Assessment

Task 1

Redesigned Visualization: Rationale and Report

This report shows the change of a visualization comparing global energy drink consumption in 2003 and 2008. Pie charts were originally employed to show consumption distribution by region, but their impact and clarity fell short. I designed a new design using a grouped bar chart to help with these problems since it more successfully highlights the data and enables engagement with and understanding of it.

Why the Original Visualization Needed a Redesign

1. **Hard-to-Compare Data**:

   - Comparing values across regions and years proved challenging with the pie charts. Small areas like Australasia, for instance, were almost invisible, whereas bigger areas were more difficult to clearly measure.

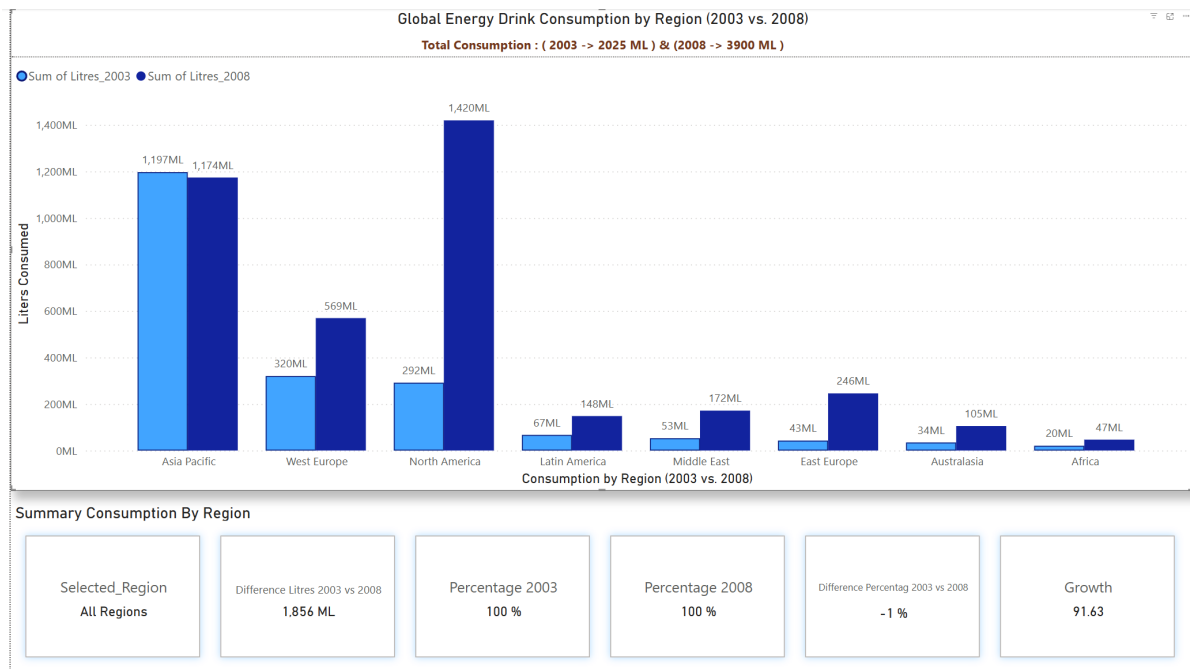   - Spotting differences between 2003 and 2008 required a lot of guesswork.

2. **Lack of Clarity**:

   - Pie charts depend on the viewer to understand area sizes, which is not perfect for exact data comparison.

   - Growth percentages were missing, forcing to calculate changes .

3. **Missed Opportunity for Storytelling**:

   - The original figures showed the facts but missed to highlight important observations as the huge increase in North America.

The Redesigned Visualization

Global Energy Drink Consumption by Region (2003 vs. 2008)

Total Consumption : (2003 -> 2025 ML) & (2008 -> 3900 ML)

● Sum of Litres_2003 ● Sum of Litres_2008

Consumption by Region (2003 vs. 2008)

Summary Consumption By Region

Selected_Region	Difference Litres 2003 vs 2008	Percentage 2003	Percentage 2008	Difference Percentag 2003 vs 2008	Growth
All Regions	1,856 ML	100 %	100 %	-1 %	91.63

Pie charts are replaced in the new data visualization tool with grouped bar charts therefore reducing the data and highlighting important trends. When comparing absolute numbers and trends highlighting changes across time within every region and displaying extra information like growth percentages without clutter and grouped bar charts are better they show how consumption levels changed over different areas between 2003 and 2008.

