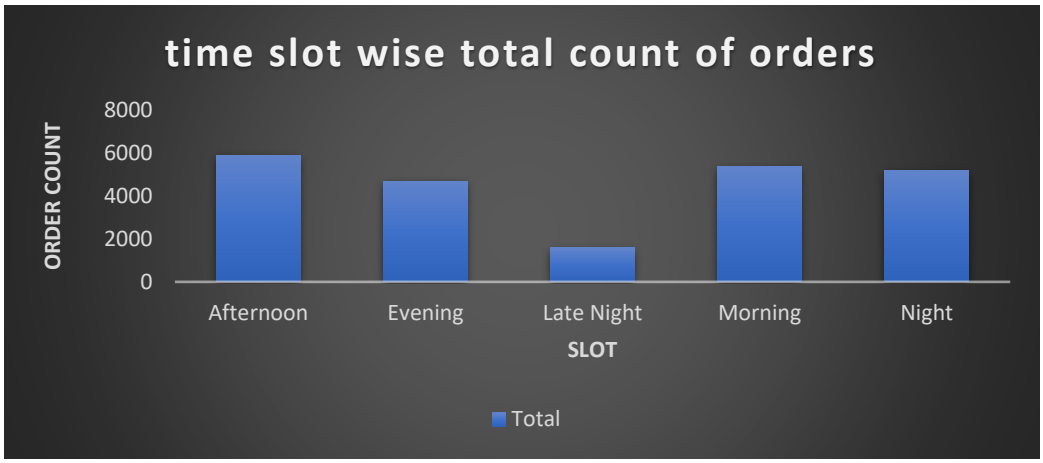
Freshco Hypermarket Capstone

Insight and Observations:

1. Order level Analysis:

a. Order Distribution at Slot Level Analysis:

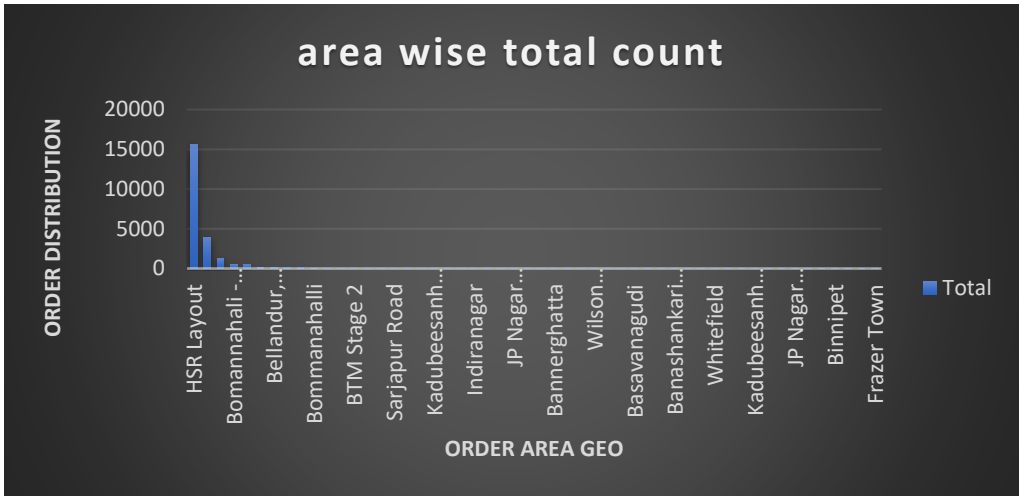
- From the data, we can observe that the order distribution follows a certain pattern across different time slots. Afternoon has the highest order distribution, followed by morning, night, and evening. Late-night orders are the least.



- This pattern suggests that **customers are more active and likely to place orders during the afternoon and morning**, while late-night sees the least amount of orders.
- This information can help in **optimizing delivery and staffing resources accordingly.**

b. Order Distribution at Order Drop Geo Level Analysis:

- The data provides insights into the distribution of orders across different order drop geolocations. HSR Layout, ITI Layout, and Harlur have the highest order counts, while **Binnipet, Pattandur, Brookefield, and Frazer Town have the lowest order counts.**



- This information can be valuable for targeting marketing efforts and optimizing delivery routes in areas with higher order counts.

c. Monthly Orders for Top Three Areas Analysis:

