

Ideal Inventory for WALRUS Art Gallery's Black History Month Promotion

Executive Summary

This comprehensive report outlines the optimal inventory strategy for WALRUS Art Gallery's Black History Month promotion, leveraging three years of sales data (2021-2023). The objective is to highlight five top-performing African American artists while considering historical sales trends. 40% of the gallery's inventory will be dedicated to these artists for the month of February.

Historical Sales Analysis

Average February Sales: 43 artworks

Standard Deviation: 3 artworks

Ideal Inventory for February: 172 artworks

Performance Index and Artist Selection

Applied a Performance Index (Sale Price / Days on Market) to identify the price ranges with the highest yield. \$400-\$500 price range was the most lucrative, with prices over \$400 having the best returns.

Carefully selected the top 5 contributing Black artists based on total sales over three years.

Artist-Specific Calculations

Utilized the Performance Index to determine the ideal inventory for the top 5 artists.

As requested, established a minimum of 10 artworks per artist. Further minimums were established by considering historical demand percentages for each artist.

Price Range Optimization

As requested, established a balanced distribution with a minimum of 5 artworks in each price range for the remaining inventory.

Restriction: No price range to exceed 20% of the total inventory.

Profit Estimates and Consideration of External Factors

Estimated profits for the proposed inventory: \$3,322.87, acknowledging the exclusion of potential increases from the Black History Month promotion.

Significant limitations in profit estimates due to a lack of data on promotional impacts. The historic average for February is \$4,972.17.

Artist Strengths and Weaknesses

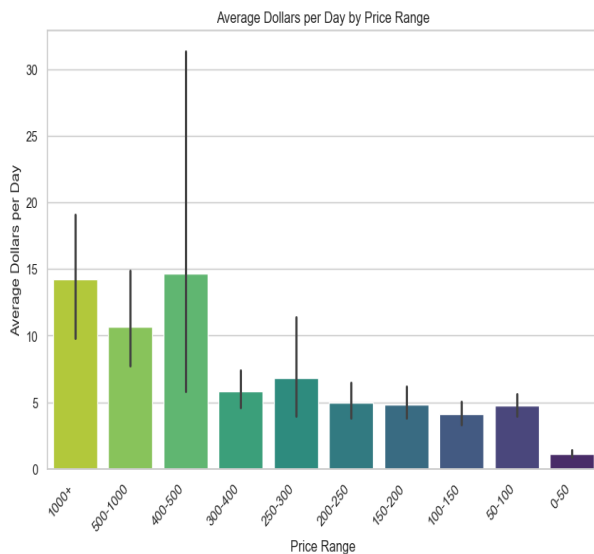
Not all chosen artists are equally strong, emphasizing the potential long-term benefits of showcasing all artists during the Black History Month promotion. Inventory above the assigned demand was allocated based on profit potential.

Recommendations and Future Data Collection

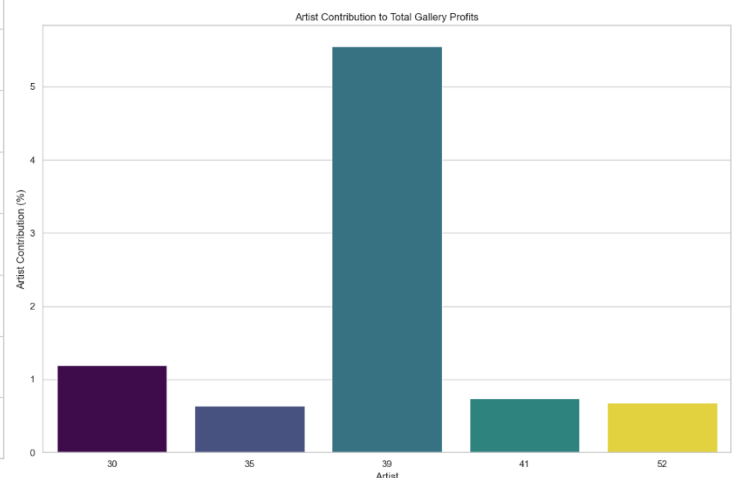
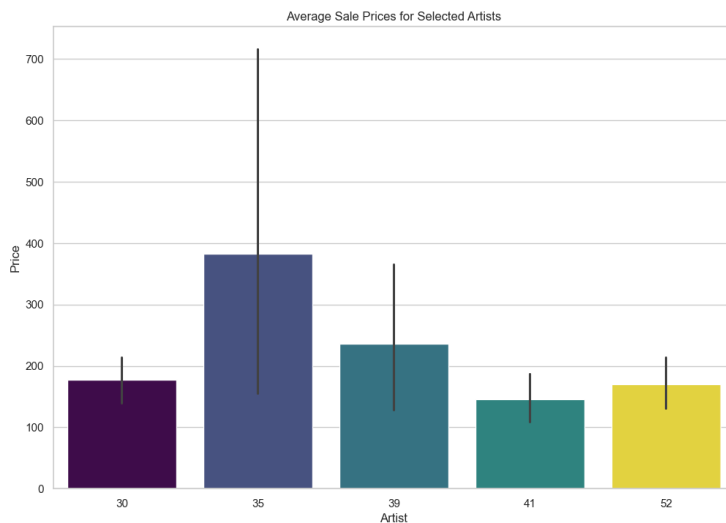
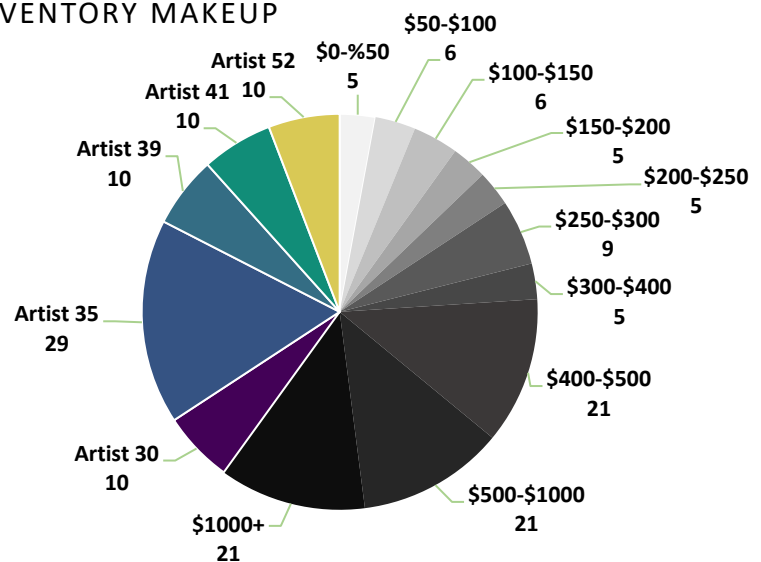
Encouraged data collection during the promotion to refine predictions for future events. Changes in promoted artists' sales, including into the future should be of specific note. Potential for changes in profits outside of the promotion.

A qualitative analysis of potential impacts on profits due to the Black History Month promotion would be beneficial for the future.

Visual Representation



INVENTORY MAKEUP



Results

Make-Up	Quantity
\$0-%50	5
\$50-\$100	6
\$100-\$150	6
\$150-\$200	5
\$200-\$250	5
\$250-\$300	9
\$300-\$400	5
\$400-\$500	21
\$500-\$1000	21
\$1000+	21
Artist 30	10
Artist 35	29
Artist 39	10
Artist 41	10
Artist 52	10