BDM CAPSTONE PROJECT

Maximizing Restaurant's Online Success

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Organization background and the problem that they are facing.

Organization Background

Details about data collected and method used in analysis.

Data collection and analysis

Visualization

Trends and insights coming out through visualizing data

Recommendation with practical implementation.

Recommendation and Expected Outcome

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Organization Background and Problem Statement

Background

- The Restaurant "Bhaj Govindam" located in Pune, having multiple outlet, running since 2020 successfully ,with an average sitting of 50 tables.

- It is an B2C establishment known for offering delicious vegetarian food that provides a homely experience.

- **Problem facing in its online business** :-

- Not able to generate enough profit from online business.

- Number of orders is less.

- Offers and discount is random not backed by any analysis.

- Lack of customer knowledge.

Data Analysis Methods

Data Cleaning:

- Cleans data using (find and replace, split, transpose, pivot/unpivot) to handle missing values, data type inconsistencies, and outliers. Connects tables with relationships (one-to-many, many-to-many). Duration: February 2024 to July 2024

Customer Segmentation

- I categorized customers using RFM analysis by calculating recency (last purchase date), frequency (number of purchases), and monetary value (total spending). These values were binned into a score range of 1-4, averaged, and used to create customer segments like Loyal, Champions and At-Risk.

Factors Impacting Orders

- I conducted item analysis to identify best and worst-selling items, along with popular combos.
- I compared current prices with market rates by collecting relevant data and also I analyzed customer feedback by identifying top recurring words.

Customer Segment Dashboard

Filters

Restaurant n...

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Bhaj Govindam

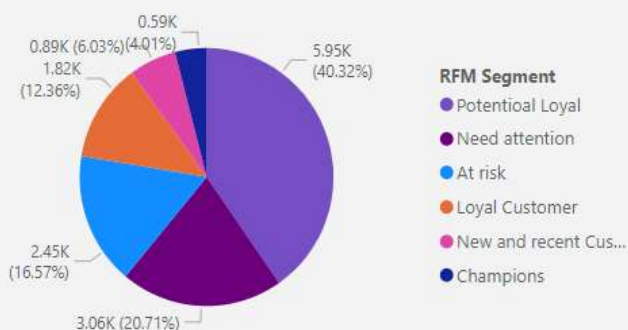### RFM Segment

(Blank)

At risk

(Blank)

Clear all slicers

Discount effect order vaolume

● Discount sum ● OrderVolume Sum

Discount sum: ₹150K, ₹100K

OrderVolume Sum: 1.0M, 0.8M, 0.6M

April, February, June, March, May

MonthName

Discount,Rating and segments

● Discount ● Ratings

Discount: ₹60, ₹52.4, ₹46.9, ₹42.4, ₹42.3, ₹40, ₹36.5, ₹32.7

Ratings: 3.4, 3.6, 3.4, 3.9, 4.3, 4.4, 4

New and rece..., Need attention, At risk, Potentioal Loyal, Champions, Loyal Customer

RFM Segment

Customer segmentation

RFM Segment
- ● Potentioal Loyal
- ● Need attention
- ● At risk
- ● Loyal Customer
- ● New and recent Cus...
- ● Champions

5.95K (40.32%)
0.59K
0.89K (6.03%) (4.01%)
1.82K (12.36%)
2.45K (16.57%)
3.06K (20.71%)

Monthly customer distribution

RFM Segment ● At risk ● Champi... ● Loyal Cu... ● Need at... ● New an... ● Potentio...

Sum of OrderVolume: 0.6M, 0.4M, 0.2M, 0.0M

0.52M, 0.40M, 0.41M, 0.31M, 0.27M, 0.23M
0.40M, 0.22M, 0.25M, 0.26M
0.13M, 0.15M, 0.13M, 0.12M, 0.10M, 0.08M
0.05M, 0.04M, 0.04M, 0.12M, 0.03M, 0.03M
0.06M, 0.05M

