Zomato Customer Segmentation Analysis Report

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Summary

My analysis started with several questions and two hypotheses:

1. What age range generates the highest total order amounts? Answer: 20s
2. Is one gender more prevalent among our customers who generate the highest total order amount? Answer: Men
3. What is the occupation of our customers who generate the highest total order amount? Answer: Student
4. What is the monthly income for our customers by occupation? Answer is in the report below.
5. Does monthly income seem to correlate with the order amounts? Answer: No
6. What educational qualifications do our highest order amount generating customers have? Answer: Graduate
7. Who is our key customer? Answer: 23 year old male graduate student

Hypotheses:

1. Monthly income is positively correlated with the amount of sales generated.
2. Customers with higher education qualifications generate higher sales amounts.

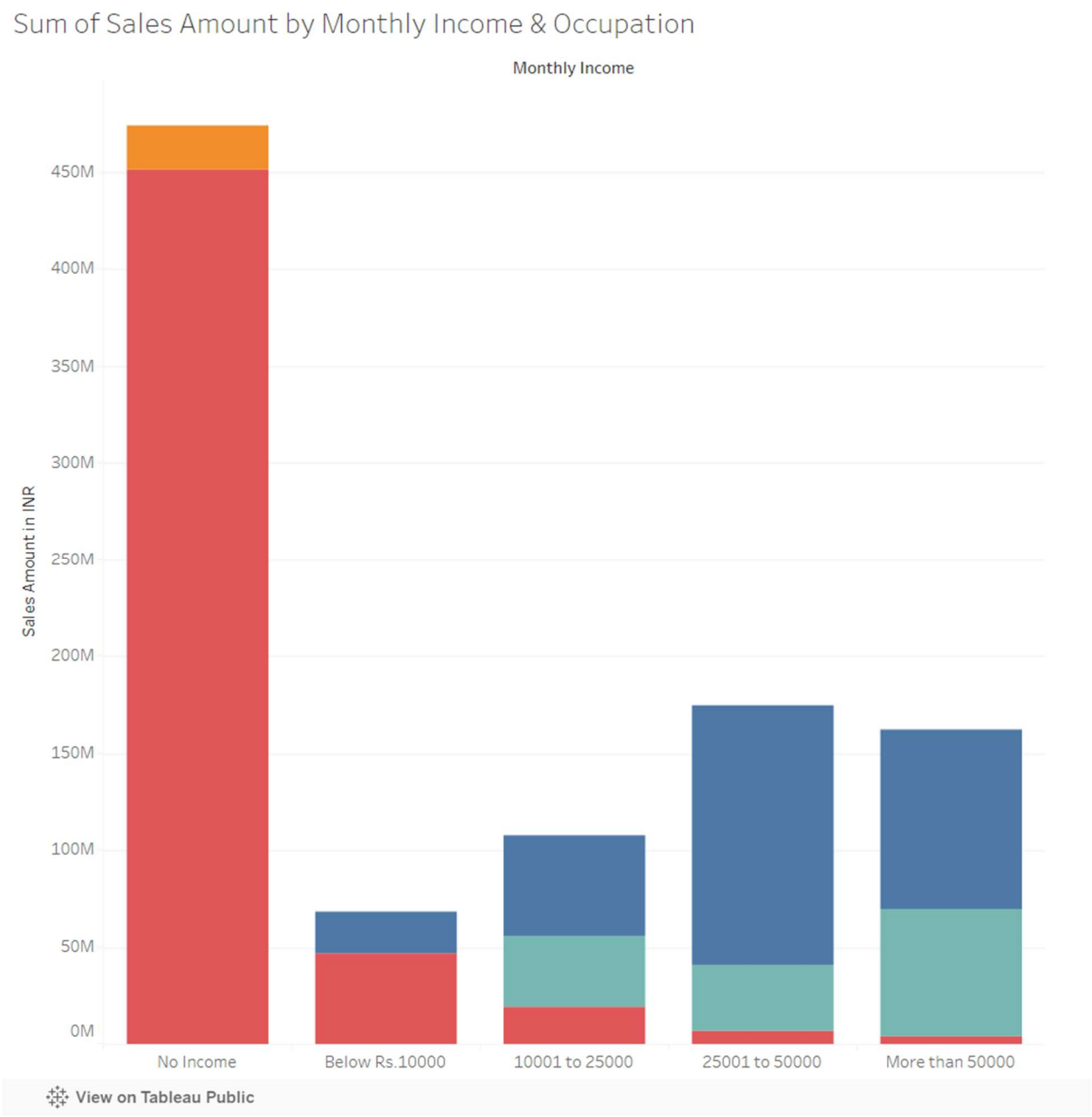
I have used our data to answer these questions and disprove my hypotheses. The result is a customer profile we can use to better target our marketing efforts toward our key customers.