Using light and dark blue colors, growth metrics, descriptive labels, and titles to lead readers throughout the chart, one provides obvious and accessible the chart. Highlighted important findings such North Americas ascent to dominate world consumption and East Europes (477.78%) growth. At the bottom, a summary panel offers an overview of the overall increase, percentage changes and other high level information.

Close groupings of bars for 2003 and 2008, consistent color coding, uniform typefaces, borders, totally defined bars and grouped measurements, horizontal alignment of bars, and logical text flow the redesign follows the gestalt ideas in action. Consistent colors and annotations link bars to their values, therefore creating a linkage.
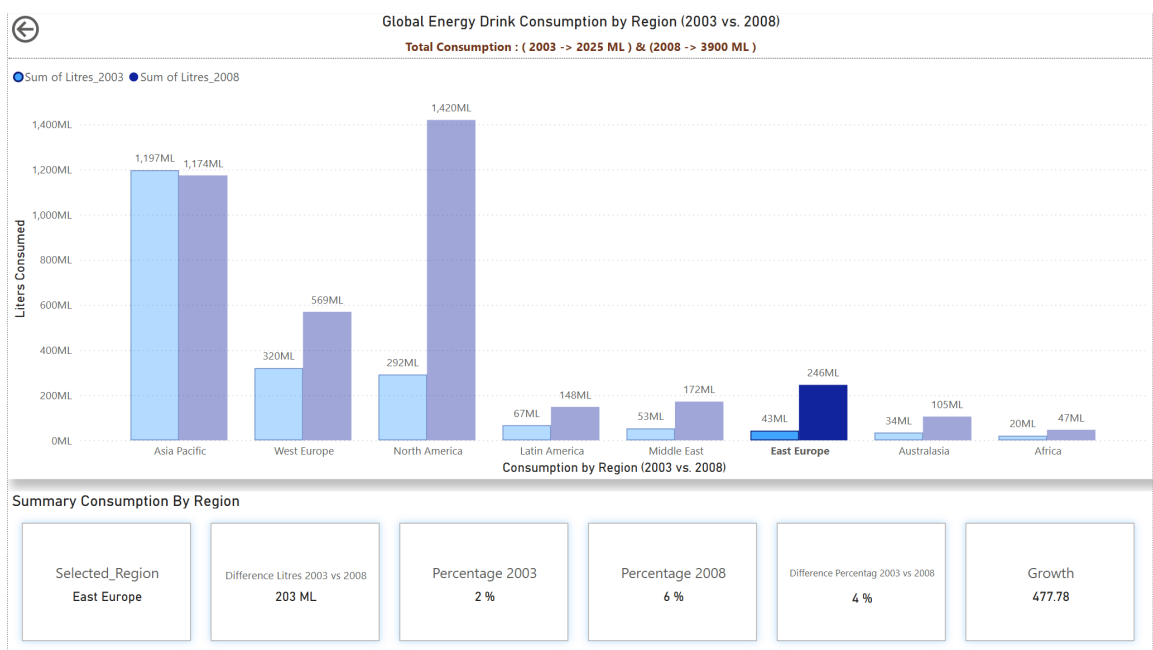
With simply a reformatting of the dataset to fit the bar chart layout, therefore keeping all values and ratios, the redesign stays true to the original data.
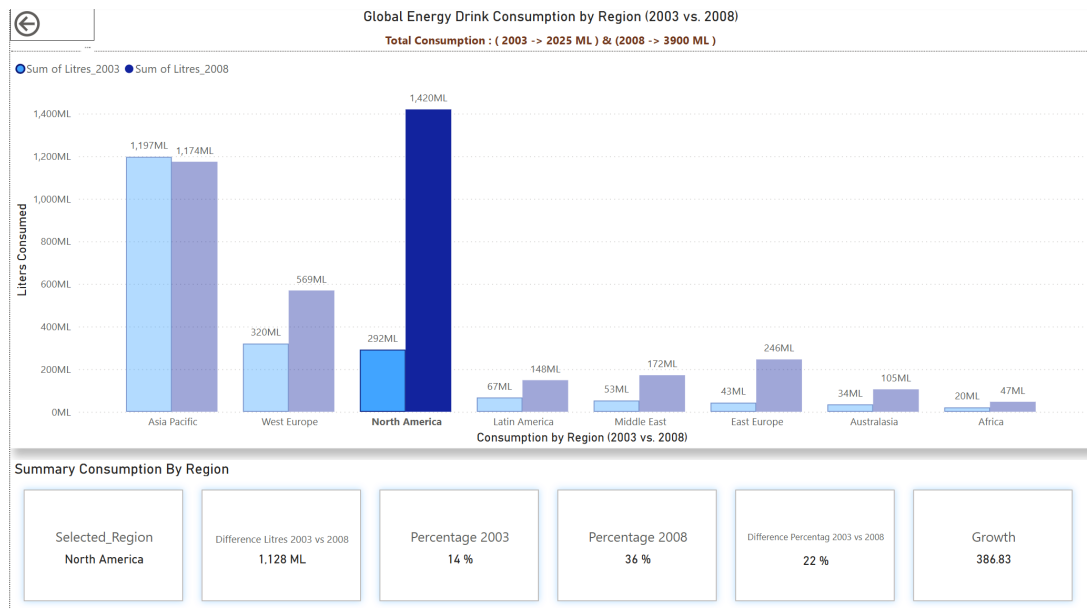
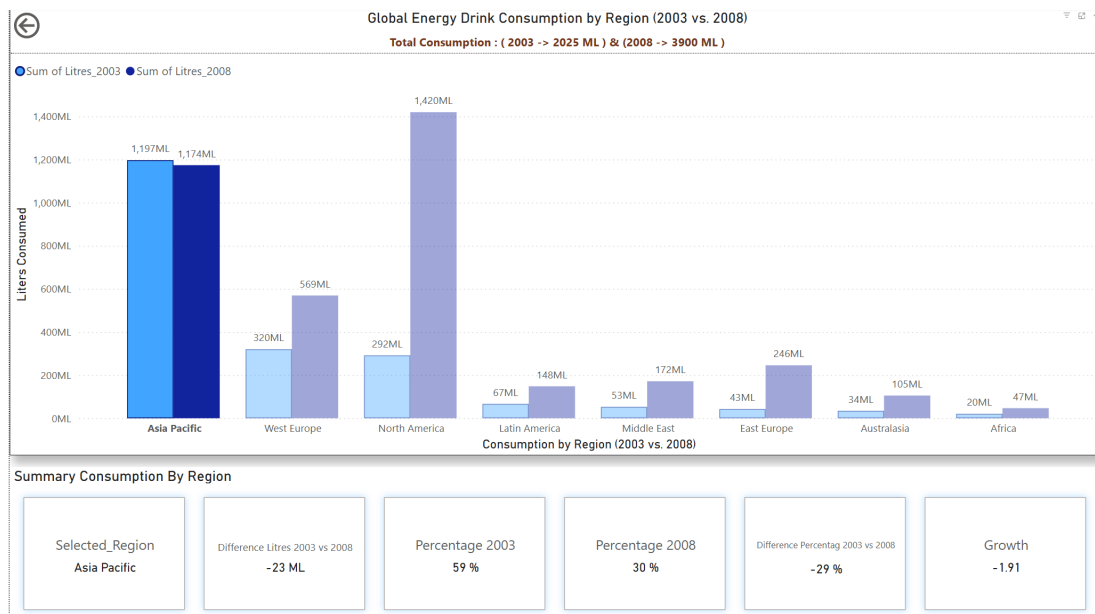# Key Takeaways from the New Chart

1. **Regional Growth Patterns**:

   - East Europe saw the biggest jump, growing by 477.78%.

   - North America expanded increasing its share from 14.4% in 2003 to 36.4% in 2008.