May, April, June, March, February

MonthName

Discounts/offers:-As the **discount** price **increases sales volume** also **increases**. It indicates discount plays a crucial role in increasing sales volume sum.
Discount given in **Wednesday** is **less**. **Increase Wednesday sales** by offering a **higher discount** to boost orders and overall revenue.
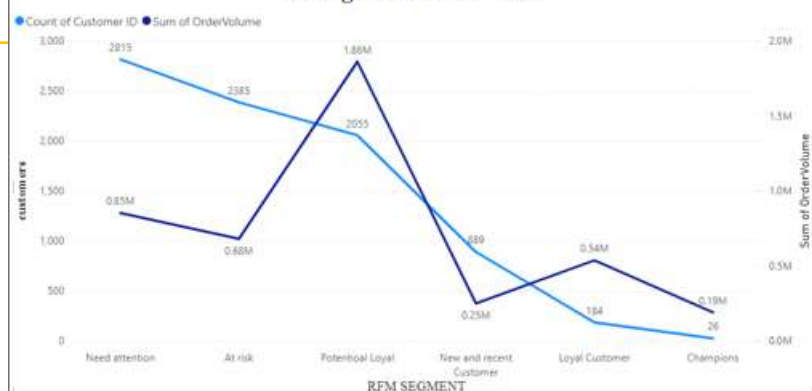
Ratings:-**Loyal customer** including champion and potential loyal are highest contributor of restaurant **visibility**, as they **give higher ratings** which ultimately attracts more orders.

Value generated Vs orders

● Count of Customer ID ● Sum of OrderVolume

customers: 3,000, 2,500, 2,000, 1,500, 1,000, 500, 0
2815, 2385, 2055, 889, 584, 26

Sum of OrderVolume: 2.0M, 1.5M, 1.0M, 0.5M, 0.0M
0.85M, 0.68M, 1.86M, 0.25M, 0.54M, 0.19M

Need attention, At risk, Potentioal Loyal, New and recent, Loyal Customer, Champions

