

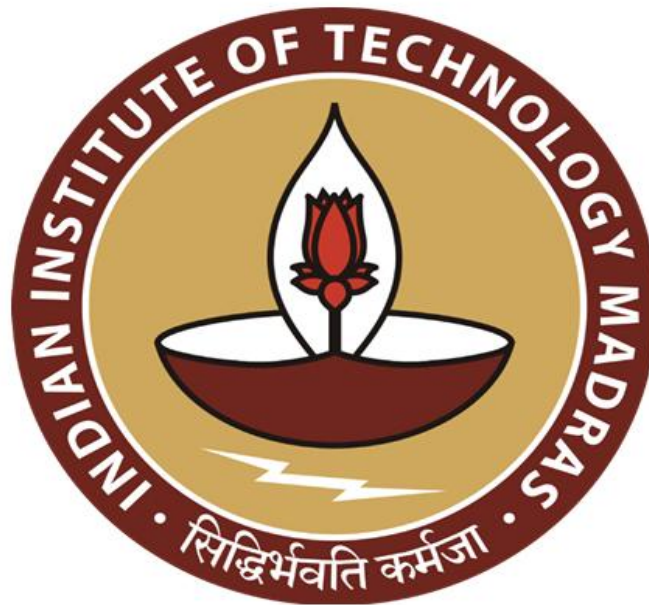
Inventory and Product Optimization through Sales Analytics of a Fashion Outlet

Final report for the BDM Capstone Project

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1. EXECUTIVE SUMMARY

This Capstone Project on Business Data Management (BDM) analyzes sales and inventory trends at The Elegant, a B2C clothing and footwear store in Rath, Hamirpur, with the objective of optimizing revenue, refining stock management, and enhancing demand forecasting for improved operational efficiency. By examining monthly sales fluctuations, category-wise performance, stock turnover rates, and seasonal demand patterns, the study provides strategic insights to streamline inventory planning and drive business growth.

This report begins with data preprocessing, which involved structuring sales records, standardizing inventory metrics, and refining SKU classifications to ensure consistency and accuracy. Exploratory Data Analysis (EDA) was then conducted using visualizations such as bar charts and line graphs to analyze revenue trends, stock movement, and sales distribution across various product categories.

Key findings indicate that while sales volume peaked in June, revenue did not reach its highest, suggesting a reliance on lower-priced products. Seasonal demand fluctuations and inventory mismanagement contributed to stock imbalances, impacting overall efficiency. The October sales surge highlighted the importance of proactive inventory planning and marketing strategies to capitalize on seasonal demand.

To enhance business performance, demand-based inventory planning should be implemented to minimize stock imbalances and improve stock turnover. A value-based pricing strategy can help maximize revenue, while targeted promotions for underperforming categories can drive sales. Strengthening demand forecasting and aligning procurement with seasonal trends will optimize resource allocation and reduce inventory costs.

Implementing these strategies will improve profitability, streamline inventory management, and support sustainable business growth. A data-driven approach will enable The Elegant to enhance operational efficiency and adapt to evolving market demands. These insights will help *The Elegant* refine its strategies and enhance business operations based on data-driven decisions.

2. DETAILED EXPLANATION OF ANALYSIS PROCESS

2.1 Analysis Overview :

The aim of this analysis is to assess the operational efficiency of *The Elegant*, a B2C clothing and footwear store in Rath, Hamirpur, with an emphasis on enhancing inventory management, addressing stock inconsistencies, and improving profitability. The study examines sales patterns, stock fluctuations, and procurement efficiency to refine pricing and stock turnover strategies, while also identifying challenges such as frequent shortages, slow-moving inventory accumulation, and seasonal supply gaps during peak demand periods.

Kindly refer to the analysis folder for details: [BDM Project](#)

A structured data-driven methodology was adopted, beginning with data acquisition, preprocessing, statistical evaluation, trend analysis, and visualization. Techniques such as demand forecasting and stock turnover assessments were applied to ensure inventory efficiency. The insights derived offer strategic recommendations, including dynamic pricing, inventory categorization, and demand-based stock planning, ensuring better alignment between stock availability and customer demand, thereby maximizing profitability.

2.2 Data Acquisition and Processing :

The dataset for this analysis was obtained from *The Elegant's* digital inventory management system, ensuring reliability and accuracy. It consists of two primary datasets—**sales data** and **stock records**—covering the period from **May 2024 to October 2024**. The sales dataset includes essential attributes such as transaction dates, product identifiers, categories, quantities sold, total revenue, and payment methods. Meanwhile, the stock dataset provides insights into inventory movements, capturing details like opening stock, stock additions, sales volume, and closing stock across **199 unique products** spanning multiple categories, including *T-shirts, Jeans, Kurtis, Shoes, Joggers, Cargo Pants, Shirts, and Track Suits*.

To refine the dataset for meaningful analysis, several preprocessing steps were performed:

- **Data Importation** – The datasets were loaded into Python using Pandas to facilitate structured data manipulation.

- **Missing Value Treatment** – Incomplete records, particularly in key fields like sales quantity and total revenue, were identified and addressed to maintain data integrity.
- **Date Standardization** – Sales transaction dates were formatted uniformly (Day-Month-Year) to enable time-based trend analysis.
- **Product Name Alignment** – Discrepancies in product naming conventions were resolved to ensure consistency and seamless data integration.
- **Duplicate Data Removal** – Redundant entries were identified and eliminated to prevent skewed results and ensure accurate calculations.
- **Data Consistency Checks** – Cross-verification of stock and sales records was conducted to identify discrepancies and ensure synchronization between recorded inventory and actual sales.

