**FRESHCO HYPERMARKET CAPSTONE**

**PROJECT REPORT**

**Introduction:**

The Report presents an in-depth analysis of the Freshco Hypermarket order level data. The analysis is divided into four sections, each focusing on different aspects of the data to extract valuable insights to ensure seamless operations and optimize customer satisfaction. The four sections are as follows:

* Order Level Analysis
* Completion Rate Analysis
* Customer level Analysis
* Delivery Analysis

**Order Level Analysis:**

1. **Order distribution at slot and delivery area level**

* Maximum number of orders placed in the afternoon, while minimum number of orders are placed in Late night.
* HSR layout has maximum number of orders as all pick points are in HSR layout.

1. **Areas having highest increase in monthly orders**

* HSR Layout and ITI Layout has consistently shown a highest increase in monthly orders from January to September.
* Harlur present a significant increase in orders, especially between august and September.

1. **Delivery Charges as a percentage of product amount at slot and month**

* Delivery Charges are usually high for late night orders and low in afternoon orders.
* January shows relatively higher delivery charges and September had low delivery charges.
* Delivery Charges reducing gradually from January to September.

1. **Discount as a percentage of product amount at slot and month level**.

* Maximum discounts are given in the month of august.
* Discounts are consistent in morning, afternoon, evening, and night orders, while discounts are low in late night orders.

1. **Discount as a percentage of product amount at drop area and slot level.**

* Late night orders have minimum discount and night orders have maximum discount.

**Summary:**

* Maximum number of orders placed in the afternoon slot and minimum number of orders placed in late night.
* HSR Layout has the maximum number of orders and there is a substantial increase in orders from January to September.
* Delivery charges are usually high for late night orders. January has the highest delivery charges, which are gradually reduced till September.
* Maximum discounts are given in the month of August followed by September.

**Completion Rate Analysis:**

1. **Completion rate at slot vs day of the week (Sunday to Saturday) level.**

* Sunday evenings and Wednesday late nights are having 100% completion rate.
* Sunday shows consistently high completion rate across all time slots
* Afternoon orders have highest completion rate.
* Overall, there is slight variation in completion rates irrespective of slot and day of the week.

1. **Completion rate at drop area level.**

* For the areas Cox town and Whitefield there is only one order placed which is cancelled and hence the completion rate is zero.
* Except Bellandur ETV, Cox Town, Domlur, EGL, Indiranagar, Marathahalli, Vivek Nagar, Whitefield all other areas have 100% completion rate.

1. **Completion rate at number of products ordered level.**

* For the product count of 20-25 has 100% completion rate.
* As the product count increases completion rate increasing.

1. **Give analysis on any pattern you observe in the completion rate.**

* Completion rate is high in the month of May and June.
* As the product count increases completion rate increasing.
* HSR Layout has 100% completion even with maximum number of orders.
* Completion rate remains high at slot level, month level, delivery area level, product level and source level.

**Summary:**

* At slot level afternoon slot has maximum completion rate and late-night orders have Minimum completion rates.
* At delivery area level except Bellandur ETV, Cox Town, Domlur, EGL, Indiranagar, Marathahalli, Vivek Nagar, Whitefield all other areas have 100% completion rate.
* HSR Layout has 100% completion even with maximum number of orders.
* At product count level completion rate increase with the product count. while product range 20-25 has 100% completion rate.
* At month level completion rate completion rate is high in the months of May and June.
* Overall completion rate remains consistently high at all the levels i.e. slot, delivery area, month, source, product count etc.

**Customer Level Analysis:**

1. **Completion rate at Source**

* Customers acquired through organic have high completion rate and Offline campaign have low completion rate
* There is marginal difference in completion rate between all sources of customer acquisition

1. **LTV for every customer**

* Customer with user id APQ2413449 has highest LTV of Rs.64,062
* Lowest LTV is Rs.15

1. **Aggregated LTV at customer acquisition source level.**

* Snapchat has highest aggregate LTV and Instagram has lowest aggregate LTV.

1. **Aggregated LTV at customer acquisition month level**

* Customer with January as acquisition has high aggregated LTV and low in September.
* Aggregated LTV decreasing month on month which is because of customer having acquisition month as January means has lifetime of 9 month, February means 8 months likewise September has lifetime of one month.

