Data Visualization

Group Assignment Solution

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# Executive Summary

### Overview

This assignment requires us to build a data story using Tableau. The dataset given to us contains information on vintage art auction done by three auction houses across US.

### Problem Statement

The art houses are involved in acquiring art pieces from artists across different nationality and then selling them through auctions. The auction prices are set based on attributes of the art piece representing its quality. Through this story we are trying to analyze the profitability of the art houses. We will try to answer following questions:

* Which art house dominates the vintage art market?
* Which art house is the most profitable?
* Which art category contributes to the maximum profitability?
* What to do to increase profitability?

### Approach

Acquisition cost and current auction price of each art piece is provided in the dataset. Sales and Profits were calculated from those fields. Different views with sales and profits are plotted to drill down on the factors which could drive profitability. Null values in Current Auction Price field is replaced with Zero to avoid errors during further analysis.

### Solution

Following is the link to the story presented which tries to answer the above questions-

<https://public.tableau.com/profile/barun.kumar#!/vizhome/VintageArt-DataVisualizationAssignment/ArtHouseProfitabilityStory?publish=yes>

### Summary

### Following conclusions are made from the study-

* Even though the market share of Artnet is only around half that of Christie, it is making almost 4 times less loss.
* Overall all three art houses are in losses, Artnet has the least loss.
* Gothic III art category is the most profitable one for Artnet followed by Dark Art II.
* Although overall trend across all art houses is negative though, Gothic III is showing positive trend for Artnet, indicating good profits for coming months as well.
* For Gothic III also, things are not good for Artnet in some states, especially Arizona & South Carolina.
* In Arizona & South Carolina, sales for Gothic III is low. To increase profitability for Artnet, Gothic III sales needs to be promoted. Also, more sales should be targeted for Nature III & Demonic I in above two states as these art categories are profitable there.