# Analytic Study of a Pan Asian Restaurant

A Final report for the BDM capstone Project

Submitted by

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# 1 Executive Summary

Introduction:

Crazy Noodles is a Pan-Asian restaurant operating in Ahmedabad, Gujarat. The restaurant operates in B2C capacity offering various Chinese Thai, Japanese, Multicuisine, and Oriental cuisine options, to a range of medium-to-high end customers. The restaurant is located in the Bodakdev area of Ahmedabad, which is a prime locality for eateries and gathering. Despite its geographical presence and strong culinary variety within the market, the business faces challenge to maintain a good profit margin while balancing food delivery commissions charged by the food delivery partner companies.

Challenges:

Due to the growing popularity of food delivery services, a significant portion of the restaurant's revenue is spent on commissions paid to food delivery platforms The food delivery companies take 25% of the sales acquired by the business through their platform. This reduces the overall profit of the company. Another major challenge is high employee turnover. Many staff members leave within a short timeframe and frequently take leaves, leading to operational inefficiencies and disruptions in daily workflows

Project Approach:

To address these challenges, a comprehensive analytical approach is proposed, focusing on the distribution of sales and employee attendance. This involves an in-depth analysis of past sales transactions to identify trends in daily revenue fluctuations, seasonal impacts, and factors influencing overall sales performance. Trying to find what could be an ideal profit margin after assessing the sales from food delivery apps and implementing it. Discussions with the business owner will help assess pricing strategies and market positioning to optimize profitability.

# 2    Detailed Explanation of Analysis Process/Method

2.1. Analysing Weekly Sales Trends

To address the challenge of figuring out which days, lead to a higher sale for 'Crazy Noodles', a systematic approach was undertaken. This involved the calculation of various key metrics to gain insights into the business's performance and profitability.

1. Day Column: A new column day was added according to the date given in the data. We can group the sales according to the days of the week and gain insights.

2. Day-wise Sales Column: Sales grouped according to the days of the week

Method used:
Python Utilisation: - Python serves as a powerful tool for performing calculations and organizing data. It simplifies numerical computations, enabling efficient analysis and visualization of complex datasets. With libraries like Pandas and NumPy, Python allows seamless data manipulation statistical analysis.

Code (In python) done for Analysis:

- sales_by_day:

  - Grouping Sales Data by Day – The dataset was structured to sum up total sales for each day of the week (Monday to Sunday).
  - Reordering the Days – Ensured that the days followed a logical sequence for better readability.
  - Visualizing Sales Trends – A pie chart was created to depict the proportion of total sales occurring on each day, making it easy to identify peak and low-performing days.

```
[6] sales_by_day = df.groupby('Day')['Sale'].sum().reindex(
        ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']
    )

[7] sales_by_day
    Show hidden output

[18] plt.figure(figsize=(8, 6))
     plt.pie(sales_by_day, labels=sales_by_day.index, autopct='%1.1f%%', startangle=140, colors=['#ff9999','#66b3ff','#99ff99','#ffcc99','#c2c2f0','#ffb3e6','#c4e17f'])
     plt.title("Sales Distribution by Day of the Week")
     plt.show()
```

*Fig 1. Code to find Sales grouped by day*

- Dine-In Sales by the day:

  - Aggregating Payment Methods – Sales from different payment modes (Cash, Card, and Google Pay) were summed up to get the total Dine-In Sales for each transaction.
  - Grouping Sales by Day – The dataset was organized to calculate total dine-in revenue for each day of the week.
  - Visualizing Sales Trends – A pie chart was created to display the percentage contribution of Dine-In Sales for each day, making it easier to spot patterns.

```python
[8] df['Dine-In-Sales'] = df[['Cash', 'Card', 'Gpay']].sum(axis=1)

[12] dinein_sales_by_day = df.groupby('Day')['Dine-In-Sales'].sum().reindex(
        ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']
    )

[13] dinein_sales_by_day
    Show hidden output

[21] plt.figure(figsize=(8, 6))
    plt.pie(dinein_sales_by_day, labels=dinein_sales_by_day, autopct='%1.1f%%', startangle=140, colors=['#ff9999','#66b3ff','#99ff99','#ffcc99','#c2c2f0','#ffb3e6','#c4e17f
    plt.title("Dine-In Sales Distribution by Day of the Week")
    plt.show()
```

*Fig 2. Code to find Dine-In sales grouped by days of the week*

- Food-Delivery Sales by the day:

  - Aggregating Delivery Sales – Sales from Zomato and Swiggy were summed to determine the total revenue generated through food delivery.
  - Grouping Sales by Day – The data was structured to calculate total delivery sales for each day of the week.
  - Visualizing Sales Trends – A pie chart was created to illustrate the percentage contribution of delivery sales on different days, allowing for easy identification of peak and low-demand days.

```python
df['Delivery-Sales'] = df[['Zomato', 'Swiggy']].sum(axis=1)

[16] delivery_sales_by_day = df.groupby('Day')['Delivery-Sales'].sum().reindex(
        ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']
    )
    delivery_sales_by_day
    Show hidden output

[27] plt.figure(figsize=(8, 6))
    wedges, texts, autotexts = plt.pie(
        delivery_sales_by_day, labels=delivery_sales_by_day.index, autopct='%1.1f%%',
        startangle=140, colors=['#ff9999','#66b3ff','#99ff99','#ffcc99','#c2c2f0','#ffb3e6','#c4e17f'],
        textprops={'fontsize': 12}
    )

    # Add Legend without Box
    plt.legend(wedges, sales_by_day.index, title="Days of the Week", loc="best", bbox_to_anchor=(1, 0.5), frameon=False)

    plt.title("Food Delivery Sales Distribution by Day of the Week")
    plt.show()
```

*Fig 3.  Code to find Food Delivery sales grouped by days of the week*

<u>2.2. Impact of Food Delivery on Profitability</u>

To evaluate the impact of food delivery charges on profit loss, calculations were performed. This involved analyzing sales made through external food delivery apps and determining the percentage lost due to these charges. The goal was to gain insights into the difference between actual sales and net revenue after deductions.