Global Energy Drink Consumption by Region (2003 vs. 2008)
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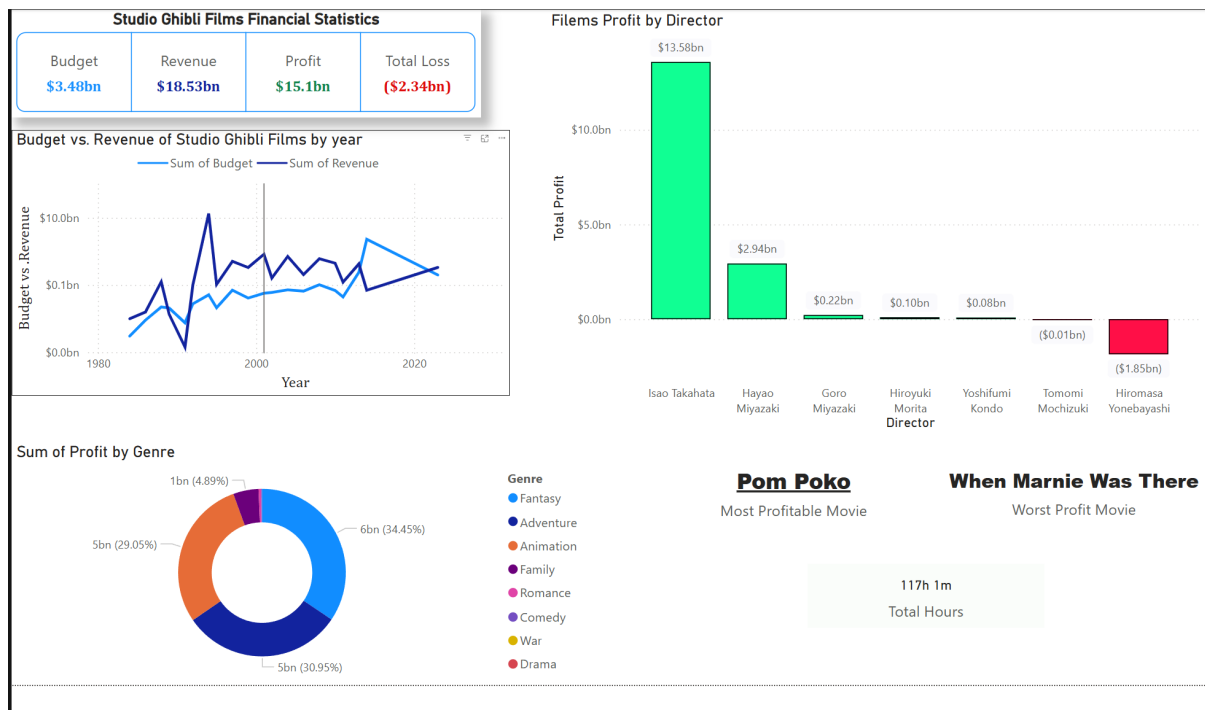
- Asia Pacific showed a slight decline, contrary to the global growth trend.

Global Energy Drink Consumption by Region (2003 vs. 2008)
Total Consumption : (2003 -> 2025 ML) & (2008 -> 3900 ML)

2. **Global Growth**:

- Total energy drink consumption nearly doubled, rising from 2,025 million liters in 2003 to 3,900 million liters in 2008.

Task 2

Studio Ghibli Films Financial Statistics

Budget	Revenue	Profit	Total Loss
$3.48bn	$18.53bn	$15.1bn	($2.34bn)

Budget vs. Revenue of Studio Ghibli Films by year

Filems Profit by Director

Sum of Profit by Genre

Genre: Fantasy, Adventure, Animation, Family, Romance, Comedy, War, Drama

Pom Poko — Most Profitable Movie

**When Marnie Was There** — Worst Profit Movie

117h 1m — Total Hours

Using profit distribution among directors, genres, and over time, his report analyzes and assesses the financial performance of Studio Ghibli films. Comparing profitability underlines important facts including the greatest and least lucrative films, budget against revenue patterns, and genre contributions to total profit in the major theme. Presenting the data in a way that lets people quickly grasp these insights at a glance is mostly the aim here.

