Report 1

Exploratory Data Analysis

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The Data The dataset contains 12043 transactions for 100 customers. Transaction period is from 01/08/2018 - 31/10/2018 (92 days duration). For each record/row, information is complete for majority of columns. Some columns contain missing data (blank or NaN cells), which is likely due to the nature of transaction. It is also noticed that there is only 91 unique dates in the dataset, suggesting the transaction records for one day are missing (turned out to be 2018-08-16).

Key Findings :

- Mean transaction amount over the dates has ranged from 33.85 to 463.78.

- Male customers have spent more on their transactions over the dates, as compared to their female customers.

- States have widely distributed transaction over the dates ,but NSW (18.01%), VIC (17%) and QLD (0.12.9%)

- Total values of mean of customers bank accounts balance have been in August, September and august are the 2965 ,6708 and 267128.12 AUD over the months.

- Total values of maximum of customers bank accounts balance have been in August, September and august are the 262153.86 ,264519.11, and 267128.52 AUD over the months.

- Total values of minimum of customers bank accounts balance have been in August, September and august are the 0.24, 0.98 and 0.98 AUD over the months.

- Male customers have had a higher account balance than female customers, over the dates.

- Most of the customers of the bank have made more credit transactions, as compared to debit transactions.

- It can be found that from the day wise transaction the No. of transaction is high in the wed and Fri day followed by Thursday and Saturday.

- I also found that the as we go toward October the no. of transaction is also increases.

- I found that from graph of date_transacion that on the 17 & 28 more no of transaction happened.

- Making a word cloud of customer first name based on Transaction mean amount gives us the names having most spending are- Jonathan, Brian, Melissa, Kenneth, Cindy etc.

- The key findings, most spending is coming from the large cities of Australia and from some key states. The bank should look to expand its operations in these areas.

- Some customers also have tendency to spend more than others. Apart from that, the average bank balance of the customers has increased. It indicates that the bank customers are getting well financially.