2.3 Exploratory Data Analysis and Trends :

Following data cleaning and preprocessing, **Exploratory Data Analysis (EDA)** was conducted to examine sales trends, inventory fluctuations, and revenue patterns at *The Elegant*. The goal was to identify key trends in stock movement, product performance, and demand shifts for a clearer understanding of sales dynamics and inventory efficiency.

- **Analysis of Revenue Patterns** – Monthly sales data was examined to track fluctuations in total revenue. This helped pinpoint months with high sales activity and periods of lower revenue, offering valuable insights into seasonal purchasing trends.
- **Evaluation of Product Category Performance** – Sales distribution across various product categories was analyzed to determine which items significantly contributed to overall revenue and which products exhibited consistently low demand.
- **Inventory Turnover Examination** – Stock movement was assessed to measure how often products were sold and replenished. This helped detect instances of excessive stock accumulation or frequent shortages, ensuring a balanced inventory.
- **Study of Seasonal Demand Variations** – Sales patterns over different months were reviewed to identify peak demand periods and off-season fluctuations. This insight was crucial for managing stock levels efficiently during high-demand phases.

- **Identification of Slow-Moving and Unsold Products** – Items with persistently low or no sales were identified to assess the risk of overstocking. This evaluation aided in developing strategies for stock clearance and supplier adjustments.
- **Profitability Assessment** – A comparative analysis of selling prices and purchase costs was conducted to determine product-wise profit margins. This facilitated better pricing strategies and ensured sustainable financial performance.

Visual tools such as bar charts and line graphs were employed to illustrate significant insights derived from the analysis. These visualizations helped in understanding overall data trends, making it easier to identify patterns and anomalies.

2.4 Statistical Summary and Quantitative Trends :

The dataset was initially examined to ensure accuracy and consistency before analysis. This involved extracting **metadata**—including column names, data types, and missing values—while also identifying and resolving duplicate records to maintain data integrity.

Essential statistical measures such as mean, median, and mode were computed to summarize sales performance across different time periods and product categories. These metrics helped assess revenue distribution, track product demand, and identify sales trends.

- **Monthly Revenue Analysis** – The dataset was organized on a month-wise basis to calculate total, average, and median revenue values. This helped in identifying patterns in sales performance, recognizing periods of peak revenue, and detecting months with lower sales activity. The findings provided valuable insights into seasonal demand shifts and purchasing behaviors.
- **Product-Category Performance Analysis** – Sales data was examined across different product categories to assess their revenue contributions. Metrics such as total units sold, average sales value, and revenue distribution were analyzed to compare high-performing products with slower-moving items, helping to identify best-selling categories and those needing strategic adjustments.
- **Inventory Trends and Stock Movement** – Inventory fluctuations were analyzed monthly across product categories, assessing stock additions, sales volume, and closing levels.

Stock turnover rates and deviations from average inventory helped identify overstocking and shortages, optimizing stock allocation and procurement.

2.5 Monthly Sales and Inventory Analysis :

The analysis tracked *Opening Stock*, *Sold Stock*, *Added Stock*, and *Closing Stock* across branches and product categories like T-Shirts, Jeans, Shoes, Kurtis, and Track Suits. Line graphs and bar charts mapped sales trends, stock fluctuations, and demand shifts. Correlating stock replenishment with sales volume exposed inefficiencies like slow-moving inventory and irregular turnover. Gaps in inventory flow and replenishment cycles revealed forecasting inefficiencies, enabling data-driven stock optimization and sales enhancement.

2.6 Category-Wise Sales Performance :

Category-wise sales performance was analyzed using *Category Name* and *Total Sale Value* to understand revenue distribution across different product categories. Sales contribution was assessed using bar charts, highlighting high-revenue categories such as *Shoes*, *Jeans*, and *T-Shirts*, which drive profitability. Lower-revenue categories like *Track Suits*, *Shorts*, and *Plazzo* were identified as slow-moving, potentially leading to excess stock and increased holding costs. The analysis provided insights into optimizing procurement, improving stock allocation, and refining sales strategies for better inventory efficiency.

2.7 Demand-Based Segmentation and Stock Turnover :

Inventory movement was analyzed by segmenting products into *Category A (high-demand)*, *Category B (moderate sales)*, and *Category C (low-demand)* based on total quantity sold. *Product Name*, *Category Name*, and *Sold Stock* were used to assess stock efficiency and sales distribution. Category A recorded the highest sales volume, ensuring consistent stock movement, while Category B exhibited moderate turnover with a steady sales flow. Category C had the lowest sales, indicating slow-moving inventory. This segmentation provided insights into stock allocation, demand trends, and overall inventory control.

2.8 Seasonal Sales Patterns and Revenue Analysis :

The analysis process involved segmenting sales data by month and category to track demand patterns over time. Key metrics like total quantity sold and stock levels were examined to identify

trends, while line graphs visualized sales variations and seasonal shifts. By analyzing stock additions and closing stock, inefficiencies such as shortages or surplus were assessed. Correlating sold stock with closing stock uncovered product movement patterns, ensuring alignment between stock availability and sales trends for better procurement, demand forecasting, and inventory planning.