Breakdown

The analysis began with data cleaning. I checked the data in the spreadsheets users.csv and orders.csv for null values and duplicate rows. Finding none I moved on to correcting a spelling error and replaced all the instances of “Self Employeed” with “Self Employed” in the users sheet. I saw that 2 entries in the orders sheet were in USD so I used

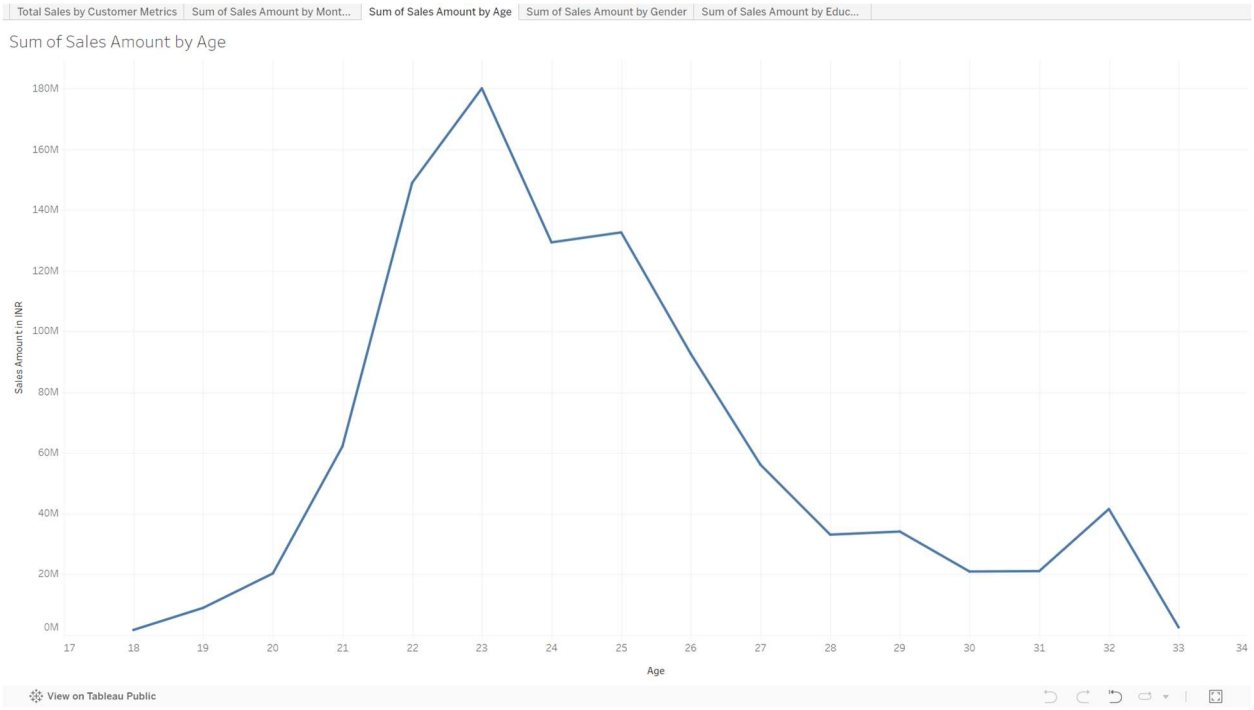
the information from this website (https://www.poundsterlinglive.com/bank-of-england-spot/historical-spot-exchange-rates/usd/USD-to-INR-2017) to convert them to INR so that all the currency types match for all entries. Next, I created a relationship between the tables in Tableau on the "User Id" columns.

