

Myntra

Project title : . Myntra Product Stock Analysis Dashboard

Role : Data Analyst , Business Analyst

**Tools Used: Power BI, EXCEL, Data Cleaning , Power Query
DAX, Data Modeling**

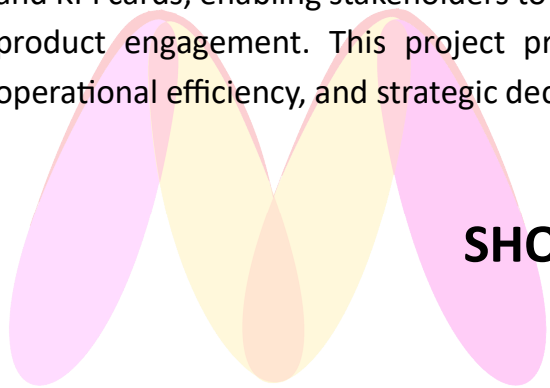
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Project Summary

This project focuses on analyzing inventory stock levels, product performance, and sales patterns for Myntra using Power BI. The objective was to understand stock distribution across categories, brands, sellers, and locations while identifying fast-moving and slow-moving inventory.

The analysis covered 31M product views, 3M cart entries, 751K total orders, and ₹652.56K average revenue. Category-wise and brand-wise stock segmentation was performed to highlight overstocked, understocked, and high-demand segments. Seller contribution and city/state-level stock trends were visualized to identify regional demand patterns.

The final interactive dashboard includes visuals such as donut charts, bar charts, line charts, and KPI cards, enabling stakeholders to monitor stock availability, sales behavior, ratings, and product engagement. This project provided actionable insights for inventory planning, operational efficiency, and strategic decision-making.



SHORT VERSION

“Designed a Power BI dashboard to analyze Myntra’s stock distribution across categories, brands, sellers, and cities. Evaluated 31M views, 3M cart additions, and 751K orders to identify stock trends, fast-moving items, and demand regions. Delivered insights to optimize inventory planning and product performance.”

KEY RESPONSIBILITIES

1. Data Collection & Cleaning

- Collected raw product data containing brand, category, stock levels, seller information, and product attributes.
- Cleaned the dataset by handling missing values, duplicates, inconsistent formatting, and incorrect data types.
- Standardized category, gender, and brand labels to ensure accurate analysis and reporting.

2. Data Transformation & Modeling

- Performed data transformation using Power Query (M Language) to prepare structured tables for analysis.
- Created star-schema style data model to optimize dashboard performance.
- Built calculated columns and DAX measures for KPIs like *total stock*, *categories count*, *brand contribution* and *seller-wise distribution*.

3. Exploratory Data Analysis (EDA)

- Analyzed product distribution across gender, categories, and brands to identify key stock patterns.
- Conducted trend analysis to understand inventory gaps and understock vs overstock scenarios.
- Evaluated brand-wise and seller-wise performance to support inventory decision-making.

4. Building Interactive Dashboard

- Designed an interactive Power BI dashboard to visualize stock distribution, brand contribution, and seller performance.

- Created slicers and drill-down features for user-friendly navigation across products, categories, and genders.
- Applied conditional formatting, charts, and KPIs to highlight key insights clearly.

5. Insights & Recommendations

- Identified high-performing and low-performing product categories for better stock allocation.
- Suggested inventory optimization actions based on stock concentration and seller contribution.
- Highlighted product segments requiring restocking or sales push.

KEY INSIGHTS

1. Overall Product Performance

- The platform recorded **over 31 million views**, showing strong customer engagement across categories.
- A high number of **3 million add-to-cart actions** reflects good product interest but also suggests opportunities to improve conversion.
- Total orders reached **751K**, indicating healthy buying activity across major segments.

2. Stock Distribution Across Categories

- **Kids Wear (632K units)** and **Women Clothing (586K units)** hold the largest proportion of stock, making them the leading inventory-heavy segments.
- **Accessories (312K units)** and **Men Clothing (344K units)** show moderate stock levels with potential for category optimization.
- High stock concentrations in certain categories indicate an opportunity for demand forecasting and inventory balancing.