2.9 Profit Margin Analysis and Pricing Optimization :

Profit margin analysis was conducted using *Category Name*, *MRP/Selling Price*, *Purchase Price*, and *Total Sale Value* to assess category-wise profitability. High-margin products driving profits were identified, while low-margin items were flagged for pricing adjustments. *Cost-to-revenue ratios* revealed seasonal fluctuations and pricing inefficiencies, highlighting rising *Purchase Price* and inconsistent *MRP/Selling Price*. These insights enabled optimized pricing, strategic markups, and improved procurement planning to sustain profitability and competitiveness.

2.10 Significant Challenges Impacting Business Performance :

Trend analysis revealed key obstacles influencing business efficiency. These challenges were evaluated based on their recurrence and impact. The most critical concerns are listed below :

- **Stock Imbalances Reducing Sales Opportunities** – Frequent shortages of fast-selling products resulted in lost revenue, while excess stock of slow-moving items led to higher storage costs and inefficient capital allocation.
- **Over-Reliance on a Few Best-Selling Products** – A large portion of revenue came from a handful of high-demand items, increasing business risk and emphasizing the need for sales diversification strategies.
- **High Inventory Holding Costs Affecting Profitability**– Despite consistent 20-25% profit margins, excessive stock retention increased operational costs, limiting the ability to invest in new inventory or business expansion.
- **Unstable Demand Cycles Impacting Inventory Planning** – Fluctuating seasonal demand patterns made forecasting sales and stock levels challenging, leading to surplus accumulation or shortages at critical times.

2.11 Visual Representations Used in the Analysis :

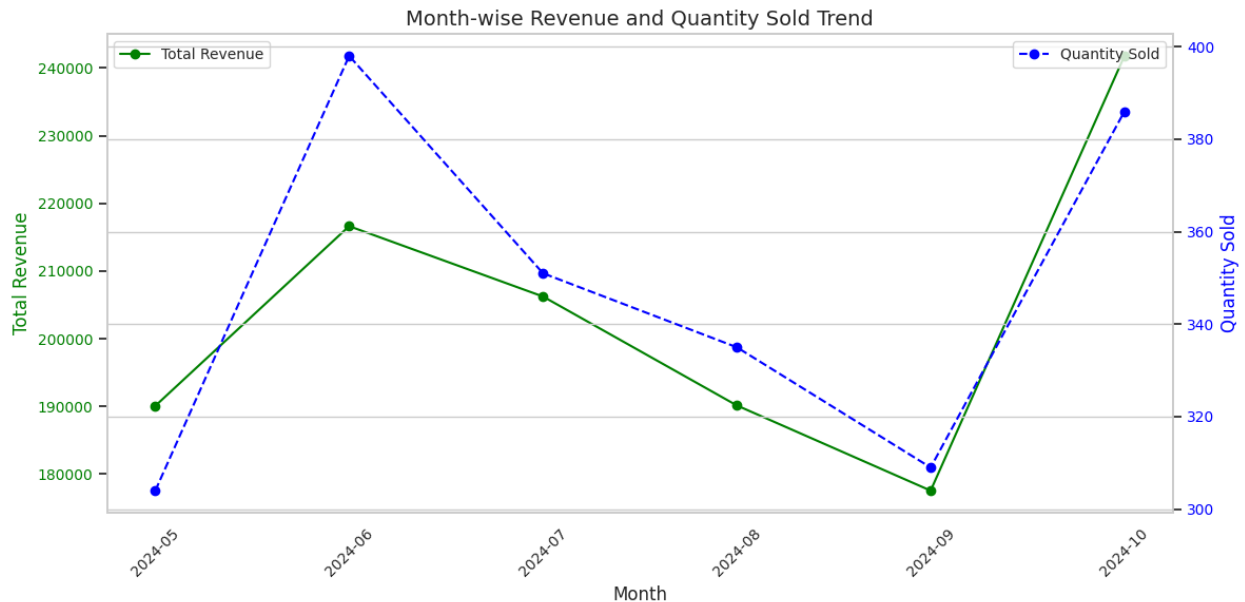
- **Line Charts** displayed monthly sales trends and inventory fluctuations, highlighting seasonal patterns. They provided insights into demand shifts and stock movement over time.
- **Bar Charts** compared category-wise sales performance and revenue contribution. They highlighted top-selling products and identified lower-performing categories for strategic adjustments.
- **Grouped Bar Chart** depicted the relationship between stock replenishment and sales volume over time.

3. RESULTS AND FINDINGS

3.1 Observations Based on Analysis :

- **Recurring Stock Imbalances** – Overstocking was a persistent issue, particularly for *Benttek Fashion* and *Zara G*, leading to excess inventory accumulation. Meanwhile, understocking of *Kurta Pajamas in October* highlighted gaps in demand forecasting, especially during festive seasons.
- **Category-Wise Sales Performance Variations** – *T-Shirts* consistently led in sales, while *Jeans* and *Kurtis* maintained steady demand. In contrast, *Track Suits*, *Plazzo*, and *Shorts* had low sales, indicating a need for better marketing strategies or stock adjustments.
- **Seasonal Demand Shifts** – Sales peaked in *October* due to festive shopping but declined significantly in *August and September*, suggesting the need for strategic stock replenishment and seasonal promotions.
- **Profitability Influencers** – While *Shoes* generated high revenue due to their price, their sales volume remained lower compared to *T-Shirts* and *Jeans*, highlighting the importance of balancing high-margin products with high-demand items.
- **Inefficiencies in Procurement and Stock Turnover** – The gap between *Added Stock* and *Sold Stock* in multiple months indicated misalignment in procurement planning, leading to either inventory accumulation or shortages.

