# Executive Summary – Zepto Inventory Analysis (SQL Project)

## Business Context

Zepto, like other rapid delivery startups, relies heavily on efficient inventory management to ensure customer satisfaction and minimize revenue loss. This project analyzes a product dataset (zepto\_v2.csv) using SQL queries to uncover stock-related challenges and provide actionable recommendations.

## Key Findings

### 1. Low Stock Products

- Several products have ≤ 2 units available, indicating poor replenishment planning.  
- Risk: Frequent stockouts → lost sales opportunities + frustrated customers.

### 2. Out-of-Stock Products

- Multiple items show availableQuantity = 0, making them unavailable for purchase.  
- Business Impact: Customers see unavailable items, increasing cart abandonment.

### 3. Category-Wise Stock Shortages

- Fruits & Vegetables are disproportionately understocked compared to packaged items like Beverages or Cooking Essentials.  
- This reflects supply chain inefficiencies in perishable categories.

## Business Impact

- Lost Revenue: Stockouts directly reduce sales opportunities.  
- Customer Dissatisfaction: Frequent unavailability erodes trust and loyalty.  
- Operational Inefficiency: Mismanaged inventory increases waste and supply chain costs.

## Recommendations

1. Demand Forecasting: Use past sales + seasonal trends to improve stock predictions.  
2. Restocking Prioritization: Ensure high-demand categories (Fruits & Vegetables) are prioritized for replenishment.  
3. Automated Stock Alerts: Trigger notifications when availableQuantity ≤ 2 to prevent last-minute shortages.  
4. Customer Transparency: Show real-time stock status on the app to reduce frustration.  
5. Supplier Collaboration: Strengthen ties with suppliers for perishable goods to ensure timely restocking.

## Conclusion

The SQL analysis highlights critical inventory management gaps in Zepto’s operations. Addressing these issues will help:  
- Reduce lost sales,  
- Improve customer satisfaction,  
- Enhance supply chain efficiency, and  
- Strengthen Zepto’s competitive edge in quick-commerce.