# Documentation

#### **Nuwefruit - Data Scientist challenge**

Event: 4YFN Hackathon – MWC Barcelona 2022 (online phase)

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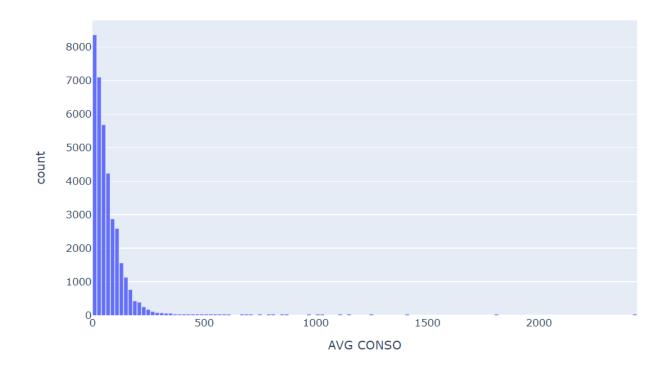
#### Task 1: EDA

#### Analysis of sales and customer activity

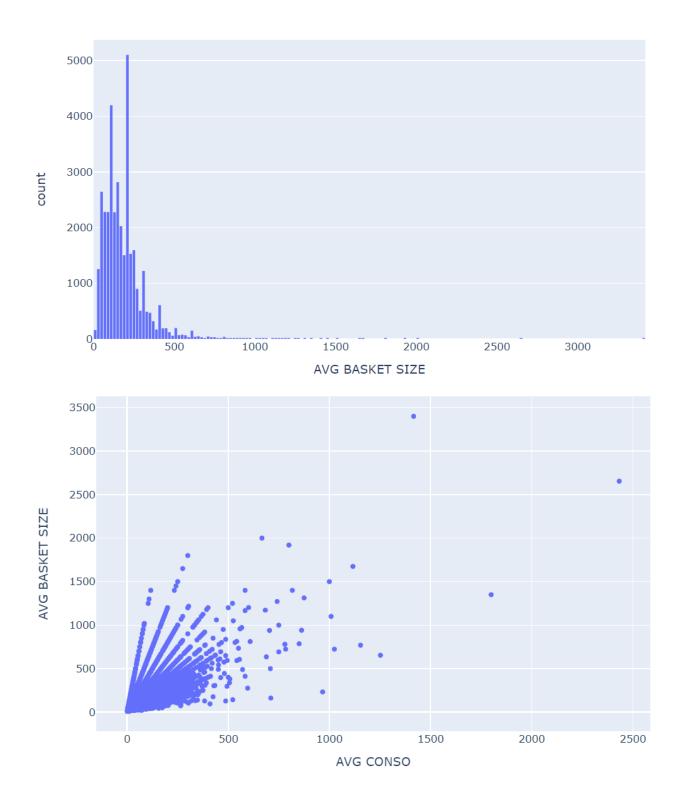
Average monthly consumption of customers (in pieces of fruit): 64.53443679634394

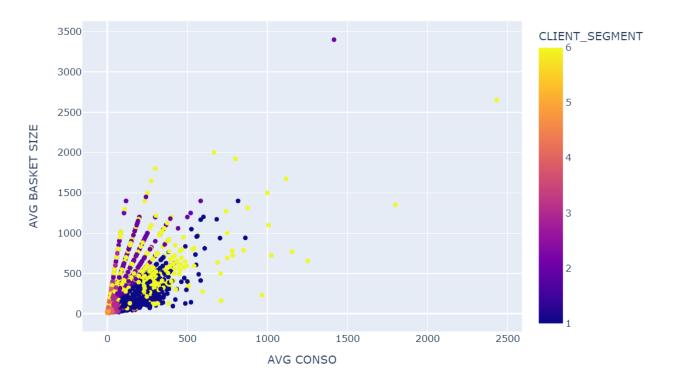
Average size of the customer's basket (in pieces of fruit): 181.21860968676924