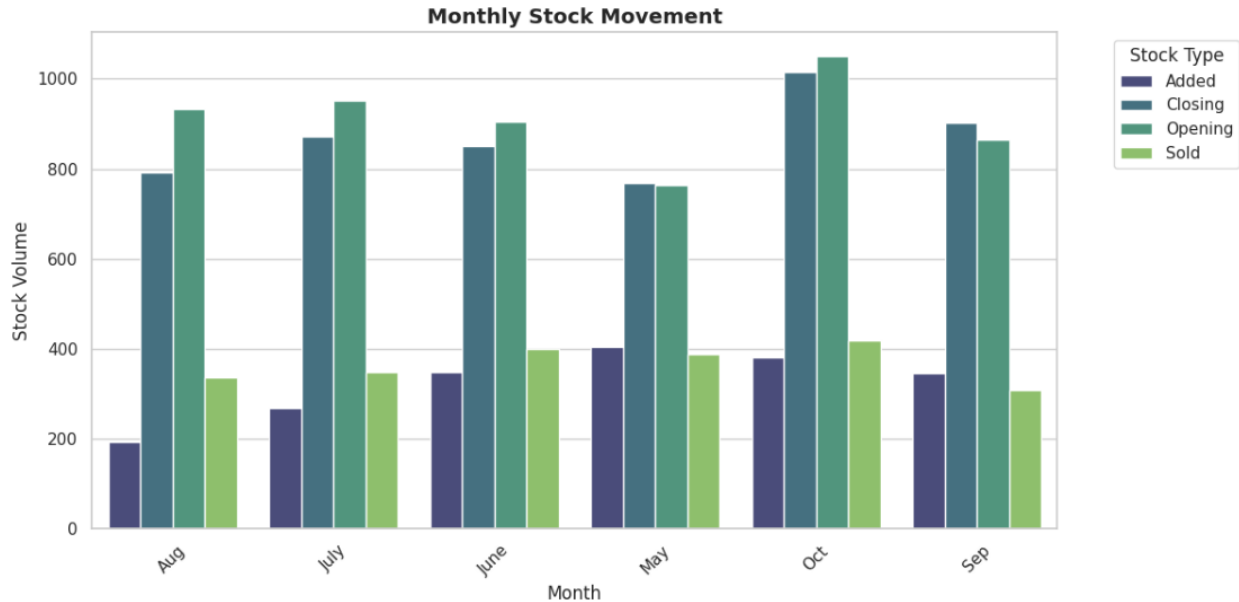
3.2 Monthly Sales and Inventory Analysis :



The chart above presents the month-wise trend of revenue and quantity sold from May 2024 to October 2024. The green line represents total revenue, while the blue dashed line represents quantity sold. This visualization highlights fluctuations in sales performance, seasonal demand shifts, and potential inefficiencies in stock planning and inventory management.

Key Findings :

- **Sales Volume Drives Revenue** – The strong correlation between revenue and quantity sold suggests that higher sales volume, rather than price changes, is the main factor influencing revenue growth.
- **June Sales Spike, But Not Revenue Peak** – June recorded the highest quantity of products sold, but the total revenue did not rise at the same rate. This indicates that a large share of sales came from lower-priced items rather than high-value products.
- **Mid-Year Sales Dip (July–September)** – A significant decline in both revenue and quantity sold occurs after June, reflecting the reduced demand or slower inventory movement.
- **October Sales Surge** – In October, both revenue and quantity sold sharply increased, marking a strong recovery in sales. This rise reflects a significant shift in demand, likely driven by seasonal factors.

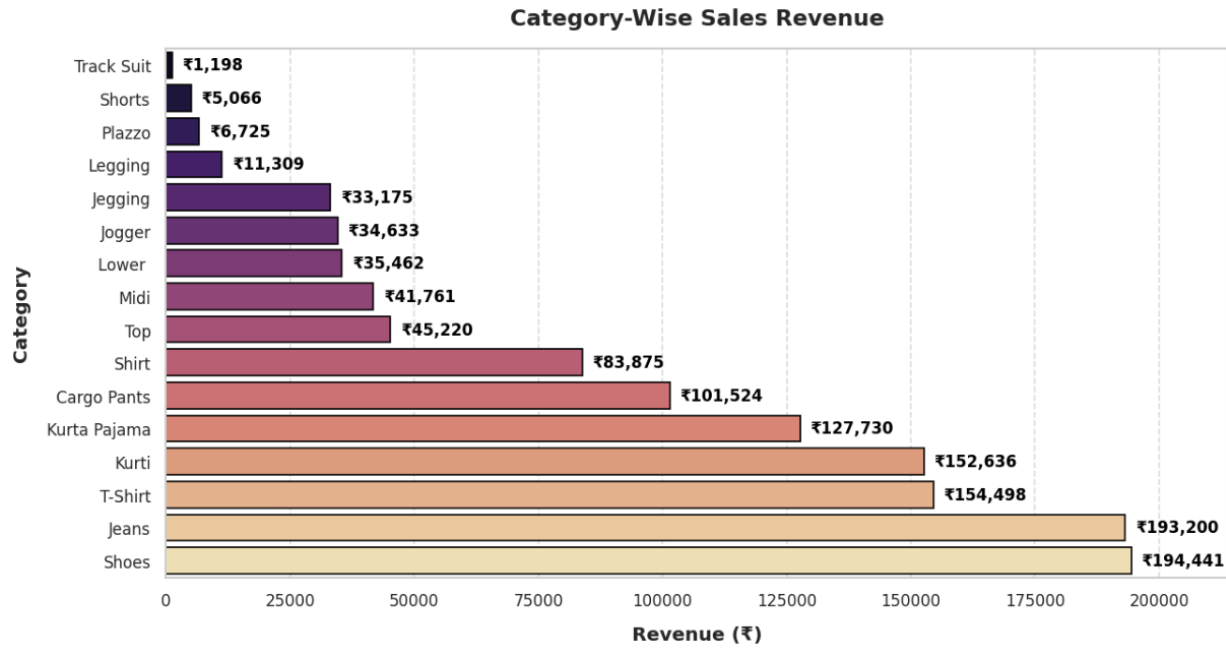


This graph represents the monthly stock movement, displaying variations in Added, Closing, Opening, and Sold stock volumes across six months. The data highlights shifts in inventory levels and stock flow across different periods.

