



# PROBLEM STATEMENT

E Commerce Customer Data Analysis



# PROBLEM STATEMENT

The problem statement for this project is that the dataset provided contains transactional information from an e-commerce platform.

The goal is to perform several data analysis tasks to better understand customer behavior, their demographics, and purchasing patterns.

The analysis is aimed at understanding customer preferences based on language settings, identifying professional trends, pinpointing specific customers based on their IP address or credit card details, and examining purchasing behavior, specifically related to high-value transactions and specific credit card usage.

The results from this analysis can be used for targeted marketing, customer segmentation, fraud detection, and improving the e-commerce platform's user experience.

# BUSINESS PROBLEM OVERVIEW

The business is seeking to leverage this data to gain a deeper understanding of its customers and optimize various aspects of its operations.

By analyzing specific characteristics, such as language preferences, professional roles, and purchasing behaviors, the business can improve targeted marketing, optimize user experiences, enhance fraud detection efforts, and personalize promotions.

By leveraging the data provided, the e-commerce business can uncover actionable insights that help drive customer acquisition, retention, and loyalty.

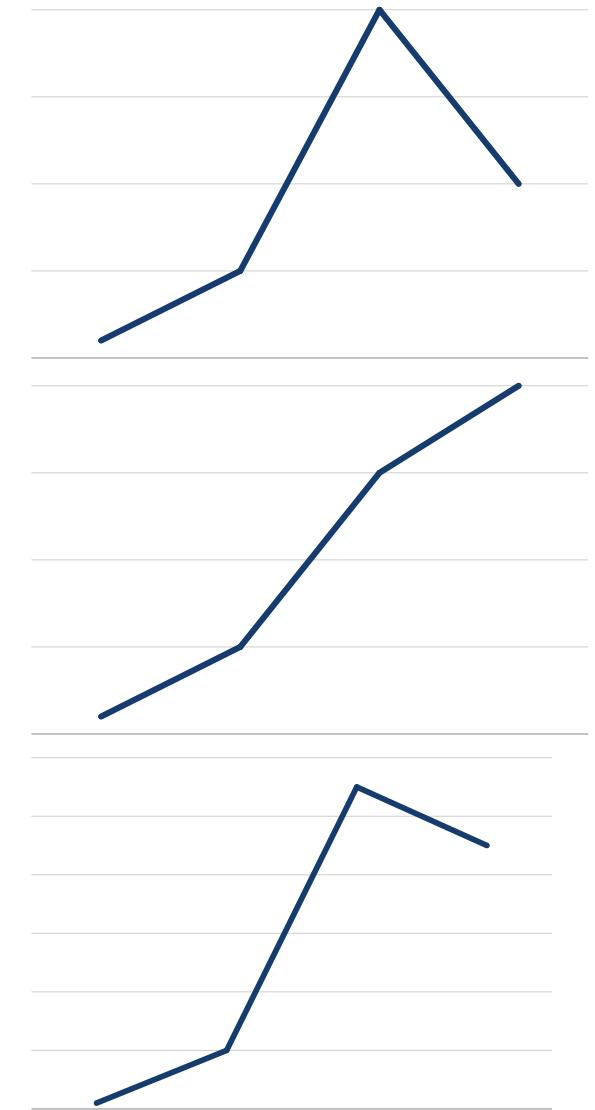
This analysis empowers the business to make data-driven decisions in marketing, customer support, and product offerings, while also enhancing fraud detection and operational efficiency.



E-commerce (short for electronic commerce) refers to the buying and selling of goods and services over the internet. It involves the use of digital platforms, websites, mobile apps, and online payment systems to facilitate transactions between businesses (B2B), between businesses and consumers (B2C), or even between consumers themselves (C2C).

E-commerce encompasses a wide range of activities, from retail sales to auction services, and it has become a significant part of the global economy. Key Elements of E-Commerce are:

1. Online Stores (Retailers)
2. Payment Systems
3. Shopping Cart and Checkout
4. Shipping and Delivery
5. Customer Service
6. Marketing and Advertising



# UNDERSTANDING & DEFINING E COMMERCE

# PROJECT PIPELINE

The project pipeline can be briefly summarized in the following steps:

- Data Understanding: Here, we need to load the data and understand the features present in it. This would help us choose the features that we will need for your final model.
- Exploratory data analytics (EDA): Normally, in this step, we need to perform univariate and bivariate analyses of the data, followed by feature transformations, if necessary. For the current data set, because Gaussian variables are used, we do not need to perform Z-scaling.
- However, you can check if there is any skewness in the data and try to mitigate it, as it might cause problems during the model-building phase.





# THANK YOU