PERSONAL FINANCE DASHBOARD REPORT

Introduction:

Objective:

- Provide users with a comprehensive overview of their financial health, including income, expenses, savings, and investments.
- Enable users to track and monitor their spending patterns, identify areas for budget optimization, and set financial goals.
- Facilitate informed decision-making by presenting actionable insights and trends derived from financial data analysis.
- Enhance financial literacy and promote responsible financial management practices among users.
- Offer a user-friendly and intuitive interface that simplifies financial data visualization and interpretation.

Significance:

- Empowers users to take control of their finances and make informed decisions about spending, saving, and investing.
- Contributes to overall financial well-being and stability for individuals and families, fostering a sense of financial confidence and security.

Scope:

- It will provide features for categorizing expenses, setting budget targets, and tracking progress towards financial goals.
- The dashboard will include interactive visualizations, such as charts, graphs, and tables, to present key financial metrics and trends.
- Users will have the ability to customize their dashboard layout, select preferred visualizations, and set personalized financial goals.

Motivation:

- The primary motivation behind developing this dashboard is to empower common users to take control of their financial well-being by providing them with a powerful tool to track their savings and expenses effectively.
- The dashboard serves as a valuable tool for self-reflection and improvement, as it allows users to discover both their good and bad financial practices over time.
- By visualizing historical spending patterns and trends, users gain insights into their financial behavior, identify areas for improvement, and develop better spending habits.

Methodology:

Data Source:

- Data was collected directly from individual regarding their spending habits, budgeting practices, and savings patterns.
- The data collection process involved importing raw survey responses and individual inquiries into Power BI, which served as the primary data source for the project.
- Upon importing the data, several data cleaning and preprocessing steps were performed to ensure data accuracy and consistency.

Data Cleaning:

- Outliers, missing values, and inconsistencies were identified and addressed using DAX formulas within Power BI.
- For example, outliers in expense amounts or savings percentages were flagged for review or adjustment.
- Invalid or incomplete entries were filtered out, and any duplicate records were removed to maintain data integrity.

Data Preprocessing:

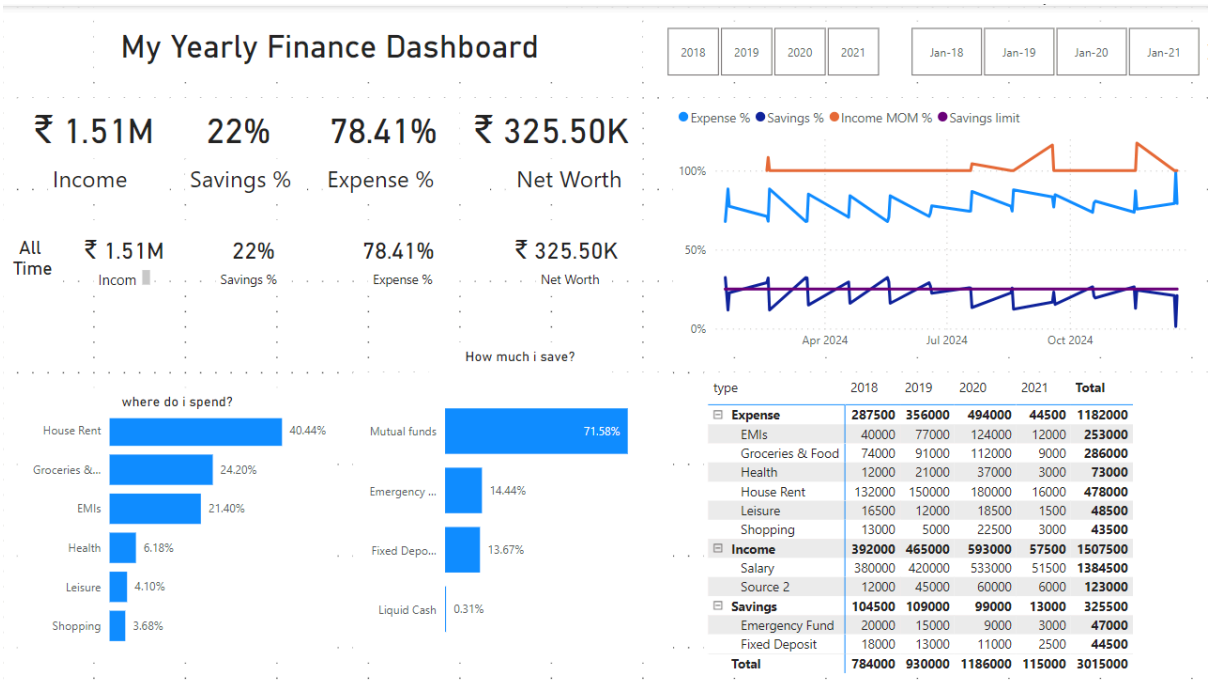
- New calculated columns and measures were created using DAX formulas to preprocess the data and derive additional insights.
- For instance, indexes such as expense-to-income ratios, savings rates, and budget adherence scores were calculated to provide deeper analysis of financial behavior.
- Data was aggregated and summarized at various levels, such as monthly totals, category averages, and demographic groupings, to facilitate meaningful analysis and visualization.

