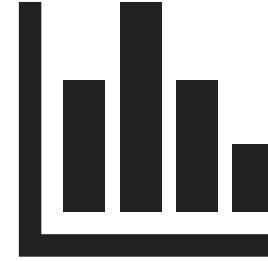


Local retails insight



Data analyst report

Presented by Joshua Kabwanga
28 Jan 2023

Objective from the stakeholder

The goal of this project is to uncover hidden trends within the dataset as requested by stakeholders. This project invites a creative approach, analytical precision, and keen attention to detail. It presents an opportunity to showcase my data analysis skills and demonstrate how I can contribute to generating valuable insights for the organization.

Description

The provided dataset delivers a comprehensive overview of transactional activities at major grocery retailers. It includes essential details such as transaction IDs, customer IDs, merchant information, transaction descriptions, dates, and transaction amounts. This dataset is key for analyzing patterns and trends to extract valuable insights.

Data cleaning and Transformation

I used Ms. Excel to clean and manipulate the dataset and tableau dashboard for visualization purpose, the dataset contains 69711 rows with 5 columns.

There was no duplicate and missing data found in the dataset.

For the purpose of this analysis, I added:

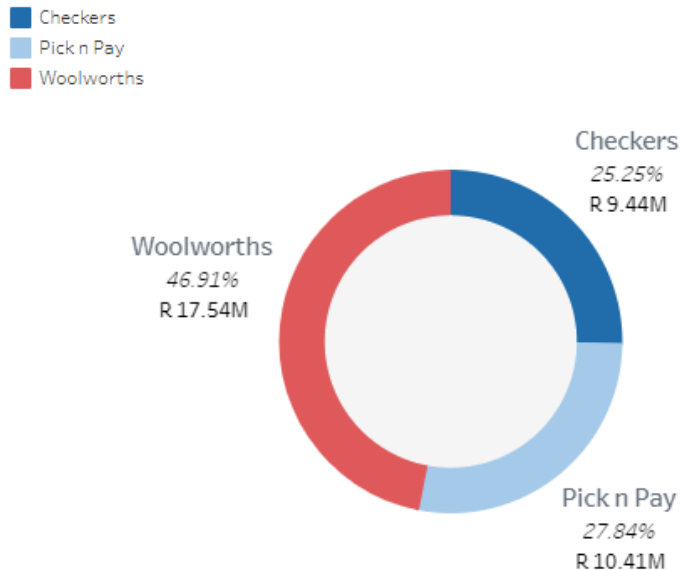
1. Monthly column which was extracted from the transaction Date.
2. Merchant column I was able to separate the three main merchant brand name into a columns:

Checkers Sixty60, Pick n Pay asap, Pick n Pay online, Woolworths Dash, Woolworths online.

Key Insight

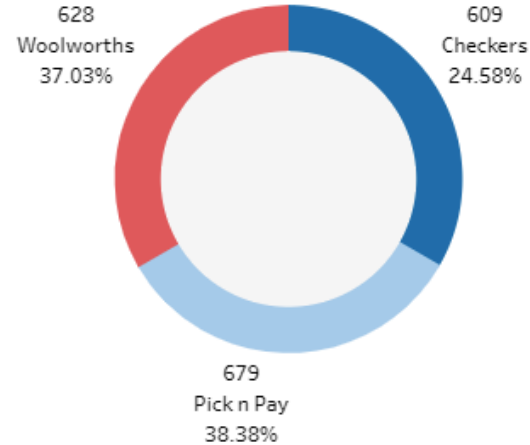
The dataset provided is over the period of 18 months, which started from January 2020 to Jun 2021, during the period mentioned there are 889 customers, 69 710 total number of transactions recorded in the dataset with R37 401 319 revenue from 3 different merchants as indicated in the pie chart.

The most profitable merchant is Woolworths with 46.19% of the sales followed by Pick n Pay with 29.29% compared to Checkers which is the least with 24.51% of revenue. That gives the difference between Woolworths and Checkers of 21.68%.