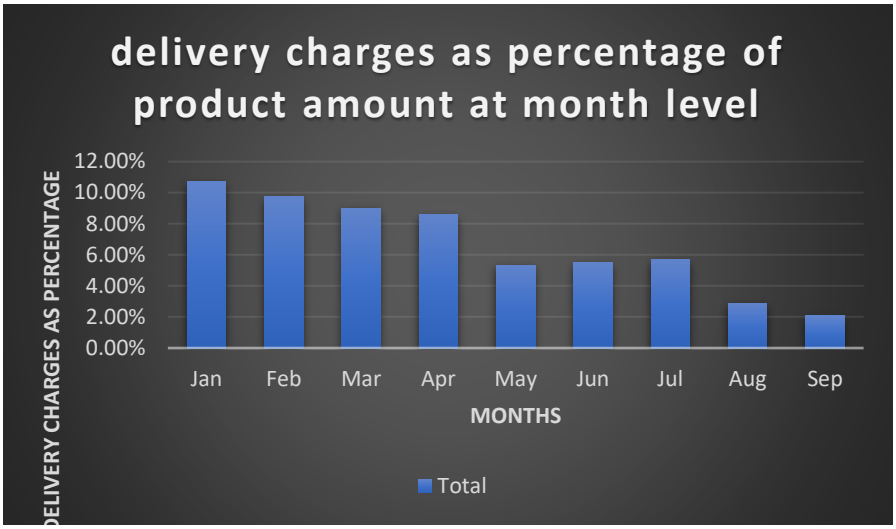
- The top three areas with the highest monthly orders are HSR Layout, ITI Layout, and Harlur. HSR Layout has consistently had the highest number of orders, followed by ITI Layout and Harlur.

areas	absolute order from jan to sep
HSR Layout	1534
ITI Layout	653
Harlur	486

- This suggests that these areas are popular among customers and should be prioritized for marketing and service improvements.

d. Delivery Charges as Percentage of Product Amount at Month Level Analysis:

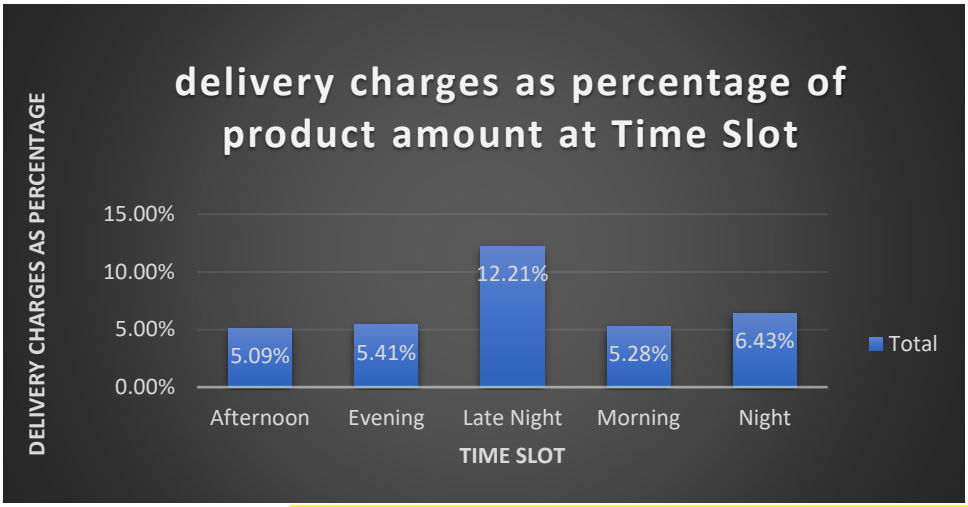
- The delivery charges as a percentage of the product amount show a decreasing trend from January to September.



- This could be due to changes in delivery policies, customer preferences, or promotional strategies.
- The drop in August and September might indicate special offers or discounts applied during these months.

e. Delivery Charges as Percentage of Product Amount at Time Slot Level Analysis:

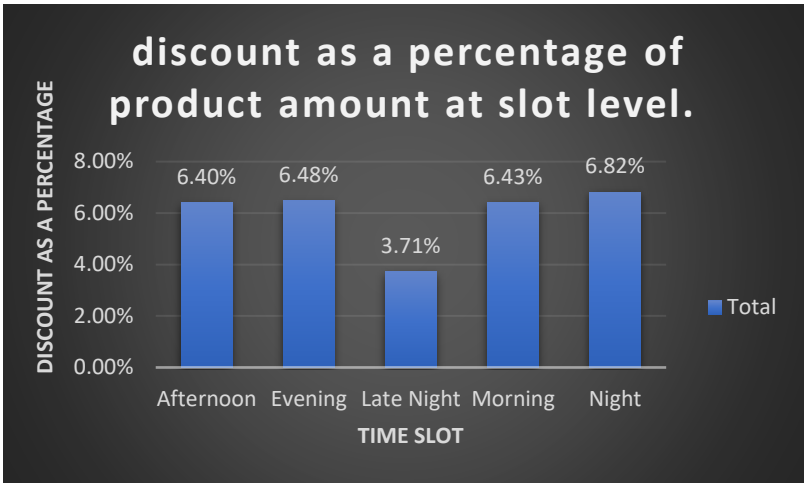
- Late-night orders have the highest delivery charges as a percentage of the product amount, followed by night and evening.
- Morning and afternoon orders have relatively lower delivery charges.



