



Exploratory Data Analysis



Of a synthesised ANZ transaction
dataset



Transaction Amounts

- **Mean** transaction amount:

\$187.93

- **Median** transaction amount:

\$29.00

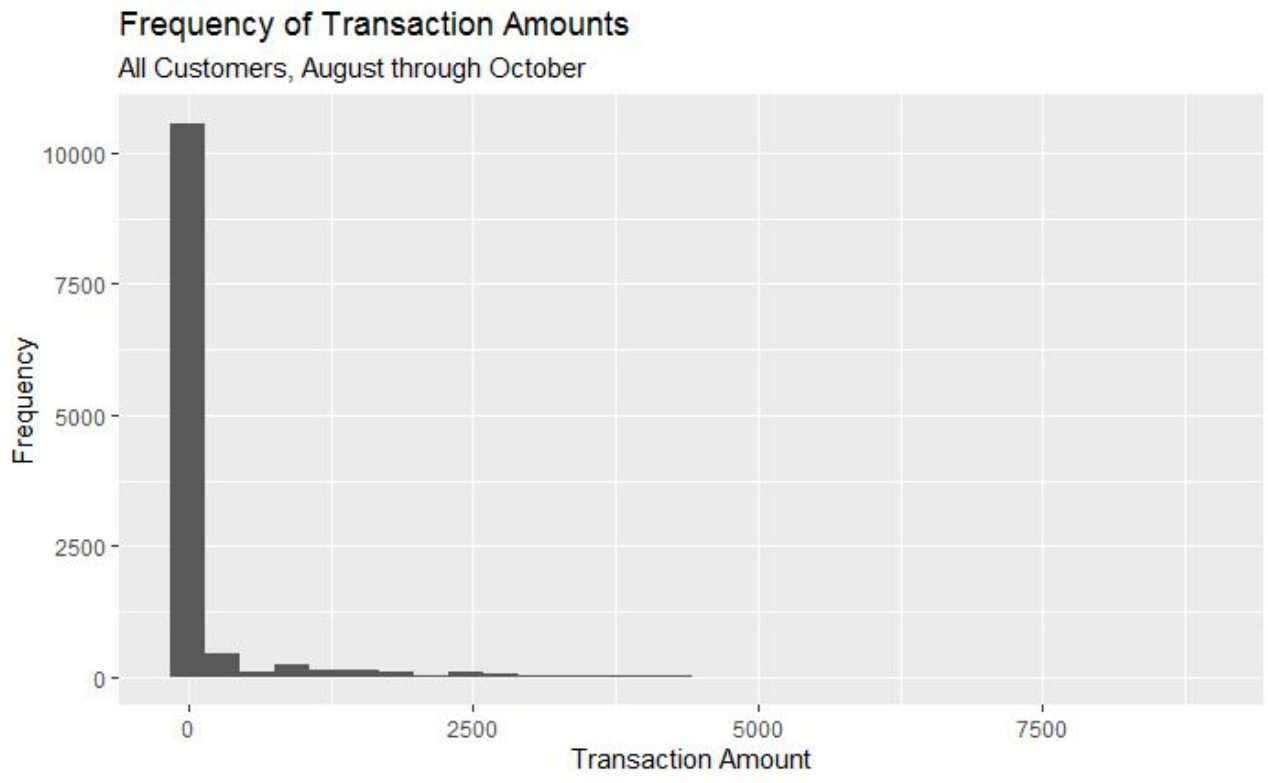
This suggests that there are **large outliers** **skewing the mean**.

- **Maximum:**

\$8835.98

- **Minimum:**

\$0.10



Very small transactions are the most frequent.

Weekly Transaction Volume

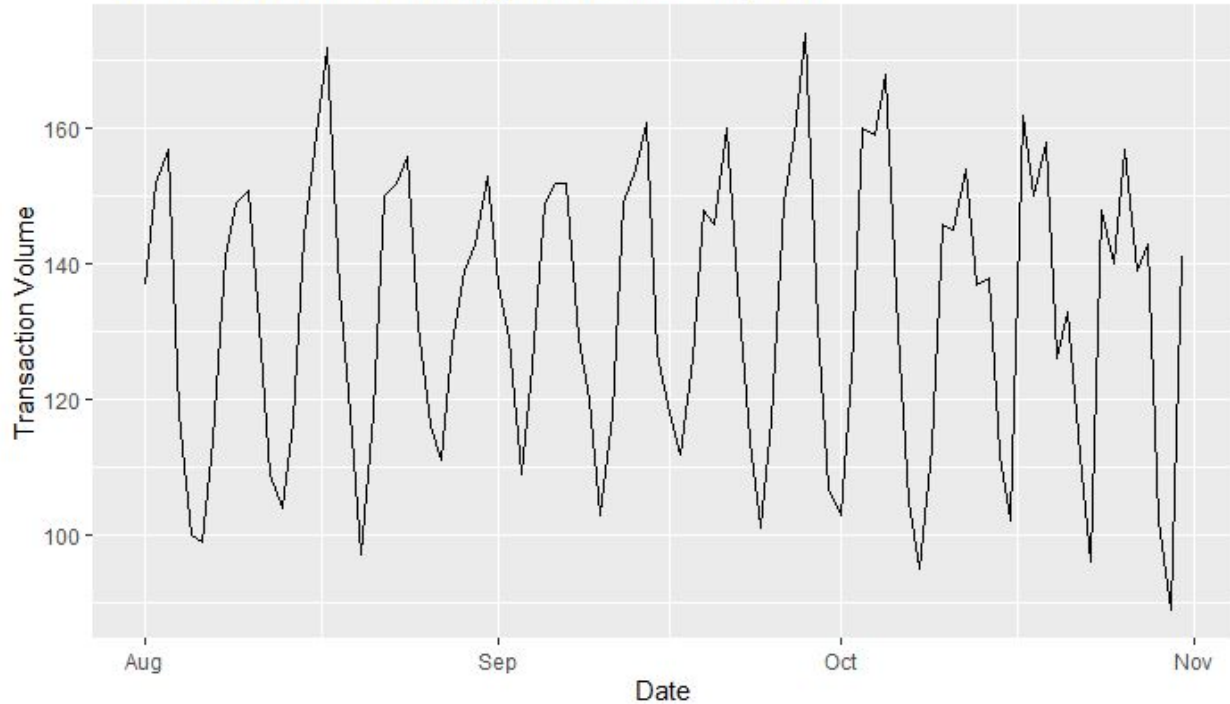
From August to October:

- There is a **cyclical pattern** of peaks and troughs.
- There are **four peak cycles per month**, one for each week.

Plotting Weekly:

- Transaction volume **starts low** at around 100 transactions on **Monday**
- **Rises daily** until a peak of around 150 **by Friday**
- **Drops** back to around 110 **by Sunday**

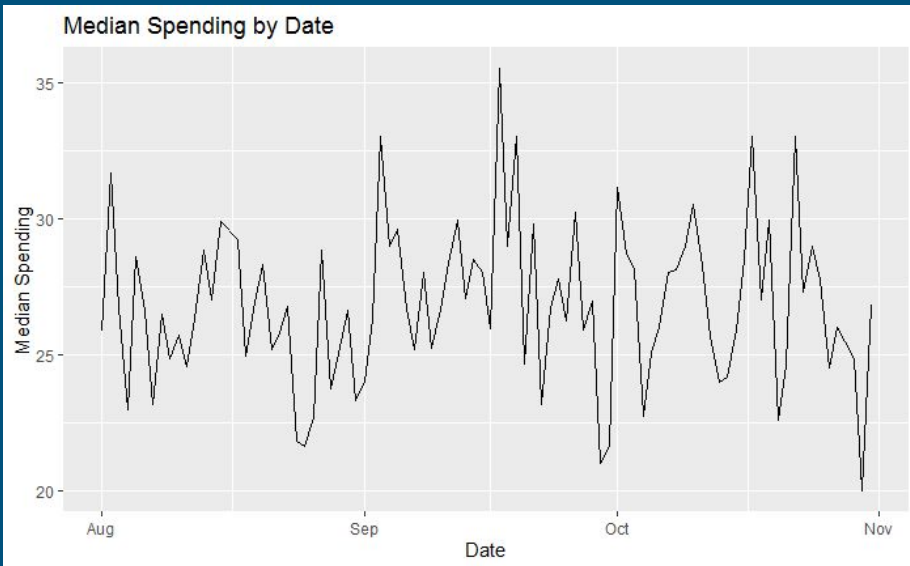
Transaction Volume from August to October by Date



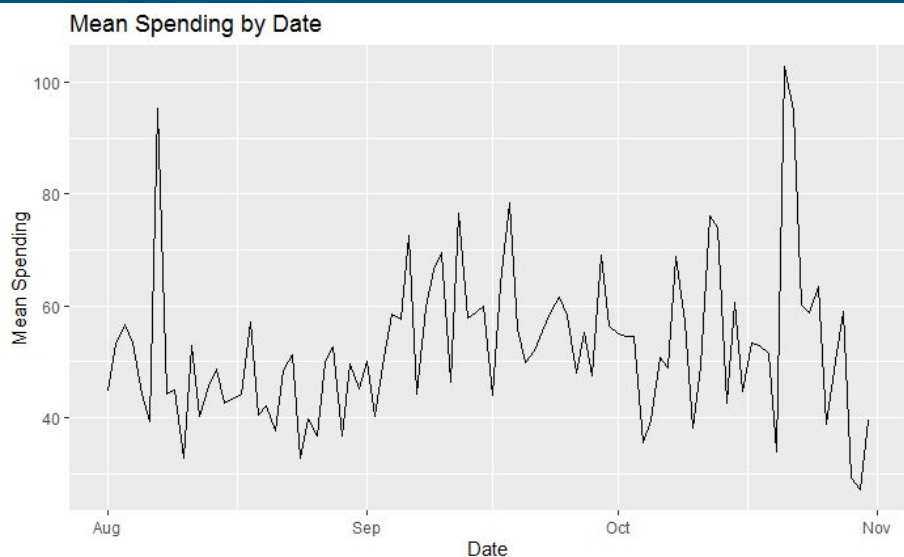
Transaction volume peaks around Friday each week.

Weekly Spending

Median daily spending looks fairly **stable**, fluctuating between around **\$20 and \$35**.



Mean daily spending looks a lot more **volatile**, ranging between around **\$10 and \$100**.



Large outliers are **skewing the mean**. There **do not appear to be regular cyclical patterns** in daily spending week by week, whether aggregated by mean or median.

Takeaways:

- Weekly volume is cyclical, peaking on Fridays
- Very small transactions are most frequent
- Rarer large transactions skew the mean.

Thanks!

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