Zomato Customer Segmentation & Behavioral Analysis

Business Intelligence Analytics Final Project



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Objective of the Analysis

About Zomato

Zomato is a global food delivery and restaurant discovery platform users across multiple countries.

Business Question

Who are Zomato's customers are, how do they behave, and how can they can be segmented to uncover insights that drive revenue and strategic decision-making?



Methodology

Data Used: orders.csv, users.csv

Tools: Tableau Public

Approach:

We used RFM Segmentation, a method that scores each customer on:

- Recency how recently they ordered
- Frequency how often they order
- Monetary value how much they spend

Each user received a **score from 1-5** in each category, where **555** indicates the most active and valuable customers, and **111** indicates the least. This allowed us to identify high-value customers for retention, and lower-engagement customers for reactivation.

KPI Overview:

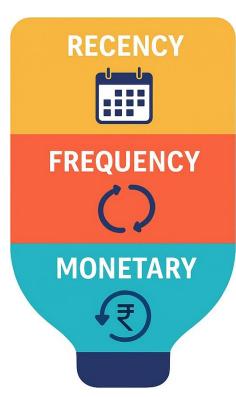
Built **KPI tiles** for revenue, customer count, and average order value to provide a quick performance snapshot.

Joins & Data Model:

Applied a **left join** in Tableau linking users.csv to orders.csv to include only customers with at least one order.

Data Cleaning:

- Removed small number of USD orders for currency consistency.
- Fixed duplicate "INR" entries caused by trailing spaces.
- Corrected occupation field typo ("self-employeed" -> "self-employed").



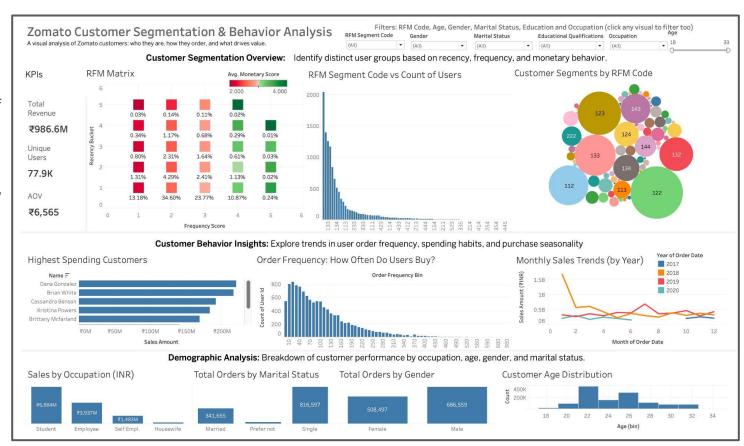
Dashboard Overview

KPI Metrics:

Displays Totals, Customer Count, and Average Order Value for a quick snapshot of business performance

Interactive Filters:

Filter results by Age, Gender, Marital Status, Education, Occupation, and RFM Score for targeted insights



Segmentation Insights

Key patterns from RFM Matrix and Segment Distribution

- Most Common Segment: RFM 122
 Represents customers who purchase somewhat recently and somewhat frequently, but spend less; a high volume, low value segment ideal for low-cost promotions or loyalty nudges.
- Other Prominent Segments:

 123, 133, 112, and 132. All reflect varying balances of moderate recency/frequency, but generally low monetary scores. These groups could benefit from upselling campaigns or bundling strategies.
- Rare High-Value Customers: RFM 544
 Very few customers fall into high-spend, high-recency segments.
 These are prime targets for VIP offers, retention offers, or referral incentives.
- Opportunity Segments: (e.g. 143, 134, 144)
 Customers with moderate to high frequency and recency, but medium spending. These users may be nudged towards higher-value orders with targeted incentives or premium upgrades.
 - Future scope: Model the impact on revenue if a small portion (5-10%) of this segment increases their AOV through targeted campaigns

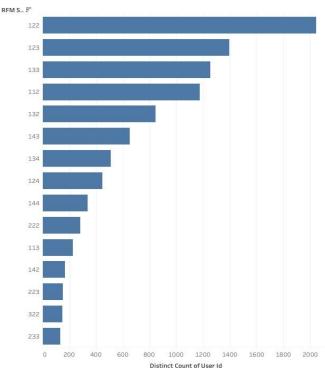
RFM Matrix



RFM Segment Composition & Volume

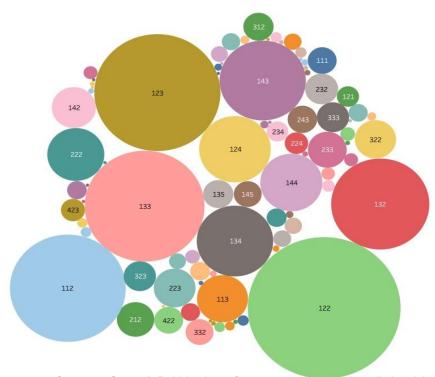
Top 15 segments by user count and their relative distribution by RFM Code

Top 15 RFM Segments by User Count



- Dominant Segments: RFM groups 122 to 132 comprise the majority of users, marked by mid-level recency/frequency and lower monetary value.
- Filtered View: Displaying the top 15 segments illustrates a skewed distribution toward low-to-mid value users.