- This information can be used to adjust delivery fee structures for different time slots and encourage more orders during periods with lower delivery charges.

f. Discount as Percentage of Product Amount at Time Slot Level Analysis:

- Late-night orders have the lowest discount as a percentage of the product amount, suggesting that customers are less likely to receive significant discounts during this time.
- Evening and night orders have slightly higher discounts compared to the late-night slot.



- This information can help in optimizing discount strategies to attract more orders during specific time slots.

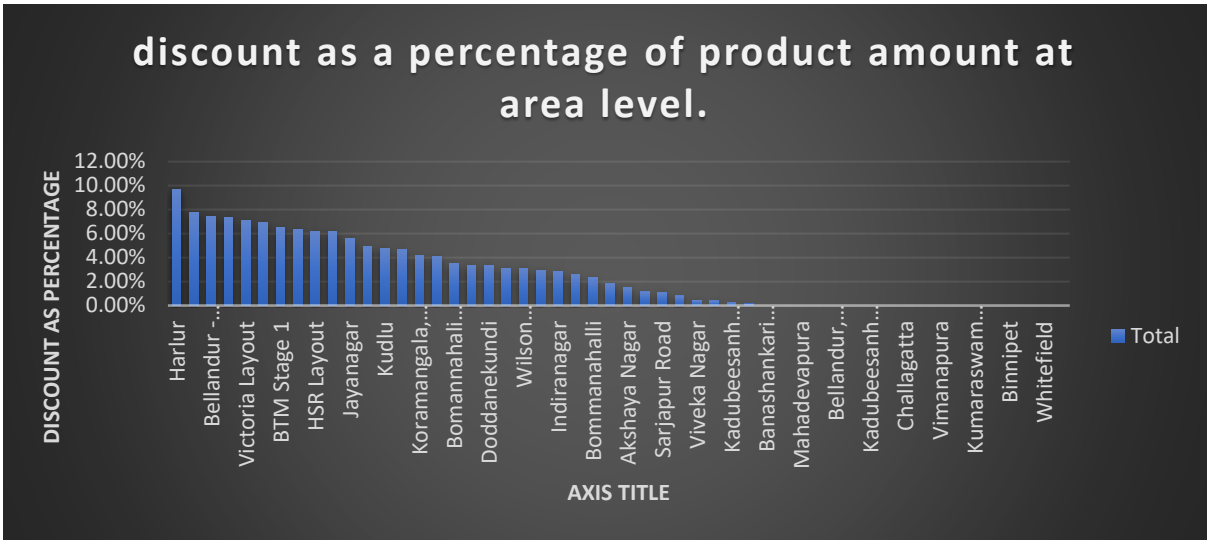
g. Discount as Percentage of Product Amount at Month Level Analysis:

- The data reveals that there is a significant spike in the discount as a percentage of the product amount in May, July, and August.

- This could indicate seasonal promotions, sales events, or marketing campaigns during these months.
- Understanding these patterns can help in planning effective discount strategies throughout the year.

h. Discount as Percentage of Product Amount at Order Drop Geo Level Analysis:

- Among the top five order drop geolocations, Harlur has the highest average discount as a percentage of the product amount, followed by Bilekahalli and Bellandur - Off Sarjapur Road.



- This information suggests that customers in these areas might be more responsive to discounts and promotions.
- Targeting specific areas with higher discount offers could potentially boost order volumes.

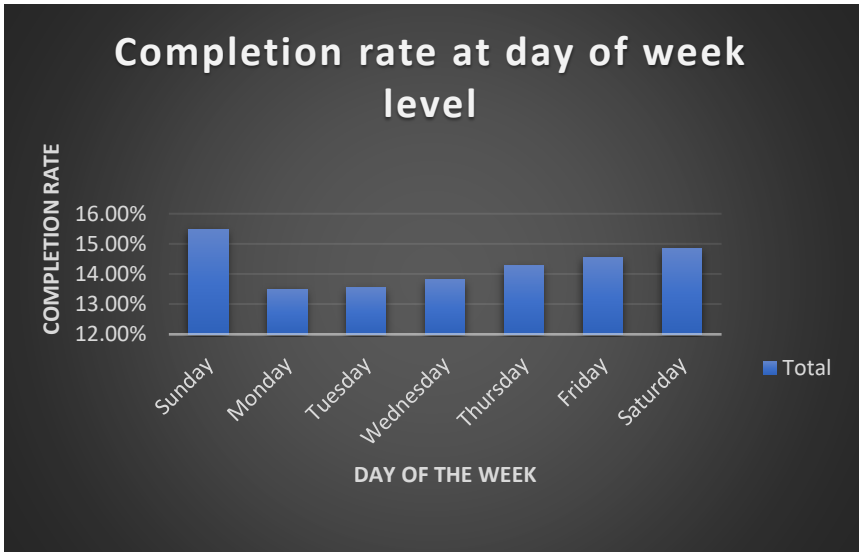
Overall, these analyses provide valuable insights into **order distribution patterns, delivery charges, and discount strategies at different levels of granularity**. These insights can be **used to refine marketing strategies, optimize delivery operations, and enhance customer engagement**.

