# **Hypermarket Data Analysis**

Hypermarket, situated in HSR, Bangalore, has established itself as a prominent supermarket in the region, catering to a wide range of customers.

In response to evolving customer needs and to enhance convenience, Freshco introduced a home delivery service in the year 2021.

To ensure seamless operations and optimize customer satisfaction, the store diligently maintained a comprehensive transaction data sheet, containing detailed information at the order level.

This document describes insights and observations at Order, Completion Rate, Delivery and Customer data level.

1. **Order level Analysis:**

* The data highlights customer behaviour at the order level. HSR Layout and ITI Layout are observed as prominent areas with consistently high order volumes. This indicates sustained demand over time.
* The distribution of discounts varies significantly across locations and time slots, with certain areas experiencing different discounting strategies during specific times of the day. For instance, Bilekahalli and Jaya Nagar witness substantial discounts in morning and evening slots, respectively.
* It is also observed that a trend of higher delivery charges during late-night slots potentially reflects operational costs or demand-supply dynamics during peak hours.
* Also, seasonal variations in delivery charges are observed in August and September showing the lowest percentages across all time slots. This concludes that understanding local demand patterns and operations is important for businesses to optimize resource allocation and reframe marketing strategies and enhance overall delivery efficiency.

1. **Completion Rate Analysis:** This refers to the rate at which orders are completed (Order successfully delivered / Total order placed).

* The data represents the completion rate across different time slots and days of the week. On average, the highest completion rates are observed during the afternoon and evening slots, with an average of 99.7% for both. Late-night slots exhibit a slightly lower average completion rate of 98.9%.
* Among the days of the week, Sunday consistently demonstrates the highest completion rates across all slots, while Friday tends to have slightly lower completion rates compared to other days.
* Also, the data indicates that most of the orders are delivered at a 50-100% completion rate while a negligible number of orders were delivered at less than 50% of completion rate.
* The data representing the completion rates at different levels of products ordered vary, with most quantities showing high completion rates of 99.3% to 100.0%. Orders with 12 or more products consistently achieve perfect completion rates of 100.0% (expect orders with 18 products).

1. **Customer Level Analysis:**

* The data describes the completion rates at the source level for acquiring customers. Facebook, Google, Snapchat, and Organic sources exhibit relatively high completion rates of 99.6%, while Instagram is a bit lower with 99.5%. Overall, the variation among these sources is very low, indicating that the customer acquisition strategies are working well across multiple platforms.
* The data on customer acquisition sources and average lifetime value (LTV) indicates that Snapchat has the highest LTV among the listed sources, followed by Google, Facebook, Offline Campaigns, Organic, and Instagram**.**
* Also, the revenue generated data indicates that Snapchat and Google tend to generate higher average revenue per customer compared to the other sources, with Snapchat having the highest average revenue.
* The table depicts the ratings given for deliveries across different time slots. It reveals varying levels of satisfaction, with higher ratings generally corresponding to higher delivery counts. The highest total deliveries and a higher rating are observed during the Night slot, with a notable count of 6154, followed closely by the Afternoon slot with 5924 deliveries.

1. **Delivery Analysis:**

* The data provides insights into the average delivery times for various drop areas across different months. For instance, in Akshaya Nagar, delivery times range from approximately 36 to 104 minutes, while in Arekere, they vary from around 29 to 57 minutes. Overall, the data underscores the importance of monitoring and optimizing delivery processes to ensure consistency and efficiency across different drop areas.
* The data provides a comprehensive overview of delivery distribution across various drop areas categorized by different times of the day. Notably, certain regions exhibit distinct patterns in delivery frequency. For instance, Akshaya Nagar witnesses a peak in deliveries during the morning and evening hours, accumulating 2,505 deliveries in total. In contrast, Banashankari Stage 2 primarily sees late-night deliveries, amounting to 290 in total.
* The data represents the average overall delivery times for various drop areas. The delivery times range from as short as 00:01:04 (Whitefield) to as long as 02:26:40 (Mahadevapura). The majority of areas have delivery times ranging from around 00:20 to 01:00.
* The data presents the average overall delivery times for weekdays and weekends across different months. Overall, delivery times tend to be shorter on weekdays compared to weekends. For example, in May, the average delivery time on weekdays is 00:42:32, whereas on weekends it is slightly lower at 00:48:30.
* The data provides the average overall delivery times categorized by different time slots. Across all slots, the shortest average delivery time is during the Late-Night slot, with an average time of 00:17:04. Morning and Evening slots have similar average delivery times of around 00:25:00, while the Afternoon slot is slightly longer at 00:25:46.