

VberEats Customer Segmentation

Note:

- The trends in the data may not describe the real world scenario
- Assume the data is retrieved from a data warehouse

Business Proposition



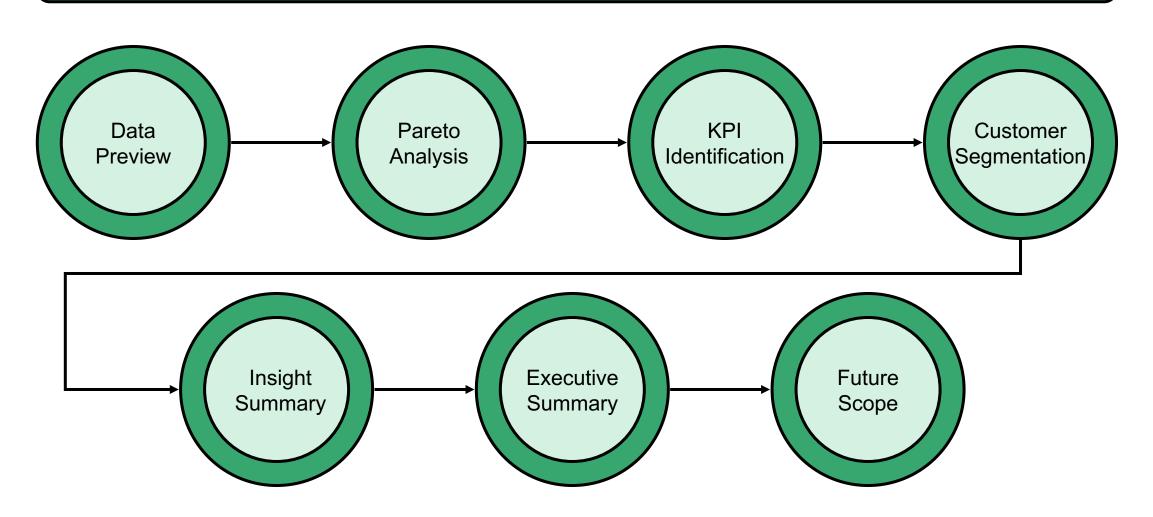
Business Proposition

As the company grows and matures VberEats is facing a tough situation where they are experiencing difficulty in retaining their customers.

Solution

Identifying the target list through customer segmentation and suggest customized marketing campaigns for different segments.

Road Map

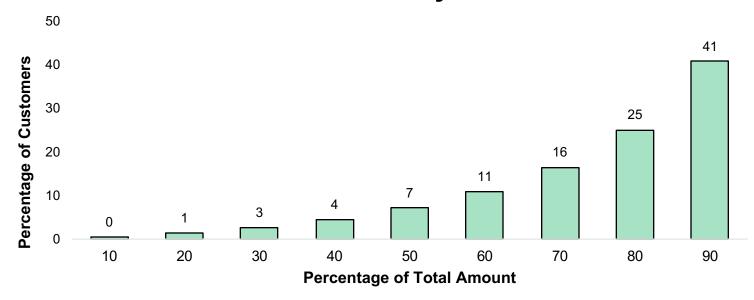


Dataset Preview

customer_id	First Time	Recent Time	# of Orders		# of Orders in last 4 weeks	Amount	Amount in last 7 days	Amount in last 4 weeks	Avg_DistanceFrom Resturant	Avg_DeliveryTime
1269647	6/29/15 10:57 AM	12/10/15 2:18 AM	212	6	43	138808	4291	26853	1.6	51
167631	7/4/15 3:39 PM	12/15/15 2:42 PM	211	8	19	56404	1925	4177	2.2	42
301524	6/26/15 9:56 AM	12/9/15 8:45 PM	189	9	33	36020	1772	6404	2.5	57
1268254	7/1/15 1:51 AM	12/14/15 1:43 AM	184	6	37	32489	975	7110	3.1	55
357161	7/11/15 6:34 PM	12/19/15 11:26 PM	182	4	23	85150	1738	9958	2.4	36
1294857	6/15/15 9:00 AM	11/25/15 2:01 PM	171	8	27	55597	1710	8436	1.6	31
387095	7/27/15 12:18 PM	12/27/15 5:50 AM	168	13	43	19055	1231	4014	2.1	48
785080	7/24/15 10:27 PM	12/25/15 9:23 AM	160	0	25	39588	0	6705	1.8	16
1288527	7/13/15 7:02 AM	12/25/15 8:47 PM	160	7	40	4343	215	1060	2.1	49
1111111	6/11/15 6:06 AM	11/21/15 2:45 AM	158	1	28	15279	94	3336	2.1	54

Major portion of the business is untapped.