2. Completion Rate Analysis:

a. Completion Rate Analysis at Day of the Week Level:

Observations:

- The completion rate varies across different days of the week.
- Sunday has the highest completion rate at 15.48%, indicating that customers are more likely to complete their orders on this day.
- The completion rates for Monday to Thursday are relatively consistent, ranging from 13.50% to 13.81%.
- There is a slight increase in completion rates starting from Thursday, peaking at 14.85% on Saturday.

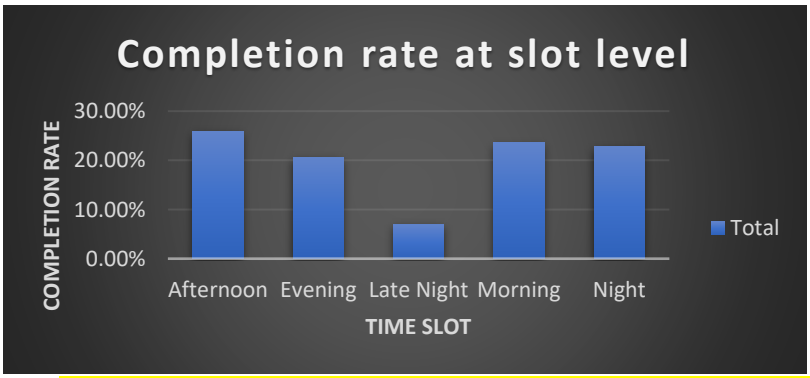


Insights:

- Sunday might be a favourable day for customers to engage with the platform, possibly due to leisure time or weekend shopping.
- The relatively stable completion rates from Monday to Thursday suggest consistent customer behaviour during weekdays.
- The increasing trend towards the end of the week (Thursday to Saturday) might indicate that customers are more inclined to complete orders as the weekend approaches.

b. Completion Rate at Time Slot Level:

- The completion rate also varies based on different time slots, with the highest rate during the afternoon (25.96%) and the lowest rate during late night (6.96%).
- The evening and night slots have relatively similar completion rates, while the morning slot also shows a moderate completion rate (23.61%).



- The higher completion rates during afternoon and morning suggest that these time periods might be more favourable for completing orders.

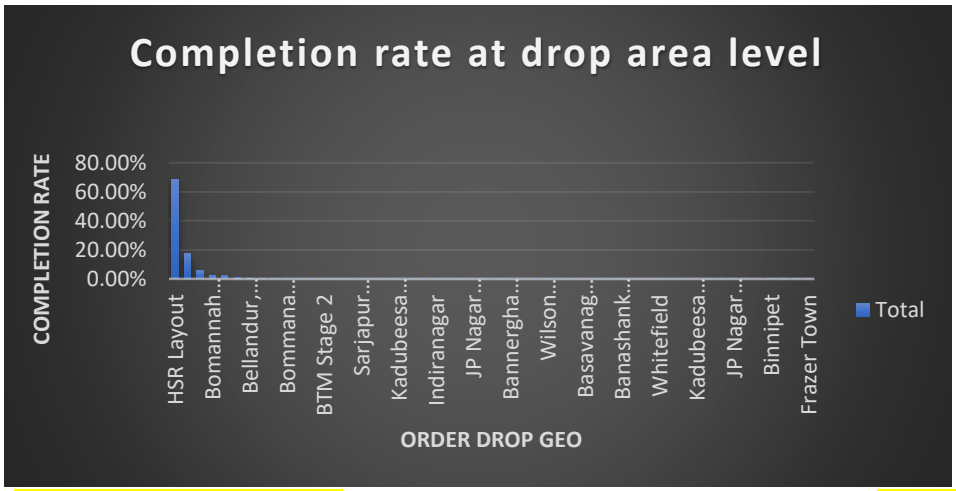
c. Completion Rate Analysis at Drop Area Level:

Observations:

- HSR Layout has the highest completion rate at 68.60%, indicating a significant preference for this drop area.
- The completion rates drop significantly for the next top areas, including ITI Layout (17.29%), Harlur (5.74%), Bomannahali - MicoLayout (2.41%), and Kudlu (2.27%).
- The bottom five areas have very low completion rates, ranging from 0.02% to 0.01%.

Insights:

- HSR Layout appears to be the most popular drop area, suggesting it might be a central and convenient location for customers.
- ITI Layout and Harlur have moderate completion rates, indicating that while they are chosen less frequently, customers are still relatively likely to complete orders for these areas.

