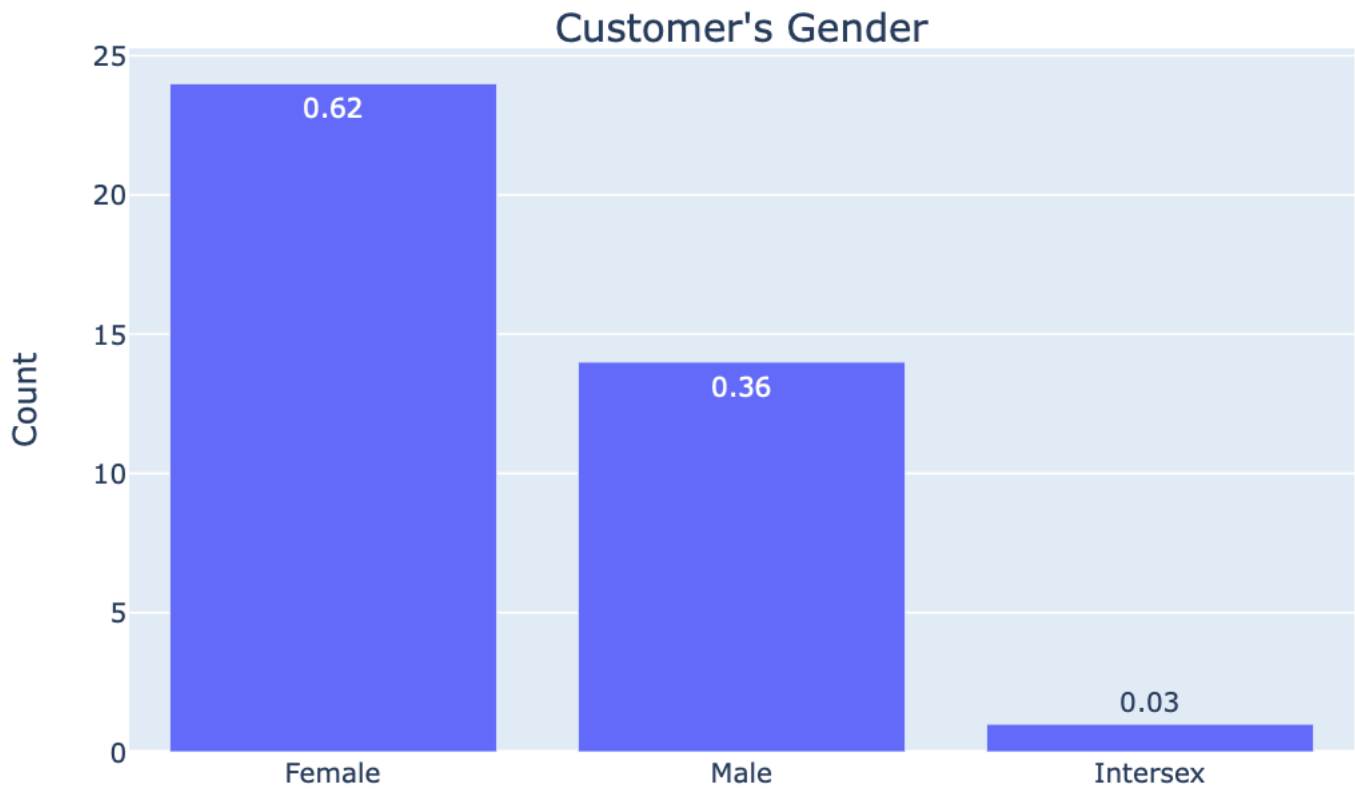




Digital Product Sampling Analysis

Yasaman Ensafi

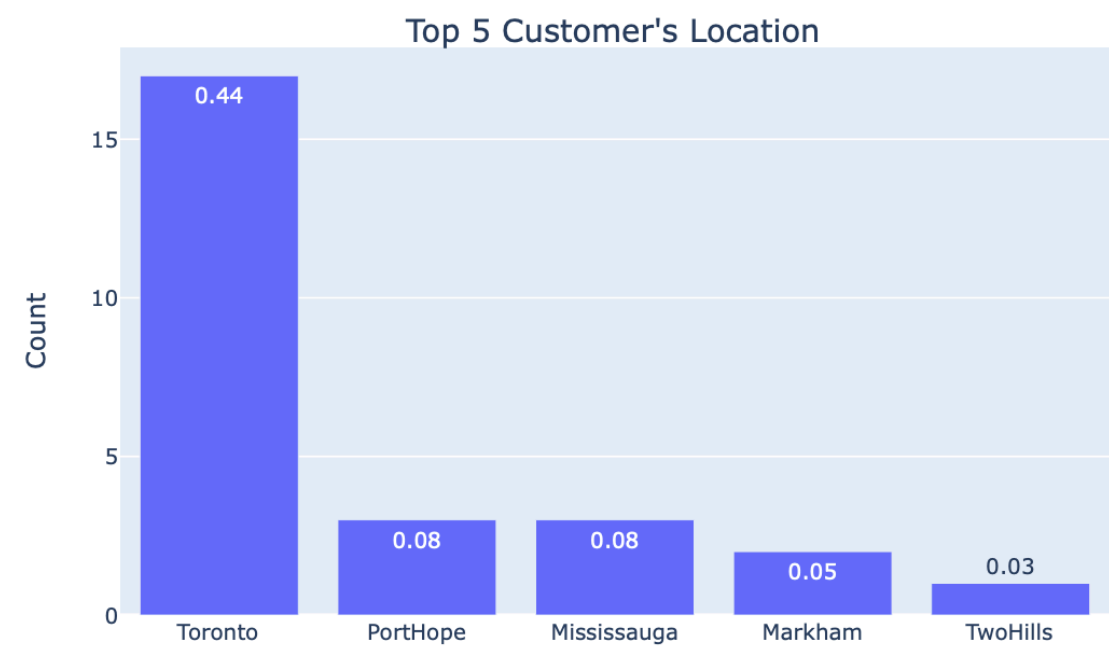
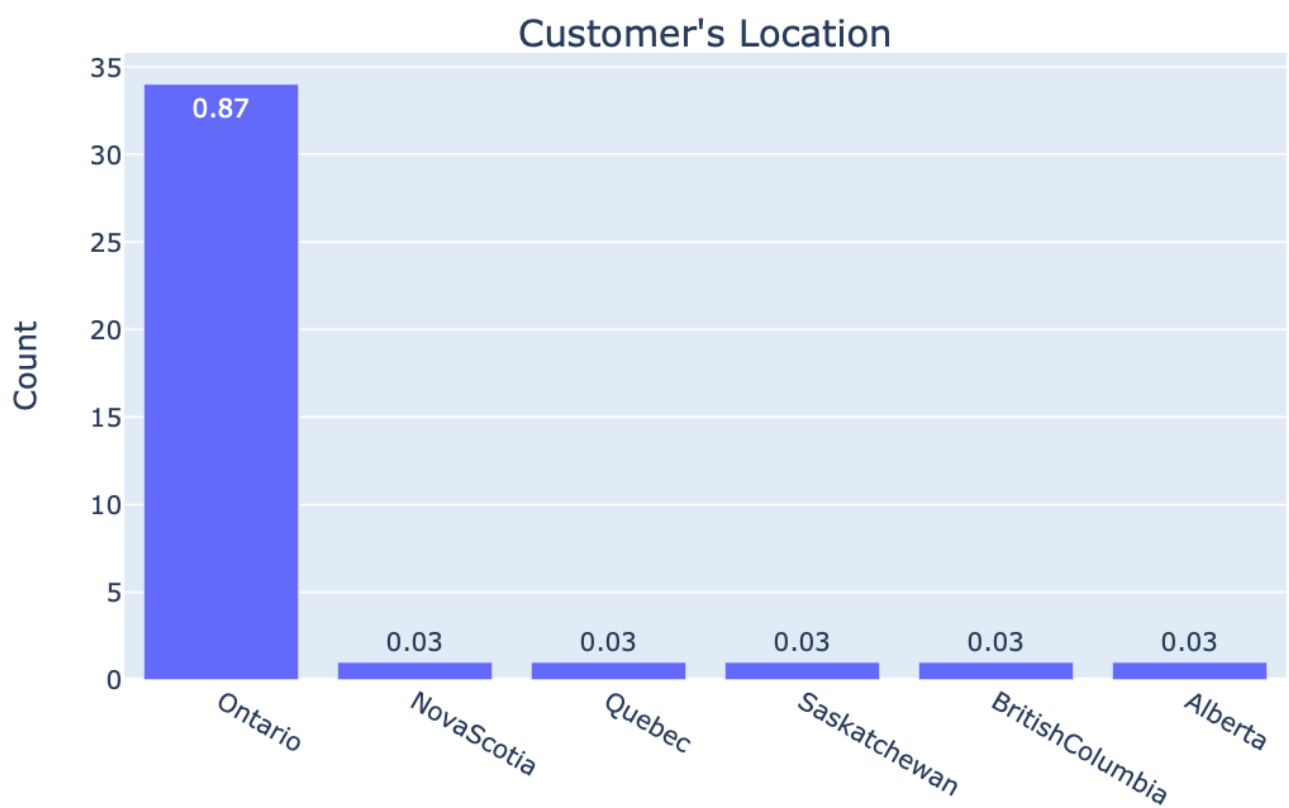
Gender



The left bar chart illustrates the customer's gender percentage. 62 percent of customers are female and 36 percent are male. Also, 3% identified themselves as intersex at birth.