1. Sales Acquired by Food Delivery apps Calculation: - Food delivery Cost: This encompasses the total sales done by the restaurant only through platforms like Zomato and Swiggy. Both the platforms charge a fee of 25% of the sales acquired through their platform.

2. Actual Sales: The sales that is left after deducting the 25% of sales for both Zomato and Swiggy individually. This is the actual sales that counts in for the profit of the restaurant.

3. Total Cost: The total cost incurred by the franchise for the month represents the sum of all additional expenses and deposits remains the same. This includes operational costs and any other necessary expenditures required for the franchise's operations.

3. Profit Analysis: - Profit Margin: Profit is the surplus amount obtained after deducting the total cost, from the actual sales generated. This metric provides a clearer indication of the business's financial performance and its ability to generate profits amidst loss of sales through food delivery apps.

Method used:
Spreadsheet Utilisation: - Spreadsheets serve as the primary tool for performing calculations and organising data. They facilitate the manipulation of numerical values, allowing for efficient analysis and visualisation of financial metrics. Additionally, spreadsheets provide a structured format for presenting findings, enabling easy interpretation and decision-making.

Calculations done in Analysis:

- 25% of sales through Swiggy = 0.25 * Swiggy
- 25% of sales through Zomato = 0.25 * Zomato
- Actual sales through Swiggy = Swiggy – 25% of sales through Swiggy
- Actual sales through Zomato = Zomato – 25% of sales through Zomato
- Actual sales = sum of all the sales through dine-in options + Actual sales through Swiggy + Actual sales through Zomato
- Total Costs = Sum of deposits + total cost (raw materials cost + logistics)
- Profit = Actual Sales – Total Cost

| Zomato | 25% Zomato | Swiggy | 25% Swiggy |
|---|---|---|---|
| 1615 | 403.75 | 705 | 176.25 |
| 4675 | 1168.75 | 1670 | 417.5 |
| 600 | 150 | 1395 | 348.75 |
| 1685 | 421.25 | 4100 | 1025 |
| 1775 | 443.75 | 300 | 75 |
| 955 | 238.75 | 2103 | 525.75 |
| 1260 | 315 | 1965 | 491.25 |
| 1260 | 315 | 1465 | 366.25 |
| 8815 | 2203.75 | 1724 | 431 |
| 3910 | 977.5 | 880 | 220 |
| 1980 | 495 | 655 | 163.75 |
| 1290 | 322.5 | 1660 | 415 |
| 1210 | 302.5 | 2270 | 567.5 |
| 3510 | 877.5 | 6475 | 1618.75 |
| 1645 | 411.25 | 685 | 171.25 |

