

# ASSIGNMENT

## Take one domain and Build Business Understanding

Domain Chosen: E-Commerce Platform (Amazon/Flipkart Type Business)

### Introduction

Business Understanding is the first phase of any analytics or data science project. It focuses on clearly identifying business goals, understanding operational challenges, and defining how data-driven solutions can support decision-making. Without proper business understanding, analysis may not align with organizational objectives. In the e-commerce domain, this step is crucial because operations involve customers, sellers, logistics, payments, and inventory management.

#### 1. Business Objective

The main objective of an e-commerce platform is to provide a seamless online shopping experience while maximizing profitability. Key goals include:

- Increasing total sales and revenue
- Improving customer satisfaction and loyalty
- Expanding the customer base
- Reducing cart abandonment rate
- Optimizing inventory and supply chain operations

The company also aims to provide competitive pricing and fast delivery to remain competitive in the market.

#### 2. Problem Statement

E-commerce businesses face several challenges:

- High cart abandonment rate – Customers add products to the cart but do not complete the purchase.
- Delivery delays – Logistics issues can result in late deliveries and negative reviews.
- Inventory mismanagement – Overstocking increases storage costs, while understocking leads to lost sales.

- Customer churn – Customers may switch to competitors due to poor experience or pricing.

These problems affect revenue, customer retention, and brand reputation.

### 3. Key Factors Affecting the Business

Multiple factors influence e-commerce performance:

- Product pricing and discounts
- Website/app user experience
- Delivery time and shipping charges
- Product availability
- Customer reviews and ratings
- Marketing campaigns and advertisements
- Payment options and security
- Seasonal demand and festivals

External factors such as economic conditions and competitor strategies also impact sales.

### 4. Role of Data in Solving the Problem

Data is central to improving e-commerce performance:

- Customer behavior data helps analyze browsing patterns and purchasing habits.
- Sales data helps forecast demand and manage inventory.
- Logistics data helps optimize delivery routes and reduce shipping time.
- Feedback and review data identifies product or service issues.
- Recommendation systems personalize product suggestions to increase sales.

Advanced analytics and machine learning models can predict customer churn, recommend dynamic pricing, and improve targeted marketing campaigns.

### 5. Expected Outcomes

By clearly understanding business goals and applying data-driven strategies, the company can:

- Increase conversion rates
- Reduce cart abandonment
- Improve inventory turnover
- Enhance customer loyalty
- Optimize operational costs
- Boost overall profitability

## 6. Success Metrics (KPIs)

To measure success, the business can track:

- Conversion Rate
- Customer Acquisition Cost (CAC)
- Customer Lifetime Value (CLV)
- Average Order Value (AOV)
- Order Fulfillment Time
- Return Rate
- Customer Satisfaction Score (CSAT)

These KPIs help evaluate whether business objectives are being achieved.

## Conclusion

Business Understanding plays a crucial role in aligning analytics with organizational goals. In the e-commerce domain, it helps identify operational inefficiencies, customer behavior patterns, and growth opportunities. By leveraging data effectively, businesses can improve performance, enhance customer experience, and achieve long-term sustainable growth.