

Model Development Phase Template

Date	12 March 2024
Team ID	SWTID1720089323
Project Title	Ecommerce Shipping Prediction Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
ID	Unique identifier for each record	No	It does not provide useful information for predicting delivery times. It is used solely for identification purposes.
Warehouse_block	Section of the warehouse where the product is stored	yes	Different sections may have different processing times and efficiencies affecting delivery times.
Mode_of_Shipment	Method used to ship the product	Yes	Different shipment methods have different speeds and reliability, influencing delivery times.
Customer_care_calls	Number of times the customer has called customer care	yes	Frequent calls may indicate issues with orders, potentially affecting delivery times.
Customer_rating	Customer's rating of the product or service	yes	While subjective, customer ratings might reflect overall service quality, indirectly affecting delivery.
Cost_of_the_Product	Cost of the product purchased	yes	Higher-value products might receive better handling or faster shipping services.

Prior_purchases	Number of purchases the customer has made prior to this one	yes	Repeat customers might receive priority service, affecting delivery times.
Product_importance	Importance of the product (e.g., low, medium, high)	yes	Higher importance products might be expedited, affecting delivery times.
Gender	Gender of the customer	yes	While generally not a direct factor, it can provide demographic insights that might correlate with delivery times.
Discount_offered	Discount percentage offered on the product	yes	Products with higher discounts might be prioritized differently in processing and shipping.
Weight_in_gms	Weight of the product in grams	yes	Heavier items might require more handling and different shipment methods, influencing delivery times.
Reached.on.Time_Y.N	Target variable indicating whether the product was delivered on time or not	yes	This is the target variable we aim to predict, so it is crucial for model training.