RFM SEGMENT

Customer segmentation:- Indicate that number of potential loyal customer is highest these customer have average RFM score. Number of loyal and champions are less.
Sales Distribution among customers: There is fluctuation in sales for every segment but loyal customers are consistent .
Conclusion Although there are fewer loyal customers, they contribute the most on average to sales, while potential loyal customers are the highest overall contributors.
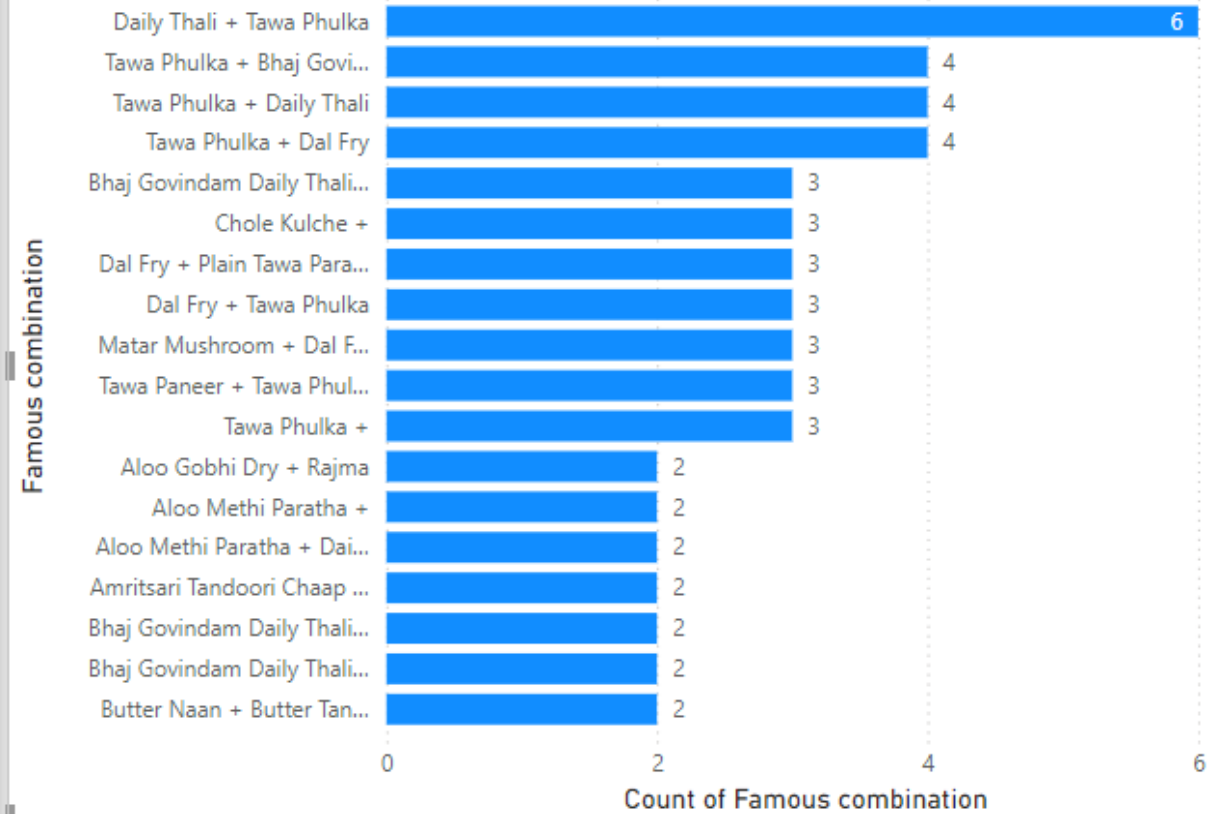
Deep Dive Analysis of each customer segment on the basis of their prefered item
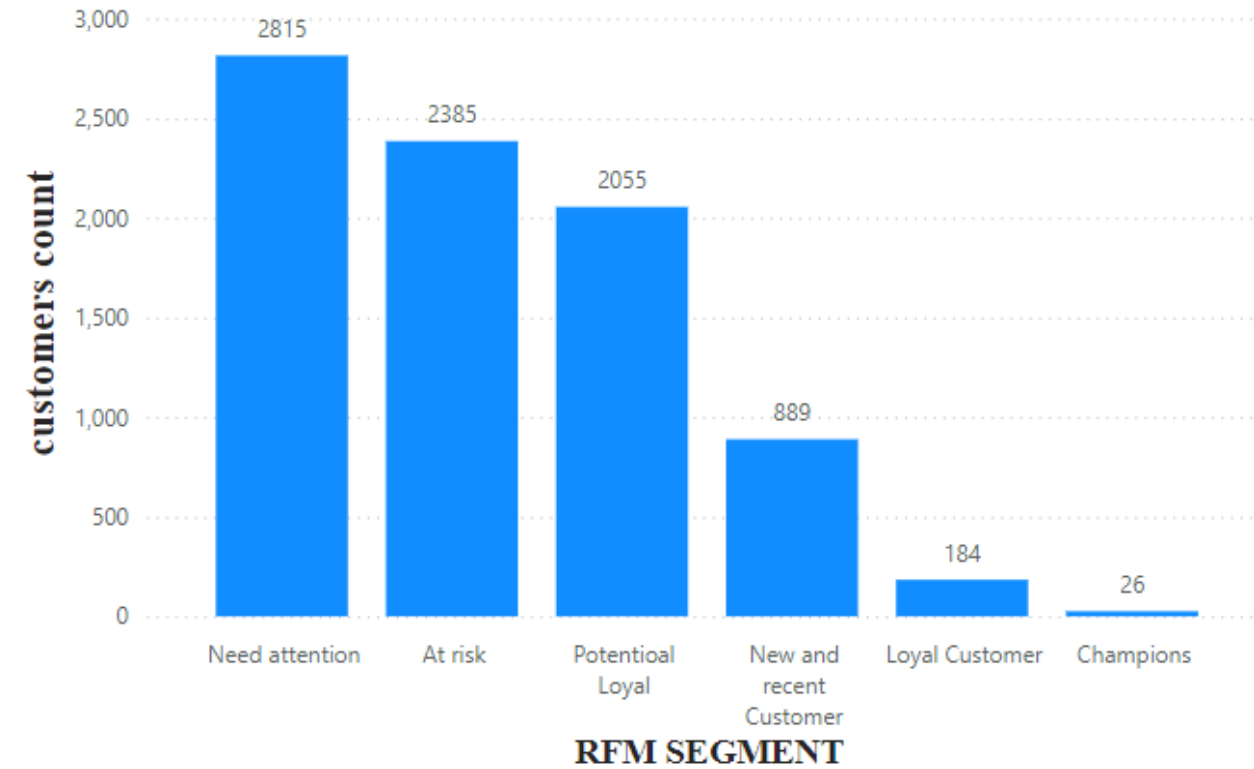
Famous Item combination