The first visualization displays the sum of the sales amount by monthly income and occupation of our customers. We wanted to know what the occupation and monthly income of our customers is who purchase the highest sales amount from us. The stacked bar chart below shows that the occupation in question is student, and the monthly income amount is no income. This visualization also answers our question of what the monthly income of our customers is by occupation. Students appear in all five income categories. Housewives appear in only the no income category. Employees have income ranging from below Rs. 10,000 to above 50,000. Self employed customers have income ranging from 10,001 to more than 50,000. Our final question for this portion of the data was whether the total sales amount is positively correlated with the monthly income of our customers. My initial assumption was that this would be true, however the data clearly shows that is not the case. Sales totaling over 451,000,000 INR came from students who have no monthly income. The next highest amount of sales came from employees with a monthly income of 25,001-50,000. Thus, I see no significant correlation between monthly income and sales amount.

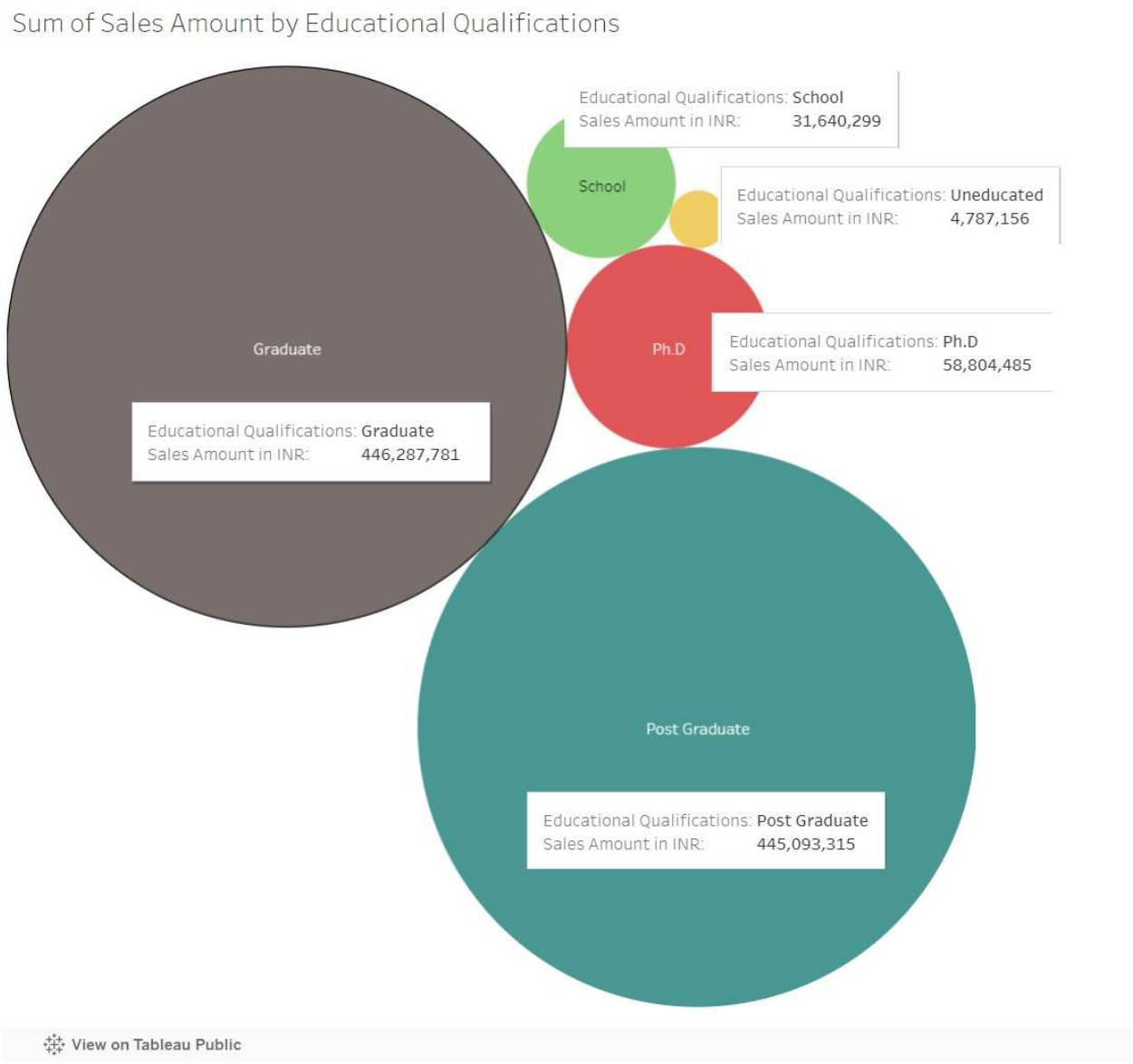


The second visualization shows the sum of sales by customer age. It is clear from the line graph below that customers aged 23 contribute the most to the sales amount with

a total just under 180,000,000. In fact, customers in their 20s contributed a combined sales amount of 889,391,139, X% of the 986,613,036 INR total sales recorded.

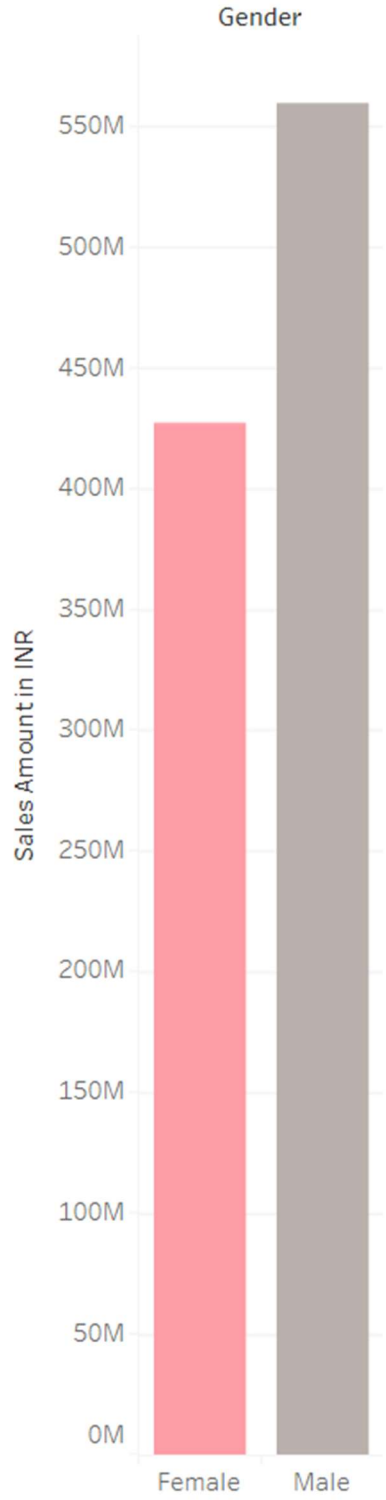


