## **Executive Summary**

## **E-Commerce Sales & Profit Analysis**

This analysis presents critical insights derived from transactional data spanning monthly trends, product categories, customer segments, and profitability. It aims to guide strategic business decisions for inventory management, marketing focus, and profitability optimization.

### **Monthly Performance Analysis**

* **Sales**:  
  + **Peak Month**: **November**, indicating strong seasonal or promotional sales (e.g., Black Friday).
  + **Lowest Month**: **January**, possibly due to post-holiday slowdowns.
* **Profit**:  
  + **Highest**: **December**, showing not only high sales but efficient cost management.
  + **Lowest**: **January**, aligning with the sales dip.

### **Sales & Profit by Category**

* **Sales Ranking**:  
   **1. Technology** → **2. Furniture** → **3. Office Supplies**
* **Profit Ranking**:  
   **1. Technology (Highest Profit)** **2. Office Supplies** **3. Furniture (Lowest Profit)**

*Implication*: While Technology leads in both sales and profit, Furniture shows a significant drop in profitability despite its sales rank.

### **Sub-Category Insights**

* **Top Performer (Sales)**: **Phones**
* **Lowest Performer (Sales)**: **Fasteners**
* **Top Performer (Profit)**: **Copiers**
* **Loss-Making Sub-Categories**:  
  + **Bookcases**
  + **Supplies**
  + **Tablets**

*Implication*: Products like **Copiers and Phones** should be prioritized in promotions, while **loss-making items** may need pricing revisions or inventory reevaluation.

### **Customer Segment Analysis**

* **Sales & Profit by Segment (Descending Order)**:  
  + **Consumer** – Highest sales and profitability.
  + **Corporate**
  + **Home Office** – Lowest contribution.
* **Sales-to-Profit Ratio**:  
  + **Consumer segment** demonstrates the **highest return on sales**, making it the most valuable segment.

*Implication*: Marketing and service strategies should be tailored more aggressively towards **Consumer** customers, with improvement strategies for **Home Office**.