Item deep dive:-This graph indicate that number of need attention customer is highest and champions is lowest. But champions are contributing most. To **increase these customer** we can **analyze** their **item preference** so that we offer **same to other new customers** that too segregated based on different outlets help in finding **best item and worst item** of each restaurant.
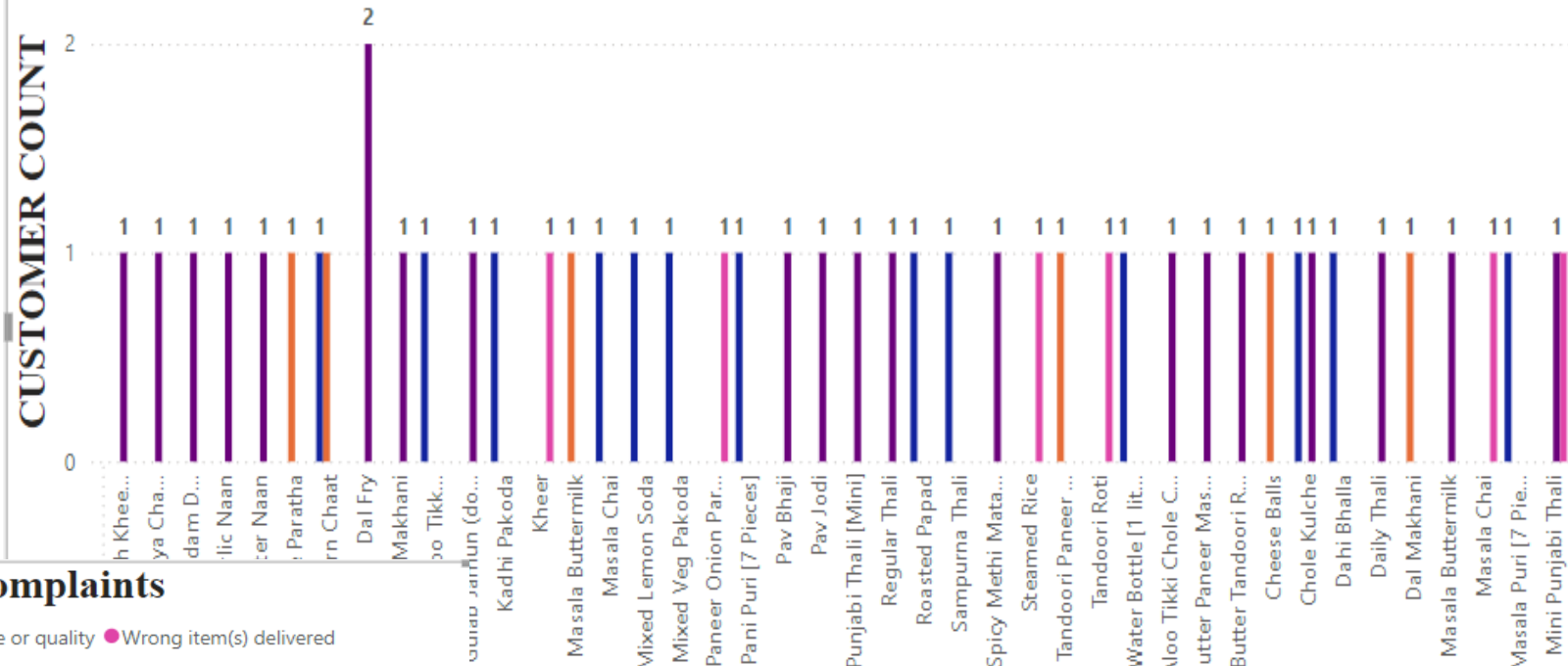
combos:- These are the combos liked by champions. **Majorly. liked combos** can be added in menu list.
Or can help in creating offers like buy one item and get offer on other.
This help in making meaningful offers/discount and increase quality of menu which ultimately increase visibility and orders.

Sales by Weekday

Sales in rupee

- ₹ 0.8M
- ₹ 0.6M
- ₹ 0.4M
- ₹ 0.2M
- ₹ 0.0M

Sun	Sat	Thu	Fri	Mon	Tue	Wed
₹ 0.79M	₹ 0.73M	₹ 0.60M	₹ 0.59M	₹ 0.58M	₹ 0.57M	₹ 0.49M

Week days

Ordering happens mostly at **night.**

Sunday is the **most** and **Wednesday** is **least** selling day.