Key Findings:

- **Highest Inventory Activity in October** - October records the highest stock additions and closing levels, reflecting a sharp rise in inventory movement compared to other months.
- **Consistent Inventory Accumulation** - Stock additions remain higher than the sold quantity across all months, indicating a steady buildup of inventory rather than a rapid turnover.
- **Stable Inventory Flow in May and June** - Opening and closing stock levels in May and June are nearly identical, demonstrating minimal fluctuations in stock movement.
- **Lower Sales Compared to Opening Stock** - The volume of sold stock consistently falls below the opening levels, highlighting either a demand gap or a deliberate stock retention strategy.
- **Noticeable Slowdown Before October Surge** - September records the lowest sold stock volume, signaling a slowdown in movement before the sharp increase in October.

3.4 Category-Wise Sales Performance :



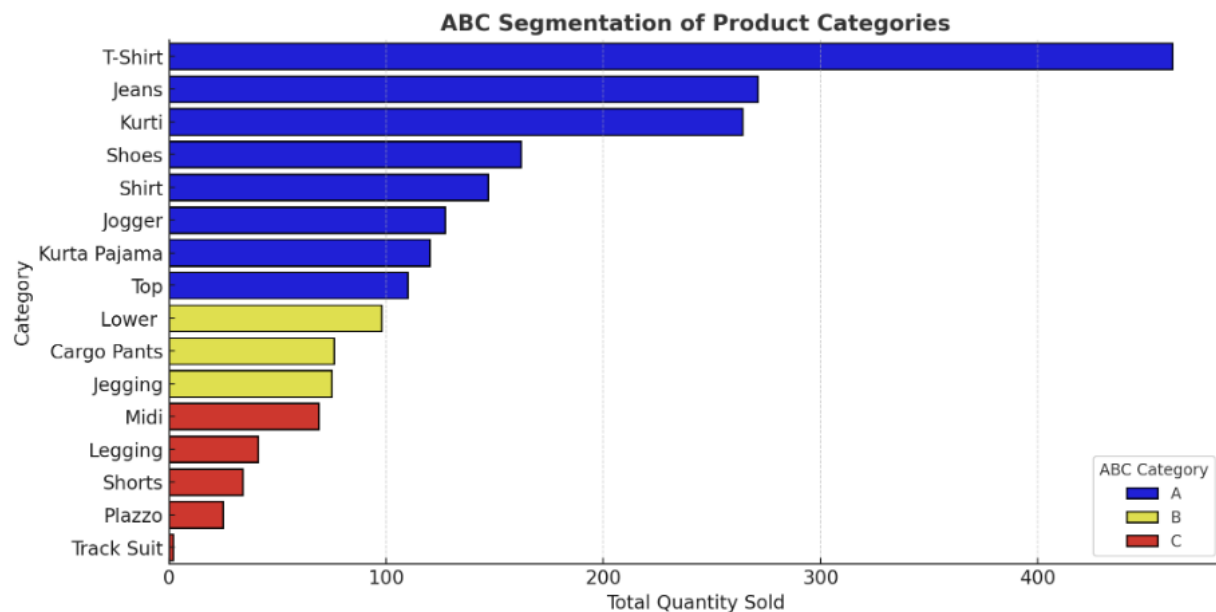
The chart illustrates category-wise sales revenue, highlighting high-performing categories like **Shoes, Jeans, and T-Shirts** that drive profitability, while lower-revenue categories such as **Track Suits, Shorts, and Plazzo** indicate potential overstock issues. This analysis helps optimize inventory and refine sales strategies.

Key Findings:

- **Highest Revenue-Generating Categories** – The categories Shoes, Jeans, and T-Shirts recorded the highest sales revenue, indicating strong customer demand and consistent sales performance. These categories significantly contributed to overall profitability.
- **Moderate Sales Performance** – Categories such as Kurti, Kurta Pajama, and Cargo Pants generated substantial revenue but remained below the top-performing categories. Their sales figures suggest steady demand, though they may not be the primary drivers of profitability.
- **Low Revenue Categories Identified** – Track Suits, Shorts, and Plazzo had the lowest sales revenue, indicating slower movement in the inventory. These categories may require further assessment to determine factors influencing their lower sales.

- **Revenue Distribution Variation** – The sales revenue is unevenly distributed across product categories, with a significant gap between high-performing and low-performing categories. This indicates varying consumer preferences and market demand across different product types.

