

Insightful Study of a Plastic Furniture Shop



Business Data Management Capstone Project Presentation



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Organizational Background

Sharda Sales

- Established: 1999 | Owner: Mr. Sharanand Jha
- Location: New Bus Stand, Madhepur, Bihar
- Business Type: B2C retail of plastic furniture (chairs, tables, almirahs, dressing tables, etc.)
- Legacy: 25+ years of operation with a strong local reputation
- Strengths: Durable, affordable, and stylish furniture; wide product variety; customer-centric service
- Market Position: Early entrant in the region, now facing competition but still a trusted and preferred choice in the community



The PDM

Problem
Data
Methodology

TAKEAWAY: Suggestions to increase sales and profitability

P: INVENTORY INEFFICIENCIES & SALES FLUCTUATIONS

Sharda Sales faces significant challenges from intense local competition, which has led to declining footfall and shrinking profit margins. The core problem stems from a lack of data-driven decision-making, resulting in operational inefficiencies.

D: DATA COLLECTED [JAN 2025 - APR 2025]

Sales and expense data from January to April 2025 was collected and digitized from handwritten logs, covering eight product categories, revenue trends, and inventory records, along with credit transactions and owner insights.

M: ANALYSIS AND METHOD

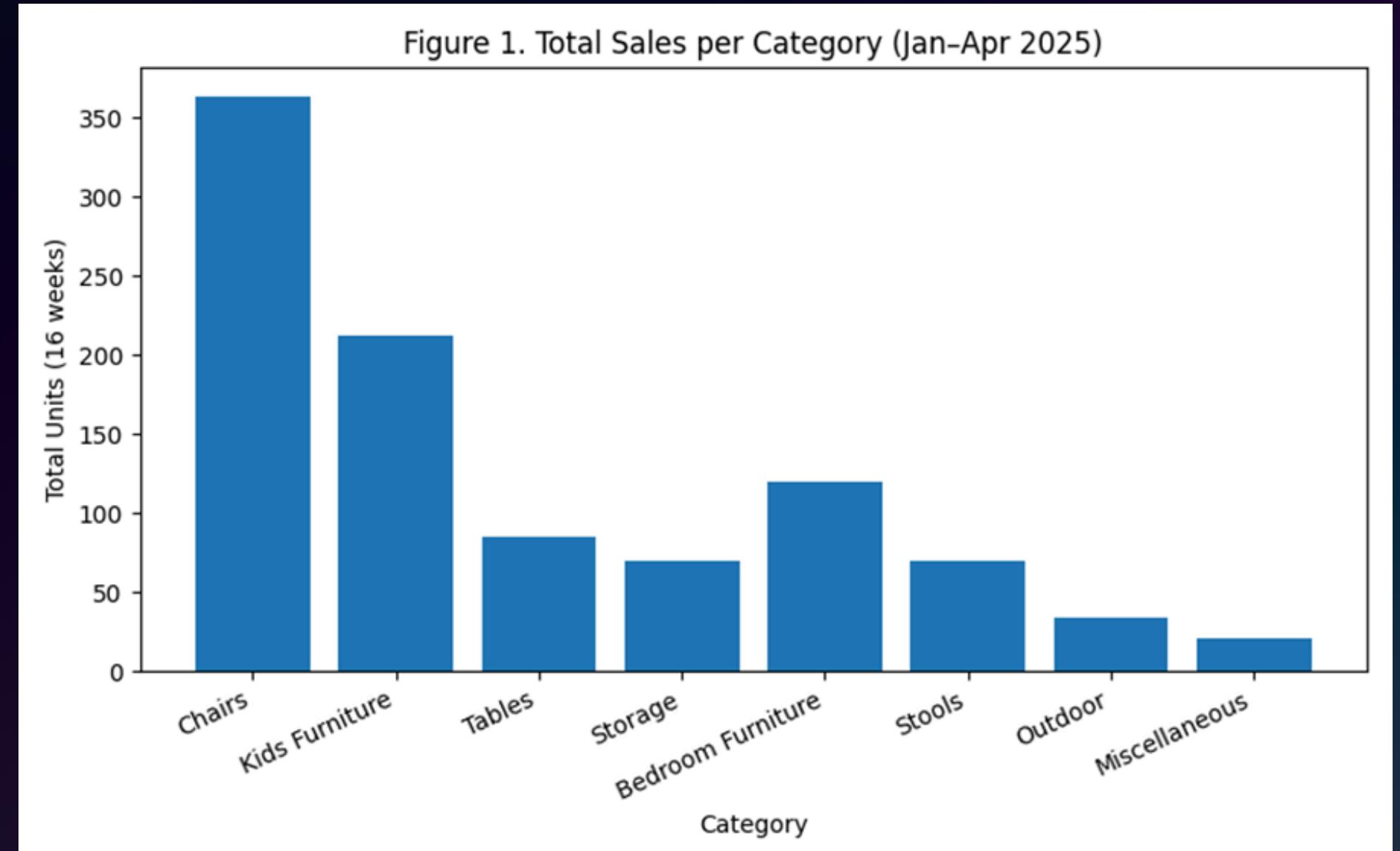
The data was cleaned and analyzed in Excel using descriptive statistics and visual charts, with ABC analysis, time-trend and seasonality analysis, a three-week moving average model and preliminary RFM segmentation.