The third visualization shows sales amount by our customers' educational qualifications. The education level with the highest sales amount is over 446 million INR for "Graduate," which is followed closely by "Postgraduate" at over 445 million INR. The sales for the other three groups are vastly smaller than the leading two groups. While "Uneducated" and "Ph.D." are clear, the other educational qualifications listed are a bit ambiguous so I will share my interpretation. "School" most likely means those customers are pursuing a bachelor's degree. "Graduate" is probably those working on a master's degree. "Postgraduate" refers to those in the process of earning a doctorate. Therefore, my hypothesis that customers with higher educational qualifications generate higher sales amounts was somewhat incorrect. Since "Ph.D." and "Postgraduate" are both higher than "Graduate", yet they both have lower sales than the "Graduate" group, a higher educational level does not necessarily lead to higher sales amounts.



The fourth visualization displays sales amount by customers' gender. Men lead women by 132,095,134 INR in sales amount.

Sum of Sales Amount by Gender



View on Tableau Public

Conclusion & Recommendation

After performing this analysis, I have come up with the following profile of our key customer: a twenty-three-year-old man who is a graduate student and has no monthly income. My findings are that customers matching these characteristics are responsible for the highest total amount of sales for our company. My recommendation, based on these observations is to target our marketing efforts toward customers who fit the profile. This profile is summarized in the following dashboard: