Zepto Inventory Data Analysis Portfolio

This Power BI project was designed to help **Zepto** effectively monitor, manage, and optimize its growing inventory across multiple product categories. The primary objective was to clean and transform raw inventory data into a structured format, enabling deeper analysis and insight generation. The end goal was to empower stakeholders with a dynamic, interactive reporting tool that supports faster, data-driven decisions for procurement, pricing, and stock planning.

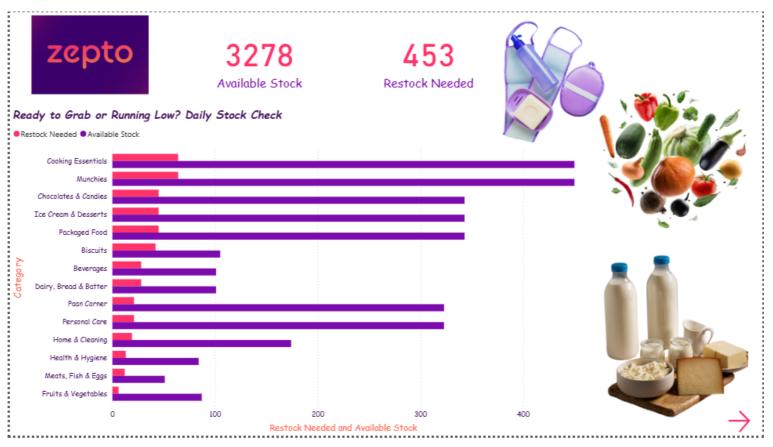
Problem Statement: Zepto, a quick-commerce platform, faces daily challenges in managing its inventory across a catalog of 1,600+ products. Essentials like dairy and fresh produce risk stockouts, while packaged goods often end up overstocked—leading to storage inefficiencies and tied-up capital. Pricing is another concern, with large gaps between Maximum Retail Price (MRP) and actual selling prices impacting profitability. With such a vast catalog, identifying low-stock or high-value items is difficult—especially when relying on raw spreadsheets. For non-technical stakeholders, this makes it hard to spot trends or act quickly. Zepto needs a system that delivers a clear daily snapshot of inventory health, highlights restocking priorities, evaluates pricing strategies, and allows easy drill-down into Stock Keeping Unit (SKU)-level details to enable fast, informed decision-making across operations, finance, and sales.

To address this, the approach involved:

- Data Preparation: Using Power Query to clean, standardize, and format the raw data for analysis.
- Analytical Modeling: Creating dynamic DAX measures in Power BI to enable interactive and insightful visualizations.

Do We Have Enough of What Customers Cart Needs?

Today, Zepto's shelves hold **3,278 items**, but **453** are flashing red—demanding urgent restock. While **Cooking Essentials** and **Munchies** are in great shape, critical gaps are emerging in **Beverages**, **Dairy**, and **Meats**.



Our dashboard empowers **Ops and Supply Chain** teams to act fast, rebalance stock, and prevent stockouts—keeping customer experience seamless, one refill at a time.

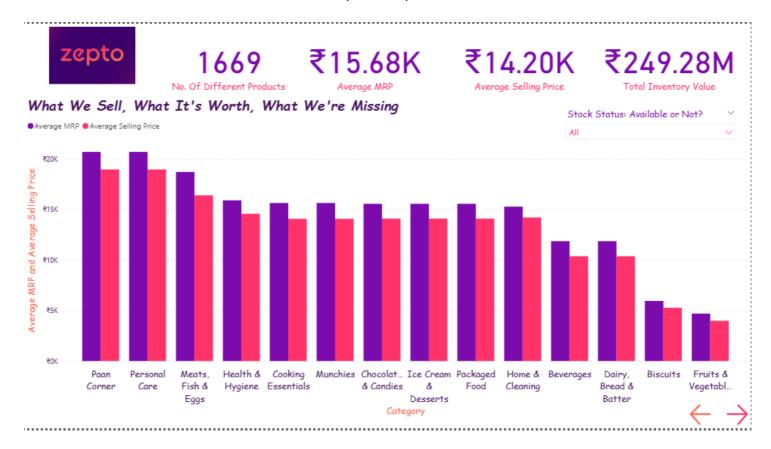
Not letting user return with empty cart or empty heart.

Are Discounts Driving Sales or Eating Profits?

Zepto offers 1,669 products with an Avg. MRP of ₹15.68K, Avg. Selling Price of ₹14.20K, and a Total Inventory Value of ₹249.28M.

Category Highlights:

- Paan Corner & Personal Care: High-value items driving revenue.
- Biscuits & Fruits/Vegetables: Low-ticket but high-volume essentials.
- Health & Hygiene, Cooking Essentials: Balanced pricing with solid margins.
- Chocolates, Ice Creams: Discount-driven traffic drivers, lower per-unit profit.



Strategic Focus:

- Maintain smart discounts in impulse categories.
- Push high-value segments for stronger revenue growth.

This dashboard helps Finance & Sales strike the right balance—ensuring customers find value without the business losing it.

No one leaves with a bitter bill or a bitter feeling.

One Click Away - From Big Picture to Fine Detail

Zepto's Interactive Product-Level Exploration dashboard acts as a powerful control center, letting users filter by category or product name to instantly access details—from the tiniest product to the full category view. Thanks to a linked slicer, any selection made here automatically updates other dashboards, creating a seamless, connected experience. Navigating between insights is effortless with intuitive arrow controls, helping stakeholders track availability, restock needs, pricing, and margins without digging through raw data.

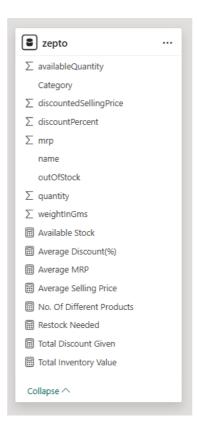


Wrapped in Zepto's signature purple and designed for one-click ease, this tool empowers **all stakeholders (CXOs, Operations, Finance, Category Managers)** navigate smoothly and focus only on what matters.

Because when every dashboard moves in sync, smarter decisions come faster.

Data Model

DAX (Data Analysis Expressions) was used to create new measures, making it easier to visualize Key Performance Indicators (KPIs) clearly. Rest all columns were already available in data.



DAX Used

Table Name: zepto

- 1. **Available Stock** = CALCULATE(COUNTROWS(zepto), zepto[outOfStock] = FALSE())
- 2. Average Discount(%) = AVERAGE(zepto[discountPercent])
- 3. **Average MRP** = AVERAGE(zepto[mrp])
- 4. **Average Selling Price** = AVERAGE(zepto[discountedSellingPrice])
- 5. **No. Of Different Products** = DISTINCTCOUNT(zepto[name])
- 6. **Restock Needed** = CALCULATE(COUNTROWS(zepto), zepto[outOfStock] = TRUE())
- 7. Total Discount Given = SUMX(zepto, zepto[mrp] zepto[discountedSellingPrice] * zepto[availableQuantity])
- 8. **Total Inventory Value** = SUMX(zepto, zepto[availableQuantity] * zepto[discountedSellingPrice])

Approach and Tools Used

Data Cleaning: Removed nulls, blanks, and entries with zero MRP in power query.

Data Modeling: Used calculated columns and DAX measures to create key metrics like Average Selling Price, Inventory Value, and Restock Needs.

Visualization: Built in Power BI, Zepto's Inventory dashboards use a vibrant and consistent color palette—featuring shades like FF6854, FF3269, 7C0BAE, and accents of white—that bring clarity and brand identity to every screen. With carefully chosen visuals such as stacked bar charts, stacked column charts, and KPI cards, the dashboards transform complex business data into easy-to-understand insights.

Navigation: Implemented left/right arrows and slicer sync for cross-page interactivity.

Sync Slicer: A synced slicer was implemented on the third page to enable category-level filtering across all report pages. This ensures a seamless and consistent user experience, allowing stakeholders to view relevant insights dynamically based on the selected category.

Conclusion & Contact

This dashboard empowers Inventory managers to make data-driven decisions for stock optimization, pricing strategy, and procurement planning.

Looking for Opportunities: I'm available for freelance projects, consulting, or full-time opportunities in data analytics and BI development.

■ LinkedIn: Khushi Shah

DISCLAIMER

This is a personal Power BI project created to showcase my data analysis and dashboarding skills. The dataset, sourced from Kaggle, is based on Zepto's product inventory structure. The goal was to clean and analyze the inventory data to uncover insights related to stock availability, restocking needs, and category-wise pricing strategy — demonstrating how data-driven decisions can enhance inventory management.

Dataset used from Kaggle: <u>Dataset</u>

Disclaimer:

This project is not affiliated with or endorsed by **Zepto**. All data used is publicly available on **Kaggle** and was used solely for educational and portfolio purposes.