

# Optimizing Inventory Management for Maximized Profitability

The objective is to review our current inventory management performance and identify areas for improvement to maximize profitability.

The slides includes:

1. Analyze inventory distribution across ABC categories
2. Understand SKU distribution and its implications
3. Review top-performing products
4. Evaluate correlation between key inventory metrics
5. Explore price vs. sales dynamics
6. Analyze sales trends over time
7. Conclude with actionable recommendations



# ABC Analysis Overview

## Inventory Value Distribution

Category A - dominates with 80% of the inventory value, amounting to \$2.25M.

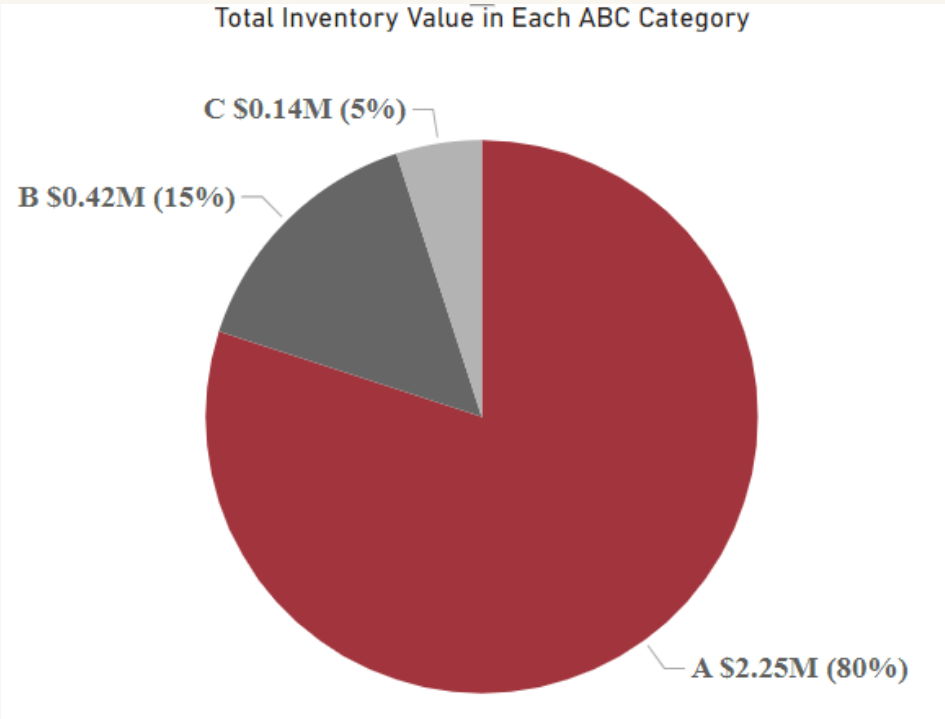
Categories B & C - represent 15% (\$0.42M) and 5% (\$0.14M) of the inventory value, respectively.

