

# MOHKART E-COMMERCE

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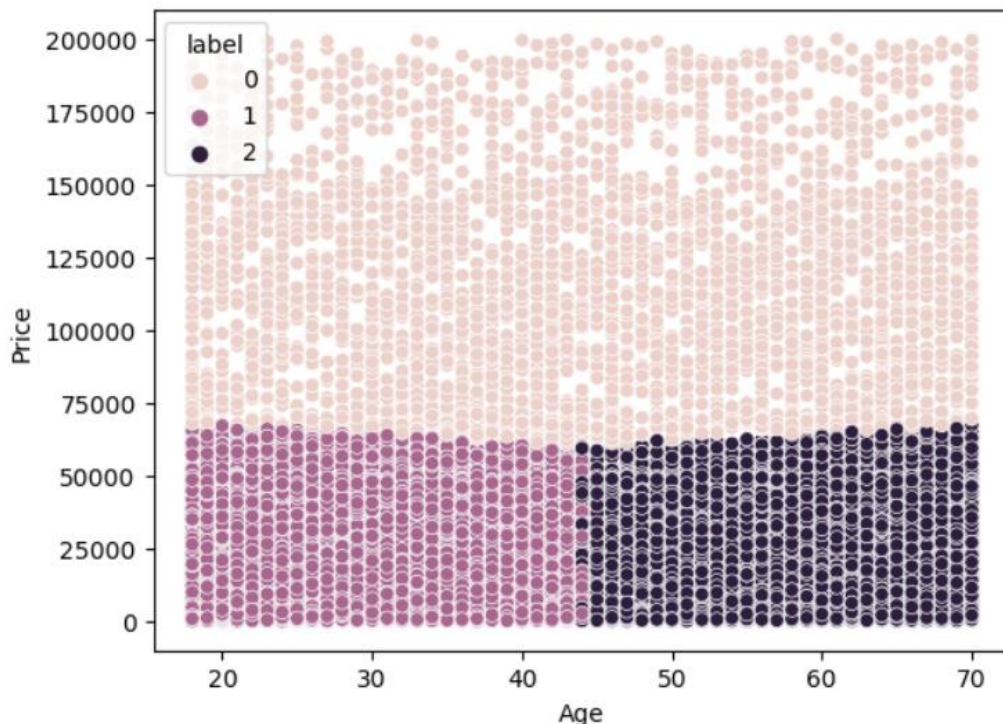
## 1. Overview

Mohkart is a leading E-Commerce player. The insights provided in this document would be helpful in preparing customer specific strategies to optimize their operations and marketing campaigns.

## 2. Customer Profiling

Appropriate clustering methods were used for customer segmentation, KMeans algorithm was used for getting the insights about the segmentation. And a scatterplot was drawn between Price and Age to show the customer segmentation.

### ***Clustering Visualization – Using KMeans and number of clusters as 3***



**FOR PYTHON CODES PLEASE REFER TO THE NOTEBOOK ATTACHED**

## **Cluster 1**

People between the ages 20 to 45 who purchase items of lower cost.

## **Cluster 2**

People between the ages 45 to 70 who purchase items of lower cost.

## **Cluster 3**

People of all the ages who purchase the items that are of the higher cost.

***From the three identified clusters, Cluster 3 emerges as the most profitable segment, warranting our highest attention. This group shows a propensity for luxury purchases, suggesting that they may respond well to premium product offerings and personalized customer support.***

***Cluster 1, comprising younger individuals (aged 20 to 45) who tend to purchase lower-cost items, should be our secondary focus. This demographic is often receptive to promotions, discounts, and offers tailored to their preferences, presenting an opportunity for targeted marketing strategies.***

***In contrast, Cluster 2, consisting of older individuals (aged 45 to 70) who also purchase lower-cost items, may require less emphasis in our marketing efforts. While still valuable, their buying behaviour suggests a different approach, perhaps focusing on loyalty programs or product bundles that cater to their needs.***

***By strategically targeting each cluster based on their unique characteristics, we can maximize our marketing efforts and drive profitability across the board.***