Data Transformation:

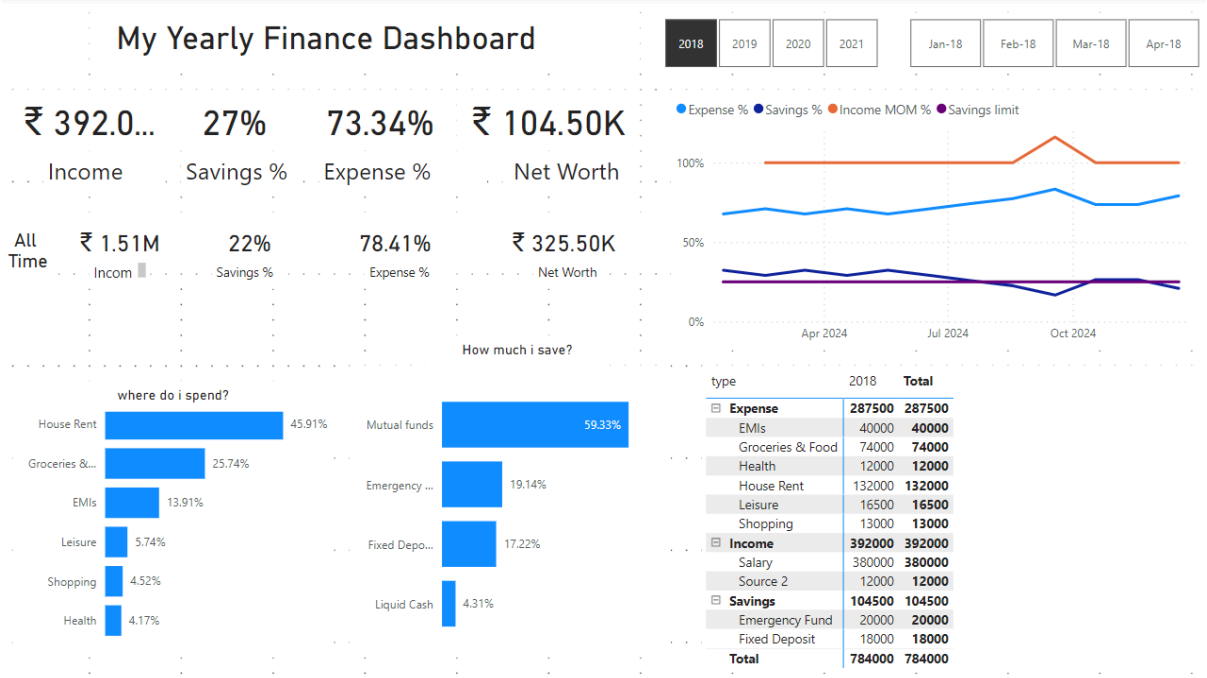
- Transformations were applied to the data using DAX formulas to standardize formats, convert data types, and harmonize data across different sources.
- For example, date fields were formatted consistently, and currency values were converted to a common currency for uniformity.
- New indexes were added to categorize and classify data based on predefined criteria, enabling segmentation and comparison of financial metrics across different groups or periods.

Dashboard Design Principles:

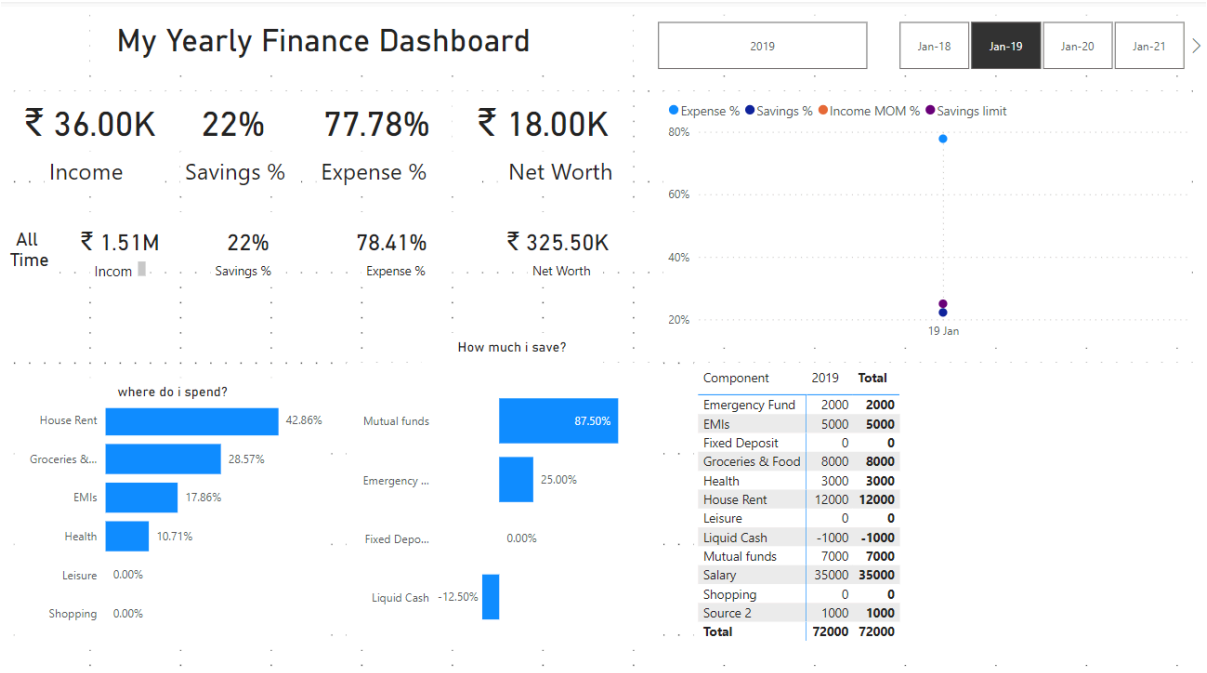
The dashboard design principles and considerations focused on creating an intuitive user interface with a visually appealing layout and interactive features to enhance user engagement and facilitate seamless navigation and exploration of financial data.



type	2018	2019	2020	2021	Total
Expense	**287500**	**356000**	**494000**	**44500**	**1182000**
EMIs	40000	77000	124000	12000	**253000**
Groceries & Food	74000	91000	112000	9000	**286000**
Health	12000	21000	37000	3000	**73000**
House Rent	132000	150000	180000	16000	**478000**
Leisure	16500	12000	18500	1500	**48500**
Shopping	13000	5000	22500	3000	**43500**
Income	**392000**	**465000**	**593000**	**57500**	**1507500**
Salary	380000	420000	533000	51500	**1384500**
Source 2	12000	45000	60000	6000	**123000**
Savings	**104500**	**109000**	**99000**	**13000**	**325500**
Emergency Fund	20000	15000	9000	3000	**47000**
Fixed Deposit	18000	13000	11000	2500	**44500**
Total	**784000**	**930000**	**1186000**	**115000**	**3015000**

