



A1 | Data-Driven Strategic Recommendations and Business Report:

Visual Data Storytelling

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Course:

Data Visualization & Analysis

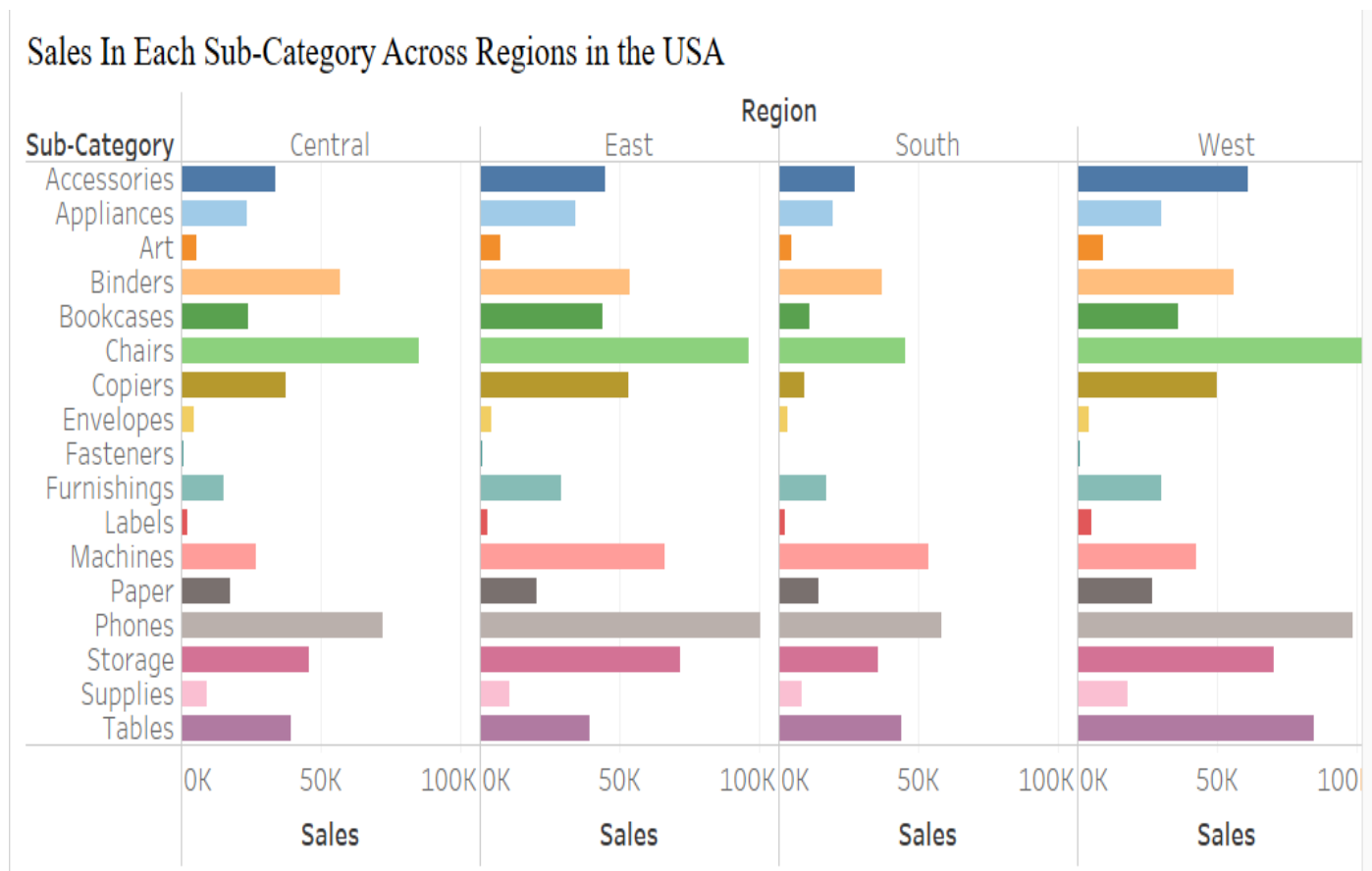
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Data-Driven Strategic Recommendations and Business Report

As the marketing analytics team lead, my objective is to present data-driven strategic recommendations to the management team for advertising budget approval to boost the sales of our products. The management team is interested in knowing about the sales situation of the sub-categories. To address this, I have built an interactive dashboard using Tableau's "Hult – Superstore.xlsx" dataset, consisting of two linked charts/sheets. The first chart shows the total sales in each sub-category across regions in the US (See Figure 1).

