

## Assignment - 4

### 4)Take one domain and build business Understanding.

#### Introduction to the Domain:

- The selected domain for business understanding is the E-Commerce Online Retail Industry, which refers to the buying and selling of goods and services through internet-based platforms where customers can browse products, compare prices, place orders, and make payments digitally without visiting a physical store.
- In recent years, the growth of internet connectivity, smartphone usage, digital payment systems, and logistics infrastructure has significantly increased the demand for online shopping platforms.
- Companies like Amazon and Flipkart have transformed the retail industry by providing customers with convenience, competitive pricing, and home delivery services.
- The e-commerce domain includes various product categories such as electronics, fashion, groceries, books, home appliances, and personal care products, and it operates through websites and mobile applications that are accessible 24/7.
- Business understanding is the first and most important phase in any data science or business analytics project because it clearly defines the problem, identifies the objectives, and determines how the business can achieve measurable growth and profitability.
- In the e-commerce domain, business understanding involves analyzing customer behavior, sales trends, product performance, operational efficiency, and market competition in order to develop strategies that improve revenue and customer satisfaction.

#### 2. Business Problem Statement

- The main business problem in the e-commerce domain is intense market competition combined with changing customer preferences, which makes it difficult for companies to retain customers, increase sales, and maintain profitability.
- Although many customers visit online platforms daily, not all visitors convert into buyers, and many customers abandon their shopping carts before completing purchases.
- Additionally, high return rates, delayed deliveries, and poor product recommendations may reduce customer trust and loyalty.

- Therefore, the organization wants to analyze customer purchasing patterns and sales data in order to increase conversion rates, reduce cart abandonment, optimize inventory management, and improve personalized product recommendations.
- The overall objective is to enhance customer experience while maximizing revenue and reducing operational costs.

### 3. Business Objectives

- The primary business objective of an e-commerce company is to increase total sales revenue while ensuring customer satisfaction and long-term loyalty.
- However, to achieve this broad objective, several specific goals must be defined clearly.
- First, the company aims to improve customer retention by understanding purchasing behavior and offering personalized recommendations based on previous buying history.
- Second, the organization wants to reduce cart abandonment rates by identifying the reasons why customers leave before completing their purchase, such as high shipping charges, complicated checkout processes, or lack of payment options.
- Third, the company intends to optimize inventory management so that popular products are always available in stock while minimizing excess inventory for slow-moving products.
- Fourth, the business seeks to enhance marketing efficiency by targeting the right customers with relevant advertisements, discounts, and promotional campaigns.
- These objectives must be measurable, achievable, and aligned with the company's long-term strategy for growth and market expansion.

### 4. Stakeholders Involved

- In the e-commerce domain, multiple stakeholders are involved in achieving business success. The key stakeholders include:
  1. Customers – They are the primary users of the platform whose satisfaction directly influences sales and brand reputation.
  2. Business Managers – They are responsible for decision-making, pricing strategies, promotional campaigns, and overall business growth.
  3. Marketing Team – They design advertisements, email campaigns, and social media promotions to attract and retain customers.
  4. Operations and Logistics Team – They ensure timely delivery of products and manage warehouse operations.
  5. Data Analysts and IT Team – They analyze data, maintain the website, and improve system performance.

Understanding the needs and expectations of each stakeholder is essential for creating effective business strategies.

## 5. Key Performance Indicators (KPIs)

To measure business success in the e-commerce domain, the company uses several Key Performance Indicators (KPIs). These include:

1. Conversion Rate – The percentage of website visitors who complete a purchase.
2. Customer Acquisition Cost (CAC) – The cost spent on marketing to acquire one new customer.
3. Customer Lifetime Value (CLV) – The total revenue generated from a customer during their relationship with the company.
4. Cart Abandonment Rate – The percentage of customers who add products to their cart but do not complete the purchase.
5. Average Order Value (AOV) – The average amount spent by a customer per transaction.

By monitoring these KPIs, the organization can evaluate its performance and identify areas that require improvement.

## 6. Risks and Challenges

- The e-commerce industry faces several risks and challenges, including cybersecurity threats, online payment fraud, increasing competition, fluctuating demand, and supply chain disruptions.
- For example, data breaches may damage customer trust and harm the company's reputation.
- Similarly, inaccurate demand forecasting may result in stock shortages or excess inventory, leading to financial losses.
- Another major challenge is maintaining customer loyalty in a competitive environment where customers can easily switch to other platforms offering lower prices or better discounts.
- Therefore, the business must continuously innovate and improve its services.

## 7. Expected Outcomes

- After completing the business understanding phase, the organization expects to clearly define the problem, set measurable objectives, identify stakeholders, and establish success criteria.

- This clarity helps the company design data-driven strategies for improving sales, enhancing customer experience, and achieving sustainable growth.
- In conclusion, business understanding in the e-commerce domain involves analyzing market conditions, customer behavior, and operational challenges in order to define clear objectives and measurable goals that guide strategic decision-making.
- By focusing on customer satisfaction, efficient inventory management, personalized marketing, and performance measurement, an e-commerce company can strengthen its competitive position and achieve long-term success in the rapidly evolving digital marketplace.