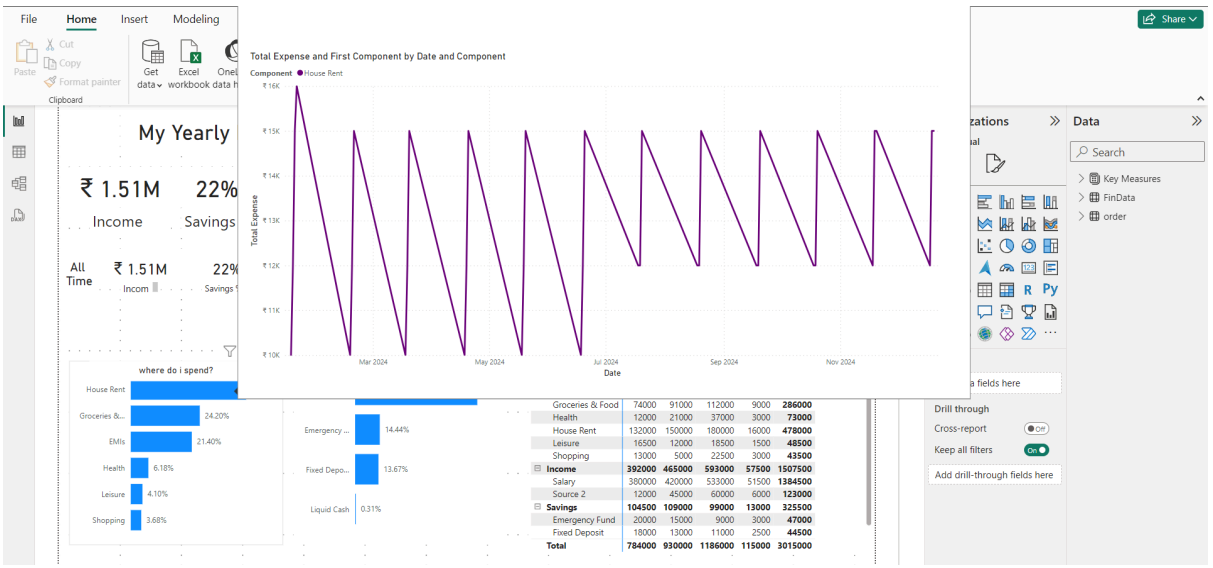


The above image shows the finance data for the year 2018.The above image depicts finance analytics for the year 2018.

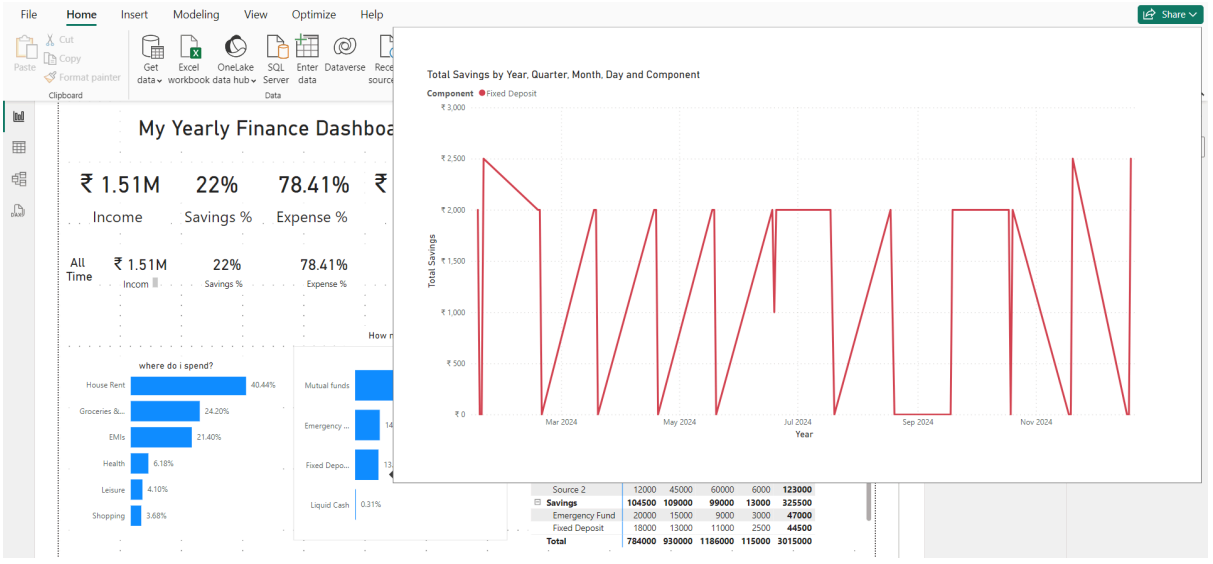


The above image here depicts about the finance analytics for the month january 2018.

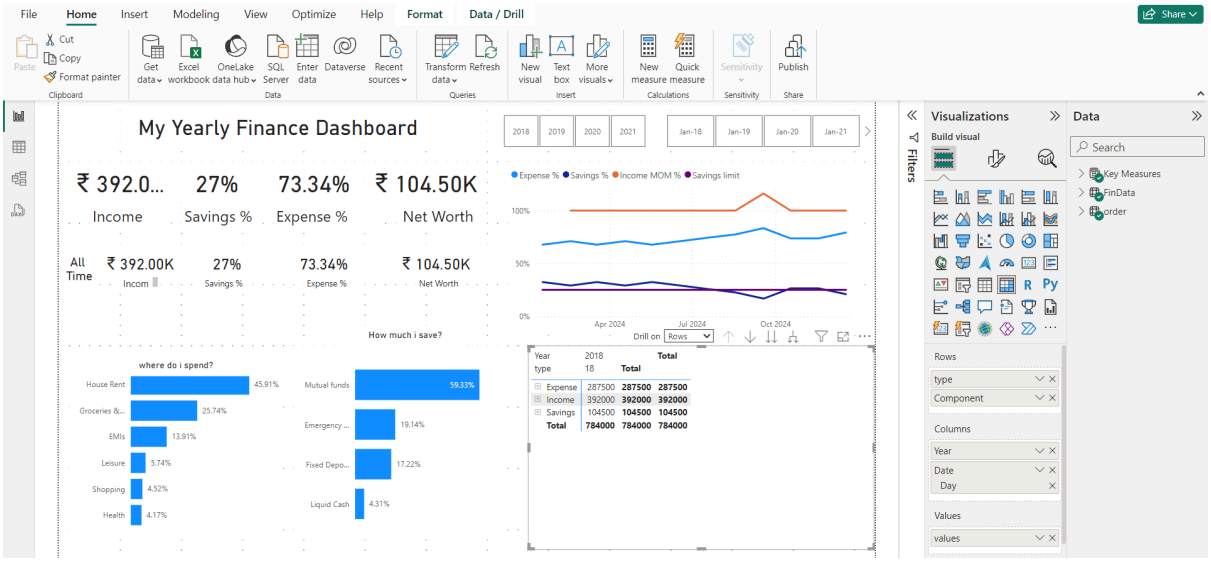
DATA ANALYSIS



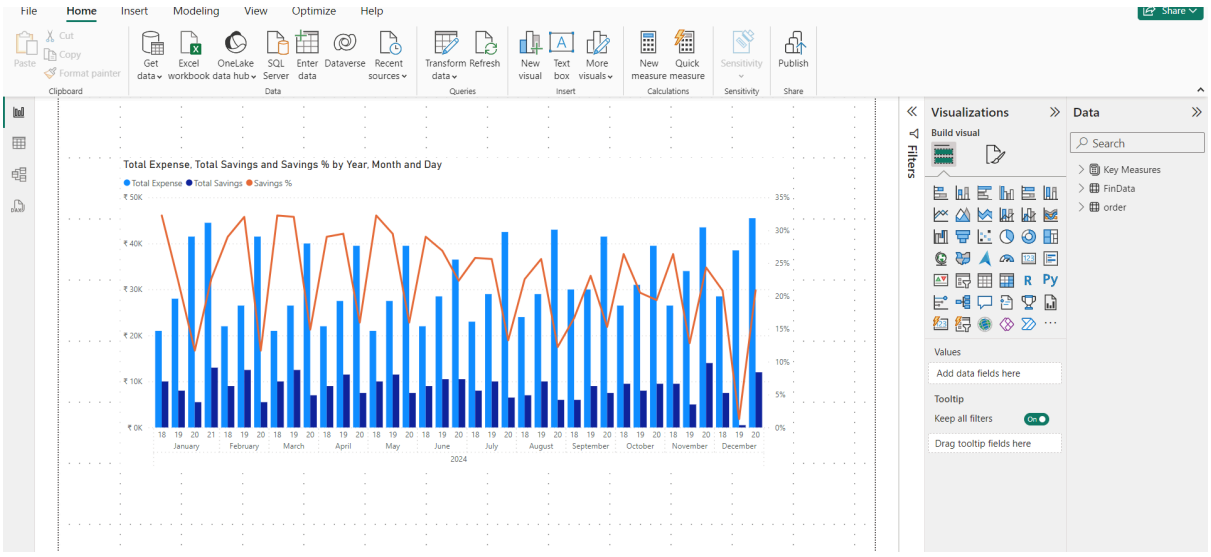
- The above image answers the question," where do I spend?"
- This particular feature is called the "Tooltip".
- In this image particular component,"house rent" against Date is visualized.
- Similarly rest of the components can be viewed.



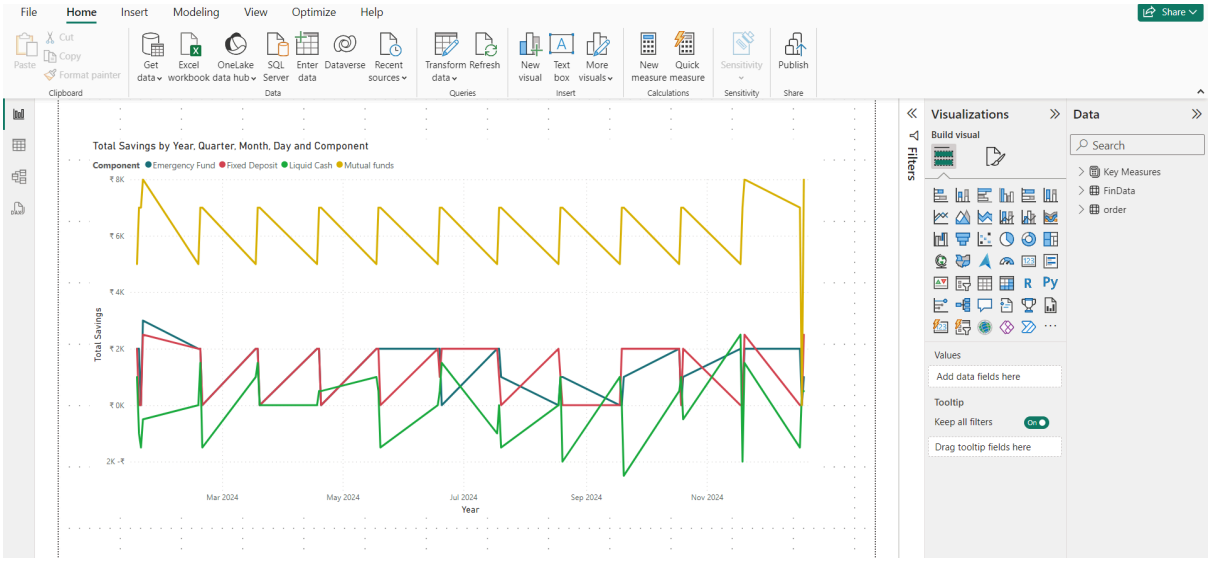
- The above image answers the question " how much I save?"
- In this image it depicts the fixed deposit against year,which is one of the components of savings.



- This visual shows the total savings by year,quarter,month, day and component.



- This particular image shows analytics for April 2020 in particular.By this we shall view by our requirements.



- This visual above shows total savings and expense by year,month,day.
- Adding to that,savings percentage is added to the visual to understand the savings trend of the user.

CONCLUSION

The development of this financial health dashboard marks a significant stride towards empowering individuals to take charge of their financial well-being. By providing a comprehensive overview of income, expenses, savings, and investments, along with interactive visualizations and customizable features, this dashboard equips users with the tools needed to make informed financial decisions. Through meticulous data collection, cleansing, preprocessing, and transformation, the dashboard ensures the accuracy and reliability of its insights, enabling users to identify spending patterns, set budget targets, and track progress towards financial goals. Beyond individual benefits, the dashboard's role in promoting broader financial literacy and stability within families and communities is noteworthy. Continued refinement and

enhancement promise to further support individuals on their journey towards financial empowerment and prosperity, ultimately contributing to a more secure financial future for all.