

Marketing Insights Dashboard

Project Handout

By: Imran Basha S



Marketing Insights Dashboard

With an increased emphasis on healthier and environmentally friendly choices, the demand for bicycles is on the rise. The dataset comprises around 1000 users and their corresponding background details, which may or may not influence their purchasing decisions.

The project aims to examine customer behaviour and demographics to gain a better understanding of market demand.

Microsoft Excel has been utilized for data cleaning, interpretation, and creating visualizations/dashboards.

The primary objective is to gain insights into customers' buying habits and various aspects of their lifestyle choices, which may aid in anticipating market potential for companies looking to enter this sector.

A simple dashboard has been constructed to visually represent the information, incorporating various filters to analyse data across different customer aspects. These marketing insights can be effectively utilized in sales forecasting efforts.

Dataset

The initial **raw dataset** comprises 1027 rows and 13 columns of data, with each user record assigned a unique ID. The data, provided in the form of an Excel file in the Data folder, can also be downloaded [Here](#).

Covering demographics, education, occupational details, and other lifestyle choices, the 13 columns of data hold potential insights into customer buying habits.



During the data cleaning process, 26 duplicate entries were identified and removed. Additionally, a column named “Age Group” was introduced to categorize customers based on age.

To enhance clarity and understanding, full terms such as "Single" and "Married" were used instead of abbreviations like "S" and "M". Extensive data preprocessing was conducted to ensure accuracy and uniformity in the data format.

The cleaned dataset, now comprising 1000 rows and 14 columns, is also available as an Excel file in the data folder.

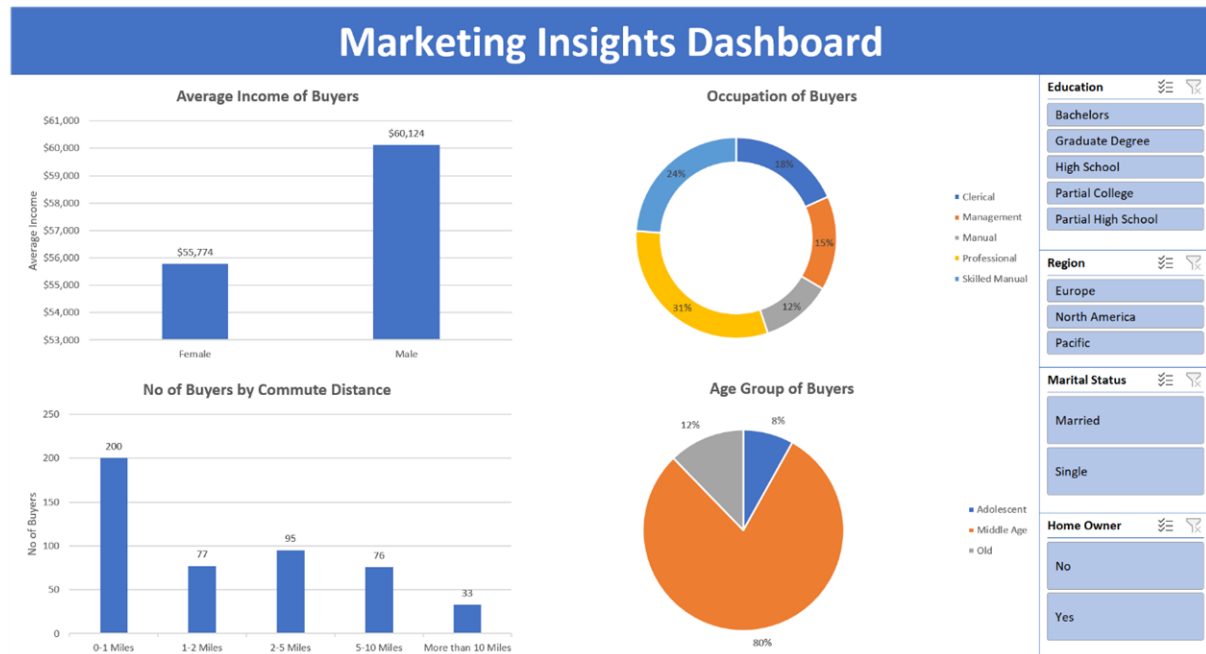
Approach

The points below outline the approach adopted in this project:

1. Two additional sheets were added for "Pivot Chart & Dashboard".
2. Duplicate values were eliminated, and abbreviations were substituted with full terms. Additionally, a column named “Age Group” was introduced.
3. Extensive data preprocessing was conducted to ensure accuracy and uniformity in the data format.
4. Microsoft Excel was employed for data cleaning, preprocessing, and creating all visualizations and the dashboard.
5. A variety of visualization types, including bar charts, column charts, pie charts, and doughnut charts, were utilized to develop a comprehensive dashboard.
6. The dashboard design embodies an executive and formal theme.



Sample Dashboard



Summary

The dashboard presents the average income, occupation, and age group of buyers, as well as the number of buyers and their commute distance. These visualizations can be further filtered based on education, region, marital status, and home-owning status, allowing stakeholders to delve deeply into specific aspects of customer behaviour.

For example, bachelor's degree holders have an average income of \$59,326 for males and \$61,625 for females. Additionally, 84% of these buyers are middle-aged, most of whom have professional occupations and live within a commute distance of 0–1 mile.



Conclusion

The dashboard provides a comprehensive visual representation of the required information, allowing for filtering based on specific aspects of customer behaviour.

As demonstrated in the summary, a multitude of insights tailored to the need can be derived, facilitating a thorough understanding of the market and aiding in sales forecasting.

This capability enables companies to assess the market potential before making investments, contributing to informed decision-making and strategic planning.

