date' [Month Name])
RETURN
TOTALMTD(CALCULATE([Transaction Amount], 'Date' [Month
Name]=selected_month), 'Date' [Date])

```

- **Past Month To Date (PMTD) Total Transactions Amount:**

PMTD Amount = CALCULATE([CMTD Amount], DATEADD('Date'[Date], -1, MONTH))

```

PMTD Amount = CALCULATE([CMTD Amount], DATEADD('Date' [Date], -1, MONTH))

```

- **Month on Month (MoM) Total Transactions Amount:**

MOM Amount = ([CMTD Amount]-[PMTD Amount])/[PMTD Amount]
MOM Amount = ([CMTD Amount]-[PMTD Amount])/[PMTD Amount]

- **KPI Card Label for Transaction Amount:**

Label Amount MOM =

```
VAR month_diff = [CMTD Amount] - [PMTD Amount]
VAR MOM = ([CMTD Amount] - [PMTD Amount]) / [PMTD Amount]
VAR _sign = IF(month_diff > 0, "+", "")
VAR _signtrend = IF(month_diff > 0, "▲", "▼")
RETURN

_signtrend & " " & _sign & FORMAT(MOM, "#0.0%") & " | " & _sign &
FORMAT(month_diff/1000, "$0.0K") & " VS LM"
```

```
Label Amount MOM =

VAR month_diff = [CMTD Amount] - [PMTD Amount]
VAR MOM = ([CMTD Amount] - [PMTD Amount]) / [PMTD Amount]
VAR _sign = IF(month_diff > 0, "+", "")
VAR _signtrend = IF(month_diff > 0, "▲", "▼")
RETURN

_signtrend & " " & _sign & FORMAT(MOM, "#0.0%") & " | " & _sign &
FORMAT(month_diff/1000, "$0.0K") & " VS LM"
```

- **KPI Card Label for Fraud Rate:**

Label Fraud MOM =

```
VAR month_diff = [CMTD Fraud] - [PMTD Fraud%]
VAR MOM = ([CMTD Fraud] - [PMTD Fraud%]) / [PMTD Fraud%]
VAR _sign = IF(month_diff > 0, "+", "")
VAR _signtrend = IF(month_diff > 0, "▲", "▼")
RETURN

_signtrend & " " & _sign & FORMAT(MOM, "#0.0%") & " | " & _sign & FORMAT(
month_diff, "0.00%") & " VS LM"
```

```

Label Fraud MOM =

VAR month_diff = [CMTD Fraud] - [PMTD Fraud]
VAR MOM = ([CMTD Fraud] - [PMTD Fraud]) / [PMTD Fraud]
VAR _sign = IF(month_diff > 0, "+", "")
VAR _signtrend = IF(month_diff > 0, "▲", "▼")
RETURN

_signtrend & " " & _sign & FORMAT(MOM, "#0.0%") & " | " & _sign & FORMAT(
month_diff, "0.00%") & " VS LM"

```

- **KPI Card Label for Total Transaction:**

Label Transaction MOM =

```

VAR month_diff = [CMTD Transactions] - [PMTD Transaction]
VAR MOM = ([CMTD Transactions] - [PMTD Transaction]) / [PMTD Transaction]
VAR _sign = IF(month_diff > 0, "+", "")
VAR _signtrend = IF(month_diff > 0, "▲", "▼")
RETURN

```

_signtrend & " " & _sign & FORMAT(MOM, "#0.0%") & " | " & _sign & month_diff & " VS LM"

```

Label Transaction MOM =

VAR month_diff = [CMTD Transactions] - [PMTD Transaction]
VAR MOM = ([CMTD Transactions] - [PMTD Transaction]) / [PMTD Transaction]
VAR _sign = IF(month_diff > 0, "+", "")
VAR _signtrend = IF(month_diff > 0, "▲", "▼")
RETURN

_signtrend & " " & _sign & FORMAT(MOM, "#0.0%") & " | " & _sign &
month_diff & " VS LM"

```

- **Label For Loyalty Tier:**

Label For Loyalty tier = SELECTEDVALUE(Data[Customer_Loyalty_Tier]) & " | " & FORMAT([Fraud Rate], "0.00%")

```

Label For Loyalty Tier = SELECTEDVALUE(Data[Customer_Loyalty_Tier]) & " | "
& FORMAT([Fraud Rate], "0.00%")

```

- **MOM Growth & diff in Fraud Rate:**

MOM Growth & diff in Fraud Rate=

```

VAR month_diff = [CMTD Fraud] - [PMTD Fraud%]
VAR MOM = ([CMTD Fraud] - [PMTD Fraud%])/[PMTD Fraud%]
VAR _sign = IF(month_diff >0,"+", "")
VAR _signtrend = IF(month_diff >0,"▲", "▼")
RETURN

    _signtrend & " " & _sign & FORMAT(MOM,"0.0%") & " | " & _sign &FORMAT(
month_diff,"0.0%") & " VS LM"

```

```

MOM Growth & diff sales =

    VAR month_diff = [CMTD Fraud] - [PMTD Fraud%]
    VAR MOM = ([CMTD Fraud] - [PMTD Fraud%])/[PMTD Fraud%]
    VAR _sign = IF(month_diff >0,"+", "")
    VAR _signtrend = IF(month_diff >0,"▲", "▼")
    RETURN

        _signtrend & " " & _sign & FORMAT(MOM,"0.0%") & " | " & _sign &FORMAT(
month_diff,"0.0%") & " VS LM"

```