Sales By Hour

Sales(In Rupee)

- ₹ 0.4M
- ₹ 0.2M
- ₹ 0.0M

10	12		14	16	18		20		22	24
₹ 0.12M	₹ 0.28M	₹ 0.37M		₹ 0.15M	₹ 0.11M ₹ 0.11M	₹ 0.16M	₹ 0.30M	₹ 0.52M	₹ 0.33M	₹ 0.22M

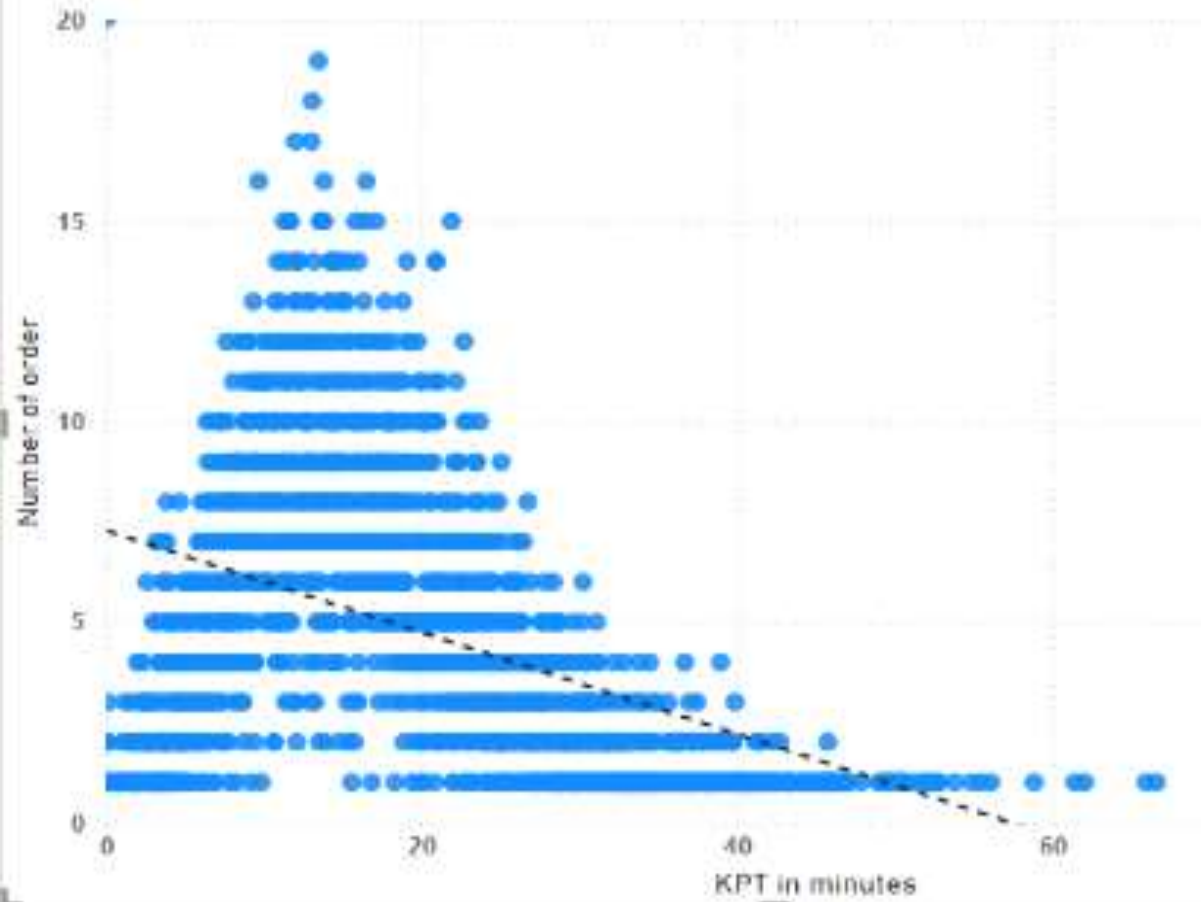Hour of day(In Hours)
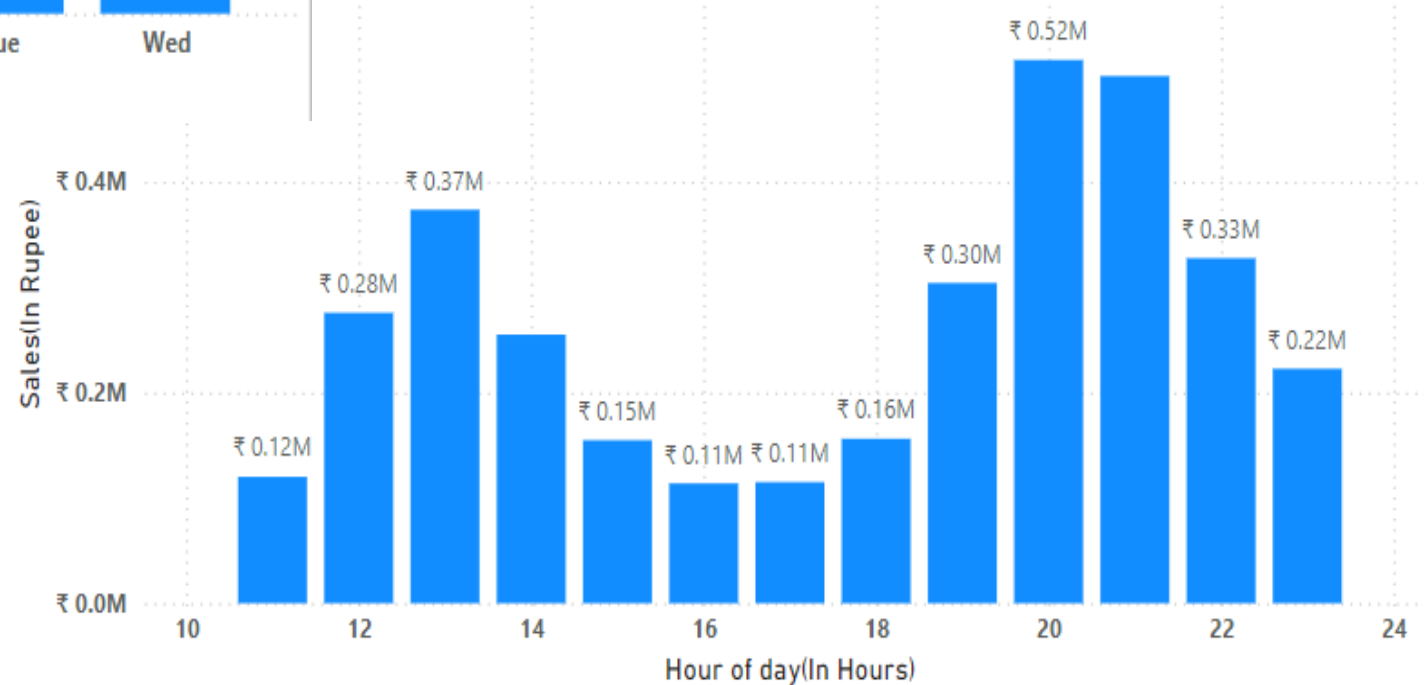
Market VS Restaurant Price trend

