

## **Topic Proposal**

### **: Key factors affecting on-time delivery in E-commerce**

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With the rise of e-commerce, people enjoy the convenience of that. For any e-commerce business to thrive, it needs to figure out what would help to build a customer base and, in turn, profits. Among all the factors, the one that favors the growth of any e-commerce company is the timely delivery of products. According to an e-commerce survey conducted in 2015, 66% of customers preferred one retailer over another because of delivery services, which can come off as a potential loss for the competitors. We think this problem is worth analyzing, which brings us to the following SMART Questions -

- What are the key factors affecting on-time delivery for an E-commerce platform?
- Based on the features, whether a certain order will be delayed?

The modeling methods we intend to use are K Nearest Neighbors, Random Forest, and Logistic Regression. The dataset is a sales data from an international electronic products e-commerce company. There is 10999 observations for 12 variables.

Link to the dataset: <https://www.kaggle.com/datasets/prachi13/customer-analytics>.

Link to our GitHub repository: [https://github.com/yunyu79/DATS\\_6103\\_Team\\_10](https://github.com/yunyu79/DATS_6103_Team_10)