Key Insights and Recommendations

Insight: Sales volume is heavily concentrated, with Chairs and Kids Furniture emerging as the dominant, best-selling categories over the 16-week period.

Implication: The business's revenue stream is fundamentally dependent on the consistent performance of these two core product lines. A stockout of these items is far more damaging to revenue and reputation than for any other category.

Recommendation: Implement a prioritized inventory strategy, focusing purchasing capital and marketing efforts on Chairs and Kids Furniture to ensure they are always in stock and prominently featured.

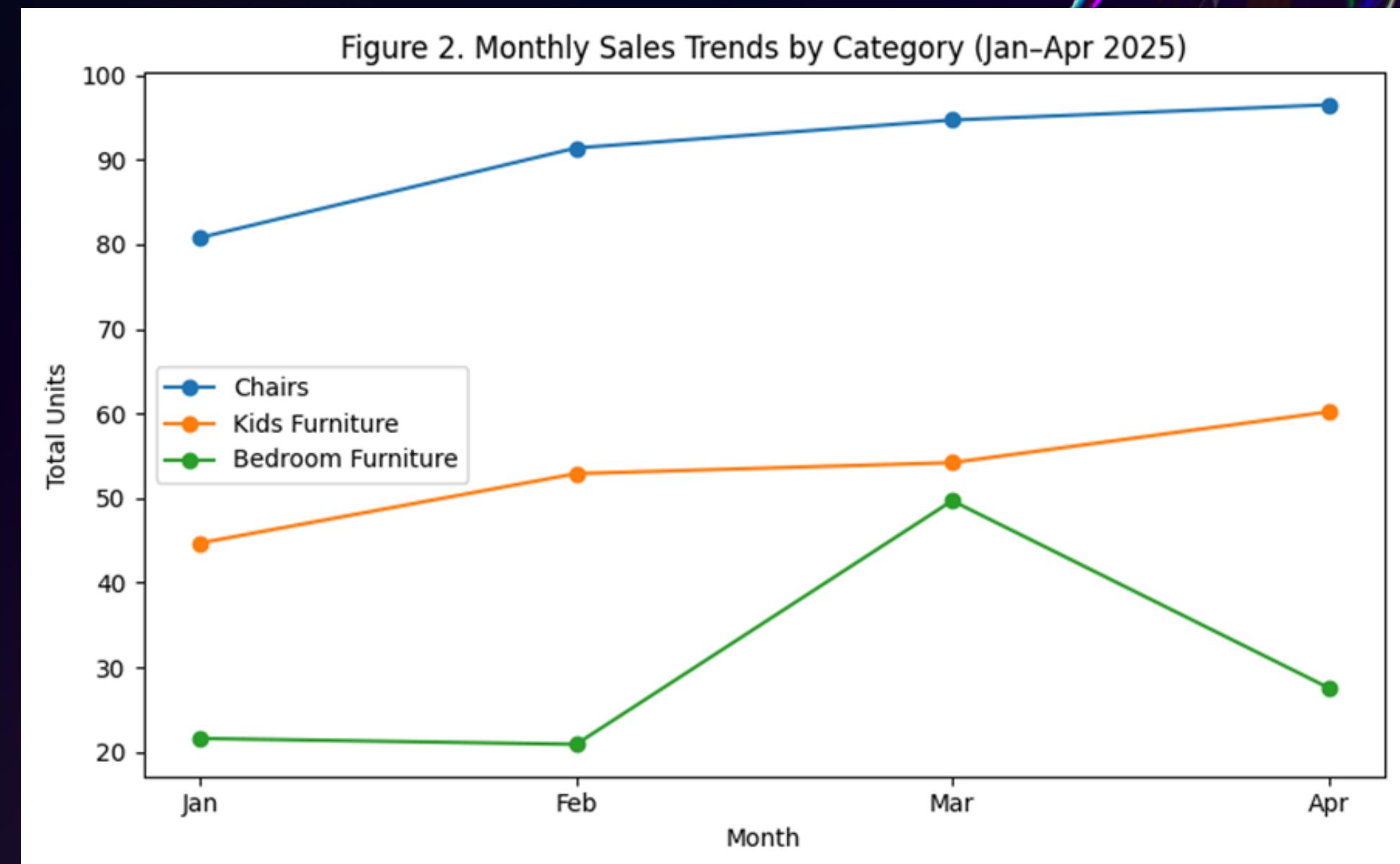


Key Insights and Recommendations

Insight: A distinct monthly sales rhythm is evident, with a noticeable dip across categories in February, followed by a significant sales peak in March and April.

Implication: The business has a predictable annual cycle with a lean month followed by a peak season. Managing cash flow through this cycle is crucial for capitalizing on the lucrative March-April period.

Recommendation: Mitigate the February dip with targeted promotions or clearance sales. Plan inventory and finances to endure the slow period and prepare for the subsequent peak demand.