## Key Insights

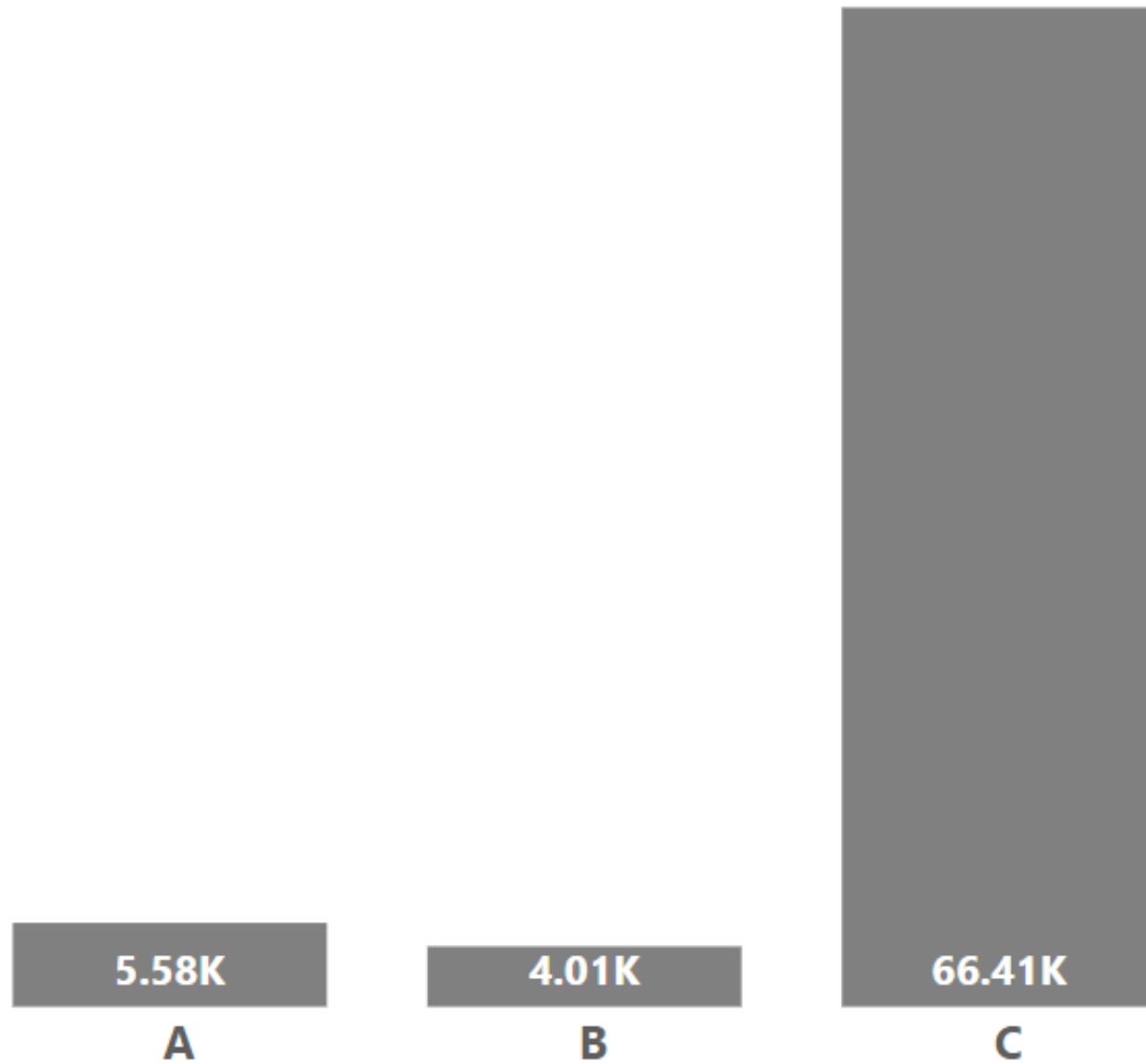
The majority of our value is concentrated in Category A, emphasizing the need to prioritize management and optimization efforts on these high-value items.

## Visuals

A pie chart depicts the inventory value distribution among A, B, and C categories, while a bar chart shows the total inventory value by each ABC category.



SKU Counts by ABC\_Category



# SKU Distribution in ABC Categories

1

## Visual Representation

A bar chart illustrates the count of SKUs in each ABC category.