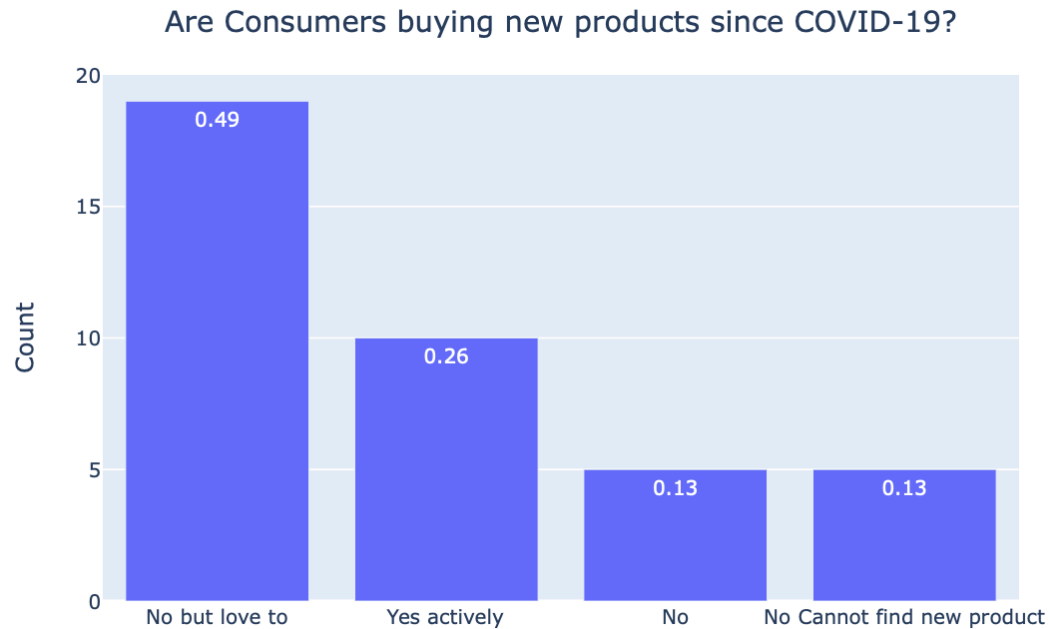


Location

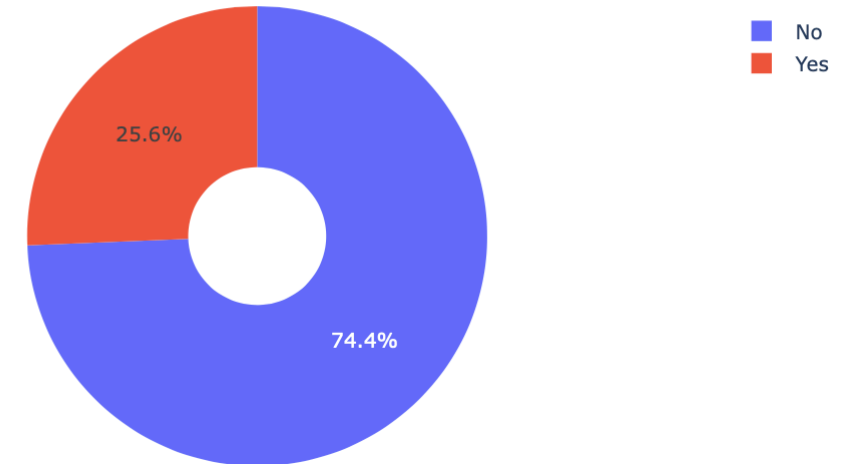


The two above bar charts indicate that 87% of consumers are located in Ontario and overall 44% of them live in Toronto. The other cities which have the most number of consumers are Port Hope, Mississauga, and Markham respectively.

1) Are you buying new products since COVID-19?



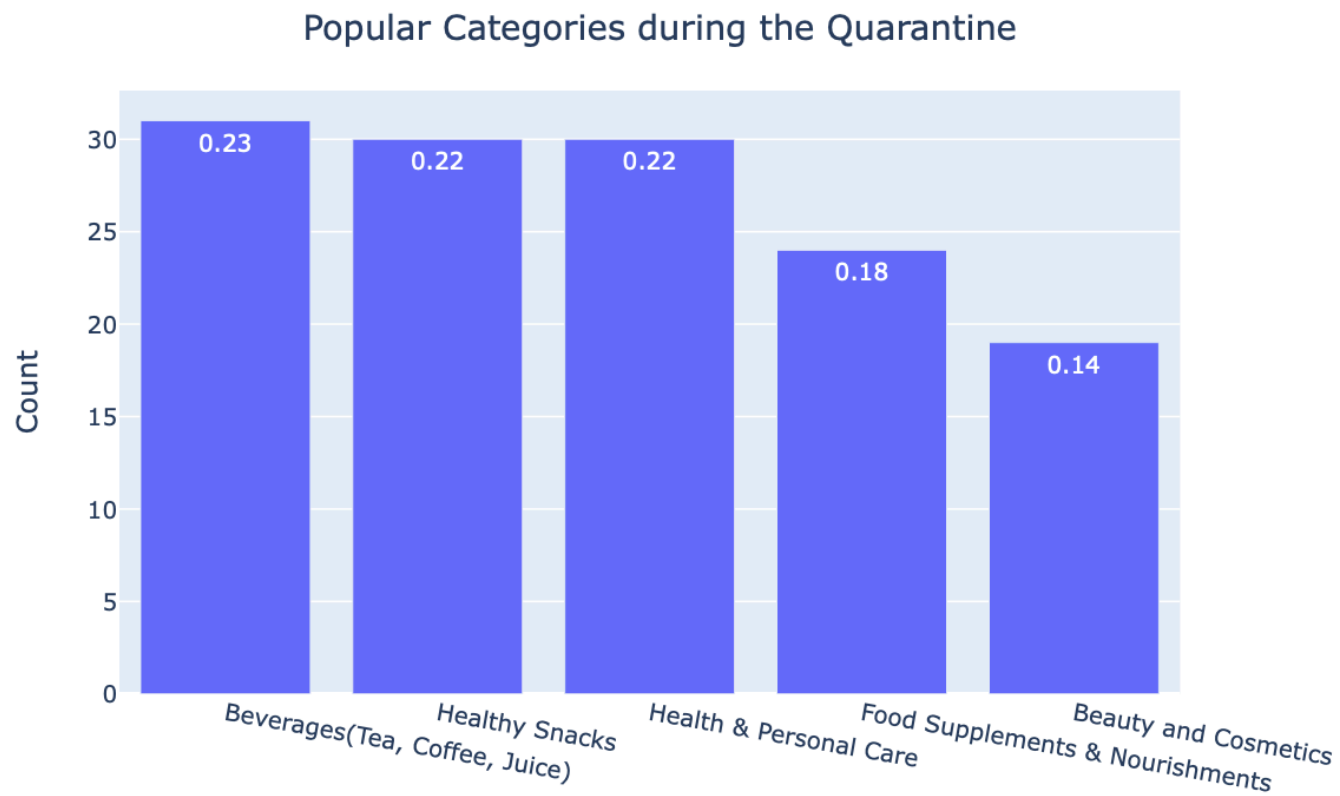
Are the customers buying new products since COVID-19?



According to the above bar chart, we can observe that near half of the customers who participated in the survey haven't bought new products since COVID-19 but they are interested to do so. On the other hand, 26% of the customers are actively buying new products.

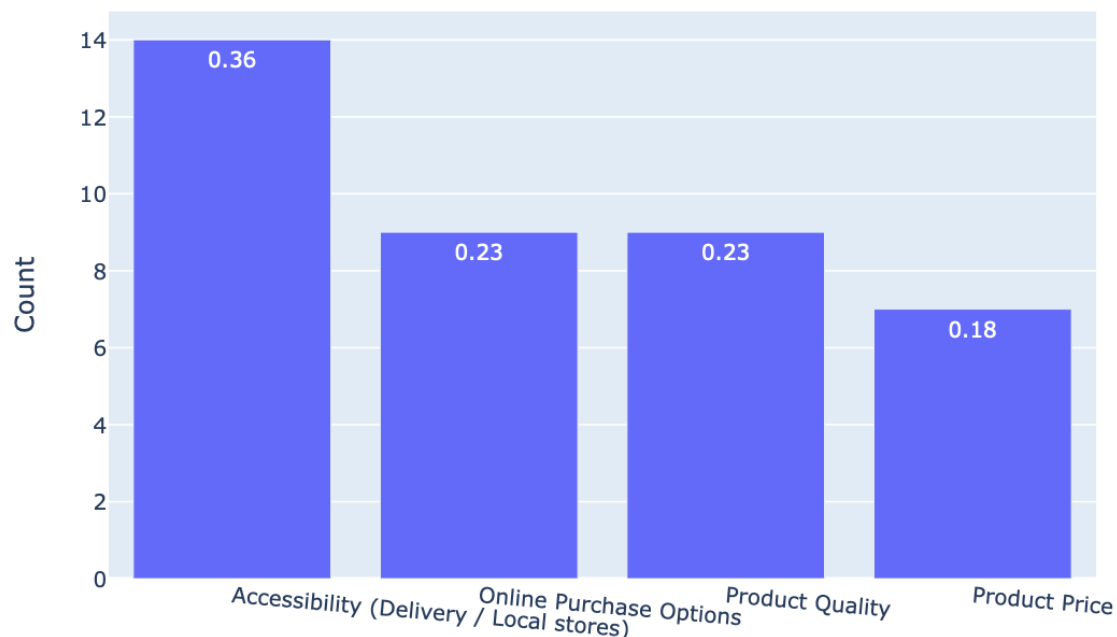
However, the pie chart shows that due to the impact of Covid-19, 74.4% of customers are not buying new products because of various reasons.

What are the categories that consumers would like to try new products during the quarantine?

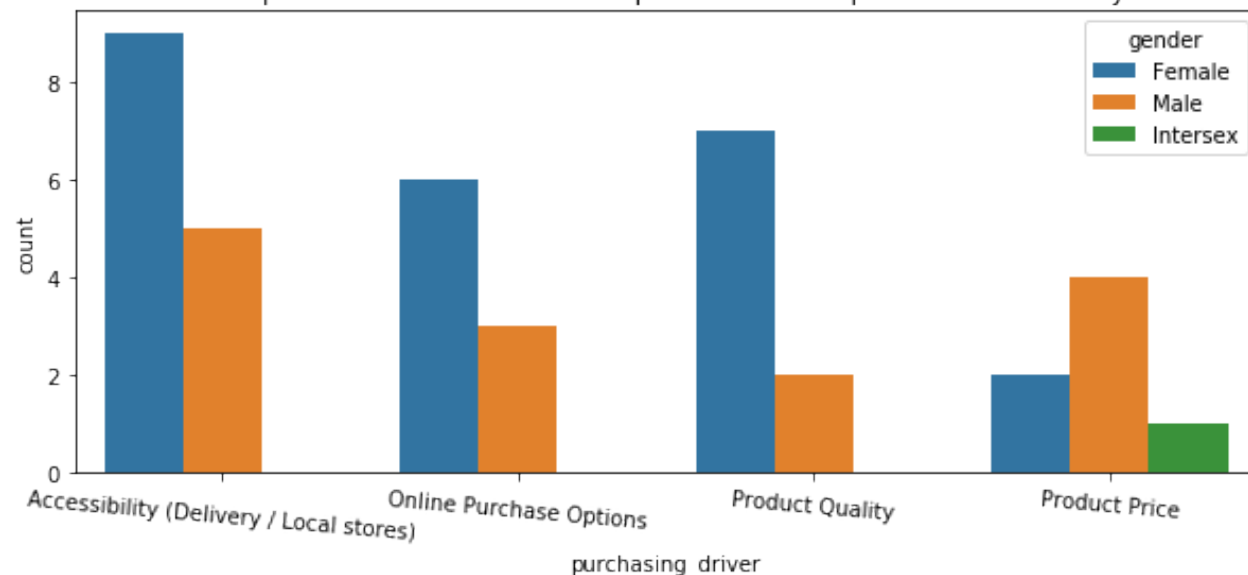


2) Compared to before quarantine, what are the biggest driver in your purchase decision?

The Most Important Purchase Driver Compared to before quarantine



The Most Important Purchase Driver Compared to before quarantine Divided by Gender



From the left chart, we understand that accessibility (Delivery / Local stores) is the most important purchase driver to the customers compared to before quarantine. Also, the right figure shows that product price has the least importance for women.

3) What makes you decide to buy a product that you tried?

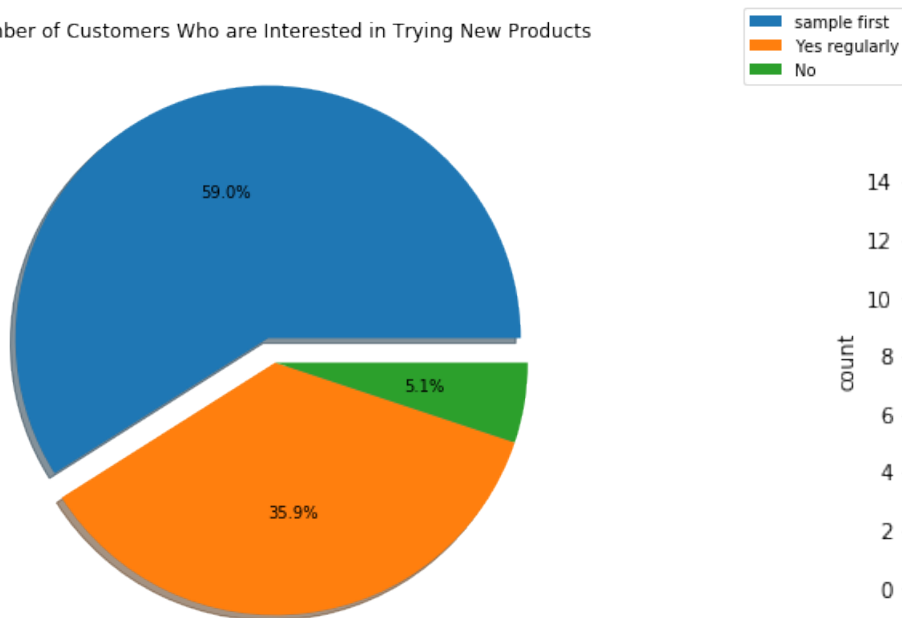
What Makes Consumers Decide to Buy a Product that they tried?



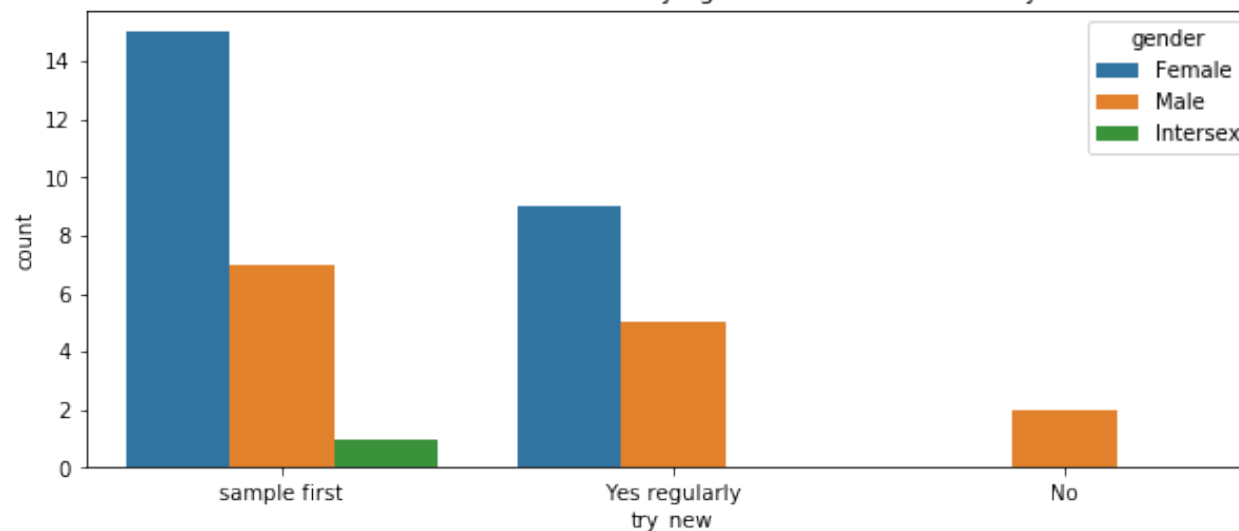
In contrast with the graph that shows the most important purchase driver compared to before quarantine, we can see that product quality and product price are the two main reasons that make consumers decide to buy a product that they have tried before. In this case, Accessibility (Delivery / local stores) has the least importance for the consumers.