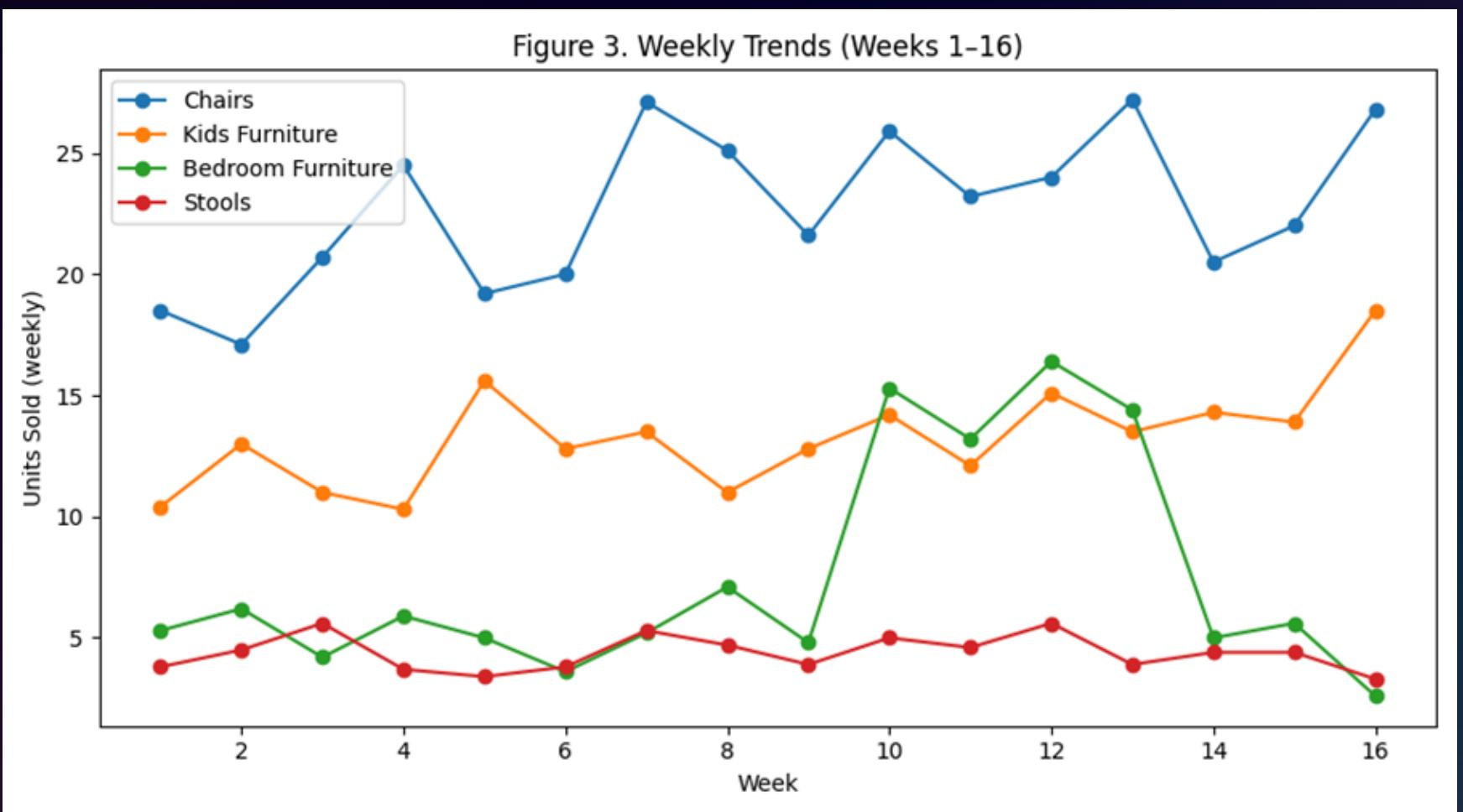


Key Insights and Recommendations

Insight: A clear seasonal trend emerges, with a sharp spike in Bedroom Furniture sales beginning in early March , indicating demand is driven by local events like the wedding season.

Implication: This predictable peak is a major, time-sensitive revenue opportunity. Without proactive planning, the business will miss significant sales.

Recommendation: Align inventory and marketing to this cycle. Increase Bedroom Furniture stock in late February and launch targeted promotions in March to capitalize on the demand.

