Business Report - Transactions by users using different banking methods
[N.B: To check the interactiveness of the created dashboard, please do import the .pbix file in the powerBI platform to check the live visualizations. Additionally check in the references section to go through the attachments.]

Objective

To create a dashboard of the transaction amounts analysis based on several parameters and services based on the provided dataset- 'Report Sheet', I have analyzed the transaction system data insights through key metrics analysis and applied DAX operations as advanced analysis to make data driven decisions.

Data Loading, Cleaning, Data Error Removing

The collected dataset has been imported into PowerBI Desktop Software, then for doing analysis, only the relevant and necessary columns have been taken, empty entries have been removed from the dataset. For doing the visualization, I have merged two columns to make one column named "Full Name", and removed the columns - Email, which was thought to be not important while making the dashboard.

Data Analysis

Calculated different columns for creating Dashboard and several visualization insights using bar chart, pie chart, card, gauge, slicers and added a new measure to calculate average transaction applying DAX operation. To check the interactive results it is guided to use the powerBI project [1] in powerBI software.

- In figure1 & 2, according to the different payment methods, through the bar chart I have shown the total transaction amount by date of transaction, the total age of the users and total transaction amount, therefore I used a card to show up the total and average transaction amounts via selecting different payment methods from the slicers. To calculate the average transaction applied DAX operation through the table existing in the dashboard as shown on the other figures labelled from 3 to 11.
- According to the dashboard, on the following figures from 3 to 11 here I clustered the dataset according to different locations, payment methods, service used, average of transaction amounts, total age of that group of users, and clustered the result based on different types of genders according to the dataset. I have used slicers to show the automated results. For different figures, different insights have been presented. The dashboard represents that it has clustered the users based on different parameters. Moreover, I have done basic analysis in python to make an EDA Report[3].
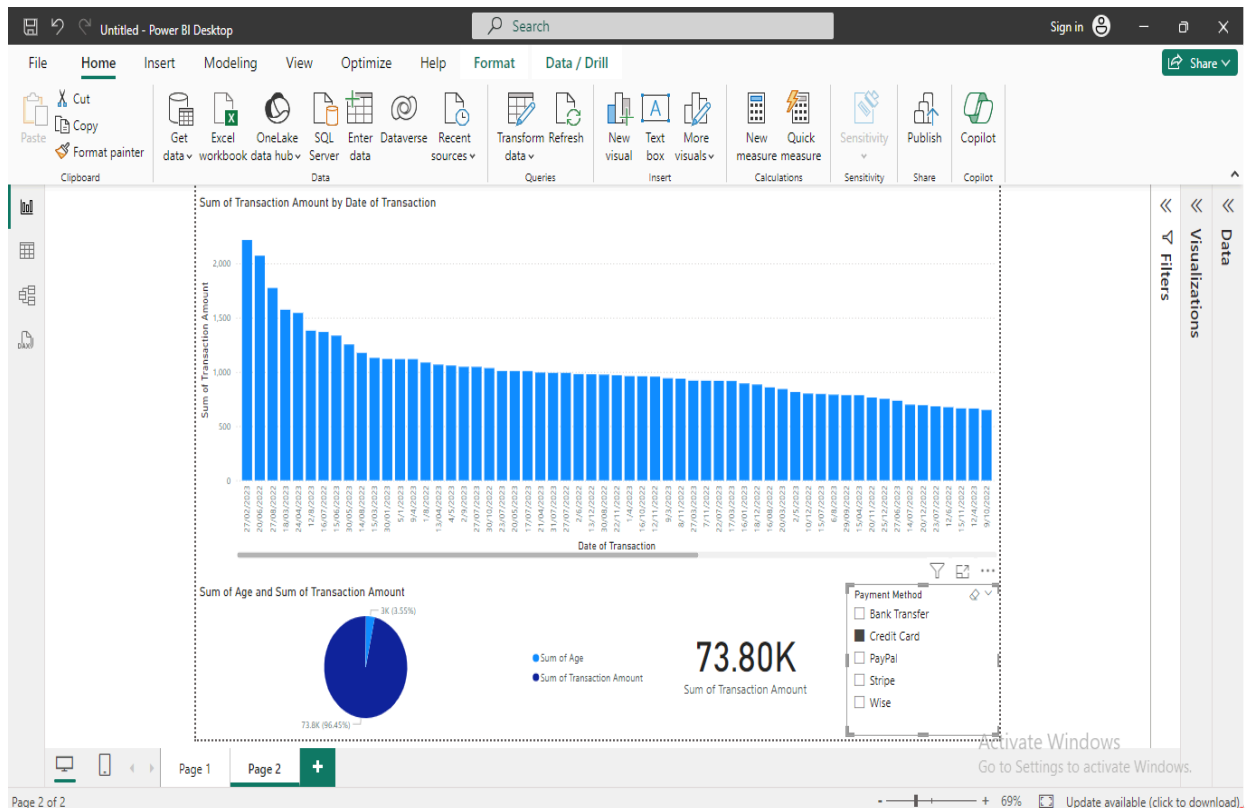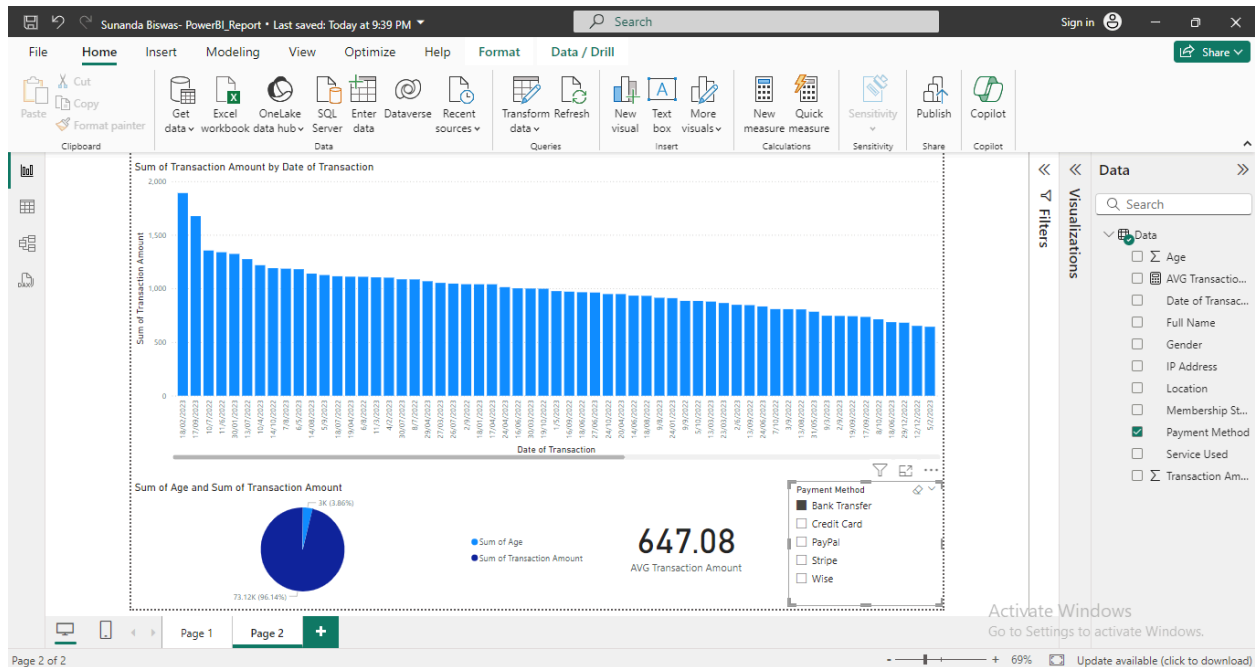
Figure 1

That shows Transactions by date and total age through barchart and pie chart, the card in the dashboard highlights the total transaction amount, and we can see different result using the slicer named payment method. For example, when choosing the users who uses the payment method, credit card, then the total transaction amount is 73.80K and the total age of all the users is 3K. Therefore, the barchart shows the transactions made by credit card users on several days.