● Restaurant Price ● Market Price
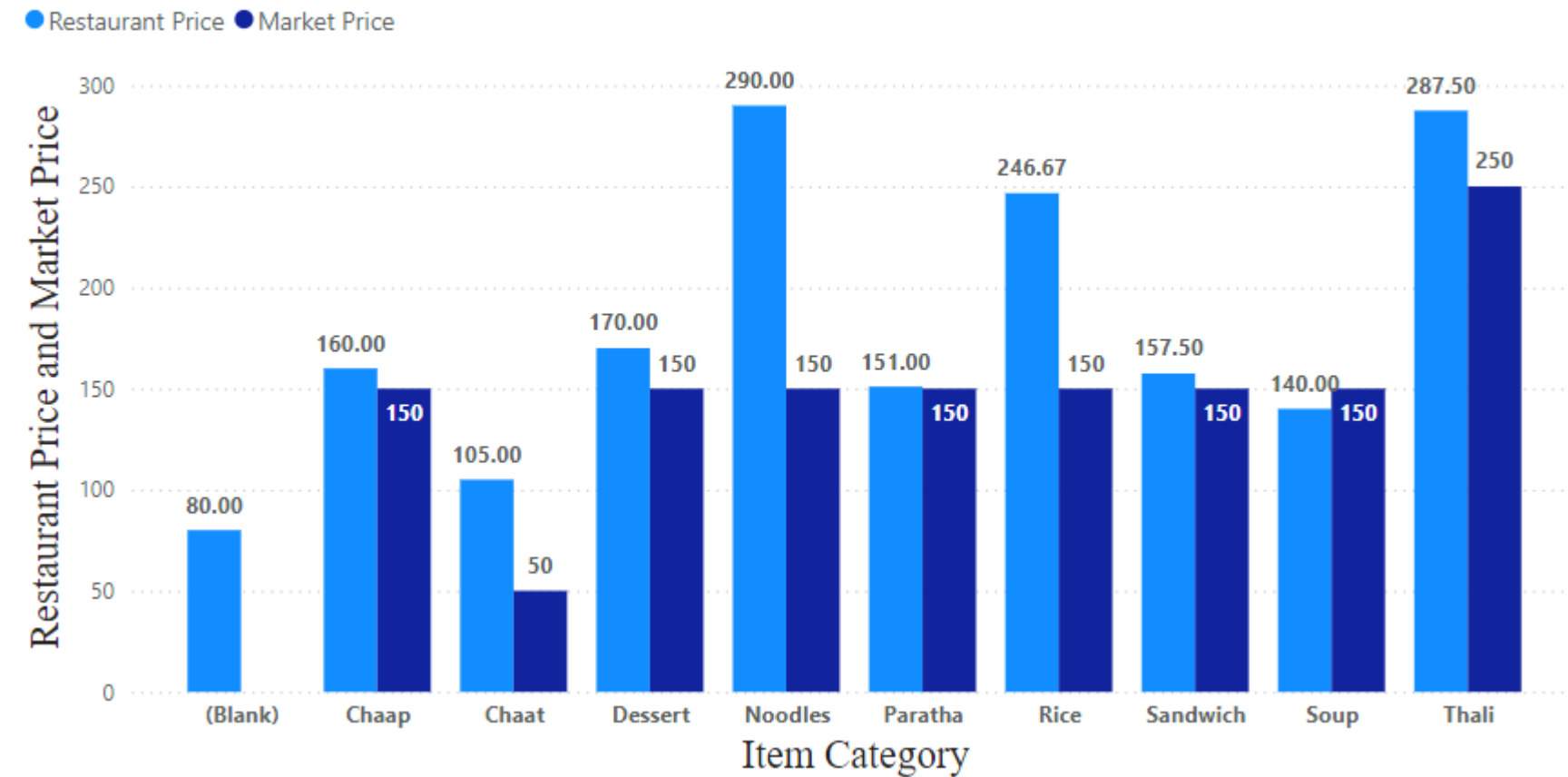
Huge Gap between **Noodles** restaurant and market rate. Price is kind of major factor **effecting visibility,** But it should also according to budget. Hence need attention.
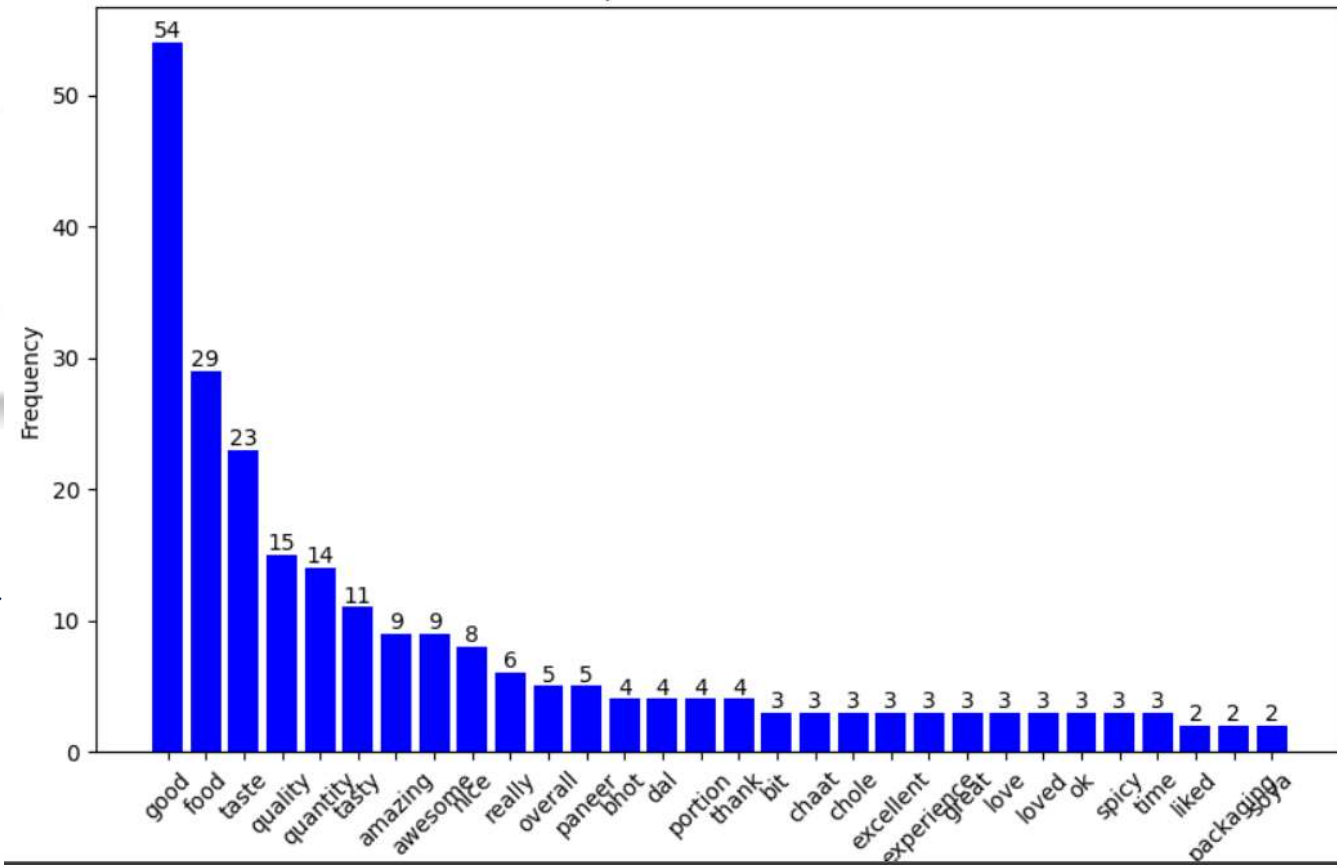
Effect of KPT on number of order