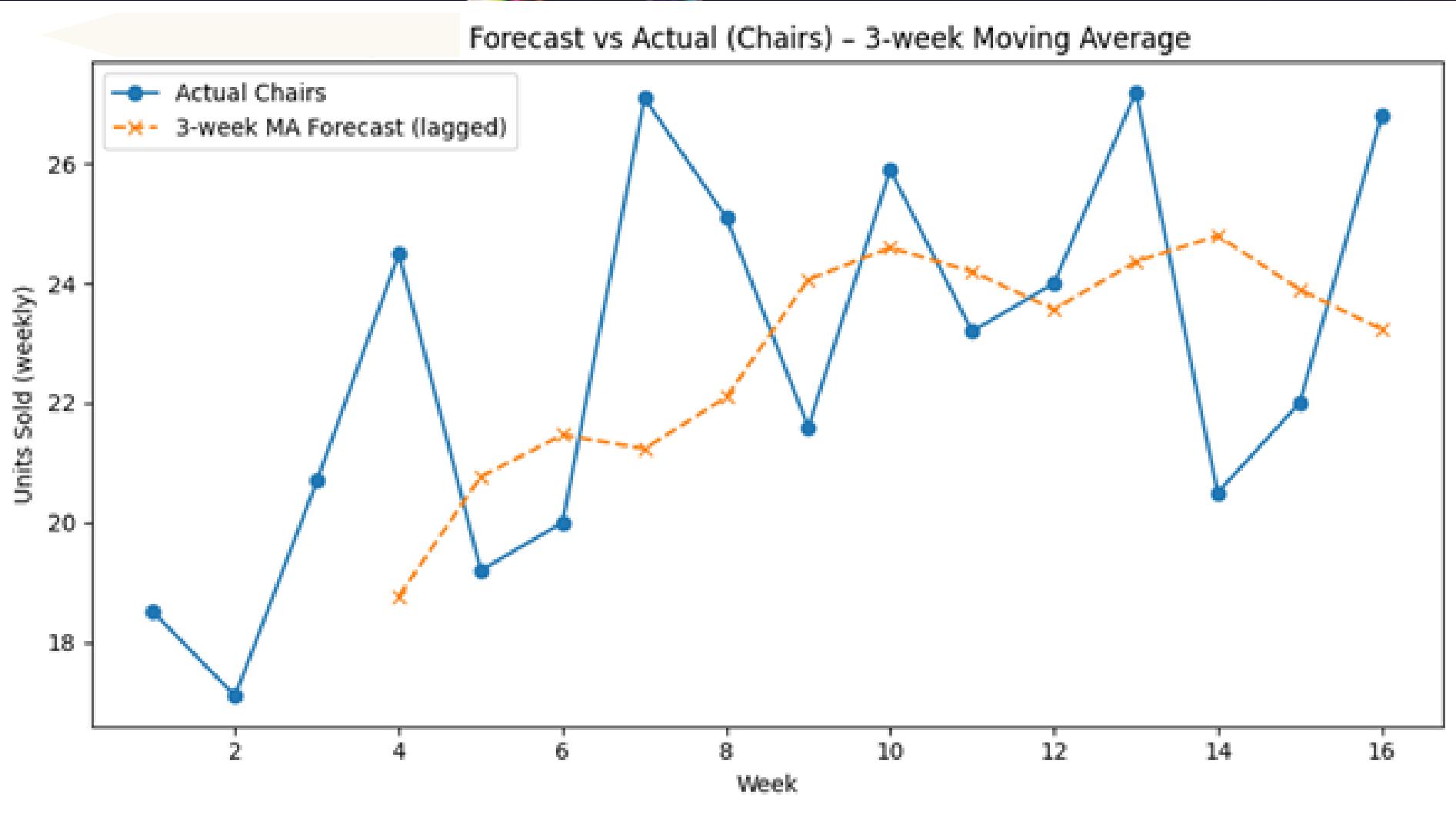


Key Insights and Recommendations

Insight: A simple 3-week moving average forecast, despite its volatility, effectively captures the general sales trend for the best-selling 'Chairs' category, validating its use as a practical planning tool.

Implication: The business can move away from purely intuitive stock decisions and toward data-informed planning without needing complex software. This builds the owner's confidence in using analytics for future decisions.

Recommendation: Formally adopt this simple forecasting model to guide weekly purchasing for high-volume products. This will help stabilize inventory levels and reduce the risk of stockouts or overstocking.