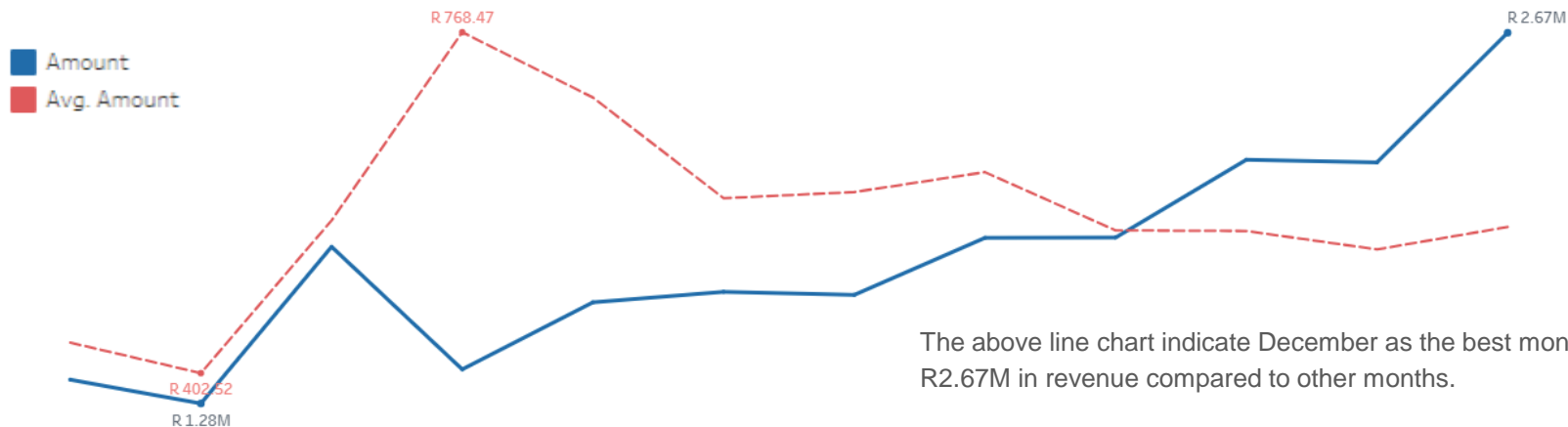


Customer distribution

Customer distribution over the period of 18 months. during the period mentioned there are Distinct 889 customers recorded in the dataset, Pick n Pay has 679(38%) follow by woolworths 628(37%) recorder, and Checkers dataset with **R37 401 319 revenue** from 3 different merchant.



2020 Key performance vs monthly sale



The above line chart indicate December as the best month sale R2.67M in revenue compared to other months.

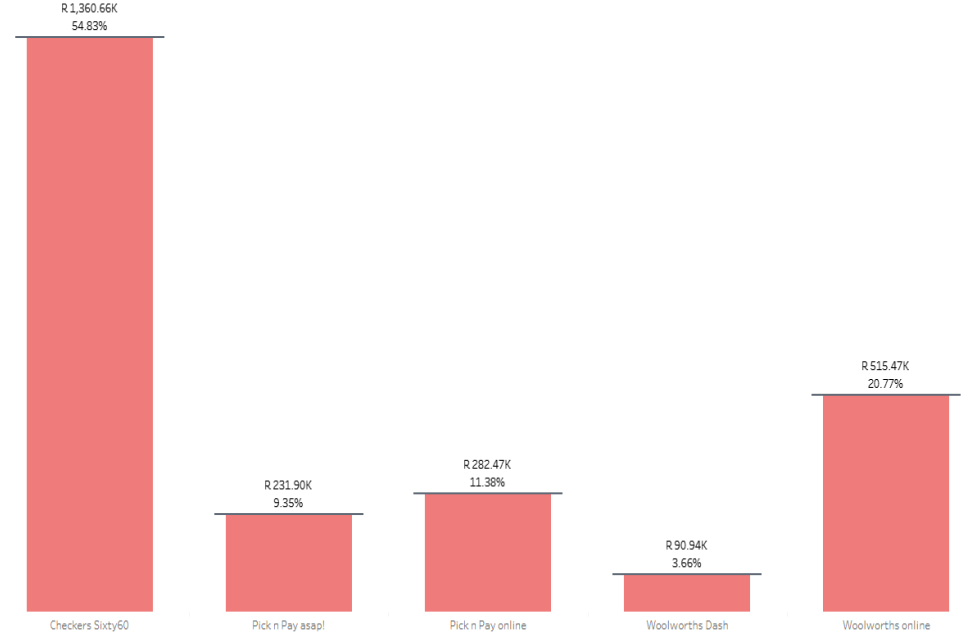
Average sales per month show April is the best month with R768.47

December is also known as a month when people receive bonuses when most companies close for the Christmas and New Year holidays and people spend money to celebrate.

