Potential Issues with the data. Over all the data quality is not great with some missing data which could be because of this being test data. I have listed down a few below.

* No primary key. There could be duplicate records which would be hard to find
* Was expecting Approved status to have ref\_approval\_date populated. In some cases it is missing. Although the ref\_completed date is populated which we can assume as approval date as well
* Declined has approved date populated which might not be correct since it was not approved. Instead i would consider ref completed at date for this status which is mostly populated but missing in a few cases
* I was expecting Cr\_created\_at date to be populated since it would be the creation time of the record
* Ref\_form\_name contains junk data, I guess its because it’s a sample dataset.

For data cleansing, we can transform data within power bi to fill in some missing dates with defaults, replace some of the bad data using calculated columns. I tend to do most of the data cleansing in sql so that power bi is not overloaded.

we might also need some bridge tables to maintain data integrity

Dashboard Explanation

Since I don’t have the use case so I have created the dashboard from the perspective of the client as to what they would like to see. There are 3 charts

Pie chart: it uses the ref\_approval\_status and a count for each status

Bar Chart: it uses the ref\_status and count for each status

Line chart: showing the trend of requests over time.

Heatmap showing the breakdown by year

KPI: I think it’s a good idea to have some top line numbers showing at the top because that gives a quick overview of the overall picture depending on date range selection

I have intentionally not used any other slicers as status seemed to be the most appropriate one, we can select the status from pie or line charts any way

As an addition I have put in the Detail tab as the drill through report based on status for the users to see the details

I have also created some new measures and used your existing ones to populate the KPIs

we can have more depth in the dashboard For example

* Trend of avg processing time over time
* Approval Rate by Reference Form Type
* Top 10 Slowest/Fastest References
* Month on Month comparisons for performance

This dashboard is by no means complete and as stated above, we can add further visuals to it but gives an outline of how it would look