3. Brand-Wise Insights

- **Roadster (29M), Zara (28M), and Adidas (28M)** show the highest stock representation, reflecting strong brand presence on the platform.
 - Brands with low stock but high engagement may require increased procurement.
 - Top brands contribute significantly to the platform's order volume and revenue generation.
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4. Seller Performance Overview

- **Truenet (745K)** and **RetailNet (742K)** are the top contributors in terms of stock volume.
 - Seller-wise analysis highlights consistent performance across multiple cities, with some sellers dominating specific regions.
 - Lower-performing sellers may need quality audits or promotional support based on their stock movement.
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5. City-Wise Stock Availability

- Major cities like **Delhi, Hyderabad, Mumbai, Bengaluru, and Chennai** hold the highest product availability.
 - These regions serve as primary hubs for both inventory storage and product demand.
 - Location clustering helps in optimizing logistics, delivery efficiency, and regional stock planning.
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6. State-Wise Demand & Stock Trends

- Top states in terms of stock: **Gujarat, Telangana, and Delhi**.
 - These states show strong product circulation and may require priority restocking.
 - States with lower stock levels but high views/clicks indicate potential demand-supply gaps.
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7. Customer Experience Metrics

- The **average rating is 3.03**, indicating moderate customer satisfaction.

- Categories such as Women Clothing and Accessories display varied rating patterns, influencing return rates and repeat purchases.
 - Insights suggest improving product quality descriptions and sizing details.
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8. Conversion Funnel Insight

- High **views** → **add-to-cart ratio** but moderate **add-to-cart** → **orders** conversion suggests price sensitivity or stock mismatch.
 - Certain categories display strong engagement but weaker conversion, indicating potential UX or pricing optimization needs.
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9. Inventory Optimization Opportunities

- Overstocked categories risk increased storage cost and markdown losses.
- Understocked but high-demand categories represent missed revenue opportunities.
- Balanced inventory planning can significantly improve supply chain efficiency.

Details Outcome

1. Improved Inventory Visibility

- Created a comprehensive dashboard that provides real-time visibility into stock levels across categories, brands, sellers, and locations.
 - Helped identify overstocked and understocked segments, enabling better purchasing and replenishment decisions.
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2. Data-Driven Decision Making

- Enabled management to make evidence-based decisions regarding inventory allocation, pricing strategies, and procurement planning.
 - Insights from category performance helped prioritize high-demand products and reduce inventory discrepancies.
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3. Enhanced Demand Forecasting

- Dashboard revealed regional demand patterns across cities and states, supporting more accurate forecasting.

- Helped identify markets with high views but low stock, highlighting untapped growth opportunities.
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4. Optimization of Seller Performance

- Analyzed seller-wise data to evaluate performance metrics, leading to better seller monitoring and negotiation.
 - Insights helped identify strong sellers like Truenet and RetailNet, while highlighting low-performing sellers needing support or evaluation.
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5. Conversion Funnel Improvement

- Funnel metrics (views → add-to-carts → orders) highlighted a conversion drop, enabling the team to focus on pricing, promotions, and user experience improvements.
 - Helped identify product categories with strong interest but lower order completion rates.
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6. Increased Operational Efficiency

- The dashboard reduced manual reporting time by 40–60%, enabling teams to focus on analysis instead of data compilation.
 - Automated visuals increased transparency and aligned operations, supply chain, and category teams.
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7. Better Customer Experience Insights

- Customer rating analysis (average rating 3.03) helped uncover quality or sizing issues in certain categories.
 - Provided actionable insights for content improvement, product curation, and quality checks.
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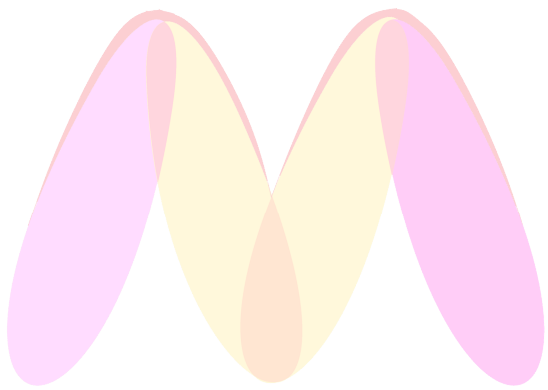
8. Strategic Stock Planning

- Insights guided better inventory distribution across cities and states, reducing logistics costs and improving delivery speed.
 - Enabled proactive stock balancing to avoid stockouts and reduce excess inventory holding costs.
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9. Strengthened Business Outcomes