3.5 Demand-Based Segmentation and Stock Turnover :



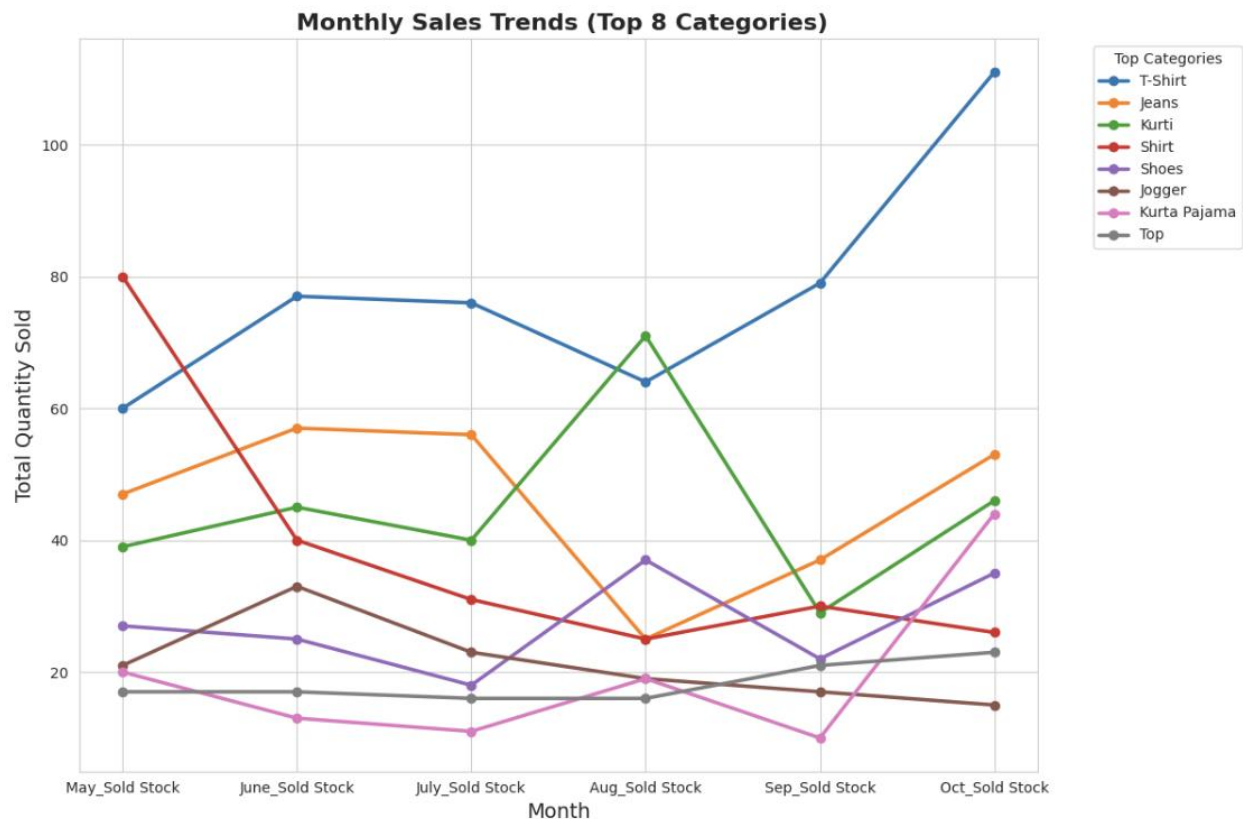
The graph illustrates ABC segmentation of product categories based on total sales. Products are grouped into Category A (high-demand), Category B (moderate sales), and Category C (low-demand) to highlight sales distribution and inventory movement. This analysis helps in identifying top-selling, steady-moving, and slow-moving products, providing insights into inventory flow and product performance across different categories.

Key Findings :

- **Top-Selling Products (Category A)** – T-Shirts, Jeans, and Kurtis record the highest sales volume, indicating strong market demand and frequent stock movement.
- **Moderate-Selling Products (Category B)** – Lower, Cargo Pants, and Jeggings show steady but moderate sales, reflecting a balanced turnover rate.
- **Low-Selling Products (Category C)** – Shorts, Plazzo, Track Suits, and Leggings have the lowest sales volume, indicating limited movement compared to other categories.

- **Sales Distribution Trend** – A significant portion of total sales comes from Category A products, highlighting a concentration of demand in select high-performing categories.
- **Variation in Product Turnover** – Sales trends vary across different product categories, with Category A experiencing rapid movement, Category B showing moderate turnover, and Category C exhibiting slow-moving stock.