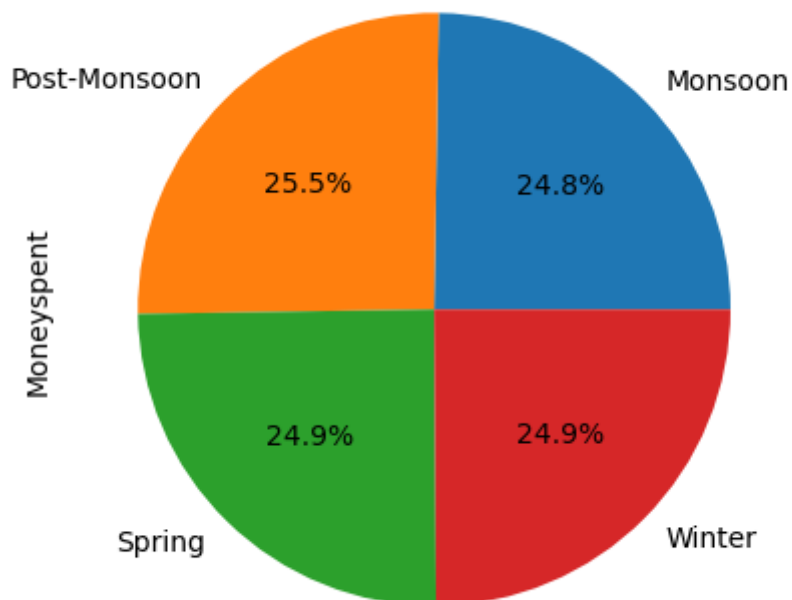
### **3. Insights**

Spending Habits of different Customer Segments.

#### **Spending habits based on seasons**

By using the dates provided we can categorize them using Feature Engineering into different seasons and based on this we can find how the people's spending habits vary from season to season.

***Pie chart – Seasons vs Money spent***



***Mohkart's stable average spending across seasons indicates a consistent sales performance throughout the year. To further enhance revenue, the company can strategically focus on boosting sales during peak festive periods like New Year and Christmas. Introducing targeted discounts and promotions during these seasons can attract a larger customer base, stimulate purchase intent, and ultimately drive higher sales volumes.***

## Spending habits based on different Regions

The people's spending habits depends on the regions where they are from.

