

Personal Finance Power BI Project

YouTube link:

https://www.youtube.com/watch?v=pqSoCa2NGj4&list=PLeo1K3hjS3uszG7FiD6_VaCDuozDt012k

Data link:

<https://github.com/JassemShe/data/blob/main/Finance%20Database.xlsx>

Questions to be answered :

- What is my net worth
- What is my spending pattern
- Am I reaching my savings targets
- Which months are financially good/bad?
- How do I spend ?
- How do I save?

Load and Transform Data

First thing we will do is to make the date as one column by selecting date columns and go to "transform" then "unpivot columns"

We will change the output column to "Date" and its format by right clicking the column and choose type "date" and in this case we will use "date" and "English (India)"

and for the value we will change the format to currency by choosing "fixed decimal number"

Then we will add a year columns by extract it from the date column, we will go to "Add column" then go to "date" and chose year and a year column will be added and change its format to text

Dashboard

Having a detailed table on the dashboard would be helpful

First thing , we will create a table "folder" for all measures we will create , from "Enter Data" on the top and named it Measure

Create measure to total values

```
Values = SUM(FinData[Value])
```

Create a measure Total income as below

```
Total Income = CALCULATE(sum(FinData[Value]),FinData[Type] = "Income")
```

Create a measure Total expense

```
Total Expense = CALCULATE(sum(FinData[Value]),FinData[Type] = "Expense")
```

Create a measure Total Savings

```
Total Savings = CALCULATE(sum(FinData[Value]),FinData[Type] = "Savings")
```

Create measures for percentages as below

```
Expense% = DIVIDE([Total Expense],[Total Income])
```

```
Savings% = DIVIDE([Total Savings],[Total Income])
```

After presenting these number using "Card" chart , we will add 2 slicers for the year and the month

and for month we will need to change the format of date from from table view and insert the format manually (mmm yy)

Now we will copy the card charts we have so that we will have a group will interact with the slicers and other will show all time numbers

After selecting the slicer we will go to "format" then " edit interactions"

We will add a bar chart to show the percentage of expenses by component

So now we want to create a line chart that's put income expense and saving changes overtime , to see how they interact and change

first we will create a measure we will use to calculate the change in income percentage month to month

```
Last month Income = CALCULATE([Total Income],DATEADD(FinData[Date],-1,MONTH))
```

Now we will create the income percentage changes by month (Could use (income2-income1)/income1))

```
Income changes Mon% = DIVIDE([Total Income],[Last month Income])
```

And since its percentage , we will change it's format to %

Now we will present Income changes% , Savings% and Expense% on line chart

Now what we can do to make the savings number make more sense , we could add a target line to the line chart, as we will create this measure

```
Savings target = 0.25
```

Now we all add a matrix table

rows - Type , Component

columns - Date , Year

values - Values

Here the thing is the table shows the order of type like this (expense , income ,savings) and we want to show it like this

(income , expense , savings)

What we will do we will create a new table and add the types as they are written in the original table and we will add another column and order them by numbers (1,2..)

then the two table will automatically have a relationship , and we will take the type from the new table and add to the matrix

Adding Tooltip

Now we will add a tooltip to show the trend for each type of expense over years

First we will create a line chart, and for the x-axis will be date

and y-axis could be values or total expense

and then the legend will be component

We will create a new page to put the line chart and name the page tooltip1

now to make the page a tooltip page from visualisation settings we will go to format page and change it's setting to be a tooltip and we will move the line chart on it

For the tooltip page we will add component as a filter for the page

Now for the bar chart in the dashboard page , from general we will switch tooltip to on and choose the page tooltip1

We will copy the bar chart and make it for the savings , and create a new tooltip for it