

Model Development Phase Template

Date	11 July 2024
Team ID	SWTID1720108776
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
Warehouse_block	Which warehouse the product is stored before delivery.	Yes	Provides data and operational insights to predicts ecommerce shipment time.
Mode_of_Shipment	Mode of transport of the product- ship, flight, by road.	Yes	Different modes have different average travel times and reliability.
Customer_care_calls	The number of calls made for enquiry of the shipment.	Yes	Provides insights on delivery issues, resolution times to predict shipment time.

Customer_rating	Customer ratings, 1 is the low (Worst), 5 is the high (Best).	Yes	Indicates the service quality which could be related to shipment time.
Cost_of_the_Product	Cost of the Product in US Dollars.	Yes	Influence shipment priority, handling care, and shipping method.
Prior_purchases	The Number of Prior Purchase.	Yes	Indicates customer behavior like preferred delivery method etc.
Product_importance	Categorized the product with parameter such as low, medium, high priorities.	Yes	Influence shipping priority and method by considering how critical the product is to timely delivery.
Gender	Customer gender.	Yes	Gender-based preferences or purchasing behaviors help in personalized delivery options
Discount_offered	Discount offered on that specific product.	Yes	Affect the volume of orders and processing delays.

Weight_in_gms	Weight of the product in grams.	Yes	Affects shipping cost, and handling requirements and improves accuracy of shipment prediction.
Reached.on .Time_Y.N	It is the target variable, where 1 Indicates that the product has NOT reached on time and 0 indicates it has reached on time.	Yes	History of shipments reaching on time is crucial for predicting future delivery times.
ID	Customer Id	No	Id of the customer has no impact on prediction.