Business Intelligence Case

These are the main insights of the daily operations from the data provided.

1. Calculate the number of orders per day of the week, distinguishing if the orders are on\_demand.

In a week, the company needs to deliver in less than 90 min an average of 32% of the total orders, being Sunday 40% (5,043) and Saturday 39% (3,492) the busiest days, on the other side the days with least demand to deliver in less than 90 min are Tuesday 25% (7,333) and Wednesday 27% (5,608), the numbers of those days are larger than Saturday and Sunday, but Tuesday and Wednesday have a bigger number of orders in total, so shoppers have time in the future to make those deliveries.

1. Calculate the average quantity of distinct products that each order has, grouped by store.

According to the data, there are 17 stores, the average quantity of different products per order for the 17 stores is 1.39 products, with a standard deviation of 0.43 products per store.

1. Calculate the average found rate (\*) of the orders grouped by the product format and day of the week.

So far, the super markets have most of the products ordered, that means that the shoppers don’t waste a lot of time finding substitutes because the average found rate for the whole week is constant for both units, the average found rate is around 85%.

1. Calculate the average error and mean squared error of our estimation model for each hour of the day.

The standard deviation for the promised time of delivery is 0.01, the gap is not that big, so Cornershop delivers at time they promise.

1. Calculate the number of orders in which the picker\_id and driver\_id are different.

The number of orders not picked and delivered by the same shopper is 216, that’s 3% of the total orders.