3.6 Seasonal Sales Patterns and Revenue Analysis :



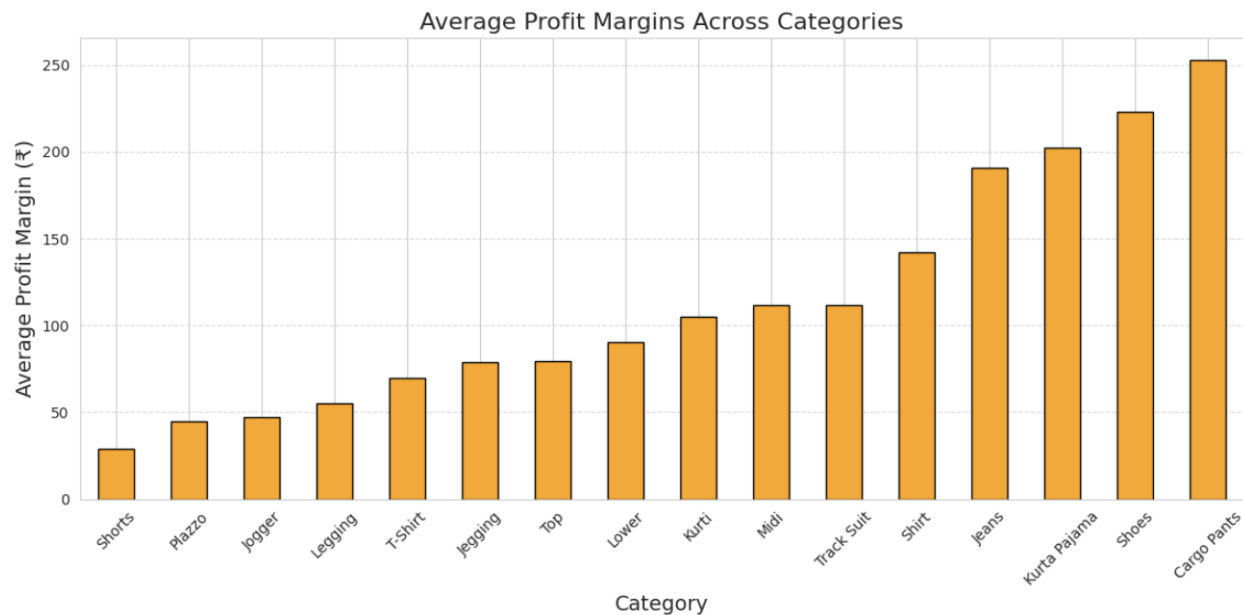
The graph illustrates the Monthly Sales Trends of the Top 8 Product Categories based on total sales from May to October. Each line represents a specific product category, showcasing its sales performance over time. It highlights how different product categories perform over time, enabling data-driven decision-making for inventory management and sales planning.

Key Findings :

- **Strong October Sales for T-Shirts and Kurta Pajamas** – Both categories saw a significant spike in October, indicating seasonal demand driven by festivals and weather changes.

- **Gradual Sales Growth for Jeans** – Sales of Jeans steadily increased towards October, reflecting consistent demand with a seasonal peak in later months.
- **Kurtis' Fluctuating Demand** – Kurti sales peaked in August before dropping, suggesting seasonal trends influenced by fashion cycles or festive buying patterns.
- **Early Surge and Decline in Shirt Sales** – Shirts had high sales in May but declined steadily, indicating stronger demand in early months with reduced interest later in the year.
- **Minimal Seasonal Impact on Joggers and Tops** – These categories maintained relatively stable but lower sales across months, showing little influence from seasonal trends.

3.7 Profit Margin Analysis and Pricing Optimization :



The bar chart represents the average profit margins across various product categories. Each category is analyzed to determine its profitability, with higher bars indicating categories that generate more profit per unit sold. The data provides insights into which product categories contribute the most to overall profitability.

Key Findings :

- **Cargo Pants Lead in Profitability** – Cargo Pants recorded the highest average profit margins, making them the most lucrative category in terms of revenue generation.

- **Strong Profit Margins for Shoes and Kurta Pajama** – Both Shoes and Kurta Pajama demonstrated high profitability, reflecting strong demand and premium pricing.
- **Steady Revenue from Jeans and Shirts** – These categories maintained mid-to-high profit margins, ensuring consistent revenue contributions.
- **Lower Profitability in Shorts, Palazzo, and Joggers** – These categories exhibited significantly lower profit margins, making them less profitable compared to other segments.
- **Higher Margins in Bottom-Wear Categories** – A clear trend shows that bottom-wear items, such as Cargo Pants and Jeans, tend to have higher profit margins, while casual wear categories like Shorts and Joggers generate lower margins.

4. INTERPRETATIONS OF RESULTS AND RECOMMENDATIONS

4.1 Monthly Sales and Inventory Analysis :

Interpretations :

- **Lower-Priced Items Impacting Revenue Growth** – The high sales volume in June did not translate to peak revenue, indicating that a significant portion of sales came from lower-priced products. This suggests a need for a more balanced product pricing strategy. Implementing targeted promotions for higher-value items could help drive revenue without solely relying on volume.
- **Mid-Year Decline Reflects Seasonal Demand Fluctuations** – The drop in sales from July to September suggests a seasonal slowdown in consumer demand. This trend highlights the importance of demand-based inventory planning.
- **Inventory Build-Up Indicates Inefficiencies** – The continuous accumulation of stock across months indicates discrepancies between procurement and the actual sales. This misalignment increases storage costs and the risk of obsolescence.
- **October Sales Surge Reinforces Seasonal Demand Trends** – The significant increase in sales and revenue in October aligns with seasonal purchasing patterns. This emphasizes the need for proactive inventory and marketing strategies ahead of peak demand periods.

Recommendations :

- **Implement a Value-Based Pricing Strategy** – Adjust pricing models to ensure profitability without solely relying on high sales volumes. Introduce strategic discounts on higher-margin products to enhance revenue.
- **Optimize Product Mix for Profitability** – Analyze sales trends and focus on promoting high-value items alongside popular lower-cost products to maintain a balanced revenue stream.
- **Introduce Targeted Mid-Year Sales Strategies** – Deploy marketing campaigns, limited-time offers, and inventory refresh strategies to sustain sales during slower months.

4.2 Category-Wise Sales Performance:

Interpretations:

- **Profitability is Concentrated in Select Categories** – A significant portion of revenue comes from a few high-performing categories, indicating a reliance on limited product lines for profitability. This exposes the business to risk if demand shifts.
- **Steady Demand for Mid-Tier Categories** – Moderate-performing categories maintain consistent sales but lack the same profitability impact as top sellers. This suggests opportunities to improve pricing, marketing, or product differentiation.
- **Underperforming Categories Indicate Inventory Inefficiencies** – The presence of low-revenue categories suggests potential issues such as overstocking, weak consumer interest, or ineffective promotional efforts. These products may require reassessment.