Increase in Kichen preparation time decrease order number.

Top Words in Reviews

Paneer ,chole and chaat are in good book of customer.

Recommendations

Increasing number of orders.

- **KPT** (**Kitchen preparation time**) - as we see more the KPT less number of orders. Decreasing this is must. For doing so we can utilize knowledge of customers peak time i.e.. **Sunday and night time**. **Operational staff need** to be either **more** at this time or need to be prepared for handling more orders during **peak time.**

- **Pricing** – This need to be **comparable** to market to increase number of order specially for **Noodles**. Expenditure needs to be adjusted for achieving optimal price while maintaining profit.

- Focus more on **may** month as it generate highest revenue.Start some offers in **march** as it genrate less revenue.

- Increase **wednesday** sales by offering special discount on that day.

Discount/offers and promo issue.

- Customer segmentation can significantly improve this area. **Loyal customers**, including potential loyal customers and champions, contribute the most to revenue, as findings show. The owner can offer special discounts to these customers through **loyalty programs** or by sending coupon codes like **'xyz'** via email, offering x% off for their **loyalty**. This helps retain customers and encourages others to become loyal.

- Similarly, for **potential loyal** and new customers, discounts can be offered on their **next three purchases.**

- **Famous Combos** help manage discounts by identifying which items are likely to be bought together but might not be due to budget constraints. **Offering deal**s on **these items** can **increase sales**.

Customer awareness- complaints and reviews.

- Identifying frequently sold items that often receive complaints, like **Dal Fry**, and improving them can boost sales while reducing complaints.

- **Refund** amount given o **packaging** by owner is significant hence need to be addressed by **assigning staff** for same specially.Refund for wrong item dilivered taken by zomato hence need no attention.