Figure 2

That shows Transactions by date and total age through barchart and pie chart, the card in the dashboard highlights the average transaction amount, and we can see different result using the slicer named payment method. For example, when choosing the users who uses the payment method, credit card, then the total transaction amount is 647.08K and the total age of all the users is 3K. Therefore, the barchart shows the total transactions made by credit card users on several days. Here we can know the average transactions by the users, that change has been made in the dashboard than the figure1.

In the following figures from figure3 to figure10, through tvisualization report(Page1), I have created several selectors such as Payment methos, Service used, Membership status, Location, Gender and according to that we can see specific results via card, gauge and pie chart that resembles the total transaction amount, total transaction amount by different genders and total age of all the users who are using that particular payment system from different locations as well.
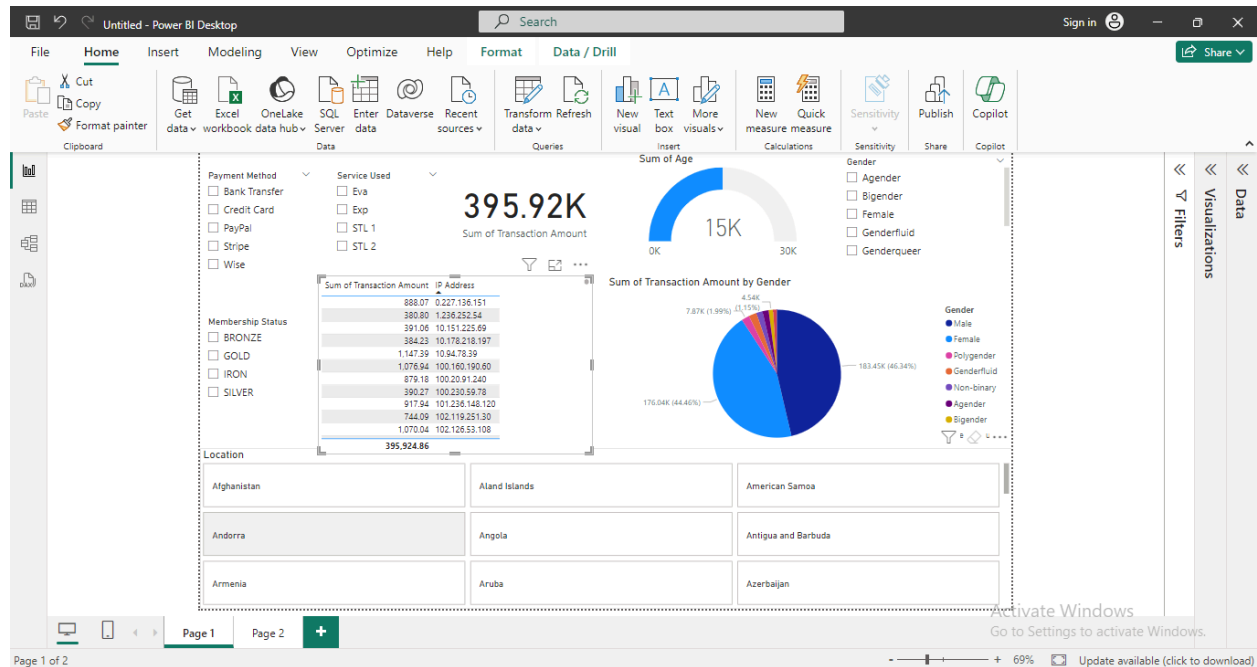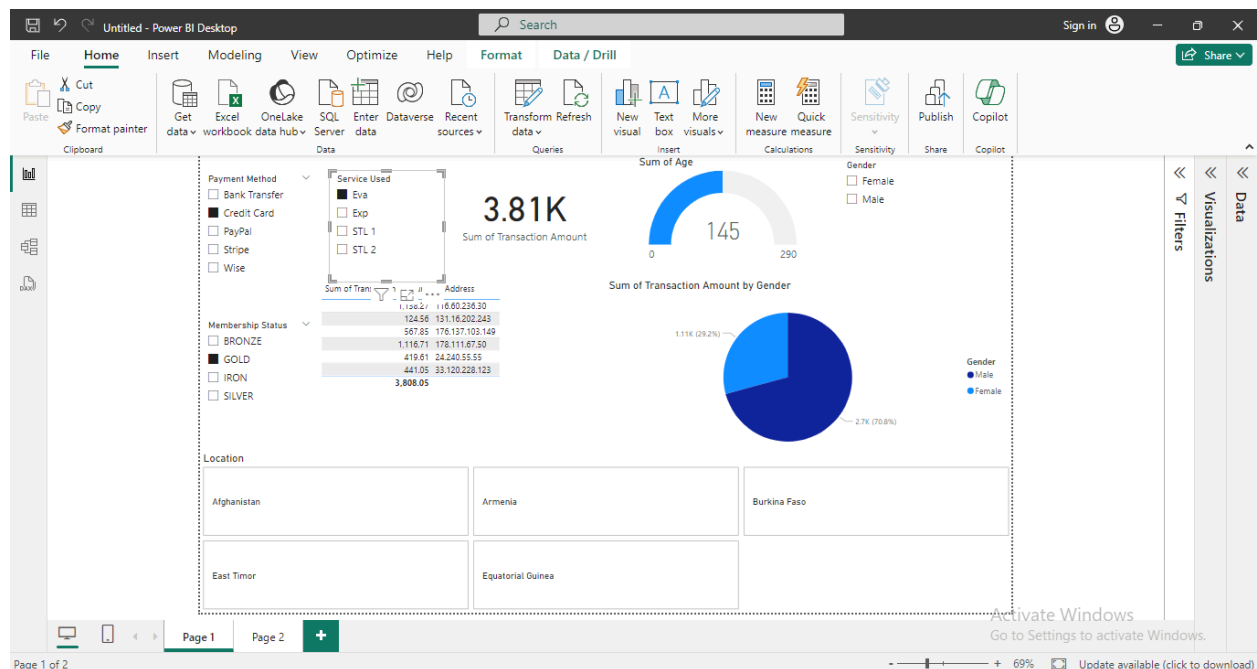
Figure 3

Figure 4

It(Figure 4) shows when the users using payment method credit card, they belong from GOLD members according to the membership status and they uses Eva service, then total transaction amount is 3.81K, total age of all users is 145 and total transaction of male users is 1.1K and female users is 2.7K.

Therefore, the location slicer shows up different locations available to choose see results more specifically.
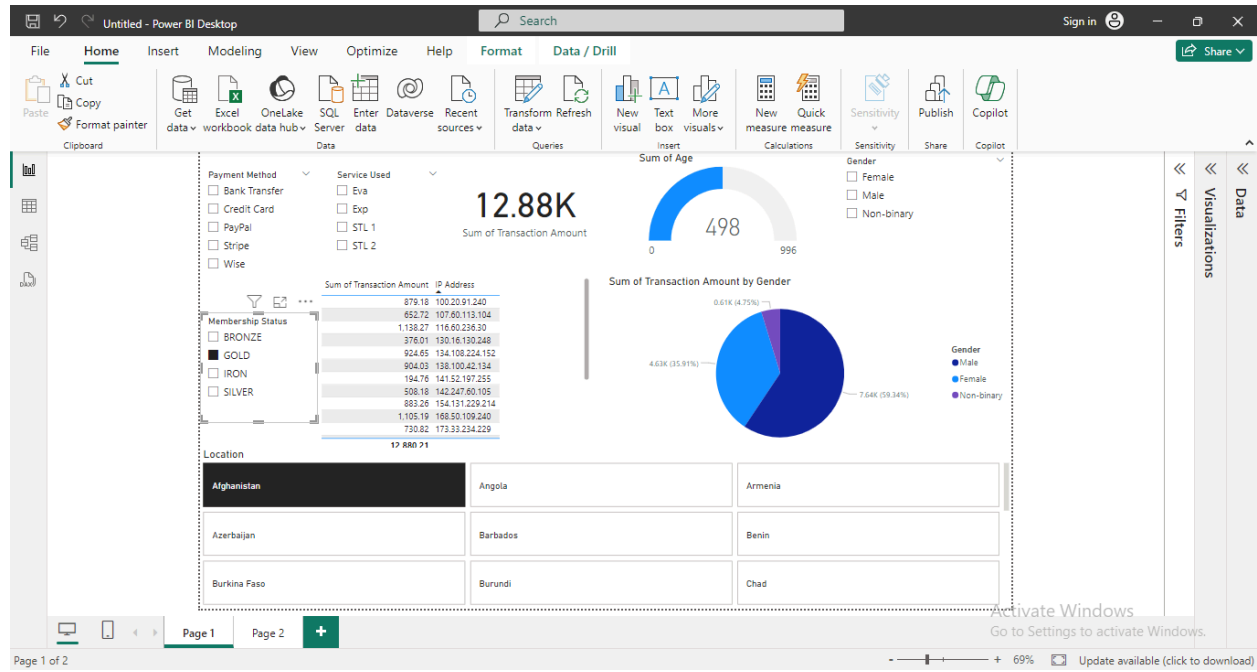

Figure 5

Figure 5 shows up the results for GOLD users located in Afganistan, their total transaction amount is 12.88K and total age 498. The total transaction of male users is 7.64K that is (59.34% of total users), female users is 4.63K(35.91%) and Non-binary users is 0.61K(4.75%).

Figure 6 & 7, in the same way as figure 5 shows up the transaction amounts of the users depending on the results for SILVER users and CREDIT Card users. Lastly, figure 8 - figure 11, it sums up the total transactions and average transactions based on location and payment status.
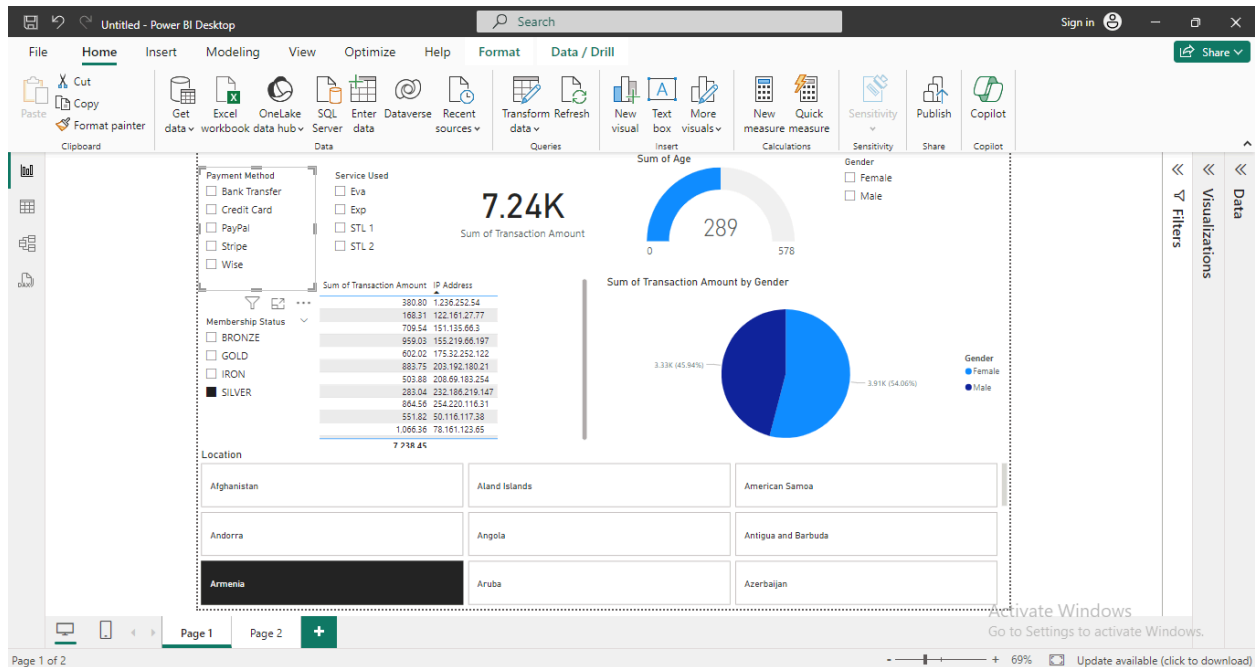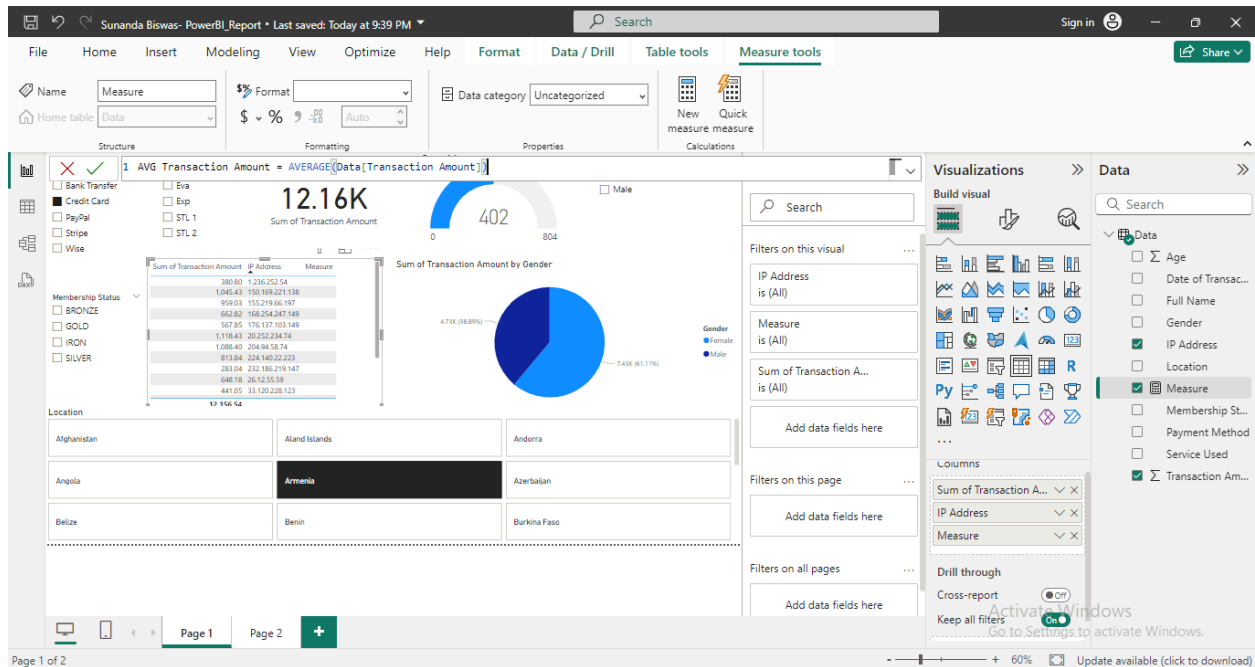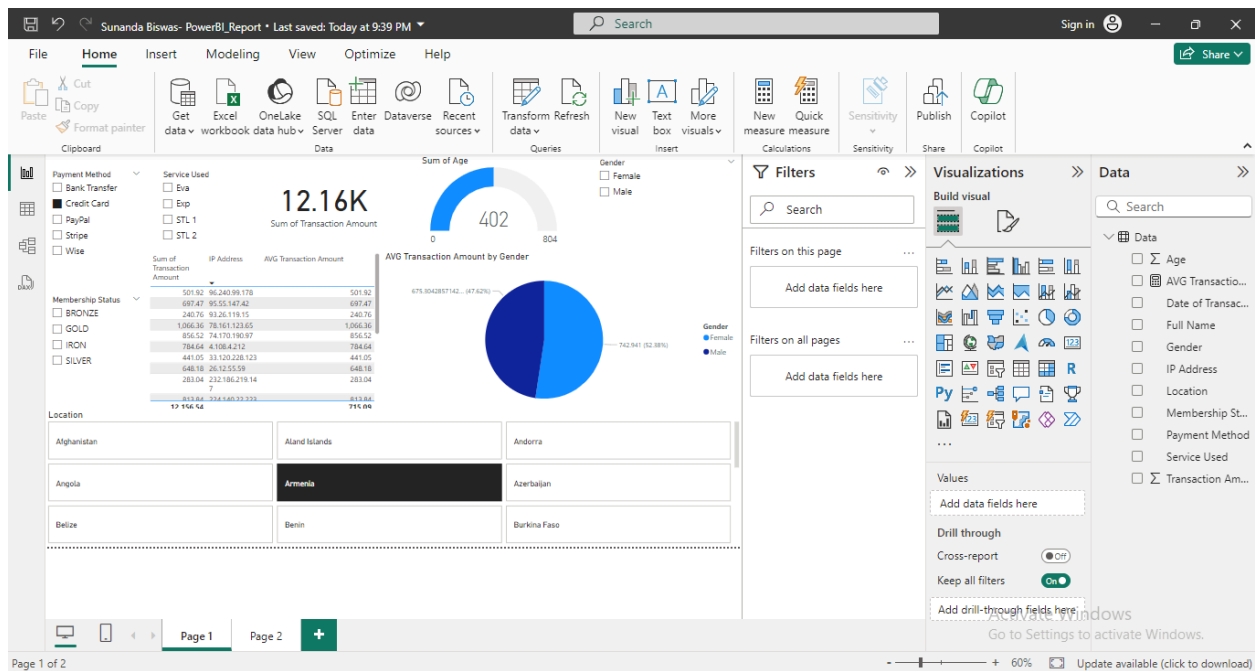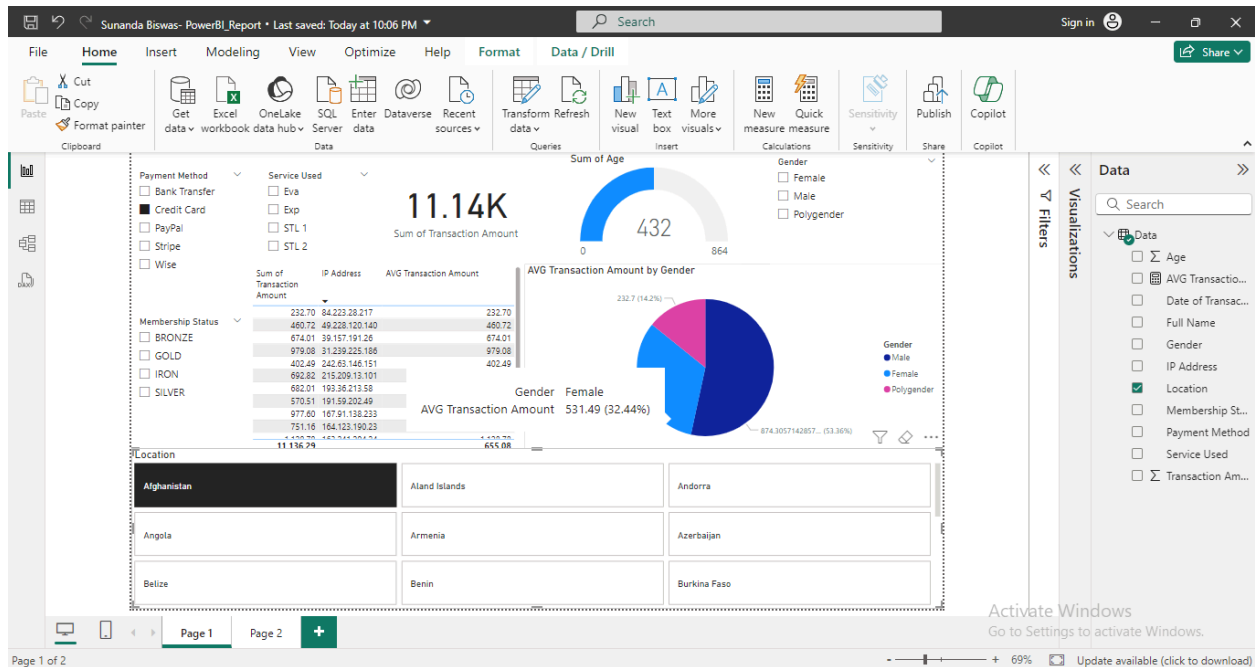
Figure 6

Figure 7

Figure 8

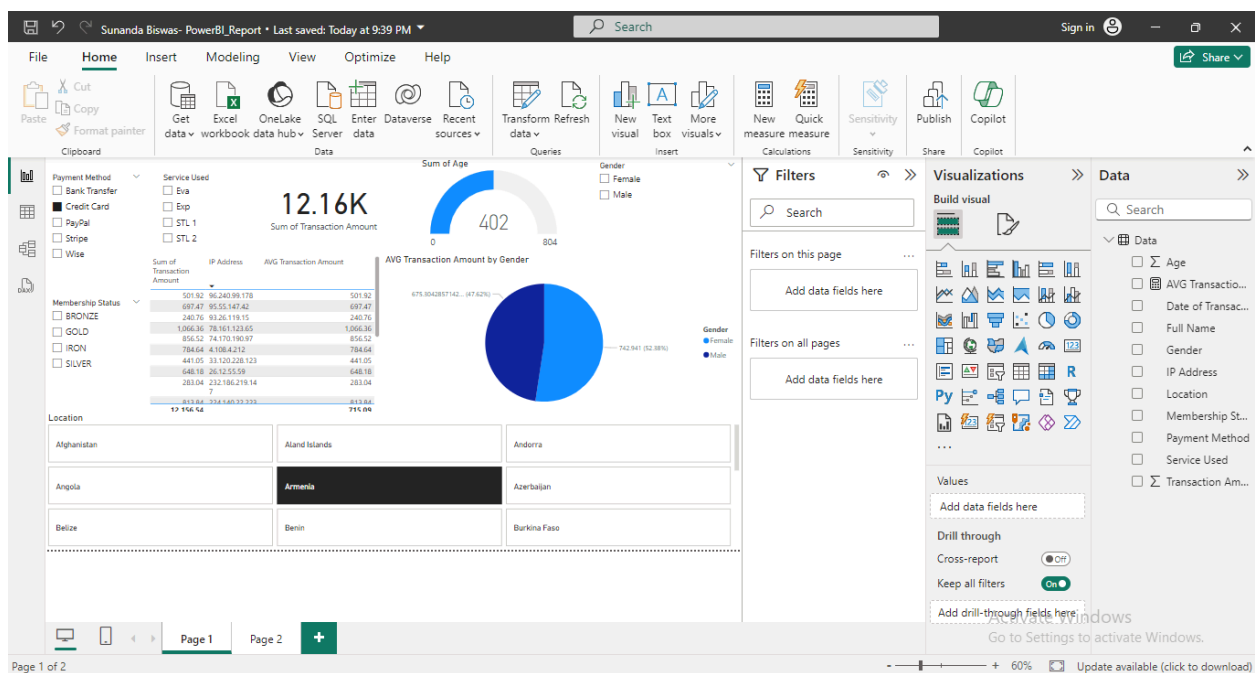Figure 9

Figure 10

Figure 11

References :

1. powerBI project: Sunanda Biswas- PowerBI_Report.pbix
2. Visualization report (only dashboards in pdf format): Sunanda Biswas- PowerBI_Report.pdf
3. Python EDA Report :   Sunanda Biswas- 01768235110.ipynb