4) Are you interested in trying new products that you have never tried before?

Number of Customers Who are Interested in Trying New Products



Customers Who are Interested in Trying New Products Divided by Gender



The right bar chart illustrates the number of customers who are interested in trying new products and it is divided by gender. This graph shows only customers who are not interested in buying new products are men.

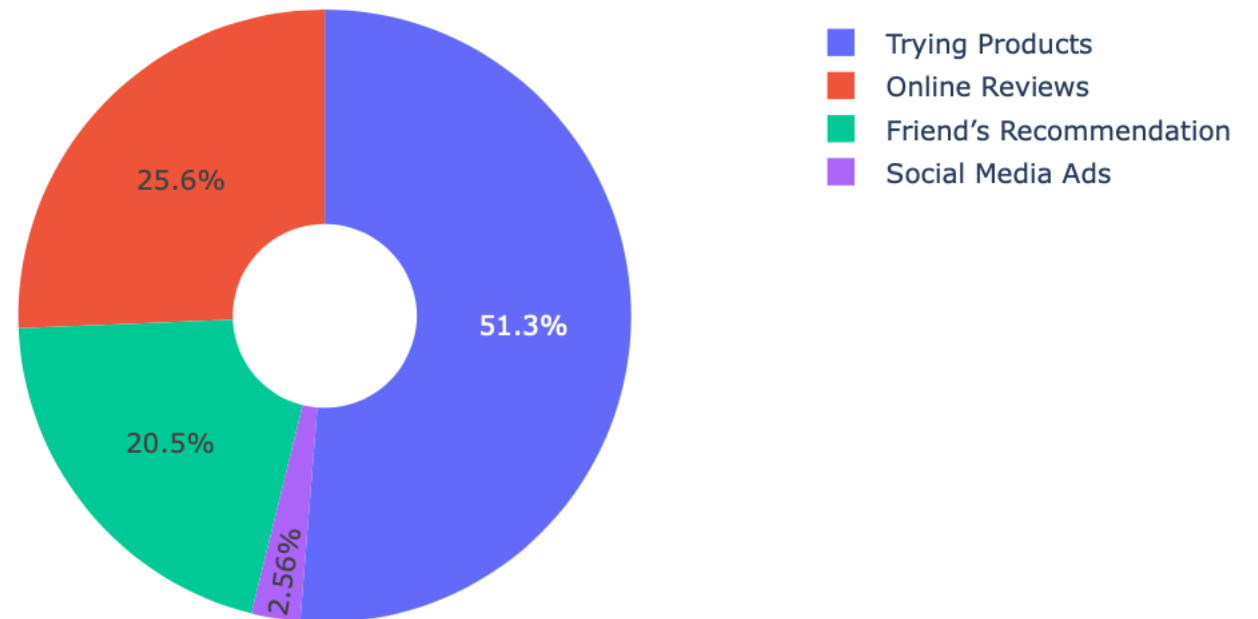
Also, the pie chart shows near 60% of customers are willing to buy new items if they try a sample first.

5) What makes you decide to buy new products?

Now we are curious to find what makes consumers decide to buy new products?

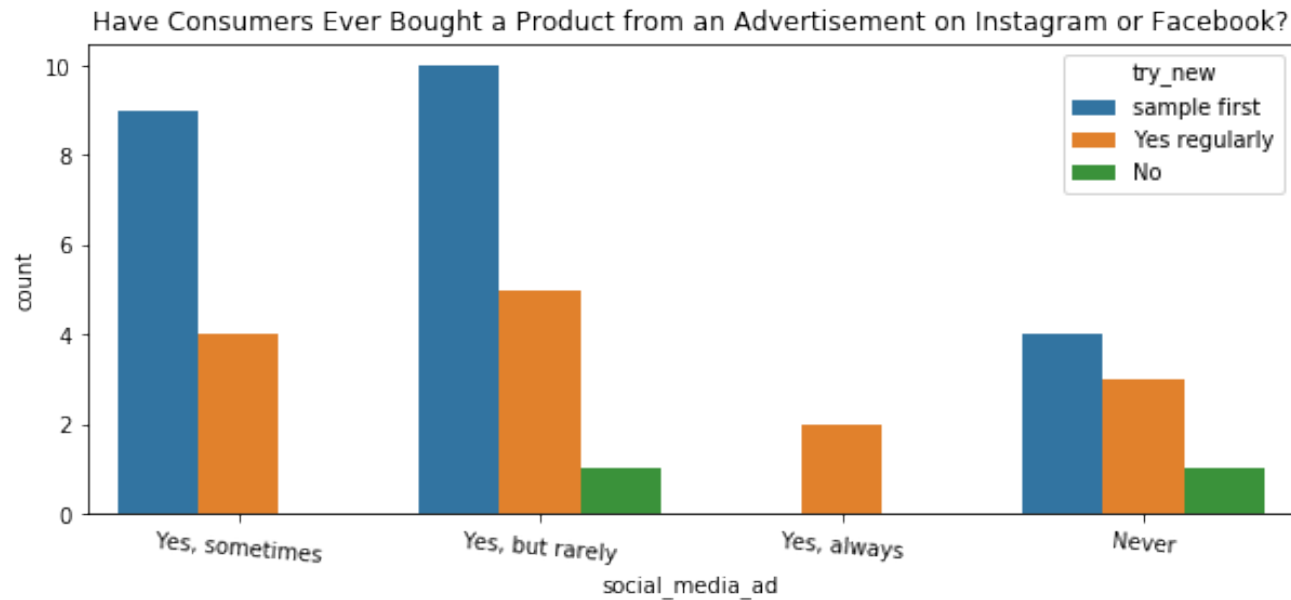
When it comes to buying a new product, more than half of the consumers prefer to try the product first. The second and third important features are online reviews and friend's recommendation respectively. It is good to mention that social media ads make only 2.5 percent of consumers to buy a new product.