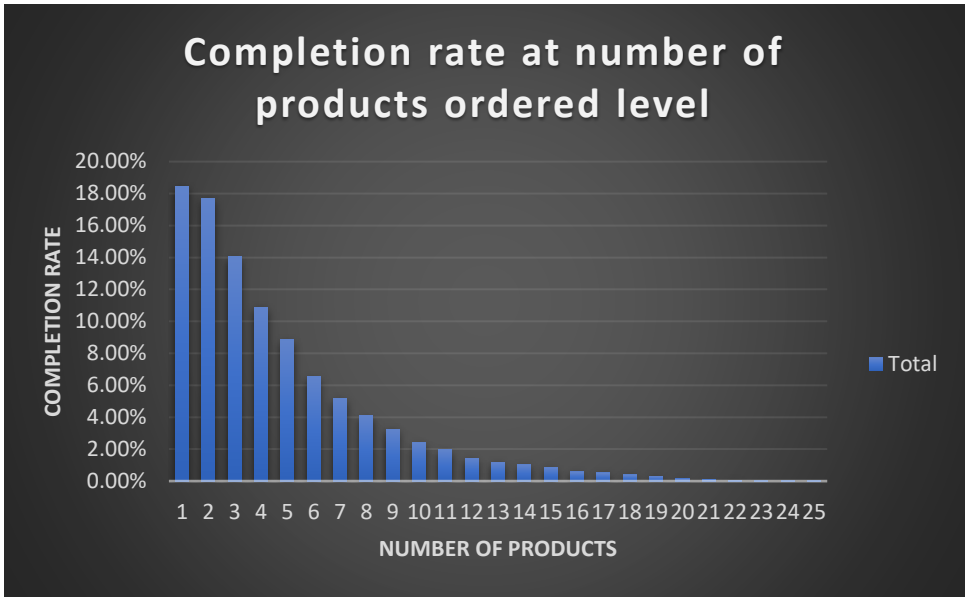


- -The low completion rates in the bottom five areas could be due to various factors, such as distance, accessibility, or demand.

c. Completion Rate Analysis at Number of Products Ordered Level:

Observations:

- Completion rates decrease as the number of products ordered increases.
- The completion rate is highest for orders with one product (18.45%), gradually decreasing as the number of products increases.



Insights:

- Customers might find it easier to complete orders with fewer products, possibly due to shorter decision-making times or reduced complexity.
- The drop in completion rates for orders with more products could indicate that customers might become overwhelmed by larger orders or might be more selective in completing them.

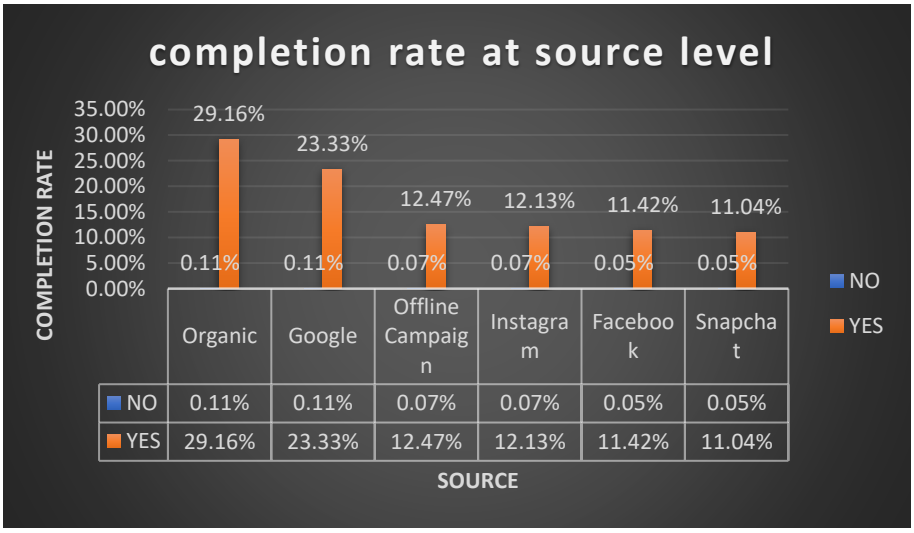
Overall Insights:

- Customers show varying completion behaviours based on the day of the week, drop area, and number of products in their orders.
- The insights from each analysis can guide strategies to improve completion rates. For example, understanding the popularity of certain drop areas could inform marketing efforts, and tailoring promotions for specific days of the week might increase engagement.
- To improve completion rates for orders with larger numbers of products, it could be beneficial to optimize the user experience during the order process, such as by providing clearer product information or streamlining the checkout process.

3.Customer Level Analysis;

a.Analysis Completion Rate at Source Level:

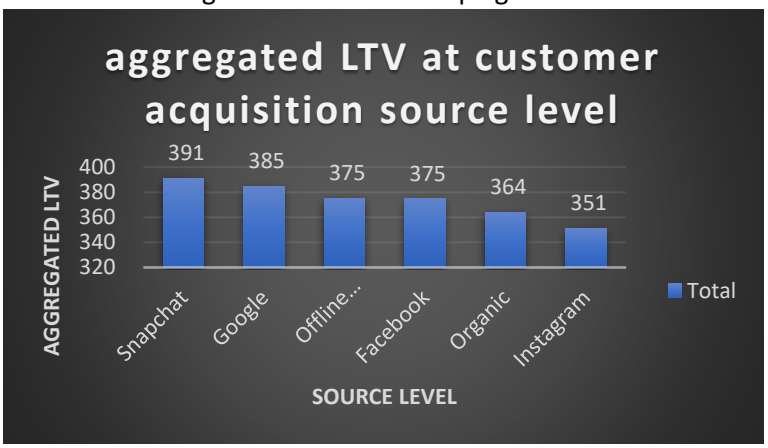
- The completion rate refers to the percentage of orders that were successfully completed (flagged as "YES") compared to the total number of orders.
- The highest completion rate is observed in the "Organic" source, with 29.16%, indicating that a significant portion of orders from this source are successfully completed.
- Among paid sources, "Google" and "Offline Campaign" have relatively higher completion rates compared to "Instagram," "Facebook," and "Snapchat."



- Snapchat has the lowest completion rate, possibly indicating a need to improve the order completion process or target a more relevant audience on this platform.

b. Analysis Aggregated Lifetime Value (LTV) at Customer Acquisition Source Level:

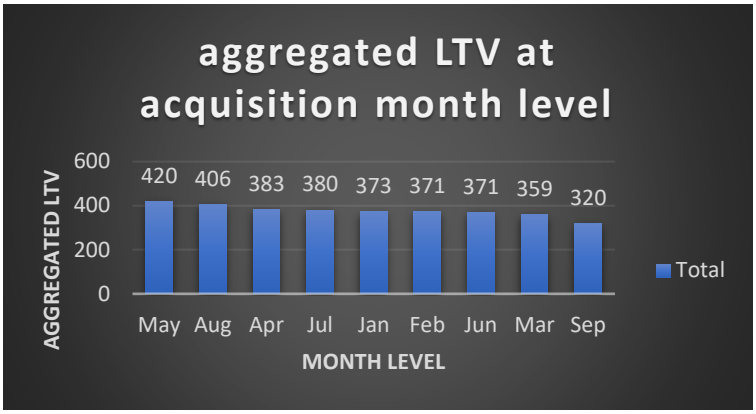
- The aggregated LTV represents the average lifetime value of customers acquired from different sources.
- Customers acquired from "Snapchat" have the highest aggregated LTV, followed closely by those from "Google" and "Offline Campaign."



- "Instagram" and "Organic" sources have comparatively lower aggregated LTV,
- suggesting that customers from these sources might have lower spending patterns over their lifetime.

c. Analysis Aggregated LTV at Acquisition Month Level:

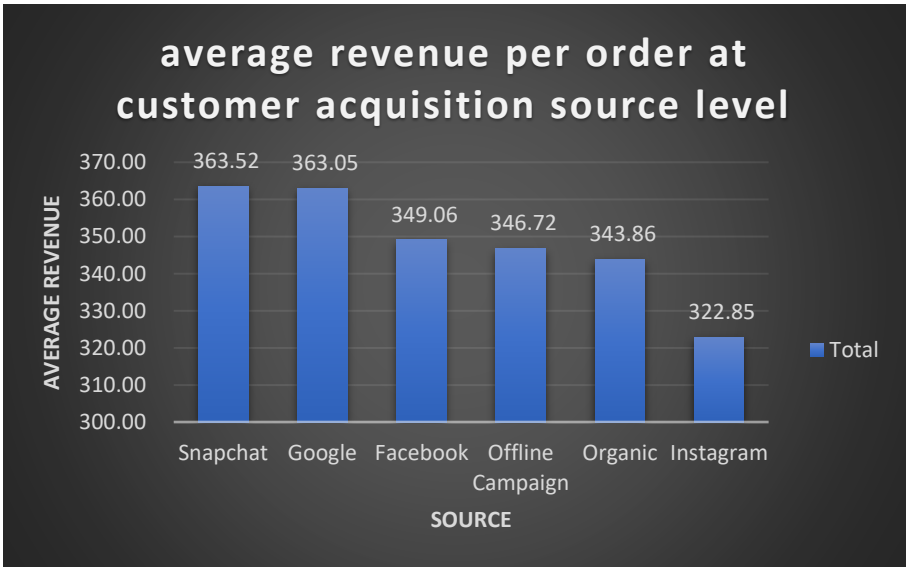
- Customers acquired in the month of "May" have the highest aggregated LTV, which could be due to various factors such as the effectiveness of marketing campaigns during that month.