#### Histogram of AVG CONSO



### Histogram of AVG BASKET SIZE





Number of customers in the client database: 35884

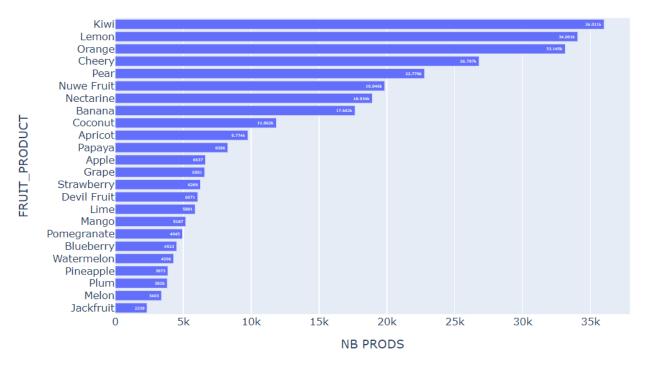
Number of customers who have placed orders: 14499

Number of orders: 17458

Number of 'prods' (1 prod = 10 pieces of fruit) ordered: 302985

Number of pieces of fruit ordered: 3029850

#### Total NB PRODS by FRUIT\_PRODUCT

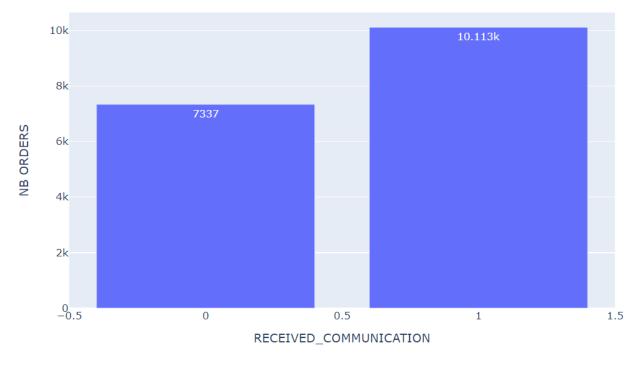


#### Number of customers by NB ORDERS

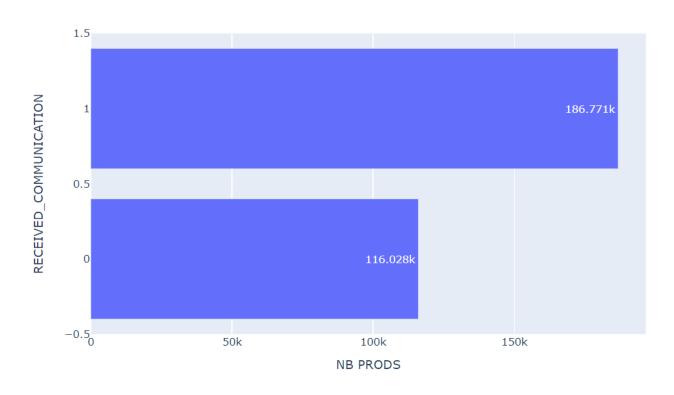


## Evaluation of the impact of the promotion

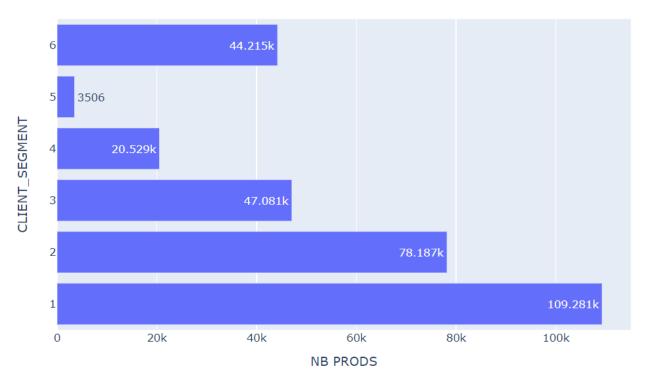
### Number of orders by RECEIVED\_COMMUNICATION



#### Total NB PRODS by RECEIVED\_COMMUNICATION



### Total NB PRODS by CLIENT\_SEGMENT



Task 2: Predictive model

#### Results

| CLIENT ID | CLIENT_SEGMENT |
|-----------|----------------|
| 48352078  | 4              |
| 18072186  | 1              |
| 48352246  | 3              |
| 18070621  | 3              |
| 48352262  | 4              |
| 48359553  | 4              |
| 18071647  | 5              |
| 48359574  | 3              |
| 48359627  | 4              |
| 18070505  | 1              |
| 18071016  | 1              |
| 18071198  | 1              |
| 18071233  | 2              |
| 18071524  | 5              |
| 18071668  | 1              |
| 18072476  | 3              |
| 48352272  | 4              |
| 18072741  | 6              |
| 18072797  | 1              |
|           |                |