

# IT300 – Business Intelligence Project

**Project Title:** Optimizing Sales Performance and Customer Segmentation in an E-Commerce Platform

## 1. Industry and Organization Description

The e-commerce industry has experienced rapid growth driven by digitalization and changing consumer behavior. This project focuses on a fictional but realistic mid-sized online retail company selling electronics, fashion, and home products. The company operates through a web and mobile platform and records thousands of daily transactions.

## 2. Business Problem

Despite high sales volume, management lacks clear visibility on customer behavior, product performance, and revenue drivers. Decisions are mostly intuitive rather than data-driven. The business needs a BI solution to analyze sales trends, segment customers, and improve profitability.

## 3. Analytical Questions

- What are the total sales and revenue trends over time?
- Which products generate the highest revenue?
- Which product categories perform best and worst?
- Who are the most valuable customers?
- How does customer behavior vary by region?
- What is the average order value?
- How frequently do customers make purchases?
- Which months show peak sales activity?
- What is the customer retention rate?
- How do discounts affect sales volume?

## 4. Key Performance Indicators (KPIs)

- Total Revenue
- Total Number of Orders
- Average Order Value (AOV)
- Customer Lifetime Value (CLV)
- Sales Growth Rate
- Top-Selling Products
- Customer Retention Rate
- Revenue by Category

## 5. Data Model Overview

The BI solution will use a star schema with one fact table (Sales Fact) and multiple dimension tables including Customer, Product, Time, and Location. The dataset will contain over 10,000 transaction records.