2

## Key Insights

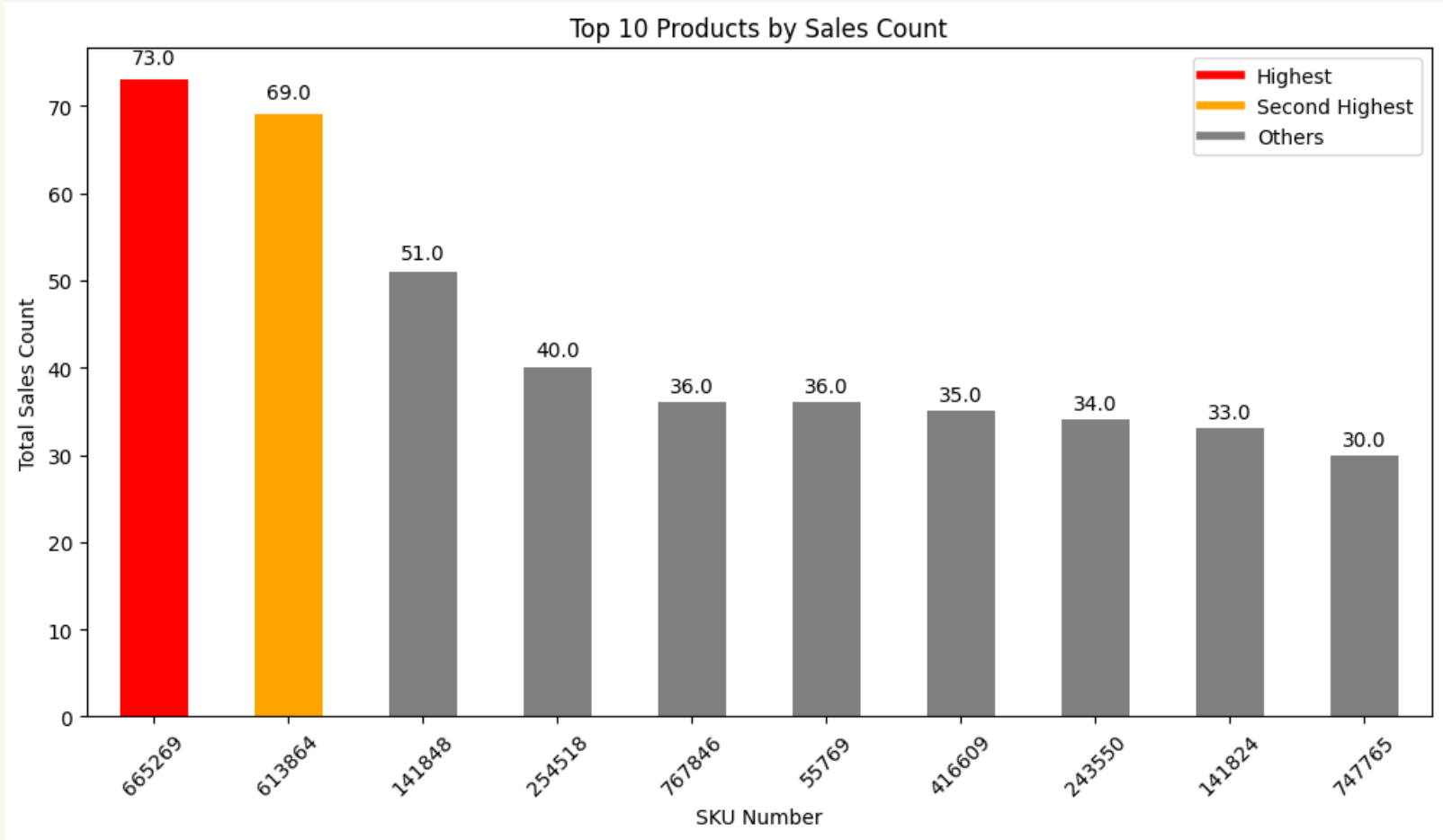
Category C has the largest number of SKUs (~67K), but these items contribute the least to total value.

Category A, with around ~6K SKUs, holds the majority of the value.

3

## Conclusion

The high SKU count in Category C presents an opportunity to **streamline** inventory, reducing low-value items to improve efficiency and focus on more valuable SKUs.



## Top Performing SKUs

Rank	SKU	Sales Count
1	665269	Highest
2	613864	Second Highest
3-10	Various	Significant

These are the top-performing SKUs by sales count, which represent our highest-demand items. By continuously monitoring these products, we can maximize revenue and adjust our inventory strategy to ensure consistent availability.

Key Insights: SKUs 665269 and 613864 are the top performers, leading sales significantly. The top 10 SKUs drive a substantial portion of our sales, indicating their critical role in our product portfolio.

Conclusion: Ensuring the availability and strategic marketing of these top-performing SKUs will be crucial for maintaining and boosting sales.

