# Power BI Transformations & DAX Measures

## Power Query Transformations

### Transformations in prod\_Churn

1. Add column: Churn Status = if [Customer\_Status] = "Churned" then 1 else 0

2. Change 'Churn Status' column data type to Number

3. Add column: Monthly Charge Range = if [Monthly\_Charge] < 20 then "< 20" else if [Monthly\_Charge] < 50 then "20-50" else if [Monthly\_Charge] < 100 then "50-100" else "> 100"

### Create mapping\_AgeGrp Table Reference

1. Keep only 'Age' column and remove duplicates

2. Add column: Age Group = if [Age] < 20 then "< 20" else if [Age] < 36 then "20 - 35" else if [Age] < 51 then "36 - 50" else "> 50"

3. Add column: AgeGrpSorting = if [Age Group] = "< 20" then 1 else if [Age Group] = "20 - 35" then 2 else if [Age Group] = "36 - 50" then 3 else 4

4. Change 'AgeGrpSorting' column data type to Number

### Create mapping\_TenureGrp Table Reference

1. Keep only 'Tenure\_in\_Months' column and remove duplicates

2. Add column: Tenure Group = if [Tenure\_in\_Months] < 6 then "< 6 Months" else if [Tenure\_in\_Months] < 12 then "6-12 Months" else if [Tenure\_in\_Months] < 18 then "12-18 Months" else if [Tenure\_in\_Months] < 24 then "18-24 Months" else ">= 24 Months"

3. Add column: TenureGrpSorting = if [Tenure Group] = "< 6 Months" then 1 else if [Tenure Group] = "6-12 Months" then 2 else if [Tenure Group] = "12-18 Months" then 3 else if [Tenure Group] = "18-24 Months" then 4 else 5

4. Change 'TenureGrpSorting' column data type to Number

### Create prod\_Services Table Reference

1. Unpivot service-related columns

2. Rename columns:

a. 'Attribute' to 'Services'

b. 'Value' to 'Status'

## DAX Measures

### Summary Page Measures

Total Customers = COUNT(prod\_Churn[Customer\_ID])

New Joiners = CALCULATE(COUNT(prod\_Churn[Customer\_ID]), prod\_Churn[Customer\_Status] = "Joined")

Total Churn = SUM(prod\_Churn[Churn Status])

Churn Rate = [Total Churn] / [Total Customers]

### Churn Prediction Page Measures

Count Predicted Churner = COUNT(Predictions[Customer\_ID]) + 0

Title Predicted Churners = "COUNT OF PREDICTED CHURNERS : " & COUNT(Predictions[Customer\_ID])