*Fig 4. Calculating percentage commission for food delivery apps*

| Date | Food Delivery | Actual delievery sale | Difference | Dine-In Sales | Sales | Actual Sales | Cost | Deposit | Total Cost | Profit | Profit(Removing food delivery sales) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01-11-24 | 4720 | 3540 | 1180 | 5717 | 10437 | 9257 | 5256 | 0 | 5,256 | 5,181 | 4,001 |
| 02-11-24 | 8880 | 6660 | 2220 | 2452 | 11332 | 9112 | 5061 | 7091 | 12,152 | -820 | -3,040 |
| 03-11-24 | 7000 | 5250 | 1750 | 12588 | 19588 | 17838 | 6202 | 1407 | 7,609 | 11,979 | 10,229 |
| 04-11-24 | 3600 | 2700 | 900 | 7161 | 10761 | 9861 | 7559 | 3774 | 11,333 | -572 | -1,472 |
| 05-11-24 | 3780 | 2835 | 945 | 3490 | 7270 | 6325 | 5792 | 2419 | 8,211 | -941 | -1,886 |
| 06-11-24 | 3100 | 2325 | 775 | 6504 | 9604 | 8829 | 7284 | 2523 | 9,807 | -203 | -978 |
| 07-11-24 | 4490 | 3367.5 | 1122.5 | 7666 | 12156 | 11033.5 | 5923 | 7666 | 13,589 | -1,433 | -2,556 |
| 08-11-24 | 505 | 378.75 | 126.25 | 8174 | 8679 | 8552.75 | 7041 | 1995 | 9,036 | -357 | -483 |
| 09-11-24 | 1550 | 1162.5 | 387.5 | 11613 | 13163 | 12775.5 | 5388 | 3743 | 9,131 | 4,032 | 3,645 |
| 10-11-24 | 14075 | 10556.25 | 3518.75 | 15384 | 29459 | 25940.25 | 6834 | 1922 | 8,756 | 20,703 | 17,184 |
| 11-11-24 | 505 | 378.75 | 126.25 | 2652 | 3157 | 3030.75 | 5241 | 9821 | 15,062 | -11,905 | -12,031 |
| 12-11-24 | 840 | 630 | 210 | 4699 | 5539 | 5329 | 7192 | 2142 | 9,334 | -3,795 | -4,005 |
| 13-11-24 | 2990 | 2242.5 | 747.5 | 7322 | 10312 | 9564.5 | 6021 | 6157 | 12,178 | -1,866 | -2,614 |
| 14-11-24 | 8455 | 6341.25 | 2113.75 | 5917 | 14372 | 12258.25 | 5181 | 2946 | 8,127 | 6,245 | 4,131 |
| 15-11-24 | 3320 | 2490 | 830 | 10058 | 13378 | 12548 | 6335 | 6126 | 12,461 | 917 | 87 |
| 16-11-24 | 4610 | 3457.5 | 1152.5 | 9162 | 13772 | 12619.5 | 6665 | 5056 | 11,721 | 2,051 | 899 |
| 17-11-24 | 5220 | 3915 | 1305 | 5424 | 10644 | 9339 | 6328 | 2925 | 9,253 | 1,391 | 86 |
| 18-11-24 | 100 | 75 | 25 | 7727 | 7827 | 7802 | 6089 | 1165 | 7,254 | 573 | 548 |
| 19-11-24 | 860 | 645 | 215 | 838 | 1698 | 1483 | 6508 | 838 | 7,346 | -5,648 | -5,863 |
| 20-11-24 | 3745 | 2808.75 | 936.25 | 3513 | 7258 | 6321.75 | 6108 | 0 | 6,108 | 1,150 | 214 |
| 21-11-24 | 1185 | 888.75 | 296.25 | 6378 | 7563 | 7266.75 | 6982 | 4614 | 11,596 | -4,033 | -4,329 |
| 22-11-24 | 4665 | 3498.75 | 1166.25 | 2693 | 7358 | 6191.75 | 5868 | 3411 | 9,279 | -1,921 | -3,087 |
| 23-11-24 | 2130 | 1597.5 | 532.5 | 9109 | 11239 | 10706.5 | 5911 | 5749 | 11,660 | -421 | -954 |
| 24-11-24 | 7005 | 5253.75 | 1751.25 | 16141 | 23146 | 21394.75 | 6557 | 4920 | 11,477 | 11,669 | 9,918 |
| 25-11-24 | 505 | 378.75 | 126.25 | 3447 | 3952 | 3825.75 | 7006 | 1778 | 8,784 | -4,832 | -4,958 |
| 26-11-24 | 2455 | 1841.25 | 613.75 | 2346 | 4801 | 4187.25 | 5466 | 0 | 5,466 | -665 | -1,279 |
| 27-11-24 | 3810 | 2857.5 | 952.5 | 8841 | 12651 | 11698.5 | 7356 | 4364 | 11,720 | 931 | -22 |
| 28-11-24 | 1245 | 933.75 | 311.25 | 1790 | 3035 | 2723.75 | 7040 | 0 | 7,040 | -4,005 | -4,316 |

*Fig 5. Calculating and Comparing Actual Sales vs the Sales reco*


## 2.3. Assessing Workforce Impact on Sales

Impact of Employee Absenteeism on Sales Performance: It is essential to analyse the relationship between workforce availability and sales performance in the restaurant. Understanding how staff absenteeism influences revenue will help determine whether sales are highly dependent on manpower. If a strong correlation is observed, strategic actions may be required to mitigate potential losses and optimize operations.

Employee attendance is categorized into three groups (bins) based on the number of staff present:
- <4: When employee attendance is less than or equal to 4
- 5-6: When 5 to 6 employees are present
- 7-8: When 7 to 8 employees are present

Code (In python) done for Analysis:

- Categorizing Employee Attendance – The number of staff present was grouped into three categories
- Grouping Sales by Attendance Levels – Sales data was aggregated based on these employee attendance groups.
- Visualizing the Relationship – A bar chart was generated to compare total sales across different staffing levels.

```python
bins = [0, 4, 6, 8]
labels = ['<4', '5-6', '7-8']
df['attendance_group'] = pd.cut(df['Staff present '], bins=bins, labels=labels, right=True)
sales_by_attendance = df.groupby('attendance_group')['Sale'].sum()
print(sales_by_attendance)
```

Show hidden output

```python
[51] plt.figure(figsize=(5, 3))
sales_by_attendance.plot(kind='bar', color=['red', 'blue', 'green'])
plt.title("Total Sales Based on Staff Attendance", fontsize=14)
plt.xlabel("Attendance Group", fontsize=12)
plt.ylabel("Total Sales", fontsize=12)
plt.xticks(rotation=0)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
```

*Fig 6. Code to get insights on sale w.r.t employee absenteeism*

Employee Attendance Trend Based on Days of the Week: Analysing employee attendance across different days of the week can help identify patterns in absenteeism. By examining the correlation between the number of absentees and specific weekdays, we can determine if there are recurring trends—such as increased absenteeism on weekends or the beginning of the week. Identifying these patterns will enable proactive workforce planning, ensuring optimal staffing levels to maintain business efficiency.

1. Day Column: A new column day was added according to the date given in the data. We can group the sales according to the days of the week and gain insights.