# Correlation Insights: Pricing and Sales Dynamics

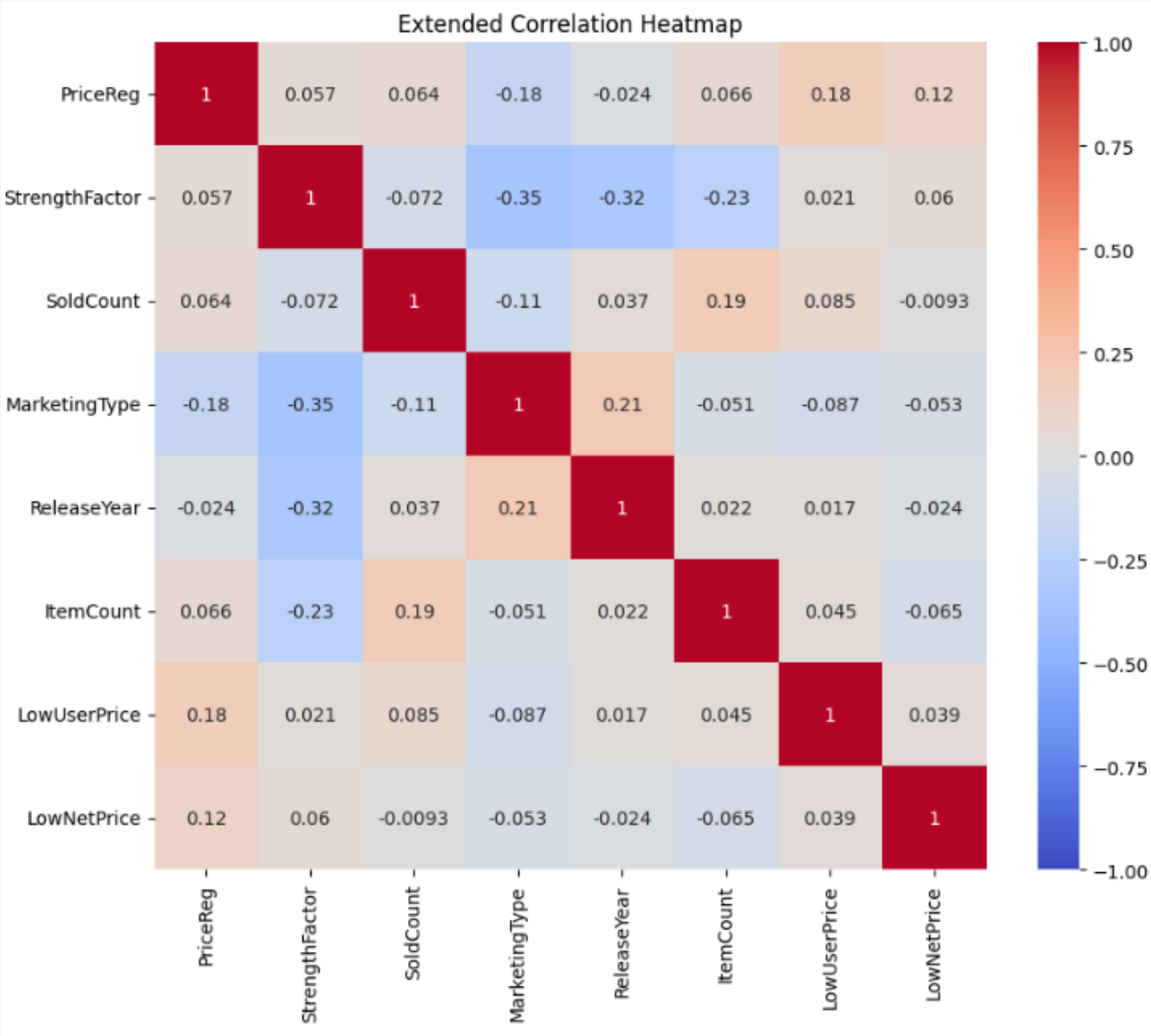
## Key Insights

StrengthFactor vs. MarketingType (-0.35):  
Moderate negative correlation suggests that stronger products are marketed differently. Consider aligning marketing strategies to better highlight product robustness.

LowUserPrice vs. PriceReg (0.18):  
Weak positive correlation indicates that as regular prices increase, so do low user prices, though the relationship is minimal. Review pricing strategies for effectiveness.

## Conclusion

The heatmap suggests that product strength and marketing strategy relationships are noteworthy, while price and sales correlations are weak, indicating a need for further exploration of other sales drivers.



# Price vs. Sales Distribution



## Visual

Scatter plot showing the relationship between regular price and sales count.