January February March April May June July August September October November December

Total sale per sub merchant

Sub-merchant key performance
Checkers sixty60 is on the lead in marketing with **54.83% revenue** alone followed by **Woolworths online** with **20.77%**, then **Pick n Pay online** with **11.38%**. The less profitable is **Woolworths Dash** with **3.66%**



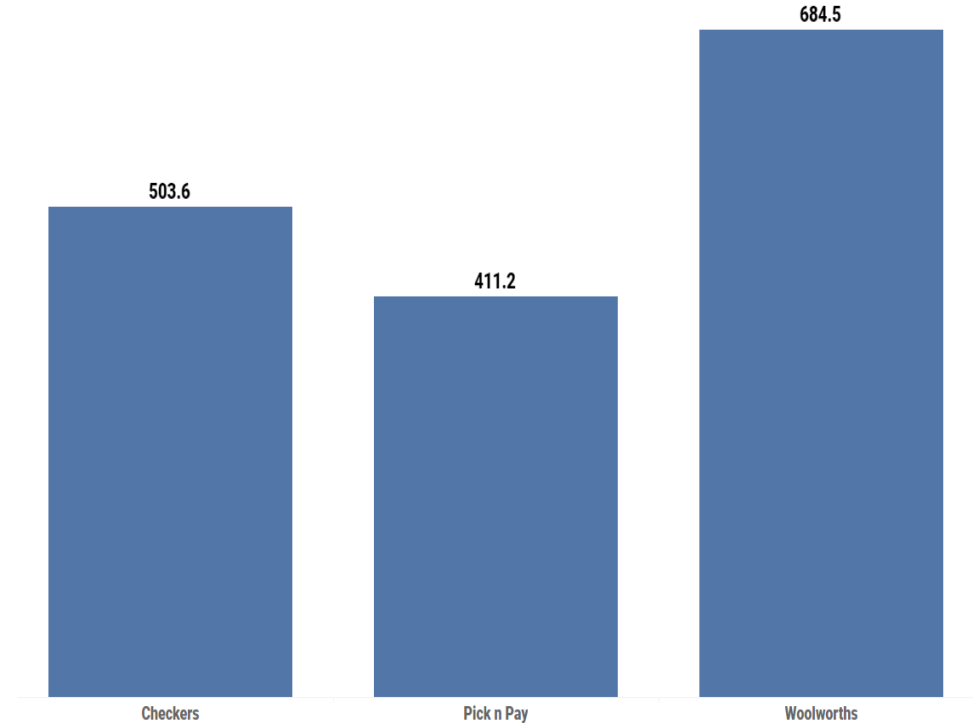
Average amount per Merchant

The term “Average” describes a value that should represent the sample.

