**Freshco Hypermarket Capstone Report**

1. **Introduction**

The purpose of this report is to delve into the data and perform a series of analyses that will provide insights into key areas of Freshco’s operations. Business metrics such as Completion rate, Customer Lifetime value, Acquisition month, Delivery Area, Slot definition, Source, Overall delivery time, Order to arrival, Arrival to pickup, and Pickup to delivery has been calculated. Specifically, the report will cover:

1-Order Level Analysis

2-Completion Rate Analysis

3-Customer Level Analysis

4-Delivery Analysis

Through these analyses, the report aims to provide actionable insights and recommendations that will help FreshCo Hypermarket optimize its operations, improve customer satisfaction, and enhance overall business performance.

1. **Order Level Analysis:**

**2.1) Methodology**

* Data Collection: Extracted relevant data from Sheet1 such as slot definition, Order Drop Geo, Completion flag and Month.
* Data Processing: Cleaned and Organized data to ensure accuracy and consistency.
* Analysis: Calculated metrics required, and using Pivot Charts I have presented the findings.

**2.2) Findings**

* Analysis has shown order distribution across different slots and areas, providing insights into most peak hours and high-demand locations.
* By comparing monthly order from January to September, it has been seen that areas such as HSR Layout, ITI Layout and Harlur have 20912 orders flagged out of total 22823. Resulting in 91.62% of total orders. Over the year there has been increase in order counts in HSR Layout and ITI Layout. Whereas, in Harlur order count has typically increased in the month of August and September, giving an idea of potential growth over the time.
* Calculations like delivery percentage, discount percentage at slot level are done calculating predefined criteria.

1. **Completion Rate Analysis:**

**3.1) Methodology**

* Data processing: Processed data into day of the week (Sunday to Saturday). Relevant data sources were extracted from raw data to plot tables.
* Calculating Completion rate: Utilized appropriate formula to calculate completion rates based on criteria.

**3.2) Findings**

* Harlur, ITI Layout and HSR Layout have completion rate of 99.69%, 99.59% and 99.60%respectively. Indicating that Freshco is performing exceptionally well in this areas in all slots.
* Completion rate at Slots level indicates that afternoon slots have highest orders over the week, whereas Late night slots have the lowest. There has been significant orders on Friday and Saturday which haven’t been completed. Further data is required to understand the cause behind failed deliveries.
* Generally orders which has less than 10 items in it are failed to be delivered, compared to orders which has more than 10 items.

1. **Customer Level Analysis:**

**4.1) Methodology**

* Calculation of Key metrics: Utilized formulas to calculate completion rates, Customer LTV and average revenue.
* Aggregation and analysis: Aggregated data by acquisition source, month and time slots to derive meaningful insights.

**4.2) Findings**

* Identifying completion rate at source level shows effectiveness in terms of order fulfillment.
* Calculating LTV and aggregated LTV provides long term value that each customer brings to Freshco. This provides analysis in identifying the most promising acquisition channel and show the effectiveness of marketing campaigns over the time period (January to September).
* Average revenue at source and month level helps in understanding the revenue generated from different sources and trends over time.
* Order with rating 5, has the highest total of discount provided by Freshco.

1. **Delivery Analysis:**

**5.1) Methodology**

* Data Collection: Collected raw data related to delivery time and charges.
* Data processing: Cleaned and organized the data, and created new columns where necessary (tagging dates as weekday and weekend).
* Aggregation and analysis: Aggregated data by order drop geo, month, days and slot.

**5.2) Findings**

* The average delivery time at month and delivery area helps in understanding the delivery performance variation across different region over time period.
* Average delivery time was calculated on monthly basis, segregated by weekday and weekend. It provides insights on delivery performance based on day of the week.
* Overall delivery time at slot level provides that average delivery time is usually less for late night slots.

1. **Conclusion:**

The analysis of Freshco Hypermarket reveals key insights into order patterns, completion rates, customer value and delivery efficiency.These insights can be further leveraged to increase business growth by serving better to it’s customer and drive profit.