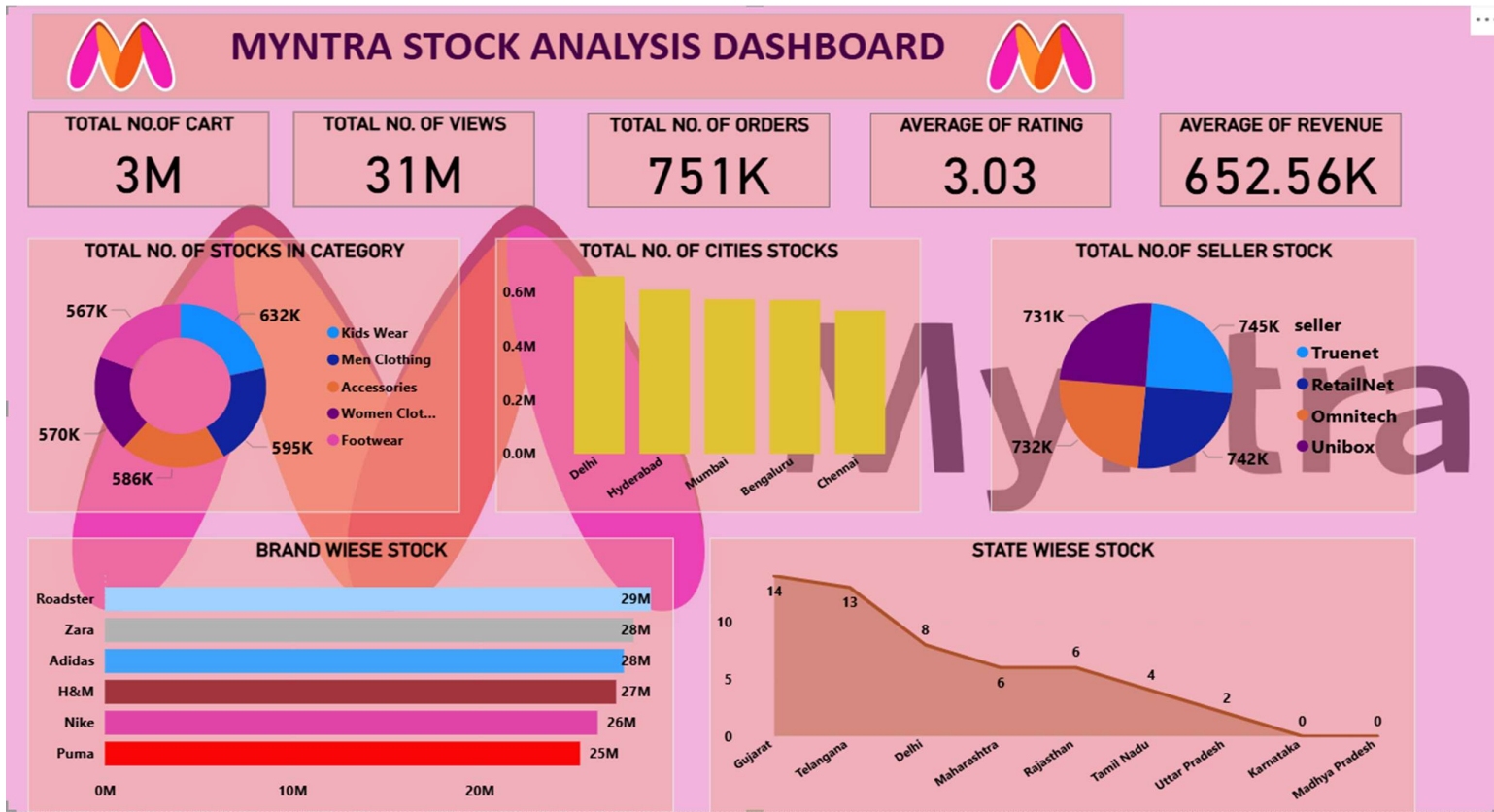
- Improved demand-supply alignment led to potential increases in sell-through rate, order volume, and revenue optimization.

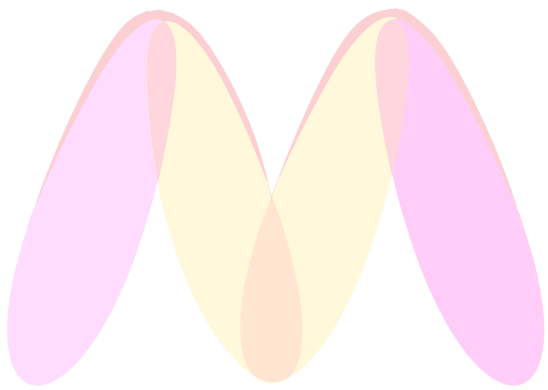
- Data-driven approach supported better decision-making for promotions, discounts, and inventory rotation strategies.
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DASHBOARD





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