With Using fundamental ideas of data visualization theory, the design aimed to strike a mix of clarity, design, and user engagement. By focusing only on the most important aspects of the data directors, genres, and financial measures clear communication (Tufte,1983) helped to prevent clutter. Important statistics were highlighted using colors green for profit and red for loss, for instance. Combining like elements such as director profits or genre specific earnings allows logical flow and clarity.

Dividing data into sections with clear titles and brief labeling helped to reduce cognitive load for interpretation. By combining bar charts, pie charts, and line graphs, the dashboard's structure compares category data (profits by director), shows relative contributions (profit by genre), and exposes temporal trends (budget vs. revenue).

To ensure clarity and help efficient communication, visuals such as bar char or line slope were selected. Not only was color aesthetically pleasing, but it also served to highlight important ideas and encode value. Directly included to the most important data points were descriptive labels. Choosing scale and size allowed one to maximize space usage free from distortion.

The graphics together describe Studio Ghibli's financial journey, including Isao Takahata's role,
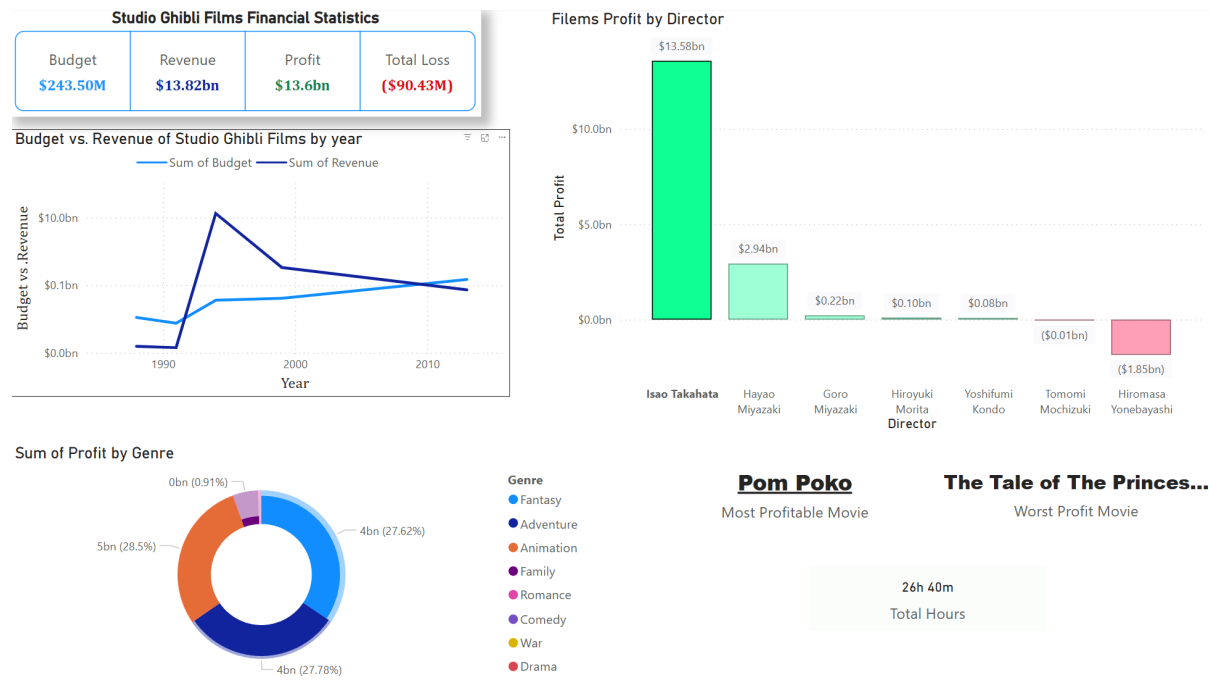
fantasy and animation's crucial part in financial success, and the change in Studio Ghibli's financial policies. Combining these components helps the dashboard present a coherent story on the achievements, difficulties, and areas for development of Ghibli Studios.

References

- Tufte, E. R. (1983). *The Visual Display of Quantitative Information*. Graphics Press.