Pareto Analysis

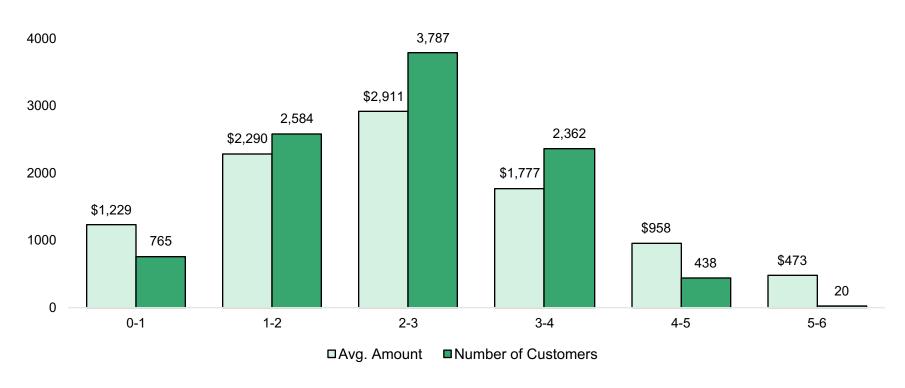


Insight Box

- There seems to exist at least two distinct groups of customers.
- Before analyzing how to get the customers more engaged, we need to focus on 'who' can we get engaged?
- Identifying high and low performing customers is dependent on the identification of most relevant features.

Identifying the KPIs

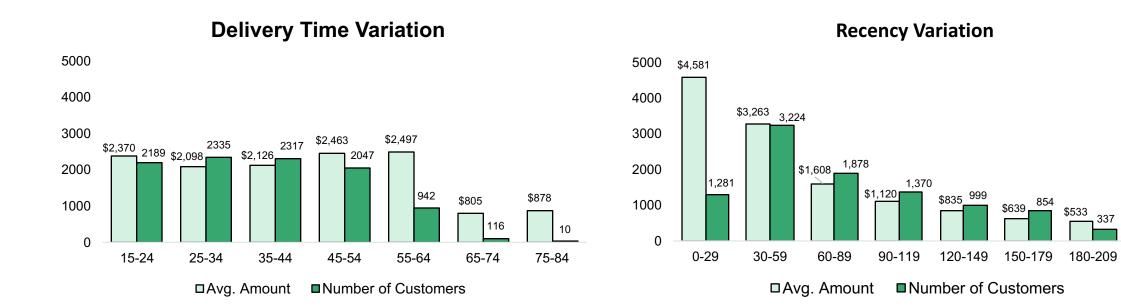
Distance from the Restaurant Variation



Insight Box

- Average distance may not be conclusive, since it does not show a clear pattern.

Identifying the KPIs



Insight Box

- Higher average delivery times impacts the spending behavior of our customers.
- Recency shows something interesting: Lower Recency (0-29) shows a very high average amount but a very few number of customers, something that was also found by Pareto Analysis.
- Recency, Avg. Amount and Number of Orders, individually, may not be sufficient.

Feature Correlation

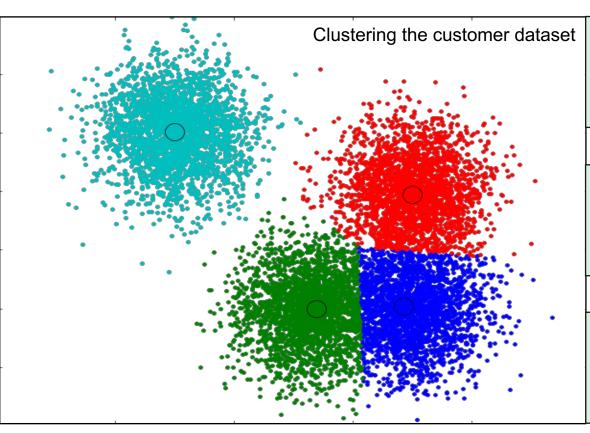
	# of Orders	# of Orders in last 7 days	# of Orders in last 4 weeks
# of Orders	100%	50%	80%
# of Orders in last 7 days		100%	80%
# of Orders in last 4 weeks			100%

	Amount	Amount in last 7 days	Amount in last 4 weeks
Amount	100%	50%	70%
Amount in last 7 days		100%	70%
Amount in last 4 weeks			100%

Insight Box

- It can be seen that there exists very high correlation between the remaining variables, which makes perfect sense, given the fact that the '# of Orders' and 'Amount' are merely the supersets to their respective counterparts.