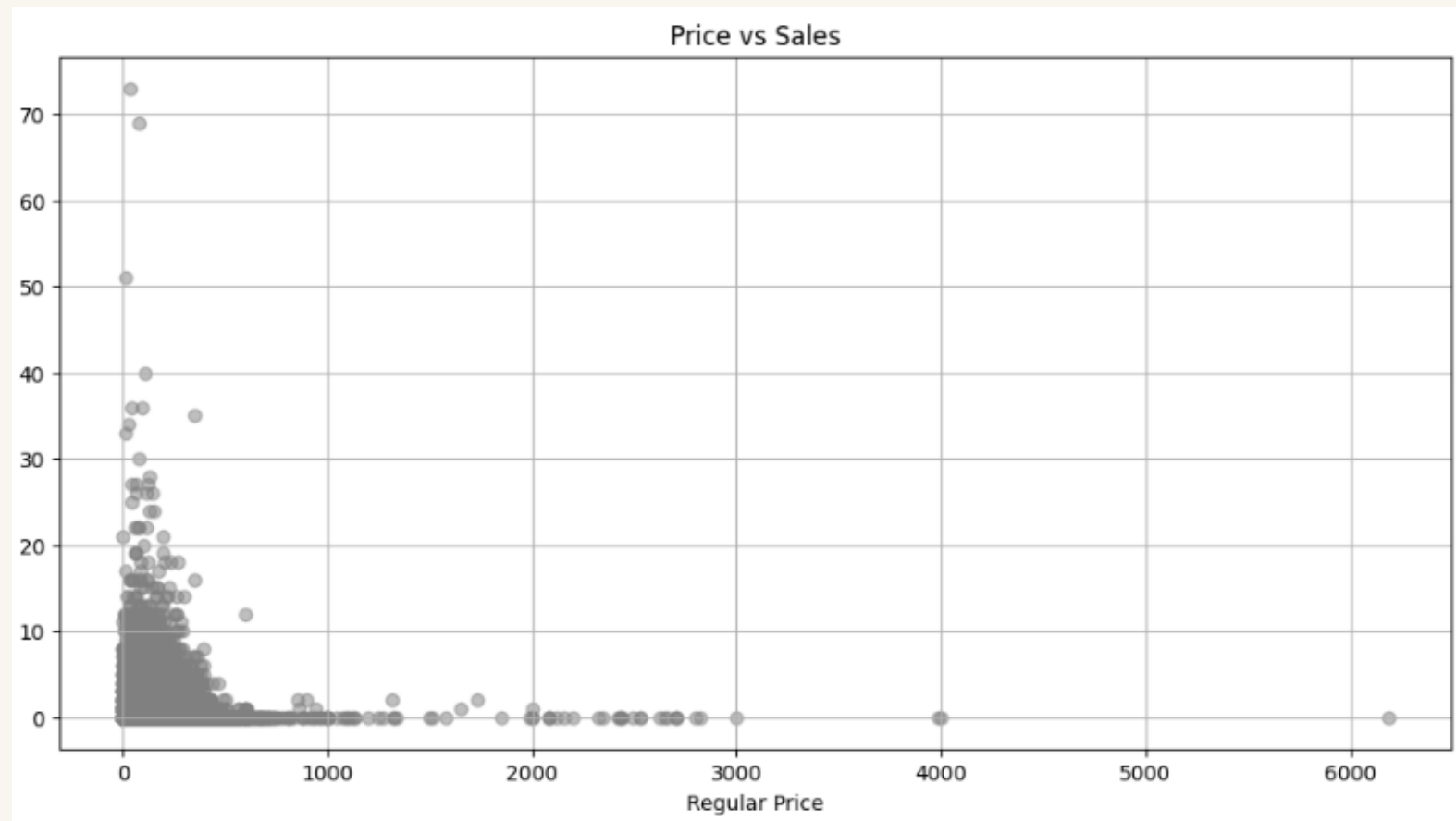
## Key Insights

Sales are concentrated heavily on items priced <\$1K. There's a clear diminishing return on sales as prices increase, indicating price sensitivity in the market.