2. Day-wise Staff attendance Column: Average of Staff present grouped according to the days of the week

Code (In python) done for Analysis:

- Calculating Average Attendance – The dataset was used to determine the average number of staff present each day (Monday to Sunday).
- Organizing the Data – The values were structured to ensure a logical sequence of weekdays.
- Visualizing Attendance Patterns – A bar chart was created to illustrate variations in staff presence across different days.

```
[54] staff_attendance_day = df.groupby('Day')['Staff present '].mean().reindex(
        ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']
     )
     staff_attendance_day
```

Show hidden output

```
[55] plt.figure(figsize=(8, 5))
     bars = staff_attendance_day.plot(kind='bar', color='skyblue', edgecolor='black')
     plt.ylim(5.5, 7.5)
     plt.yticks([5.5, 6.0, 6.2, 6.4, 6.6, 6.8, 7.0, 7.2, 7.5])
     for bar in bars.patches:
         plt.text(bar.get_x() + bar.get_width() / 2,
                  bar.get_height() + 0.05,
                  round(bar.get_height(), 2),
                  ha='center', fontsize=10, color='black')
     plt.title("Average Staff Presence by Day of the Week", fontsize=14)
     plt.xlabel("Day of the Week", fontsize=12)
     plt.ylabel("Average Staff Present", fontsize=12)
     plt.xticks(rotation=45)
     plt.grid(axis='y', linestyle='--', alpha=0.7)
     plt.show()
```

*Fig 7. Code to find Average of Employee absenteeism grouped by days of the week*

# 3. Result and Findings

3.1. Profits Overview

Cost: Cost incurred in daily cleaning and sourcing raw materials for the day. It includes the purchase cost and delivery from the vegetable stores. Other raw materials which are the standard for all the restaurants under the chain are sent over by the business owner.
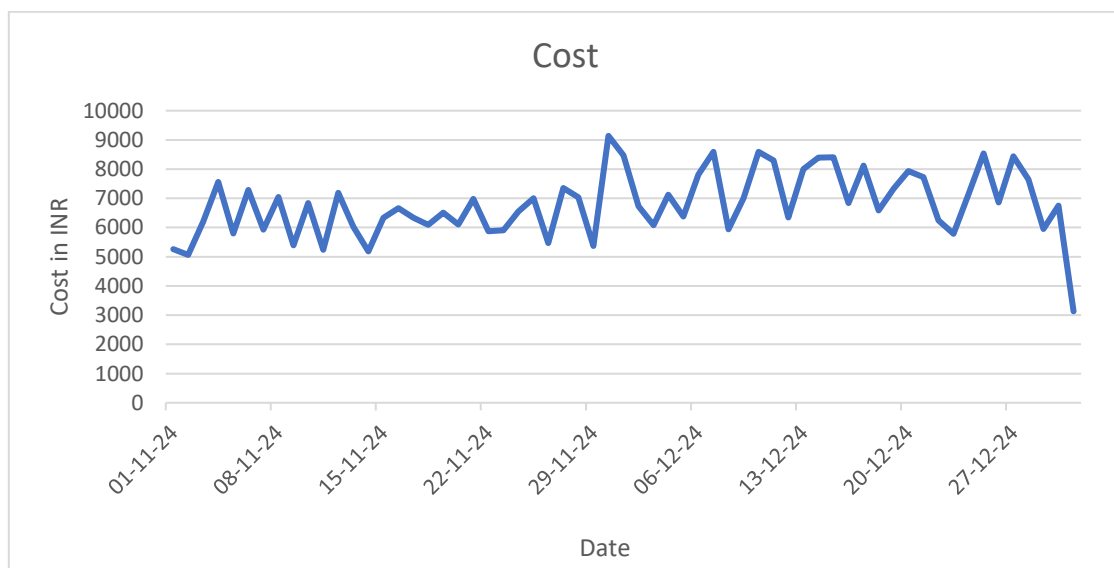


*Fig 8. Trend of Cost during November and December '24*

The above analysis shows:

- Mean Cost: ₹6,784.54.  The average cost incurred in procuring vegetables for the day amounts to approximately ₹6,784.54 This figure serves as a central measure of the typical expenditure associated with daily procurement activities.

- Median Cost: ₹6,752 The median cost, standing at ₹6,752, indicates the middle value in the dataset.

- Standard Deviation of Cost: ₹1,127.41 With a standard deviation of ₹1,127.41, the variability in costs around the mean is quantified. This metric provides a measure of the dispersion or spread of the data points from the average cost, indicating the degree of fluctuation in procurement expenses.

- Minimum Value: ₹3,132 and Maximum Value: ₹9,138. This defines the range of the data.

The cost of vegetables fluctuates frequently with small spikes, indicating randomness in daily prices. However, the low standard deviation suggests that these fluctuations remain within a narrow range, indicating relative price stability over time.