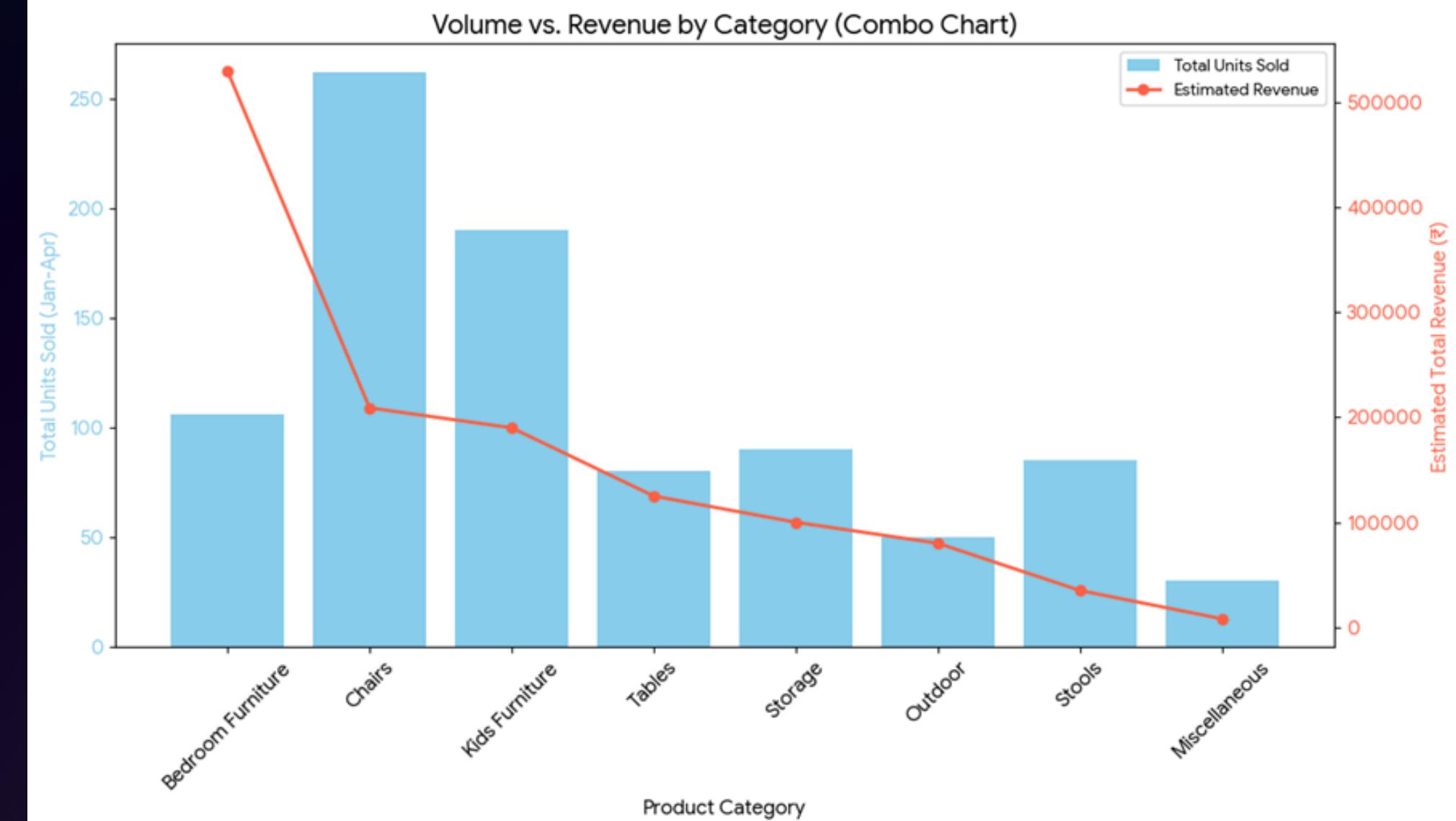


Key Insights and Recommendations

Insight: A critical divergence exists between sales volume and revenue generation. Bedroom Furniture is the most financially significant category, generating the highest revenue from relatively few sales, while the highest-selling item by volume, Chairs, contributes far less to total revenue.

Implication: The business relies on two different product types: high-volume "staples" like chairs that ensure consistent cash flow, and high-value "premium" items like bedroom furniture that drive overall profitability. Both are crucial but require distinct strategies.

Recommendation: Implement a dual strategy. For high-volume items, focus on efficient inventory management to ensure constant availability. For high-value items, focus on targeted marketing and upselling to maximize profit from each transaction.



Conclusion

The analysis of Sharda Sales marks its successful transition from instinct-based retailing toward a more resilient, data-informed business model, which is crucial for navigating heightened local competition. The study confirmed that while high-volume staples like Chairs and Kids Furniture are the cornerstone products driving consistent sales , the greatest profitability comes from high-value categories like Bedroom Furniture. A clear seasonal trend was identified, with a notable sales peak in March and April, presenting a predictable opportunity to align inventory and marketing with local demand. By leveraging these data-driven insights and adopting simple forecasting, Sharda Sales has a clear roadmap to optimize inventory, enhance profitability, and build a foundation for sustainable growth.

Thank You

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