

Before touching the laptop

Step 1. When given data by a client, usually it comes messy, it can be a headache cleaning data, however data in Power BI mostly comes in Excel or CSV which is much easier to clean.

Step 2. The client usually has a direction for example “to find out how to manage employees and is seeking insights about that specific aspect” “find out what stock to reduce or increase” but with Power BI, I find the best approach is to explore the data as much as one can especially for those unique relationships so to create a good dashboard going, once a good interactive dashboard is created, explore some more, click here click there, till you find a missing piece or an insight.

Hands on

1. Load data first instead before of transform
2. Clean data, remove, split, or use first row as headers

Dashboard

I start by looking for a primary key in my data to keep an accurate count of the number of items, a primary key is a unique ID for each line of data like an employee number or invoice number, that cannot be shared or repeated.

1. Add card with PK set to count (distinct) just “in case” to compare number of rows with count.
2. In this particular case the client wants to categorize the data in months, so first we calculate the time frame between the two dates, invoice date and payment date in a new column, this gives us the time frame in days or months depending on the DAX measure,

Outstanding invoice is when the invoice is due but its not paid in time

dates = DATEDIFF('Data'[Invoices due data].[Date], 'Data'[Data paid].[Date], DAY)

OR

Measure datesu = DATEDIFF(FIRSTDATE(Data[Invoices due data].[Date]), LASTDATE(Data[Data paid].[Date]), DAY)

NB: I find that it's rather easier to always use Google than learn DAX, it has good supportive community online and a lot of resources online

3. Once you have the time frame, then one can categorize using another dax measure into another column basing on our time frame column, i rather prefer using switch statements cause they are easier to manipulate.

```
No of days of outstanding = SWITCH (
    TRUE (),
    'Data'[dates]< 0, "paid early",

    'Data'[dates]>= 1
    && 'Data'[dates] <= 29, "In time",

    'Data'[dates] >=30
    && 'Data'[dates]<= 59, "Late",

    'Data'[dates] >=60
    && 'Data'[dates]<= 89, "Very Late",

    'Data'[dates] >=90, "Late "
)
```

NB: after apply my switch, i discover negative time values, “insight discovered”, the client didn’t include this in the task, usually i find the client doesn’t know the details, and its upto the data analyst to discover such insights, (simply get the direction or goal of the client).

4. So i add a negative option to my switch or ask the client, open lines of communication help alot. i also discovered blank paid dates, so i thought to convert the null values to zero just to be safe but these are dates so it won’t work however null is always zero and a pointer too.

Exploring more i discover invoices with none purchase orders non-PO invoice, i could use a measure to count “none”,(PS:google it). I lazily use a quick measure with a filter option

Count of Purchase order for None =

```
CALCULATE(
    COUNTA('Data'[Purchase order]),
    'Data'[Purchase order] IN { "None" }
)
```

5. Remember is insight gained can be added to our dashboard for exploration purposes.