- The months of "Sep" and "Mar" have the lowest aggregated LTV, indicating that customers acquired during these months tend to have lower lifetime values on average.

d.Analysis Revenue per Order at Different Customer Acquisition Source Level:

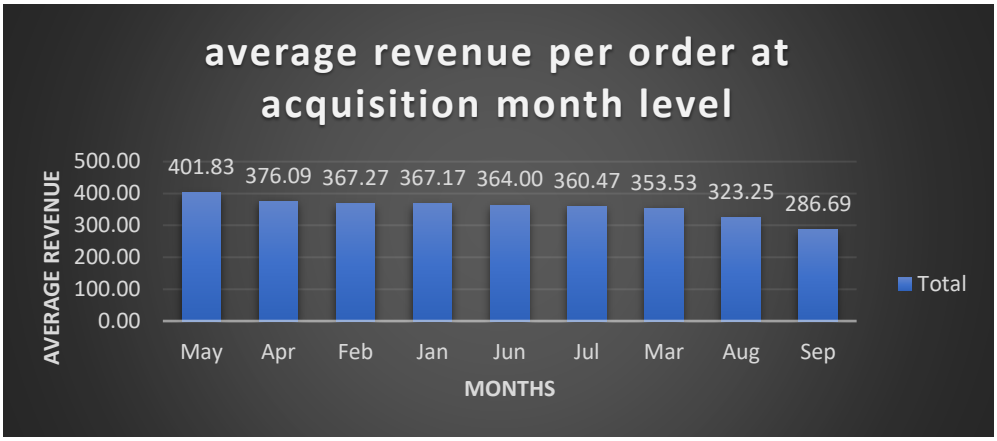
- The "**Snapchat**" source has the highest average revenue per order, followed closely by "Google" and "Facebook."



- "**Instagram**" and "**Organic**" sources have relatively lower average revenue per order, which could be attributed to the nature of user behaviour or the type of products promoted on these platforms.

e. Analysis Average Revenue per Order at Acquisition Month Level:

- "**May**" again stands out with the **highest average revenue** per order,
- suggesting that customers acquired during this month tend to make higher-value purchases.



- "**Sep**" has **the lowest average revenue** per order,
- possibly indicating a need for targeted strategies to boost customer spending during this month.

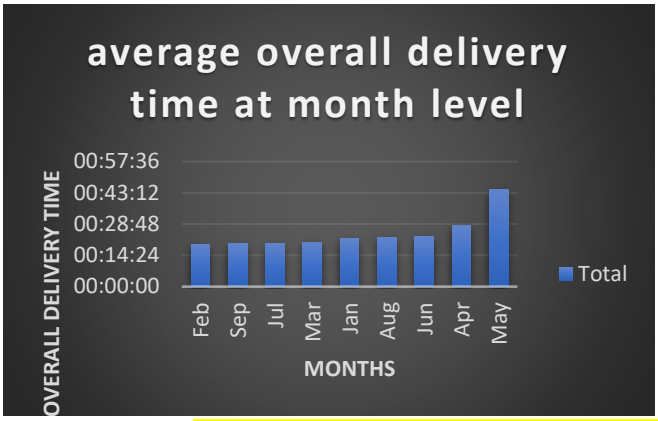
Overall Insights and Observations:

- "**Snapchat**" seems to be **performing well** in terms of **both aggregated LTV and average revenue per order,** suggesting it might be a lucrative platform for customer acquisition.
- "**May**" appears to be a promising month for customer acquisition, as customers acquired during this **month** tend to **have higher LTV and spend more per order**.
- "Organic" sources show good completion rates, but their aggregated LTV and average revenue per order are comparatively lower. This could indicate the need for strategies to increase customer spending over time.
- "**Instagram**" and "**Facebook**" show **relatively lower performance across multiple metrics**, indicating the potential for improvements in customer acquisition and retention strategies on these platforms.

4.Delivery Analysis:

a. Analysis on Average Overall Delivery Time at Month level: Looking at the average overall delivery times across months, we can observe the following:

- The fastest delivery months are February, September, and July, with average times of around 19 minutes.
- The slowest delivery months are April and May, with average times of around 27 minutes and 44 minutes, respectively.

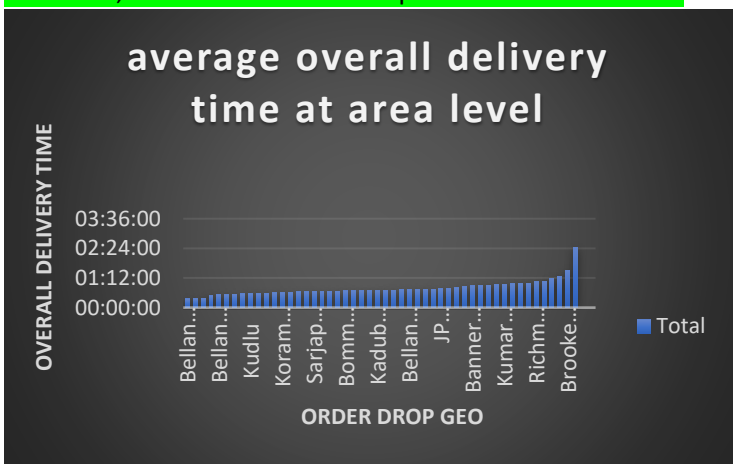


- There seems to be a slight fluctuation in delivery times across the months, with a general trend of shorter delivery times during the months of February, September, and July.

b. Analysis on Average Overall Delivery Time at Delivery Area Level:

Top five areas with the fastest average delivery times:

- The delivery areas with the fastest average delivery times are generally within or near Bellandur, such as Bellandur Ecospace and Bellandur ETV.



