##### Capstone - Funnel Analysis ****Business Case: Swiggy****

**Dates of highs in the orders with respect to same day last week**

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| **Date** | **orders w.r.t same day last week** | **Reason** |
| 17-01-2019 | High | High Count of restaurants, Less Delivery Charges & Less Avg Cost for two, High Success Rate of payments |
| 21-01-2019 | High | High Count of restaurants |
| 22-01-2019 | High | High Count of restaurants & Packaging charges, High Success Rate of payments |
| 31-01-2019 | High | Less Packaging charges, Delivery Charges & Avg Cost for two, High Success Rate of payments |
| 05-02-2019 | High | High Count of restaurants, Less Out of stock Items per restaurant & high Number of images per restaurant |
| 26-02-2019 | High | High Count of restaurants, Less Out of stock Items per restaurant, Packaging charges & high Number of images per restaurant |
| 28-02-2019 | High | Less Out of stock Items per restaurant, Delivery Charges & high Number of images per restaurant |
| 09-03-2019 | High | High Count of restaurants, Less Out of stock Items per restaurant & High Success Rate of payments |
| 24-03-2019 | High | High Count of restaurants, Less Delivery Charges & Less Avg Cost for two & high Number of images per restaurant |
| 26-03-2019 | High | Less Packaging charges & Less Delivery Charges, High Success Rate of payments |
| 11-04-2019 | High | Less Delivery Charges |
| 14-04-2019 | High | High Success Rate of payments |
| 18-04-2019 | High | High Discount, Low out of stock, Low Avg cost of two & high Number of images per restaurant |
| 19-04-2019 | High | Low Packaging charges & Low Avg Cost for two, High Success Rate of payments |
| 27-06-2019 | High | High Count of restaurants, Less Out of stock Items per restaurant, Low Packaging charges & Low Avg Cost for two |
| 23-07-2019 | High | Less Out of stock Items per restaurant, Low Packaging charges & Delivery Charges |
| 18-08-2019 | High | High Number of images per restaurant & High Success Rate of payments |
| 21-09-2019 | High | Less Delivery Charges |
| 09-10-2019 | High | Less Packaging charges & Avg Cost for two |
| 21-10-2019 | High | Less Out of stock Items per restaurant |
| 09-11-2019 | High | High Success Rate of payments |
| 24-11-2019 | High | Less Avg Cost for two & High Success Rate of payments |
| 01-12-2019 | High | Less Delivery charges & high Number of images per restaurant |
| 22-12-2019 | High | Less Out of stock Items per restaurant, Packaging charges, Delivery charges & high Number of images per restaurant |

**Dates of Lows in the orders with respect to same day last week**

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| **Date** | **orders w.r.t same day last week** | **Reason** |
| 10-01-2019 | Low | High Packaging charges, Avg Cost for two & Less Number of images per restaurant |
| 29-01-2019 | Low | High Packaging charges & Less Count of restaurants |
| 19-02-2019 | Low | Less Number of images per restaurant |
| 02-03-2019 | Low | High Delivery charges & high Avg Cost for two |
| 19-03-2019 | Low | High Avg Cost for two & Less Number of images per restaurant & low Success Rate of payments |
| 04-04-2019 | Low | Low Average Discount & High Packaging charges |
| 12-04-2019 | Low | Less Number of images per restaurant |
| 25-04-2019 | Low | High Avg Cost for two |
| 20-06-2019 | Low | High Avg Cost for two |
| 16-07-2019 | Low | High Avg Cost for two |
| 11-08-2019 | Low | High Packaging charges & High Avg Cost for two |
| 14-09-2019 | Low | High Out of stock Items per restaurant, Avg Cost for two & Packaging charges |
| 17-11-2019 | Low | High Out of stock Items per restaurant & Packaging charges |