Visualizing Customer Segments by RFM Code



- Segment Spread: Bubble size reflects user volume; colors distinguish RFM codes across clusters.
- User Base Shape: The visual reveals a fragmented distribution, with concentration in lower-value segments and fewer users in high-RFM areas.

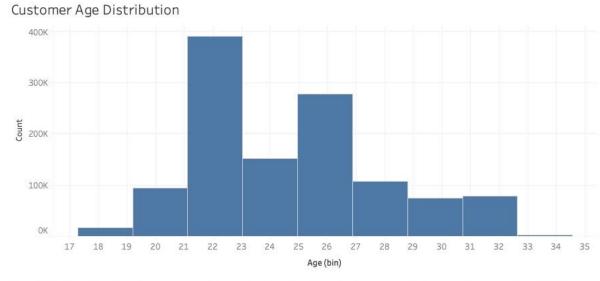
Customer Behavior Insights

- Sales Trends by Year: Sales peaked in January 2018 and declined through 2020, with no strong seasonal pattern.
 Notable Anomaly: A small spike appears in July 2019. This could be linked to a marketing push, seasonal holiday, or product launch further investigation could clarify the driver and inform future promotional timing.
- Order Frequency: Most users are low-frequency buyers (20-30 orders); a smaller group of loyal users drives long-tail activity.
- Top Spending Customers: Revenue is concentrated among a small, high-value group. These users fall into RFM codes 135 and 145.
- Sales by Weekday: Sales peak on Fridays and Mondays, indicating strong weekday engagement



Demographic Insights

- Young Core Audience: The majority of users fall between 20-28, indicating a strong concentration of young adult customers.
- High Student Engagement: Students contribute the highest sales volume, suggesting strong brand resonance with this demographic.
- Single Users Lead in Orders: Among all marital groups, single users place the most orders.
- Male Users Spend More: While both genders are active, male users drive a higher share of total orders.





Summary of Key Insights

Customer Segmentation:

- Majority of users fall into lower-frequency, low-recency segments (e.g., 112, 123, 122, 133)
- Small but valuable groups (e.g., 135, 145) contribute disproportionately to revenue.

Customer Demographics:

- Users are primarily young adults (ages 20-28), with high engagement among students.
- Single users and male users account for higher order volume.

Customer Behavior:

- Peak spending occurred in 2018, with no consistent seasonal pattern since.
 - One notable exception was a July 2019 sales spike, which may warrant further investigation for event or campaign-driven causes
- Most users place 20-30 orders; loyal users form a long-tail minority.
- Sales are strongest on Fridays and Mondays.

Strategic Takeaways & Recommendations

Target High-Value Segments

Focus retention and re-engagement campaigns on RFM segments 135 and 145, who show high monetary value and frequency.

- → Send exclusive monthly offers and introduce a points-based loyalty program to reward repeat purchases.
- Simulations suggest that increasing purchase frequency in these segments by 10% could yield an outsized revenue boost

Invest in Young Adult Marketing

Tailor promotions to resonate with users aged 20-28, especially students, who drive both volume and spend.

→ Leverage Instagram Reels/Tiktok and short form video ads to increase brand resonance.

Optimize for Weekday Traffic

Peak activity occurs on Fridays and Mondays.

→ Launch time-sensitive offers like "Free Fries Friday" or app notifications to drive engagement (e.g., "Free side with ₹X minimum").

Engage Single & Male Users

These groups lead in order volume.

→ Use personalized messaging or tailored incentives to deepen engagement and retention.

Offer Student Deals

Students account for the highest sales volume.

→ Consider school-based partnerships, bulk meal offers, or referral bonuses aimed at student networks.

Explore Weekend Expansion

Currently low weekend traffic presents untapped potential, seen by falling sales instead of rising.

→ Pilot limited weekend hours to attract busy weekday users or "lazy Sunday" demand.

Promote Re-Engagement for Inactive Users

Target the low frequency buyers (long-tail users), as they represent a large share of the base.

→ Set up campaigns with personalized reminders, discount codes, or limited-time offers to increase engagement.

Conclusion

By understanding our customer's habits and value, we can design smarter retention strategies that boost loyalty, increase order value, and grow revenue; without prioritizing costly new acquisitions.