### *Average sales city wise*

```
City
Lucknow      74447.565671
Allahabad    74303.494050
Ahmedabad    74207.195348
Mysore       73734.409122
Hyderabad    73540.630927
Surat        73183.981024
Bareilly     72593.013213
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```

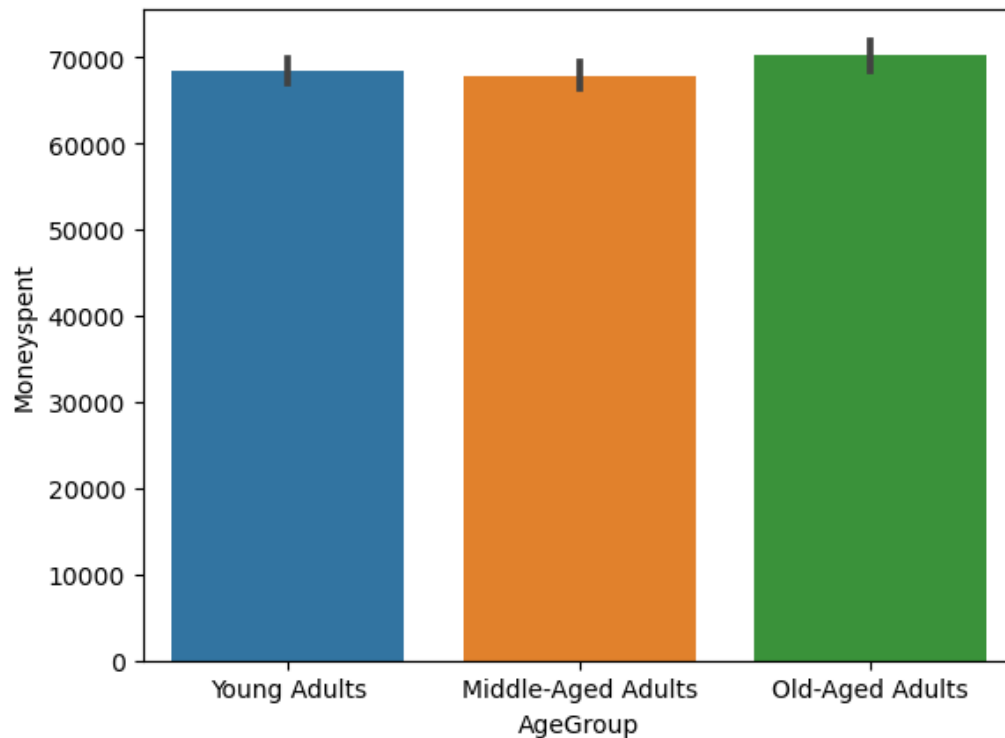
***To broaden its reach, Mohkart should not only maintain its strong presence in top-tier cities but also target developing cities. This can be achieved through strategic marketing campaigns, tailored promotions, and increased engagement on social media platforms. By analyzing customer preferences and adapting its product offerings accordingly, Mohkart can effectively cater to the diverse needs of these markets. Collaborating with local businesses can also be beneficial in driving sales growth and establishing a strong foothold in these regions.***

## Spending habits based on age group

The average sales vary between the different age groups.

Feature Engineering was done to gain more insights.

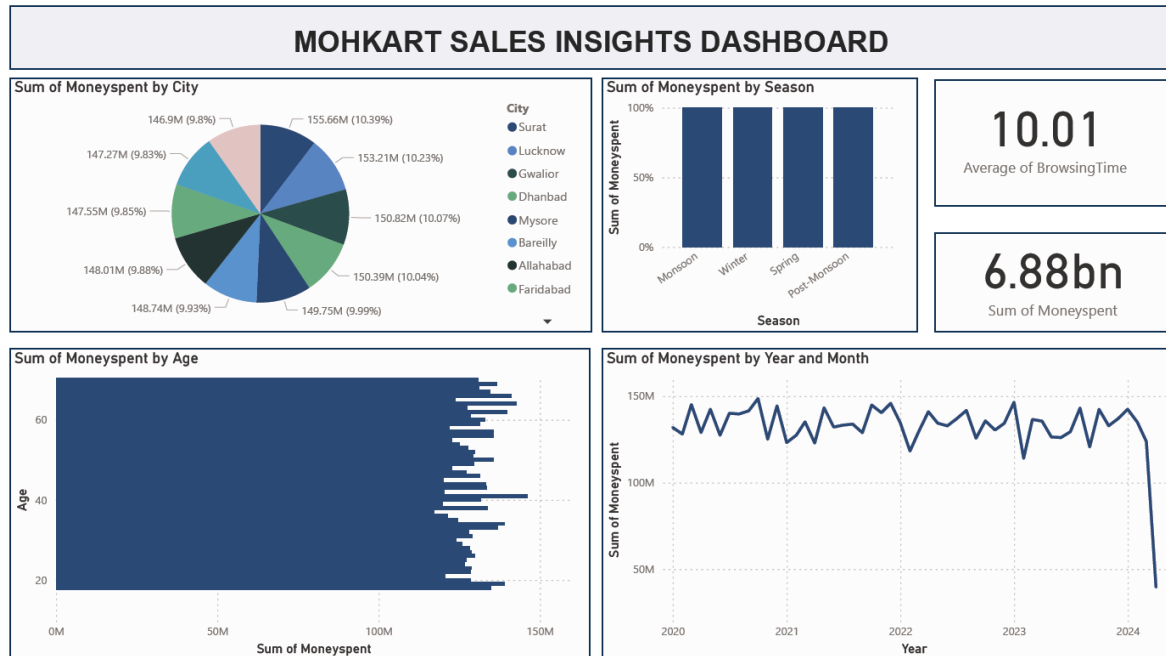
*Average sales age wise*



***Old-aged adults have the highest average spending, followed by young adults and then middle-aged adults. This suggests that targeting marketing efforts towards older customers could yield higher returns. However, engaging with young adults and middle-aged adults should not be neglected, as they also contribute significantly to sales. Adjusting product offerings and promotions to cater to these different age groups can help maximize sales and customer engagement.***

## 4. STORY TELLING AND VISUALIZATION

*Visualization and report creation using Power BI*



- ***With an average browsing time of approximately 10.01 minutes, customers are actively engaging with Mohkart's offerings. This level of engagement has translated into a substantial total spend of 6.88 billion, indicating a strong market presence and potential for further growth.***
- ***From the above pie chart, we can observe that the total sum of money spent in each city is relatively similar, indicating a balanced distribution of sales across cities. However, Mohkart should focus on enhancing sales in tier 1 cities to capitalize on their higher potential for revenue generation. Implementing targeted marketing campaigns, offering city-specific promotions, and improving product availability and***

***delivery services in tier 1 cities can help Mohkart boost sales and expand its customer base.***

- ***Mohkart's consistent spending patterns across different seasons reflect a steady sales performance year-round. To amplify revenue streams, Mohkart could strategically elevate its sales initiatives during peak festive seasons such as New Year and Christmas. Implementing focused promotional strategies and tailored discounts during these periods has the potential to allure a wider customer base, ignite purchase enthusiasm, and ultimately elevate sales figures significantly.***
- ***The line chart indicates a decline in market performance in the second half of 2024, posing a significant concern for Mohkart as this trend could potentially impact their sales in the upcoming years. It is crucial for Mohkart to analyse the underlying factors contributing to this decline and implement strategies to mitigate its impact***
- ***Mohkart's active customer engagement, reflected in an average browsing time of 10.01 minutes, has translated into a substantial total spend of 6.88 billion. While the sales distribution across cities appears balanced, focusing on tier 1 cities could enhance revenue. Despite consistent sales performance throughout the year, a decline in market performance in the second half of 2024 signals the need for strategic analysis and corrective measures.***