3. 2 Sales Performance Across the Week

**Sales by day**: It is important to know which day is making a higher sale with respective to other days.
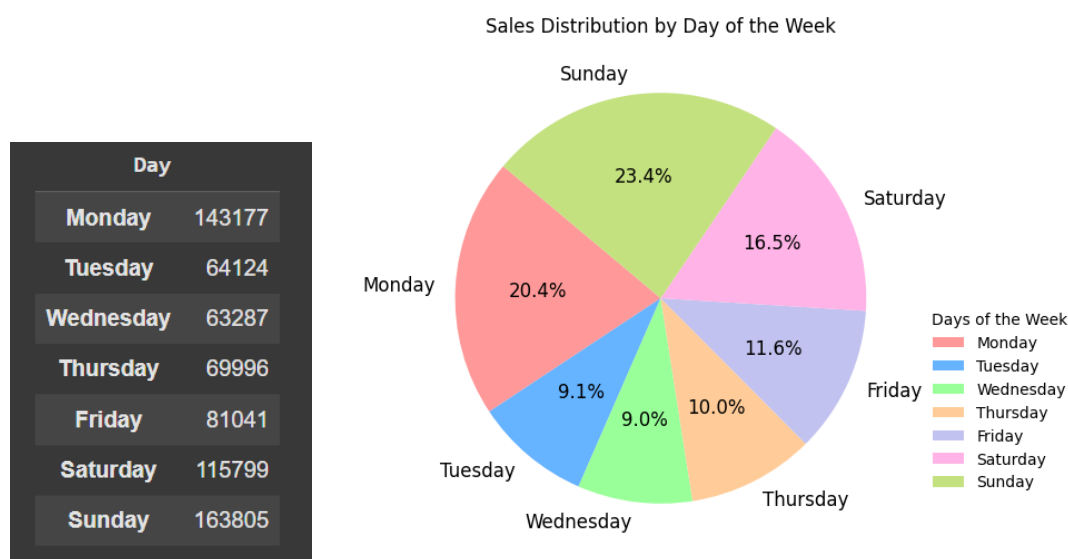


*Fig 9. Pie-Chart depicting the sales percentage during different days of the wee*

The above analysis shows:
- Sunday accounts for the highest sales.
- Monday follows as the second-highest sales day.
- Saturday ranks third in sales volume.
- Together, these three days contribute 60% of total sales, highlighting their significance in revenue generation.
- The lowest sales occur on Wednesday, followed by Tuesday and Thursday.

Understanding these patterns allows for strategic decision-making, such as optimizing marketing campaigns, adjusting inventory, and allocating resources effectively to maximize sales potential.

**Dine-In Sales by day**: It is important to know which day is making a higher sale during Dine-In with respective to other days.

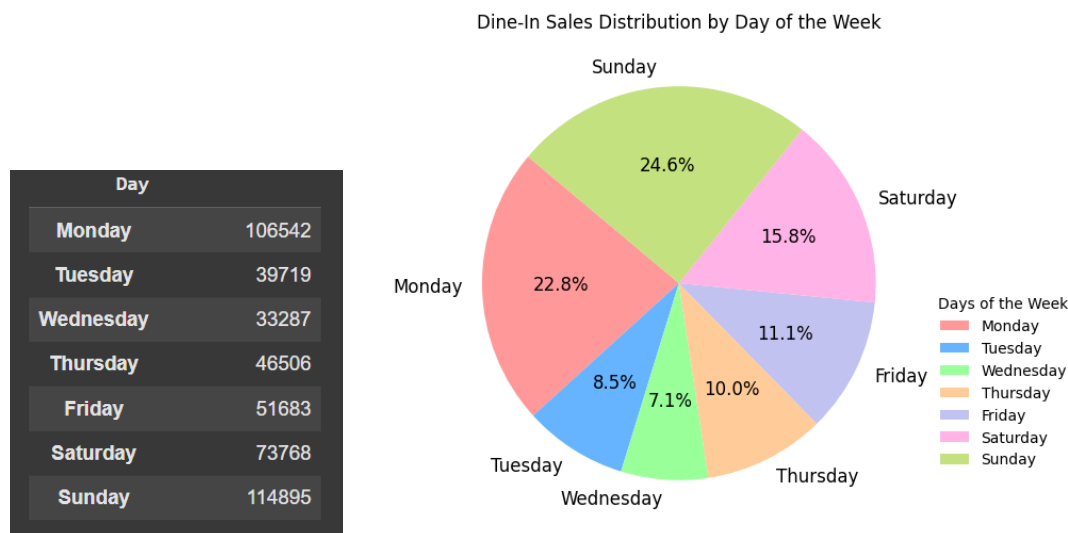| Day | |
|---|---|
| Monday | 106542 |
| Tuesday | 39719 |
| Wednesday | 33287 |
| Thursday | 46506 |
| Friday | 51683 |
| Saturday | 73768 |
| Sunday | 114895 |



*Fig 10. Pie-Chart depicting the Dine-In sales percentage during different days of the week*

The above analysis show:

- Sunday contributes the highest percentage of sales at 24.6%, making it the most profitable day.
- Monday follows closely, accounting for 22.8% of total sales.
- Saturday ranks third with 15.8%, reinforcing the trend of increased weekend dining.
- Together, Sunday, Monday, and Saturday make up 63.2% of total sales, emphasizing the importance of weekends and the start of the workweek for dine-in businesses.
- The lowest sales occur on Wednesday (7.1%), followed by Tuesday (8.5%) and Thursday (10.0%).
- Friday (11.1%) shows slightly higher sales compared to mid-week days but remains lower than weekends.

So, Weekends drive significant sales, making them ideal for promotional offers or special menus and the mid-week sales are comparatively lower, presenting an opportunity for targeted discounts or weekday-exclusive deals.

**Delivery Sales by day**: It is important to know which day is making a higher sale using the external food delivery apps with respective to other days.



