

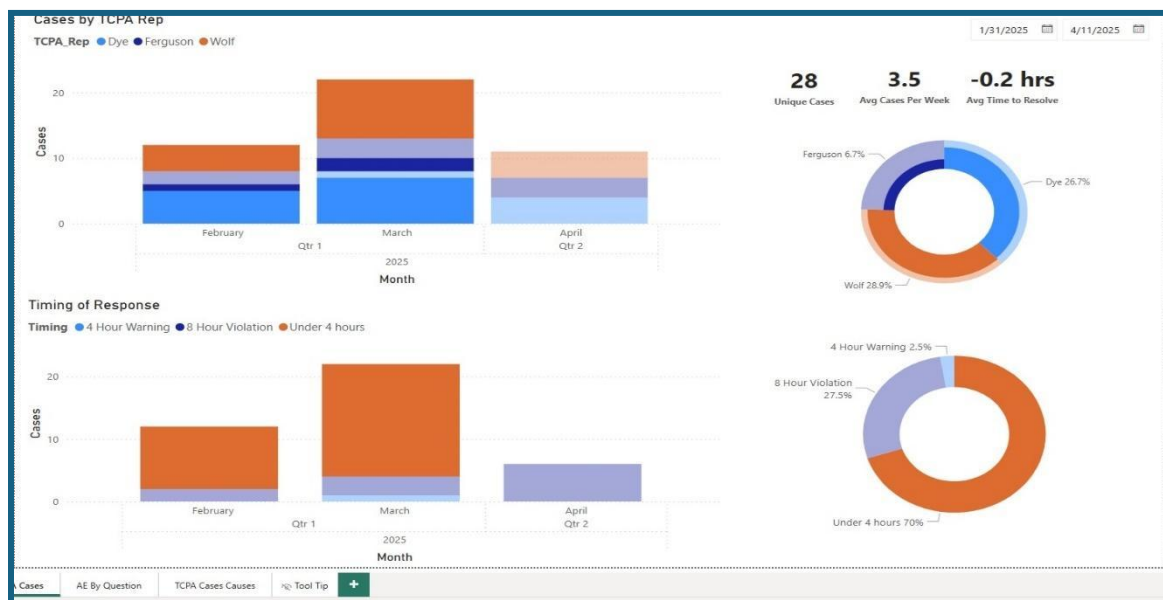
FedEx / TCPA Case Management Report

Power BI and Excel

Purpose:

This report outlines the automated process for capturing case data from the FedEx Salesforce Lightning Ticketing System into both Power BI and Microsoft Excel. It provides a high-level overview intended for users with a basic to intermediate understanding of Power BI and Excel.

Power BI



The Power BI report uses direct connection to SQL Server which is connected via APIs to the Salesforce Lightning system which captures tickets for the TCPA department and other FedEx departments. This information is updated periodically throughout the day.

The SQL formula used in both the Excel and Power BI platforms is as follows

with cases as(select casenumber, max(closeddate) as close_tmstp from [RevPRD].[WRO_MASTER_FXE].[sf_case]where last_assigned_queue__c = 'REV-TCPA' and createddate_dt > '2023-12-31' and status = 'Closed' group by casenumber

)select distinct a.casenumber as case_nbr, a.case_re_opened__c as reopened, a.subject, a.suppliedname as requestor_name, a.suppliedemail as requestor_email,

a.createddate as create_tmstp, a.closeddate as close_tmstp, b.lastname as owner_name

from [RevPRD].[WRO_MASTER_FXE].[sf_case] a

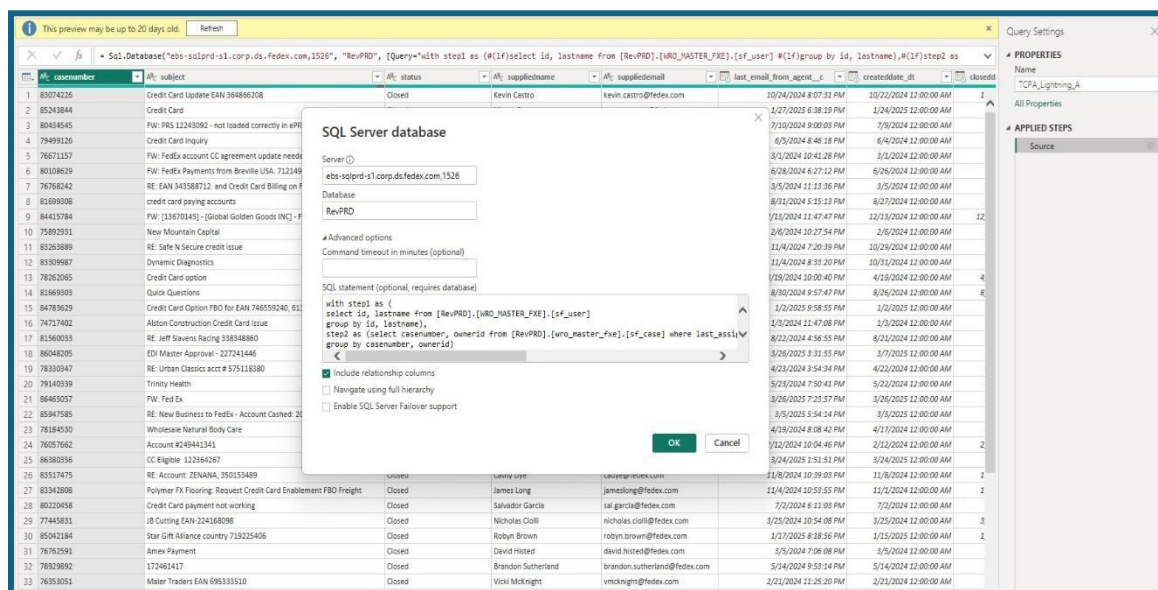
inner join [RevPRD].[WRO_MASTER_FXE].[sf_user] b on a.ownerid = b.id

inner join cases c on a.casenumber = c.casenumber and a.closeddate = c.close_tmstp

order by a.closeddate desc, a.casenumber

It is placed in the Source section of the Power Query Editor which will create the table needed

Add the Server name and Database name in the correct areas



Various Charts and graphs can be created from the table

Using Various DAX formulas can be used to filter to data down

DAX Coding for Power BI

Average Cases per week

```
AvgCasesPerWeek_A =  
VAR TotalCases = DISTINCTCOUNT(TCPA_Lightning_A[casenumbr])  
VAR StartDate = MIN(TCPA_Lightning_A[createddate_dt])  
VAR EndDate = MAX(TCPA_Lightning_A[closeddate])  
VAR TotalWeeks = DATEDIFF(StartDate, EndDate, WEEK)  
RETURN  
TotalCases / TotalWeeks
```

To create categories base off conditions – similar to a CASE statement in SQL

```
BusinessHour3 =  
SWITCH(  
    TRUE(),  
    TCPA_Lightning_A[TimeDifference_A2] < 4, "Under 4 hours - " & TCPA_Lightning_A[Name],  
    TCPA_Lightning_A[TimeDifference_A2] <= 8, "4 Hour Warning - " & TCPA_Lightning_A[Name],  
    TCPA_Lightning_A[TimeDifference_A2] > 8, "8 Hour Violation - " & TCPA_Lightning_A[Name]  
)
```

How to find hours between 2 date / times

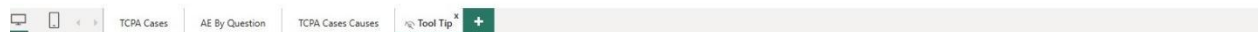
```
TimeDifference_A = VAR TotalDuration =  
    SUMX(  
        TCPA_Lightning_A,  
        DATEDIFF(TCPA_Lightning_A[last_email_from_agent__c], TCPA_Lightning_A[closeddate],  
        MINUTE)  
    )  
VAR RecordCount = COUNTROWS(TCPA_Lightning)  
VAR AvgDuration = TotalDuration / RecordCount  
VAR Hours = ROUND(AvgDuration / 60, 1)  
  
RETURN  
Hours & " hrs "
```

How to find records (cases) that are on 1 table but not the other – and return them in a string

```
Missing Cases = CONCATENATEX(  
  EXCEPT(  
    SELECTCOLUMNS(TCPA_Lightning, "CaseNumber", TCPA_Lightning[Case Number]),  
    SELECTCOLUMNS(TCPA_Lightning_A, "CaseNumber", TCPA_Lightning_A[casenumbr])  
  ),  
  [CaseNumber],  
  ", "  
)
```