Recommendations :

- **Diversify Revenue Streams** – Reduce dependency on top-performing categories by improving visibility and demand for mid-tier products through strategic marketing and bundling offers.
- **Reposition Low-Performing Categories** – Assess whether low-revenue items should be repositioned, discontinued, or redesigned. Implement targeted promotions or exclusive discounts to clear excess stock.

- **Leverage Consumer Insights** – Conduct surveys or analyze customer feedback to understand why certain products perform better than others and adjust inventory and marketing strategies accordingly.

4.3 Demand-Based Segmentation and Stock Turnover:

Interpretations:

- **Heavy Dependence on High-Demand Products** – The majority of sales are concentrated in Category A, indicating that business performance relies heavily on a few top-selling items. This can be risky if market preferences shift.
- **Moderate Sales Categories Show Stability** – Products in Category B have a balanced turnover rate, making them reliable contributors to revenue. However, they may require additional promotional efforts to enhance profitability.
- **Low-Selling Items Lead to Inventory Holding Costs** – Category C products exhibit slow movement, which can result in excess stock, higher holding costs, and potential losses if demand does not improve.

Recommendations:

- **Optimize Inventory Allocation** – Maintain sufficient stock levels for Category A products while preventing excessive reliance on them. Gradually increase stock for Category B products with potential growth opportunities.
- **Revamp Low-Performing Product Strategies** – Consider discontinuing, repositioning, or repackaging Category C items based on consumer insights. Introduce discounts or bundled promotions to accelerate movement.
- **Diversify Sales Channels for Moderate-Selling Products** – Increase visibility of Category B products through targeted promotions, influencer collaborations, or bundling with best-selling items to enhance their turnover.
- **Regular Stock Reviews and Adjustments** – Implement periodic stock assessments to minimize excess inventory in slow-moving categories while ensuring high-demand products are adequately replenished.

4.4 Seasonal Sales Patterns and Revenue Analysis :

Interpretations:

- **Seasonal Demand Peaks in October** – The sharp rise in sales for T-Shirts and Kurta Pajamas indicates strong festive-driven demand, requiring better inventory planning.
- **Consistent Growth in Jeans Sales** – The gradual increase suggests that Jeans remain in demand throughout the year, with a seasonal peak in later months.
- **Fluctuating Sales for Kurtis** – Sales peaking in August suggest that demand is influenced by changing fashion trends or cultural buying patterns.
- **Shirt Sales Decline After Early Peak** – High sales in May followed by a drop suggest occasional demand, possibly linked to summer or promotional campaigns.
- **Minimal Seasonal Influence on Joggers and Tops** – The stable but lower sales indicate these categories are not significantly affected by seasonal trends, requiring demand-stimulation strategies.

Recommendations:

- **Optimize Festive Inventory** – Increase stock for high-demand categories like T-Shirts and Kurta Pajamas before October to capitalize on peak sales.
- **Maintain Steady Promotions for Jeans** – Since Jeans have consistent demand, year-round marketing and availability should be ensured.
- **Align Kurtis and Shirt Promotions with Demand Cycles** – Targeted discounts and marketing in peak months (August for Kurtis, May for Shirts) can maximize revenue.
- **Reevaluate Joggers and Tops Strategies** – Bundle these products with better-selling items or introduce new designs to boost sales.

4.5 Profit Margin Analysis and Pricing Optimization:

Interpretations:

- **Cargo Pants Drive Profitability** – The highest margins indicate strong pricing power, making them a key contributor to overall revenue.

- **Shoes and Kurta Pajamas Offer High Returns** – Their strong profitability suggests demand for premium or higher-priced variations.
- **Jeans and Shirts Provide Consistent Revenue** – While not the most profitable, their steady margins ensure financial stability.
- **Low Margins in Shorts, Palazzo, and Joggers** – These categories may face pricing pressures or lower perceived value, reducing profitability.

Recommendations:

- **Expand High-Margin Categories** – Prioritize inventory and promotions for Cargo Pants, Shoes, and Kurta Pajamas to maximize profitability.
- **Reposition Low-Margin Items** – Consider pricing adjustments, cost reductions, or bundling strategies for Shorts, Palazzo, and Joggers.
- **Enhance Mid-Tier Profitability** – Optimize pricing strategies for Jeans and Shirts to maintain consistent contributions.
- **Capitalize on Bottom-Wear Demand** – Stock new designs or premium versions of Cargo Pants and Jeans to sustain profit growth.

5. CONCLUSION

This analysis highlights the need for better inventory management, sales optimization, and profitability enhancement. Addressing stock imbalances—especially overstocking and understocking—will streamline operations and reduce costs. Strengthening demand forecasting and procurement planning is essential for maintaining optimal stock levels.

Prioritizing high-demand products like Shoes, Jeans, and T-Shirts while reassessing underperforming categories can improve sales. Seasonal trends emphasize strategic stock replenishment to mitigate slowdowns and maximize peak sales. Efficient resource allocation based on demand segmentation will ensure high-turnover items remain a priority while refining strategies for slow-moving stock. Focusing on high-margin categories like Cargo Pants and Shoes, along with optimized pricing, will enhance profitability. Refining inventory planning and pricing models will improve efficiency, strengthen customer satisfaction, and drive sustainable growth.