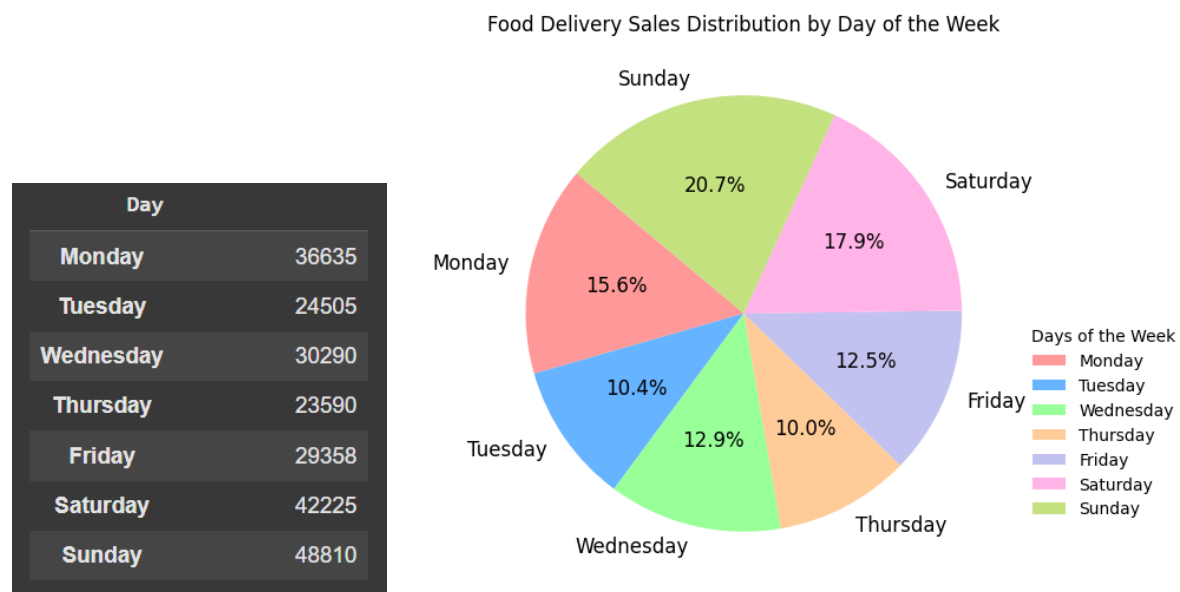| Day | |
|---|---|
| Monday | 36635 |
| Tuesday | 24505 |
| Wednesday | 30290 |
| Thursday | 23590 |
| Friday | 29358 |
| Saturday | 42225 |
| Sunday | 48810 |

*Fig 11. Pie-Chart depicting the Food Delivery sales percentage during different days of the week*

The above analysis show:

- Sunday leads with the highest sales, accounting for 20.7%, indicating strong weekend demand.
- Saturday follows closely at 17.9%, reinforcing the trend of increased weekend orders.
- Monday (15.6%) ranks third, showing a significant number of orders at the start of the workweek.
- Together, Sunday, Saturday, and Monday contribute 54.2% of total sales, highlighting weekends and the start of the week as peak ordering times.
- Wednesday (12.9%) and Friday (12.5%) maintain moderate sales levels.
- The lowest sales occur on Tuesday (10.4%) and Thursday (10.0%), suggesting these are the least active days for food delivery.

Weekends drive the highest food delivery demand, making them ideal for promotional campaigns and special discounts. Mid-week (Tuesday and Thursday) shows the lowest demand, indicating an opportunity to boost sales with targeted weekday deals.

<u>3. 3 Workforce Trends & Their Effect on Revenue</u>

**Impact of Employee Absenteeism on Sales Performance:** Sales grouped by number of employees:  The Sales of the restaurant is affected by the attendance of the staff.
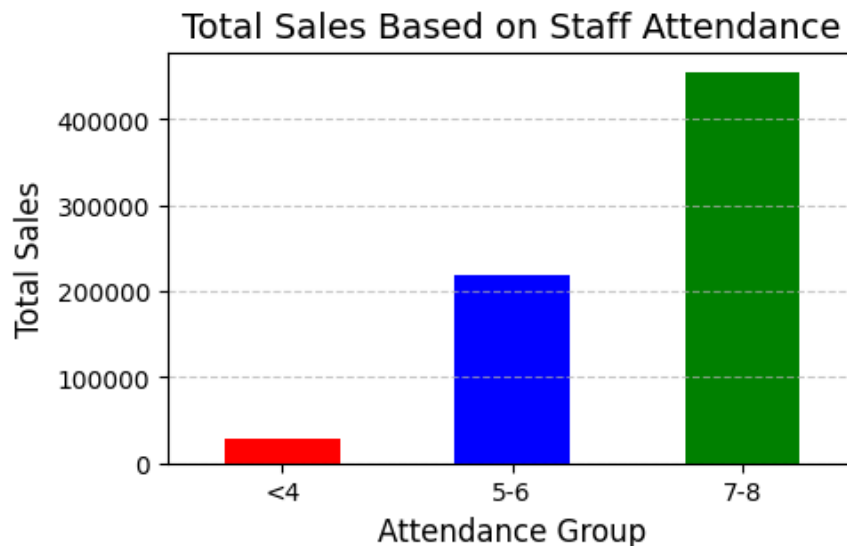


*Fig 12. Line Chart to show variating and pattern in Employee Attendance*

The above analysis show:

Higher Attendance Leads to Higher Sales:

- When 7-8 employees are present, total sales are 455,354, the highest among all groups.
- This indicates a strong positive correlation between staff availability and sales performance.

Moderate Sales with 5-6 Employees:

- Sales drop to 217,979 when the staff count reduces to this range.
- While sales are still substantial, a reduction in manpower seems to impact performance.

Lowest Sales with Fewer than 4 Employees:

- The lowest total sales (27,896) occur when there are fewer than 4 employees working.
- This suggests that insufficient staff leads to operational inefficiencies, possibly affecting customer service and order fulfillment.

