

Flipkart Logistics Fraud Detection

In this project will try to detect the source/reason due to which a flipkart seller doesn't receive the right product for the products that were not accepted by the customer. We have gathered the data from a single flipkart seller , so the results can vary. We will also predict if the seller will receive the wrong product if it is rejected by the customer.

Data (till now):

SPF Claims- A seller protection fund (SPF) enables online sellers to claim a certain amount as compensation for unfair losses. Seller needs to upload the pictures for proof and state the reason for claiming SPF ,concerned with the respective order.

Order ID- An Order ID is the number system that Amazon uses exclusively to keep track of orders. Each order receives its own Order ID that will not be duplicated. This number can be useful to the seller when attempting to find out certain details about an order such as shipment date or status.

The returns for which the seller claimed the spf reflects that the returned product is not resellable , we collected all the Order Id's of spf claims and categorized them in different reasons.

Reason:

1. Wrong/Missing Product - Product was missing or wrong product was returned.
2. Used - Used product was returned with no resale value.
3. Damaged - Returned product is Damaged.
4. Not Received - Didn't receive the product , but was marked returned by flipkart.
5. 60+ Days - 60+ Days gone past but didn't get the product.

Using selenium we scraped the seller support portal to fetch this data.

For the data of all returned products a csv file from the seller portal is downloaded.

We have two csv files, one for all orders and one for completed returns .In the returns file we have data in the range Feb 2021 - July 2021. The spf data is also from the same time range.I have requested flipkart to send the previous data. As of now I have merged the spf data and the returns csv file.

Details of the resulting dataset -

152 entries, 0 to 151

Data columns (total 24 columns):

#	Column	Non-Null Count	Dtype
0	Return Requested Date	152 non-null	object
1	Tracking ID	144 non-null	object
2	Order ID	152 non-null	object
3	Order Item ID	152 non-null	object
4	Return Type	152 non-null	object
5	Return Sub Type	152 non-null	object
6	Return Status	152 non-null	object
7	SKU	152 non-null	object
8	FSN	152 non-null	object
9	Product	152 non-null	object
10	Return Delivery Promise Date	126 non-null	object
11	Picked Up Date	123 non-null	object
12	Out For Delivery Date	19 non-null	object
13	Completed Date	152 non-null	object
14	Return Reason	152 non-null	object
15	Return Sub-reason	152 non-null	object
16	Comments	81 non-null	object
17	Buyer Pincode	152 non-null	int64
18	Buyer City	152 non-null	object
19	Buyer State	152 non-null	object
20	Total Price	152 non-null	float64
21	Quantity	152 non-null	int64
22	Vendor Name	144 non-null	object
23	Reason	39 non-null	object

Description Of Columns:

- Return Requested Date - Date on which return was requested by customer.
- Tracking ID - Logistics tracking ID to track and trace the shipment during it's journey from warehouse / seller to customer.
- Order ID - Customer level ID for an order. There can be multiple shipments with the same Order ID.
- Order Item ID - Product level ID for an order. Shipments are normally packed for every Order Item ID.
- Return Type - * RTO - "Courier Return"; order cancelled post dispatch from seller.
* RVP - "Customer Return"; customer creates a return post delivery.
- Return Subtype - Refund/Replacement
- Return Status - State of the Return Item - approved, picked from customer, in transit, out for delivery, delivered, cancelled etc.
- SKU - Seller defined identifier for their products
- FSN - Flipkart defined identifier for products.
- Product - Listing Name of the Product
- Return Delivery Promise Date - Promised date for the delivery of return to the seller.
- Picked Up Date - Date of pick up from customer.
- Out For Delivery Date - Return out for delivery to the seller.
- Completed Date - Return received by seller.
- Return Reason - Reason given by customer while creating the return
- Return Sub-reason - Detailed reason given by customer while creating the return
- Comments - Customer's comments stating the reason for return.
- Buyer Pincode - Pincode of buyer
- Buyer State - Political State of buyer
- Total Price - Selling Price of product*Quantity
- Quantity - Number of units of the product that customer has ordered
- Vendor Name- Logistics partner scheduled and responsible for delivery of product to the Seller
- Reason - Reason for which seller made the SPF claim.

Spf Claims - 39
Total Entries - 152