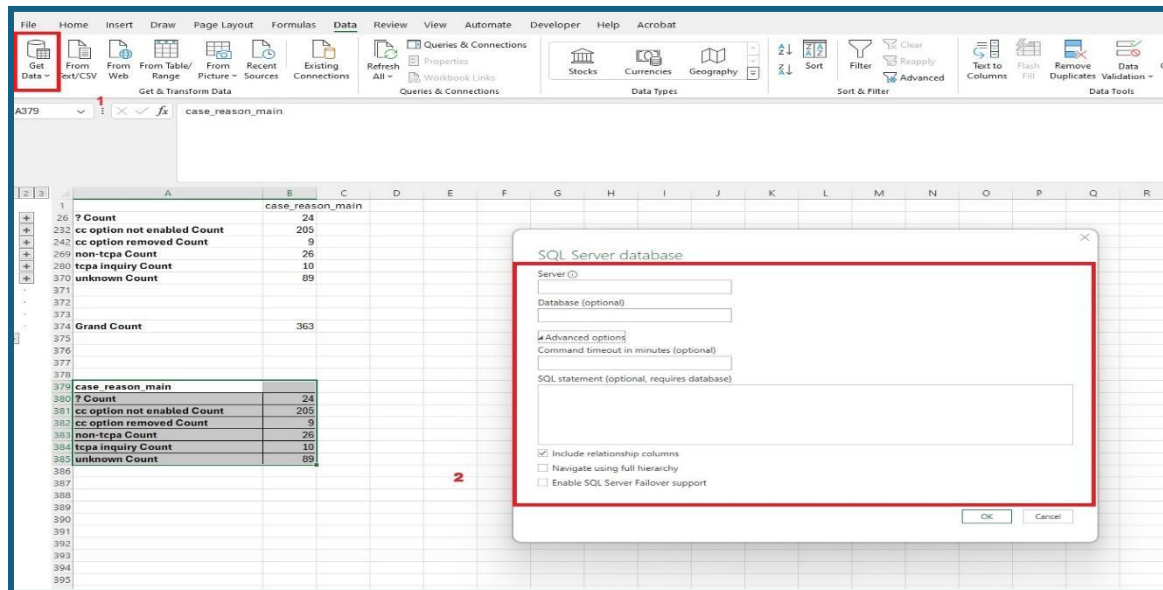
In addition, Tool Tips can be added to highlight more information about the graphic or table

Based On Business Hours after Assigned



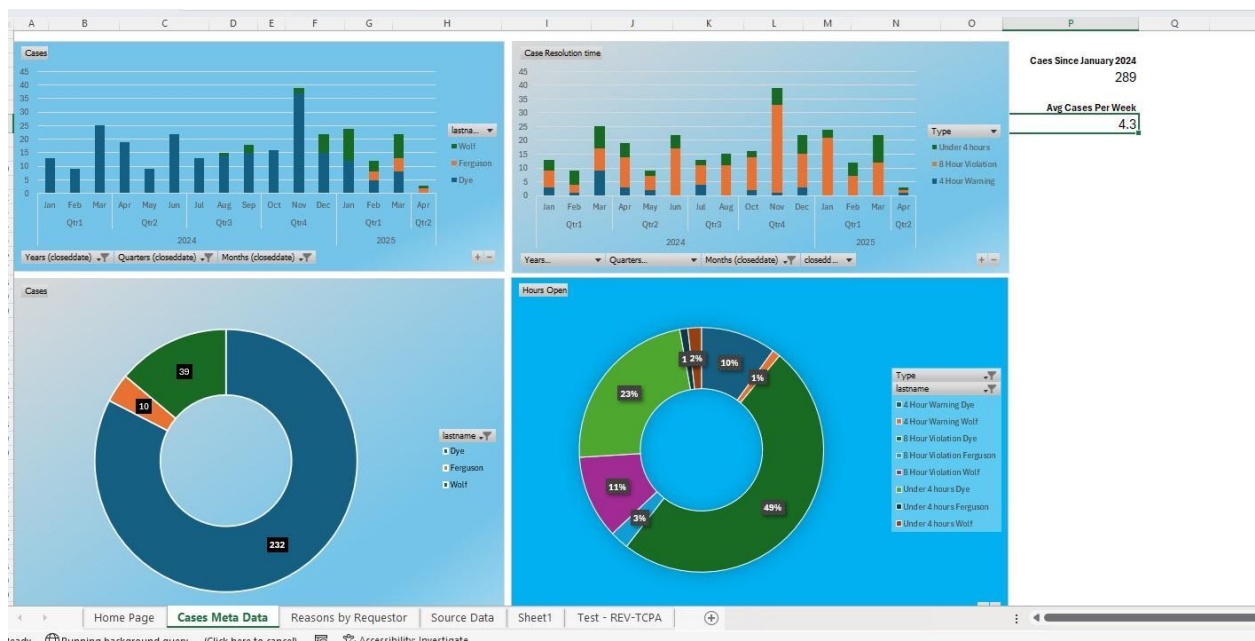
Example

Excel Version



- 1) Get Data and find source – in this case it's SQL Server
- 2) Place the same SQL code along with server id and database

Adding and automated updates to an excel report is almost the same as Power BI except for how the data is auto refreshed Under Query options



To recreate the tables needed in Excel use pivot tables for individual segments