1. **Average Revenue (Product amount after discount) per order at different customer acquisition source level**

* Snapchat (363.5) has highest average revenue per order followed by Google (363.1) with a marginal difference.
* Instagram has lowest average revenue per order with Rs. 322.9

1. **Average Revenue (Product amount after discount) per order at different customer acquisition month level**

* January month has highest Average revenue per order at acquisition month level with 385.5.
* September month has lowest Average revenue per order at acquisition month level with 247.5.
* Average revenue per order at acquisition month is decreasing month on month especially from May to September which means old customers have highest order value.

1. **Is there any pattern in order rating across slots, number of items placed, delivery charges, discount.**

* Orders placed during morning slot and afternoon slot are rated high. While irrespective of slot all orders rated high with minor difference
* Orders having less than 5 products are rated high and rating decreased with increase of products.
* Orders with delivery charges greater than 200 are 5 rated.
* Orders with discount range 300-399 are rated high.
* Overall order rating is 4.85 which is high states that customer is satisfied.

**Summary:**

* There is marginal difference in completion rate between all sources of customer acquisition with organic having highest completion rate and offline campaign low completion rate.
* Average revenue per order is high for old customers
* Rating is consistent high with minimal difference irrespective of source, slot, discount percentage, delivery charges states that customers are highly satisfied.

**Delivery Level Analysis:**

1. **Average overall delivery time at month and delivery area level.**

* Average overall delivery time is high in the month of May.
* Average overall delivery time is Low in the month of February.
* Mahadevapura, Brookfield, Vimanapura has high average overall delivery time.

1. **Average overall delivery time at month and weekday/weekend level**

* Usually weekend average overall delivery time is high than weekday time
* Average overall delivery time high in the month of May and low in the month of February.

1. **Average overall delivery time at slot level.**

* Late night order has less overall delivery time as traffic is low in late night.
* Afternoon slot has high delivery time followed by evening slot.

1. **Do you see any pattern in delivery charges with slot or delivery area**

* Average delivery charges are high in Late night and low in morning slot.
* Delivery charges are zero at Bennipet & Bellandur, ETV.
* Delivery charges varying from 0-43.2% which might be based on drop area distance, slot, month or some other factor like weather conditions, order value, festive offer, targeted areas to improve orders and on first order etc.

1. **Do you see any pattern in delivery time and delivery area.**

* Mahadevapura, Brookfield, Vijayapura has high average overall delivery time.
* Bellandur, Ecospace has low overall delivery time of 00:21:19 followed by HSR Layout, ITI Layout.
* Overall delivery time varying with delivery locations w.r.t distance, slot, day of the week, traffic and some other external factors like weather, change in delivery location etc.

**Summary:**

* Afternoon orders have high delivery time and Late-night orders have low deliver time because of traffic or number of orders.
* Usually, weekends have high delivery times than weekday.
* Delivery Charges usually high for late night order because of time factor.
* Delivery charges varying from 0-43.2% based on drop area distance, slot, month or some other factor like free delivery based on order value, festive offer, targeted areas to improve orders and on first order etc.
* Overall delivery time varying with delivery locations w.r.t distance, slot, day of the week, traffic and some other external factors like weather, change in delivery location etc.

**Overall Insights and Recommendations**

**Order Level Analysis:**

* As per orders level analysis about 92% of orders are from HSR Layout, ITI Layout, Halur and highest increase in monthly order from January to September found in all three areas.
* Need to focus on increment of orders in other areas by giving special offers and discounts, use social media engagement, targeted marketing, referral programs, attractive ads, knowing the customer needs, optimising the delivery process etc.

**Completion Rate Analysis:**

* Completion rate show consistency across different slots, days of the week, month and acquisition sources. This indicates a stable performance across these categories implying efficient operation.
* However, completion rate at delivery area is varying which is because of order cancellation in particular areas which need to be reduced by Monitoring customer feedback, conduct market research, offer 24/7 customer support, be transparent, provide responsive customer services, provide clear policies, improve product information, display customer reviews and rating, offer clear and flexible return policies.

**Customer Level Analysis:**

* Order rating showcase consistency across slots, product count, delivery charges and discount ranges. Majority of ratings are between 4.8 to 5.0 indication a high level of satisfaction overall.

**Delivery Level Analysis:**

* Delivery time, delivery charges are varying with delivery areas, slot, month. Late night orders have high delivery charges and Mahadevapura, Brookfield, Vijayapura has high overall delivery time because of one pick area and some other factors which leads to reduction in order count in particular slot and area.
* Delivery performance can be improved by optimising delivery routes, improving warehouse efficiency, training and supporting delivery personnel, collaboration with reliable partners etc.