What Makes Consumer Decide to Buy New Products?

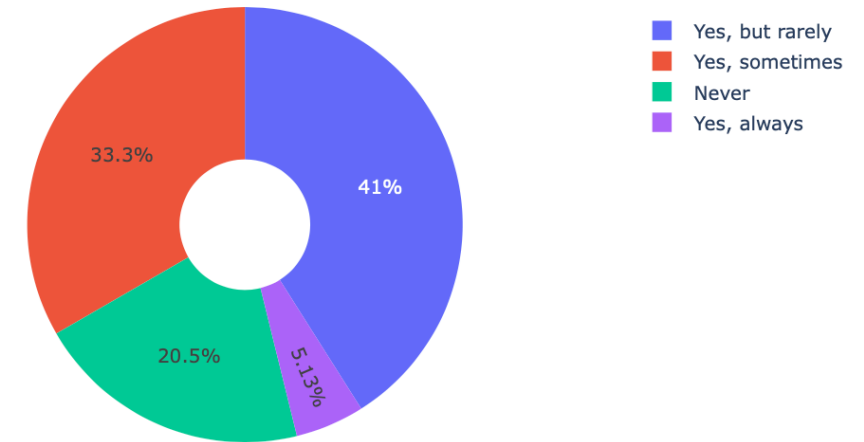


6) Did you ever buy a consumer product from an advertisement on Instagram or Facebook?



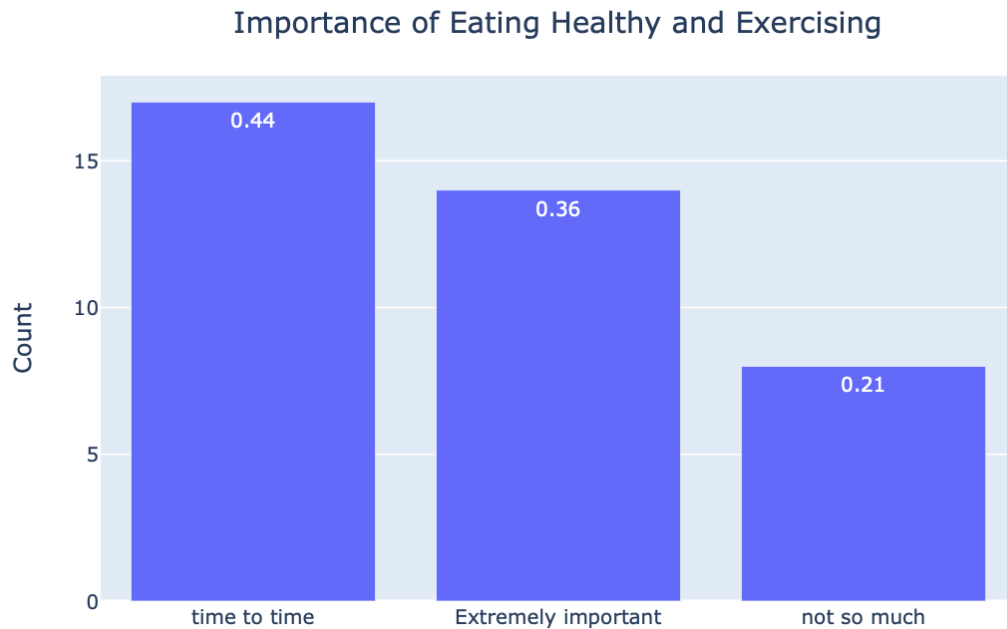


Have Consumers Ever Bought a Product from an Advertisement on Social Media?



The above pie chart at the right shows that 41% of consumers rarely shop from social media advertisements, 33 percent sometimes shop and 20.5 percent never but anything from the advertisement on Instagram or Facebook. As we expected, the only consumers who always shop from social media advertisements are the ones who regularly buy new items.

7) Is eating healthy and exercising important to you or anyone in your household?