The analysis clearly indicates that employee attendance has a direct impact on sales performance. Higher staff availability (7-8 employees) corresponds to significantly higher sales, while lower attendance (<4 employees) results in a sharp decline. This highlights the importance of optimized workforce planning to ensure operational efficiency and maximize revenue. To mitigate sales loss, strategies such as better shift management, absenteeism reduction, and workload balancing should be explored to maintain consistent staffing levels during peak business hours.

**Employee Attendance Trend Based on Days of the Week:** The comparison of average employee absentees on different days of the week.
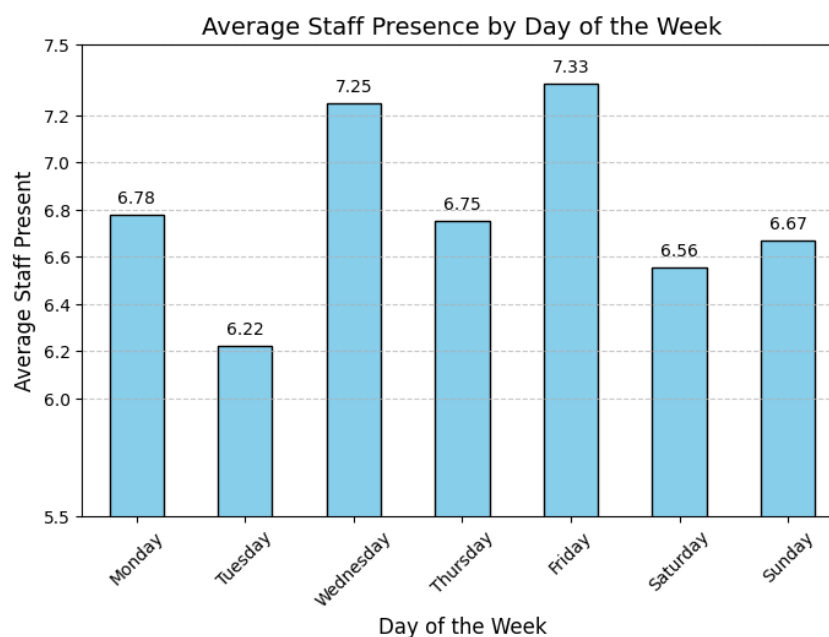


*Fig 13. Average Man-power on a given day of the week*

The above analysis show:
- Highest Attendance: Friday (7.33) & Wednesday (7.25) – Likely due to higher demand.
- Lowest Attendance: Tuesday (6.22) – Employees may prefer taking leave early in the week.
- Moderate Presence: Monday (6.78), Thursday (6.75), Saturday (6.56), Sunday (6.67).

Staff attendance varies throughout the week, with the highest presence on Friday and Wednesday and the lowest on Tuesday. This fluctuation could impact operational efficiency and sales performance. Ensuring consistent staffing, especially on low-attendance days, can help maintain service quality and optimize sales.

# 4.     Interpretation of Results and Recommendations

4.1. Financial Overview of the Business

| | |
|---|---|
| Turnover (₹) | ₹ 10,651 |
| Revenue (₹) | ₹ 6,42,959 |
| Cost (₹) | ₹ 6,32,309 |
| Average Daily Profit (₹) | ₹ 175 |
| Proft Percentage | 1.65% |

The monthly income from the business amounts to ₹10,651.

4.2. Impact of Food-Delivery Commission on the Business

| | |
|---|---|
| Dine in Sales (₹) | ₹ 4,66,400 |
| Delivery Sales (₹) | ₹ 2,35,413 |
| Commission to Online Apps (₹) | ₹ 58,853.25 |
| Actual Sales (₹) | ₹ 6,42,959.75 |
| %Profit before giving commission | 9.90% |
| %Profit after giving commission | 1.65% |

Online food delivery platforms charge a significant commission of almost 25% of delivery sales.

Before paying commissions to external food delivery apps like Zomato and Swiggy, the business enjoys a profit margin of 9.90%. However, after accounting for these commissions, the profit margin drops significantly to 1.65%, indicating that delivery platform fees erode a substantial portion of profits. According to industry data, the average profit margin for restaurants in India typically ranges between 5% and 15% (Indian Retailer, 2024). This suggests that our business is operating below the average profitability of mid-sized

restaurants in India, highlighting the need for strategic adjustments to improve financial performance.

4.3. Boosting Dine-In Revenue: Strategies for Growth

The above sales determines that the market for Asian cuisine in the city. The challenged however is to increase the dine-in sales and reduce the high commission of the delivery platforms. Since dine-in sales contribute **66.5% of total revenue** and have no commission fees, increasing dine-in traffic can significantly boost overall profits.

A. Enhancing Customer Experience

- Ambience & Comfort: Improve seating arrangements, and music to create a welcoming environment.

- Buffet System: A buffet system can be introduced to provide a great variety for a decent price and attract customers.

- Personalized Service: Train staff to provide exceptional service, remembering frequent customers' preferences.

- Loyalty Programs: Offer discounts or reward points for repeat visits to encourage customer retention.

B. Targeted Marketing & Promotions

- Social Media Engagement: Regularly post food pictures, customer testimonials, and offers on Instagram. The restaurant can highlight its vegan-friendly menu to appeal to younger demographics

- Influencer & Blogger Collaborations: Invite food bloggers or local influencers for reviews to attract new customers.