Customer Segmentation

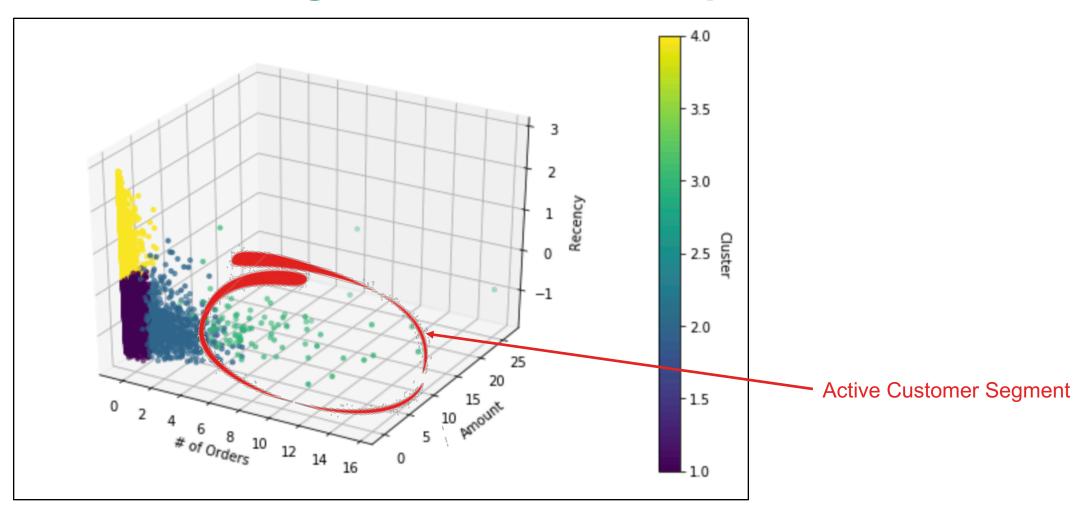


Post the feature KPI analysis it can be deduced that Recency, # of Orders and Amount are the most important features that can be used to segment the customers.

Customer segmentation was carried out using a simple machine learning algorithm called clustering.

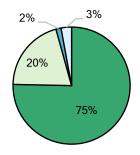
The output of clustering will segment similar customers into the same cluster.

Customer Segmentation with respect to KPIs



Cluster Summary

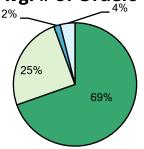




■Active ■Semi Active

■Passive ■Semi Passive

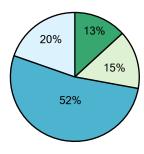
Avg. # of Orders



■Active □Semi Active

■Passive ■Semi Passive

Avg. Recency



■Active □ Semi Active

■Passive □Semi Passive

Cluster	Avg. Amount	Avg. # of Orders	Avg. Recency	Number of Customers	Avg. Distance From Restaurant	Avg. Delivery Time
Active	37488	89	35	94	2	38
Semi Active	10136	32	39	828	2	37
Semi Passive	1440	5	52	5765	2	36
Passive	700	2	139	3269	2	38

Insight Summary

Customer Retention

The retention of customers is directly related to the fact that some customers contribute a lot towards revenue, whereas others, not so much. (As indicated by Pareto Analysis.)

KPIs

Recency, # of Orders and Amount are the most important metrics in segregating customers into groups.

Avg. Distance from Restaurant is not a significant factor.

Business Proposition

Avg. Delivery Time, although not significant in deciding customer groups, may be relevant in getting more customers engaged.

Executive Summary

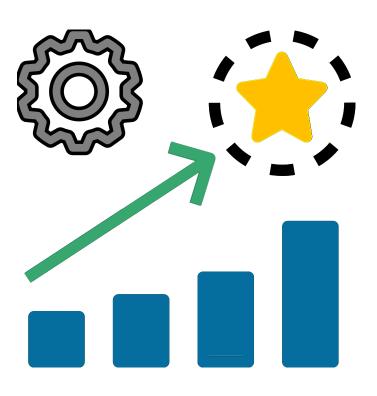
Reduction in Delivery Time

The company needs to strive to reduce the delivery time should be less than 55 minutes all locations.

Increasing Customer Retention

Customized marketing campaigns for the Passive and Semi Passive customer groups thereby trying to move these customer segments up by one level.

Future Scope



Analytics

- Promotional discounts and coupons can be shared to the customer, whose contact information can be retrieved from the database.
- Recommend to setup a Google Analytics account to track the conversion of customers with the help of inbuilt GA features such as URL builder and campaign tracking.

Advanced Analytics

 Employ regression to predict the potential amount spent by the customers.