- This could be due to factors like proximity to the main warehouse, efficient delivery routes, and lower traffic congestion.

Bottom five areas with the slowest average delivery times:

- The delivery areas with the slowest average delivery times include CV Raman Nagar, Pattandur, Vimanapura, Brookefield, and Mahadevapura.
- These areas might be farther from the warehouse, have less efficient routes, or experience higher traffic congestion.

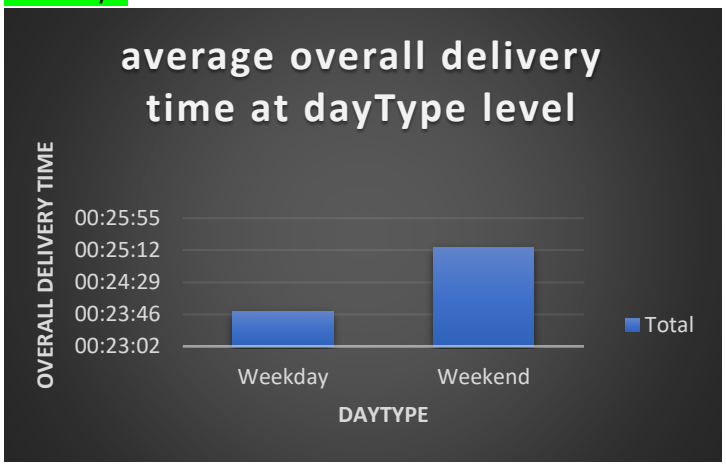
c. Analysis on Average Overall Delivery Time at Month Level:

- The months of February, September, and July consistently show faster average delivery times compared to other months.

- May stands out as the month with the slowest average delivery time, which could be due to increased demand during that month or other local factors.

d. Analysis on Average Overall Delivery Time at Weekend/Weekday Level:

- The data suggests that deliveries on weekends take slightly longer on average compared to weekdays.

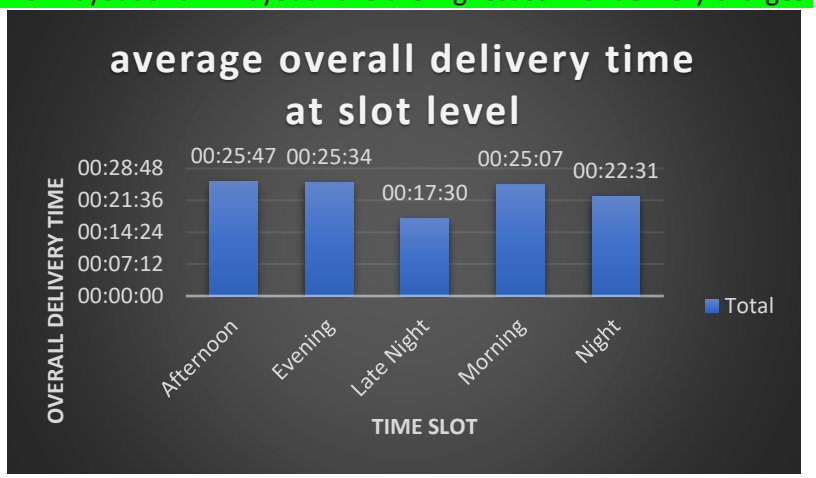


- This could be due to increased traffic or other factors associated with higher weekend activities.

e. Analysis on overall delivery time with Slot or Delivery Area:

Top five areas with the highest sum of delivery charges:

- HSR Layout and ITI Layout have the highest sum of delivery charges.



- These areas might have a high volume of orders or larger orders, resulting in higher delivery charges.

Bottom five areas with the lowest sum of delivery charges:

- Bellandur Ecospace and some other areas show very low or even zero delivery charges.

- This could be due to promotions, offers, or other factors driving down delivery charges in these areas.
- The delivery charge sum varies across time slots, **with afternoon and morning slots contributing the most to the total charges.**
- This might suggest that more orders are placed during these times, leading to higher delivery charges.

f. Patterns in Delivery Time and Delivery Area:

Several factors could contribute to the patterns observed in delivery times and delivery areas:

- **Distance from Warehouse**: Proximity to the warehouse likely plays a significant role in the observed delivery time differences. Closer areas experience shorter delivery times due to reduced travel distances.
- **Traffic and Accessibility:** Areas with heavy traffic congestion may experience longer delivery times, especially during peak hours.
- **Delivery Routes:** More efficient and direct routes in some areas could lead to faster deliveries.
- **Delivery Volume and Demand**: Areas with higher delivery volumes or uneven demand might have longer delivery times as drivers need more time to complete deliveries.
- **Delivery Infrastructure:** Well-planned and accessible delivery infrastructure can contribute to faster delivery times.