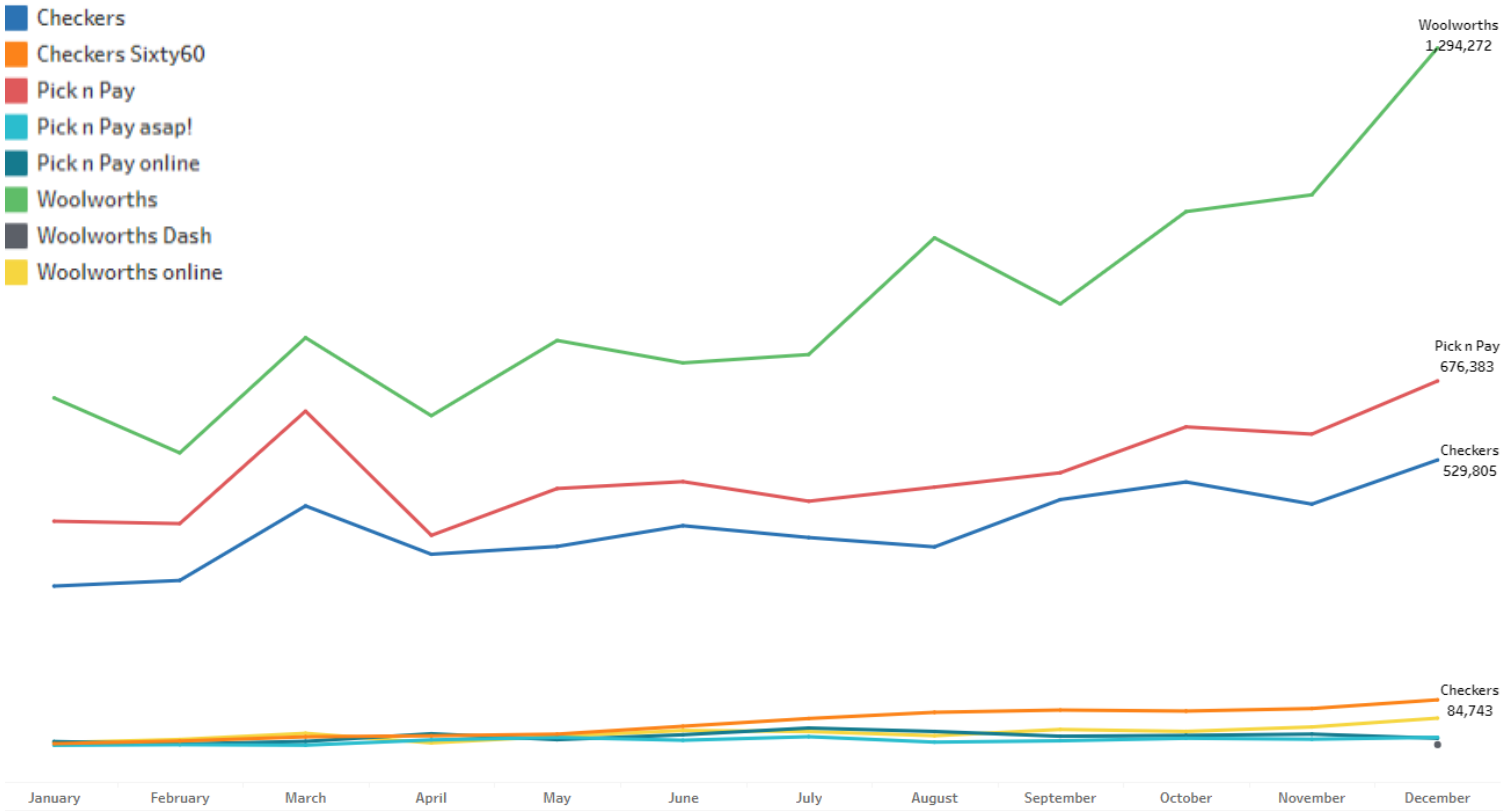
An average is defined as **the sum of all the values divided by the total number of values in a given set**. It is also known as the arithmetic mean.

After the above calculation **woolworths** has the highest amount average follow by **Checkers** then **Pick n Pay**.

With this we should now understand why woolworth has the most profit compare with the rest merchant.



Key Performance per month



Conclusion

1. Between the period of 18-month **Woolworths** is the most profitable brand with **46.91%** revenue compared to **Pick n Pay 29.29%** and **Checkers 27.27%**.
2. Customer distribution indicated that **Pick n Pay has 38.38%** customers compare follow by **Woolworth 37.03%**, but the average price showed the Woolworth products are high then pick n pay. This is the reason why Woolworth Brand is the leading market in revenue.
3. December is the most profitable month then other months.
4. According to the observation, the period of 18 months that the dataset was recorded which is from January 2020 to June 202, the 2021 seems to be the most profitable year compared to 2020. The reason being if calculate 2020 from January to June month the period of 6 month we have **9.30Millions (37%)**, compare 2021 from January to June the period of 6 months we have **15.57Millions(63%)** which gives the different of **26% margin**.

Thank you...