- Happy Hours & Special Discounts: Offer time-bound discounts during non-peak days such as mid-week to increase footfall.

- Event Hosting: Organize live music nights, kitty-parties or theme-based dinners to draw in crowds.

- Corporate Tie-ups: As the restaurant lie in the main hub of the city with offices nearby, special meal discounts for their employees can be introduced to encourage bulk bookings.

C. Optimizing Menu & Pricing

If dish-wise sales data is available, the restaurant can analyse which menu items are the most profitable and strategize pricing, promotions, and marketing accordingly.

Categorize items into:

- High-margin, high-selling dishes → Promote aggressively.

- High-margin, low-selling dishes → Improve visibility through marketing.

- Low-margin, high-selling dishes → Consider price adjustments or bundling in combos.

- On days with high Dine-in (Weekends and Monday) sales pricing could be increased to make more profit and on days with less Dine-in Sales (Mid-week) pricing could be reduced to attract more customers. Offer lunch discounts on weekdays to attract office-goers.

### 4. 4  Reducing Third-Party Dependency: Alternative Delivery Strategies

Delivery sales contribute **33.5% of revenue**, but **commission charges (25%) significantly reduce profits**. Here's how to optimize this:

A. Launching a Restaurant-Owned Delivery System

Instead of relying on third-party apps like Zomato and Swiggy, the restaurant can:

- WhatsApp ordering provides a simple and cost-effective alternative for customers, reducing reliance on third-party apps and their associated commission fees. The restaurant can print a QR code linked to its WhatsApp number on food packaging, menus, and receipts. When customers scan the QR code, they can instantly connect with the restaurant to place orders, reducing reliance on third-party apps. To further encourage direct orders, the restaurant can offer free delivery for orders above a certain amount, making it a more attractive option for customers.

- Offer Discounts on Direct Orders: Encourage customers to order directly by offering a 5-10% discount compared to third-party platforms.

- Develop a Mobile App or Website: A direct ordering platform reduces dependency on aggregators and saves commission costs.

- In-House Delivery Fleet: Employ part-time delivery staff or use hyperlocal delivery services like Uber eats or Rapido, which have lower commission rates.

B. Subscription-Based Delivery Model

- Offer a monthly subscription where customers pay a fixed amount for unlimited or discounted deliveries. For example: A "₹299 per month for free deliveries" plan encourages loyalty and reduces per-order costs.

C. Increasing the price on Food Delivery apps

- The restaurant can **adjust menu prices on third-party delivery apps** by slightly increasing the cost of dishes. This helps offset the high commission fees charged by these platforms, ensuring better revenue per order. By maintaining **lower prices for**

**direct orders** through WhatsApp or the restaurant's own platform, customers will be encouraged to order directly, further improving profitability.

4.5  Improving Workforce Stability & Efficiency

During a discussion with the restaurant manager, he highlighted ongoing staff-related challenges. Most of the employees are from the Northeast and are struggling to adjust to the cultural and lifestyle differences of a new city. This lack of familiarity affects their job satisfaction and engagement, leading to frequent leaves and a lack of long-term commitment. Additionally, many staff members switch jobs frequently in search of better pay to support their families back home. Some also take on extra jobs to increase their earnings, which further impacts their availability and performance at the restaurant. Few Strategies that could lead to improvement in the situation can be:

1. Improve Employee Engagement & Retention

- Cultural Sensitivity Training: Help employees adapt to local norms through workshops and mentorship programs.

- Team-Building Activities: Organize staff gatherings to create a sense of belonging.

2. Financial & Career Incentives

- Attendance-Based Bonuses: Reward employees with incentives for consistent attendance.

- Growth Opportunities: Provide skill development programs or pathways for promotions.

3. Optimize Work Schedules & Shifts

- Introduce rotational shifts to reduce burnout.

- Offer extra pay for peak hours to ensure availability during high-demand periods.

4. Reduce Dependency on External Staff

- Recruit and train local staff to reduce cultural adjustment challenges and job switching.

- Partner with hospitality training institutes for a steady workforce supply.

By implementing these solutions, the restaurant can improve staff reliability, service efficiency, and ultimately, sales performance.

# 5.    Conclusion

The analysis of Crazy Noodles, a Pan-Asian restaurant in Ahmedabad, provides valuable insights into its operational and financial challenges. The study highlights the significant impact of food delivery commissions, which reduce profit margins from 9.90% to a mere 1.65%. This underlines the importance of increasing dine-in sales, which currently contribute 66.5% of total revenue but have untapped potential for further growth. By improving the in-restaurant experience through enhanced ambiance, loyalty programs, and special promotions, the restaurant can attract more customers and reduce its dependency on third-party delivery platforms.

Employee absenteeism is another critical factor affecting revenue, with sales showing a direct correlation to staff availability. Higher attendance results in significantly higher sales, while a reduced workforce leads to inefficiencies and lower earnings. Addressing this issue requires strategic workforce planning, attendance-based incentives, and improved engagement initiatives to retain employees. Additionally, the restaurant must explore alternative delivery channels, such as in-house delivery services or direct customer engagement through WhatsApp and a proprietary ordering system, to minimize commission losses and enhance profitability.

Overall, this analysis provides a data-driven roadmap for optimizing operations, maximizing revenue, and ensuring long-term sustainability. By implementing the recommended strategies—such as targeted marketing, better staffing policies, and alternative delivery options—Crazy Noodles can strengthen its market position and achieve greater financial stability in the highly competitive restaurant industry.