

# E-Commerce Report

## 1. Introduction

The retail industry thrives on **data-driven decision-making**, and understanding sales performance is crucial for optimizing revenue. This project analyzes Blinkit's sales data to uncover insights into **product categories, outlet performance, and customer behavior**. The aim is to provide actionable recommendations for improving sales efficiency and overall profitability.

## 2. Methodology

- **Data Source:** Blinkit sales dataset (8,523 products, \$1.20M sales).
- **Data Cleaning:** Performed using **SQL & Python (Pandas)** to remove inconsistencies, handle missing values, and standardize formats.
- **Exploratory Data Analysis (EDA):** Conducted in Python using **Matplotlib & Seaborn** for trend visualization.
- **Dashboarding:**
  - **Excel Pivot Dashboard** for quick KPI monitoring
  - **Power BI Dashboard** for interactive and dynamic exploration

## 3. Key Performance Indicators (KPIs)

- **Total Sales:** \$1.20M
- **Average Sales per Item:** \$141
- **Total Number of Items:** 8,523
- **Average Customer Rating:** 3.9

## 4. Findings & Insights

- **Item Categories:** Fruits & snacks are top contributors, while categories like bread and health items generate minimal revenue.
- **Outlet Size:** Medium-sized outlets perform the best with **\$507.9K sales**, while small outlets lag.
- **Outlet Location:** Tier 3 outlets dominate with **\$472K sales**, compared to Tier 1 outlets at \$336K.
- **Fat Content:** Regular products contribute **65%+ of sales**, showing customer preference for non-dietary variants.
- **Time Trends:** Sales dipped in 2010 (\$78K) but recovered steadily in later years.

## 5. Recommendations

- Focus marketing on **Tier 3 & Medium outlets** where sales are strongest.
- Increase visibility of **Fruits, Snacks, and Household** categories.
- Introduce **discounts & loyalty programs** for low-performing outlets.
- Improve product visibility for **low-fat & niche categories** to balance customer demand.

## 6. Conclusion

This analysis highlights how Blinkit can strategically **expand Tier 3 outlets, optimize product offerings, and focus on high-demand categories** to increase revenue. Using SQL, Python, Excel, and Power BI, we successfully developed a **data-driven framework** that enables better decision-making and long-term business growth.