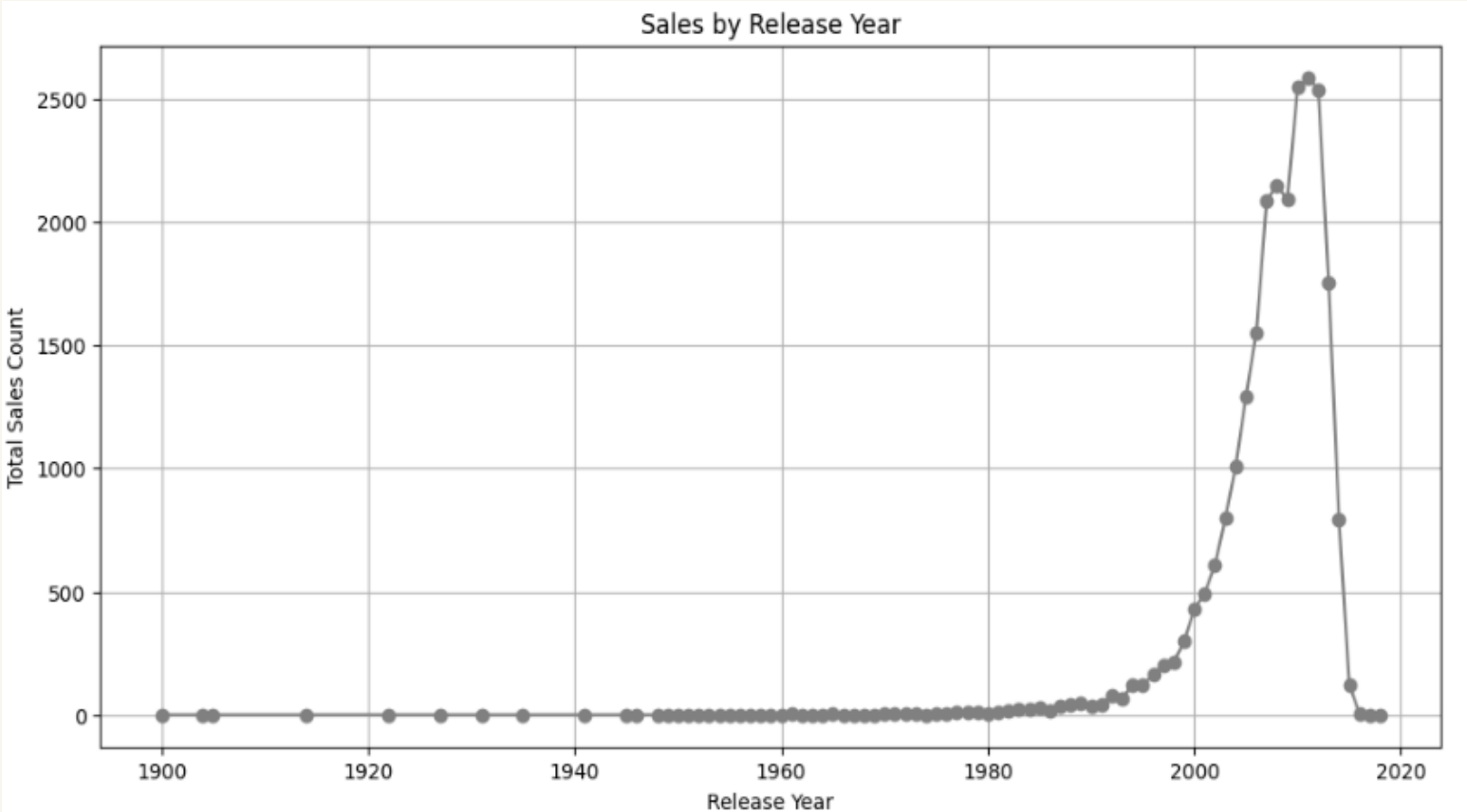


## Conclusion

This insight points to the need for more competitive pricing strategies or bundling for higher-priced items to boost their sales.



# Sales Trends by Product Release Year



1

## Visual

Line graph showing the trend of sales by product release year.

2

## Key Insights

Sales peaked for products released around the 2000s, followed by a sharp decline in recent years. This decline could indicate market saturation or a shift in consumer preferences.

3

## Conclusion

To revitalize sales, we should consider innovating our product offerings or refreshing existing products through updated marketing strategies and price adjustments.

# Strategic Recommendations

## Focus on Category A

Prioritize inventory management, stocking, and marketing of Category A items due to their high value contribution.

## Streamline Category C

Reevaluate and potentially reduce the SKU count in Category C, focusing on eliminating low-value items.

## Leverage Sales Data

Maintain and expand efforts on top-selling SKUs, refining pricing strategies to boost the sales of underperforming SKUs.

## Revisit Product Strategy

Address the decline in recent sales by exploring new product lines or revitalizing existing products through strategic marketing and pricing.