**Source of traffic change**

**Observations:**

* Facebook has high fluctuation in percentage change, Twitter has moderate, You tube & Others are less fluctuated compare to Facebook & twitter
* As Facebook has significant spike in beginning stage, which act as a outlier & impacts the average & standard deviation

**Source of traffic fluctuations - Raise as compared to the same day last week**

**Source of traffic fluctuations - Dropped as compared to the same day last week**

**Observations:**

* 37 days in 2019 has 0% traffic fluctuation as compared to same day last week
* Social media & other channels are equally impacting the customer engagement
* While the drop specifically on Facebook indicates platform specific challenge

**Deviation in Conversion stages**

**Observations:**

* Listing to Menu – Indicates consistent customer interest in viewing menu after seeing the Listings
* Menu to Cart – Variability in customer decision, potentially influenced by discounts & out of stock items
* Cart to Payment – High deviation due to high packing charges & delivery charges
* Payment to Order – Variability in customer experience, due to payment gateways issues

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**Fluctuations in conversions stages**

**Observations:**

* L2M – Indicates significant drop, where we need to focus on quality & promotions
* M2C – High drop rates, potentially due to discount factor
* C2P – Indicates more customers are left at this stage due to high delivery charges
* P2O – Inferior due to payment failures

**Deviation in Variables**

**Observations:**

* Most fluctuated variables are Avg cost of two & out of stock items per restaurant, which impacts M2C & C2P conversions

**Performing Hypotheses to identify the possibility for fluctuation in conversions**  
With implementation of Regression testing below are the Coefficient & P-Values with dependent variables for each conversion stage.

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| **Conversion Stage** | **Coefficient Value** | **P-value** | **Variables** | **Observations** |
| **L2M** | 0.00 | 0.00 | Count of restaurants | Statistically significant, but low impact |
| **M2C** | 1.05 | 0.00 | Average Discount | Significantly influences the M2C & discounts play a crucial role |
| **M2C** | 0.00 | 0.00 | Out of stock Items per restaurant | Statistically significant, but low impact |
| **M2C** | 0.00 | 0.04 | Average Delivery Charges | Statistically significant, but low impact |
| **C2P** | 0.00 | 0.00 | Average Packaging charges | Statistically significant, with low impact |
| **C2P** | -0.01 | 0.00 | Average Delivery Charges | Statistically significant, higher delivery charges may negatively impact the conversion rate. |
| **P2O** | 0.78 | 0.00 | Success Rate of payments | Statistically significant, strong predictor of the final conversion stage |

**Post validating the hypotheses using Supporting data & Recommendations to improve Conversion rate**

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| **Conversion Stage** | **Variable** | **Recommendations to improve Conversion rate** |
| **L2M** | Count of restaurants | Focus less on no of restaurants & more on quality & promotions |
| **M2C** | Average Discount | Offering targeted discounts |
| **M2C** | Out of stock Items per restaurant | Restaurants have to ensure to Minimize out of stock items |
| **M2C** | Average Delivery Charges | Reduce delivery charges or provide free delivery for purchases over a specific amount. |
| **C2P** | Average Packaging charges | Reduce packaging charges without compromising quality through strategic partnerships |
| **C2P** | Average Delivery Charges | Reduce delivery charges through strategic partnerships |
| **P2O** | Success Rate of payments | Enhance the payment methods by fixing the issues caused for payment failures |

**Insights:**

* **Higher packaging & delivery charges** negatively impact the **cost to payments** conversion rate
* **Discounts play** a crucial role at **menu to cart** conversion stage
* **Success rate of payments** is directly proportional to **payment to order** conversion stage

**Conversion Funnel Analysis: Measure Quarterly**

**Conversion Funnel Analysis: Year - 2019**

**Insights:**

* Conversion funnel indicates significant drop at cart to payment & payment to order stages
* Providing more discounts during high traffic time will improve cart to payment conversion rate
* Enhancing the payment methods/gateways to improve payment to order conversion rate
* By implementing the above insights, we can improve the overall conversion rate.