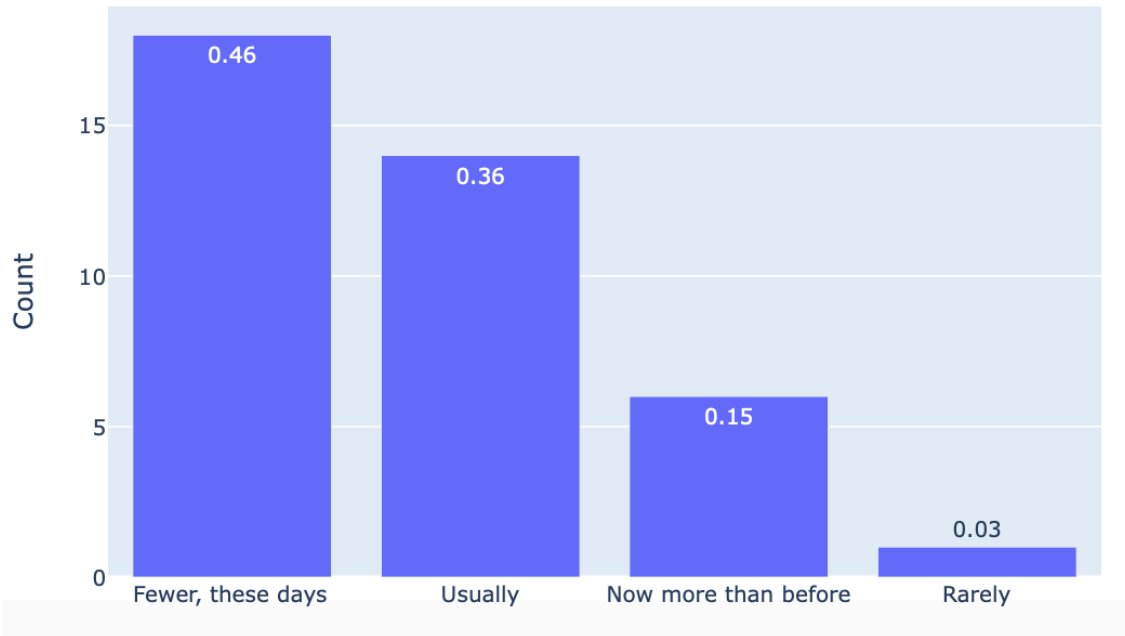
According to the above bar chart, 44 percent of consumers exercise and eat healthily from time to time and for 36 percent of them exercising and eating healthy is extremely important.

However, for 21 percent of people, these aspects are not very important.



8) When it comes to consumer products, do you buy premium goods?

Do Consumers Buy Premium Goods?



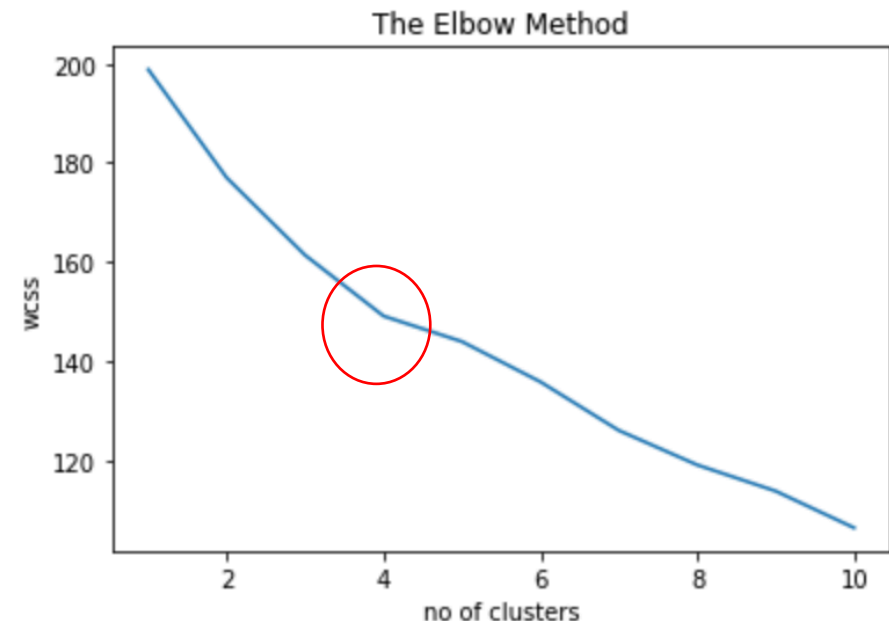
The left graph shows that 46 percent of consumers are buying fewer premium goods these days, however, 36 percent usually buy these goods. On the other hand, only 3 percent of consumers rarely buy premium goods.

Customer Segmentation using K-Means Clustering method in order to group similar users

| | user_id | predicted_cluster |
|---|--------------------------------------|-------------------|
| 0 | 0022601F-B1CB-4BC2-8F72-C20F231F5C2E | 2 |
| 1 | 067E2182-3CB6-4D74-ACF0-B334C733D6CC | 0 |
| 2 | 179131D8-9495-437D-9230-A55B672B880A | 0 |
| 3 | 24329031-FC5C-4D20-8560-5B53CA5BE38B | 1 |
| 4 | 24CA4D2E-BF4F-43C8-9F91-67BF4CACBA0A | 1 |
| 5 | 27394A30-9CA8-4DA1-9368-8F4B8C8A6BF2 | 2 |
| 6 | 290DCE9C-8347-466D-B841-7F7FF20FF310 | 2 |
| 7 | 32CB510C-6C84-4A22-97B1-B15AB6C59D27 | 1 |
| 8 | 39B641F7-BDC9-4043-B938-A5D9E7669301 | 3 |
| 9 | 3F7B47E0-F115-4A80-A454-5B525EA978D0 | 1 |

We want to group customers based on their attributes using a Machine Learning technique called K-Means. The below graph shows that we can divide consumers into 4 groups to reach optimal results.

The left table shows a sample of the results.





THANK YOU