Figure 1: Sales in Each Sub-Category Across US Regions



The second chart shows the sum of sales per sub-category with a reference line included (average sales).

Figure 2: Total Sales Per Sub-Category

Total Sales Per Sub-Category

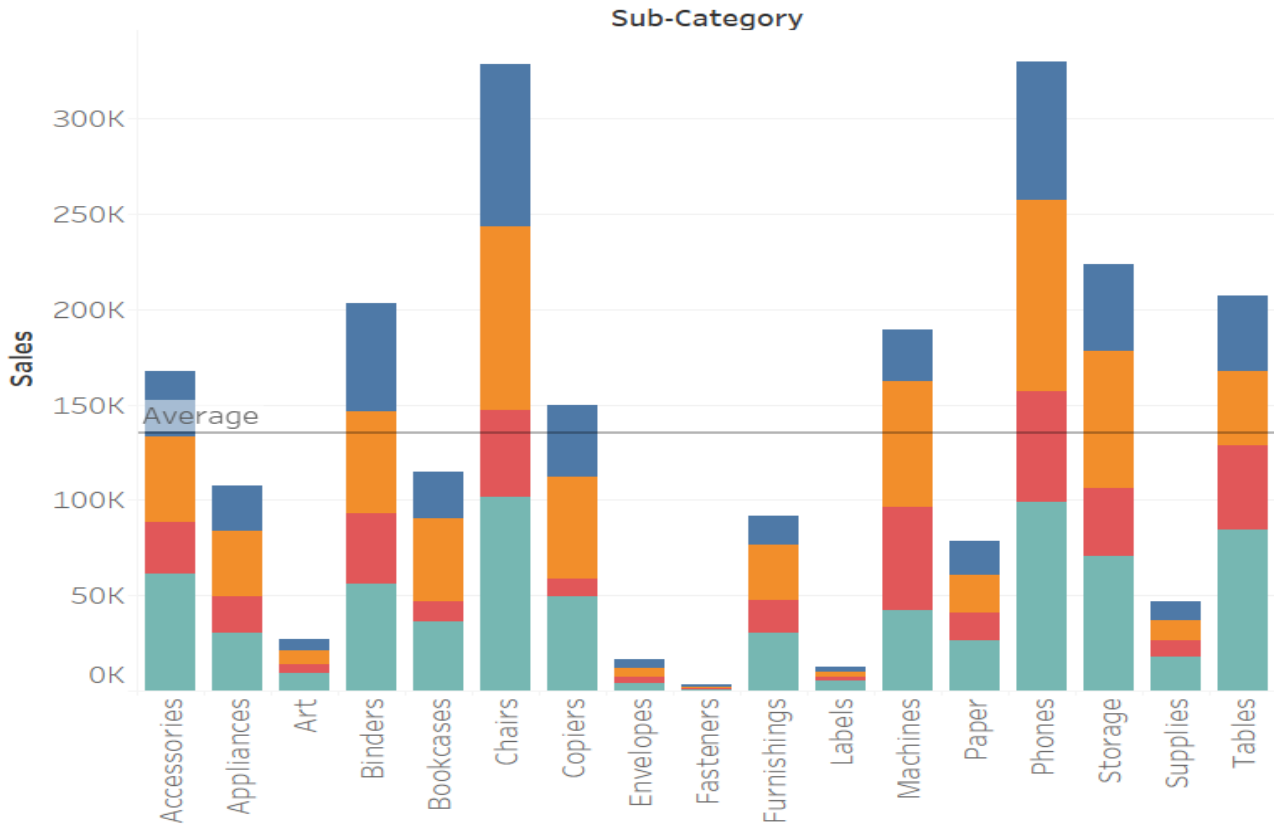


Figure 3: Profit for Each Category Across the Regions

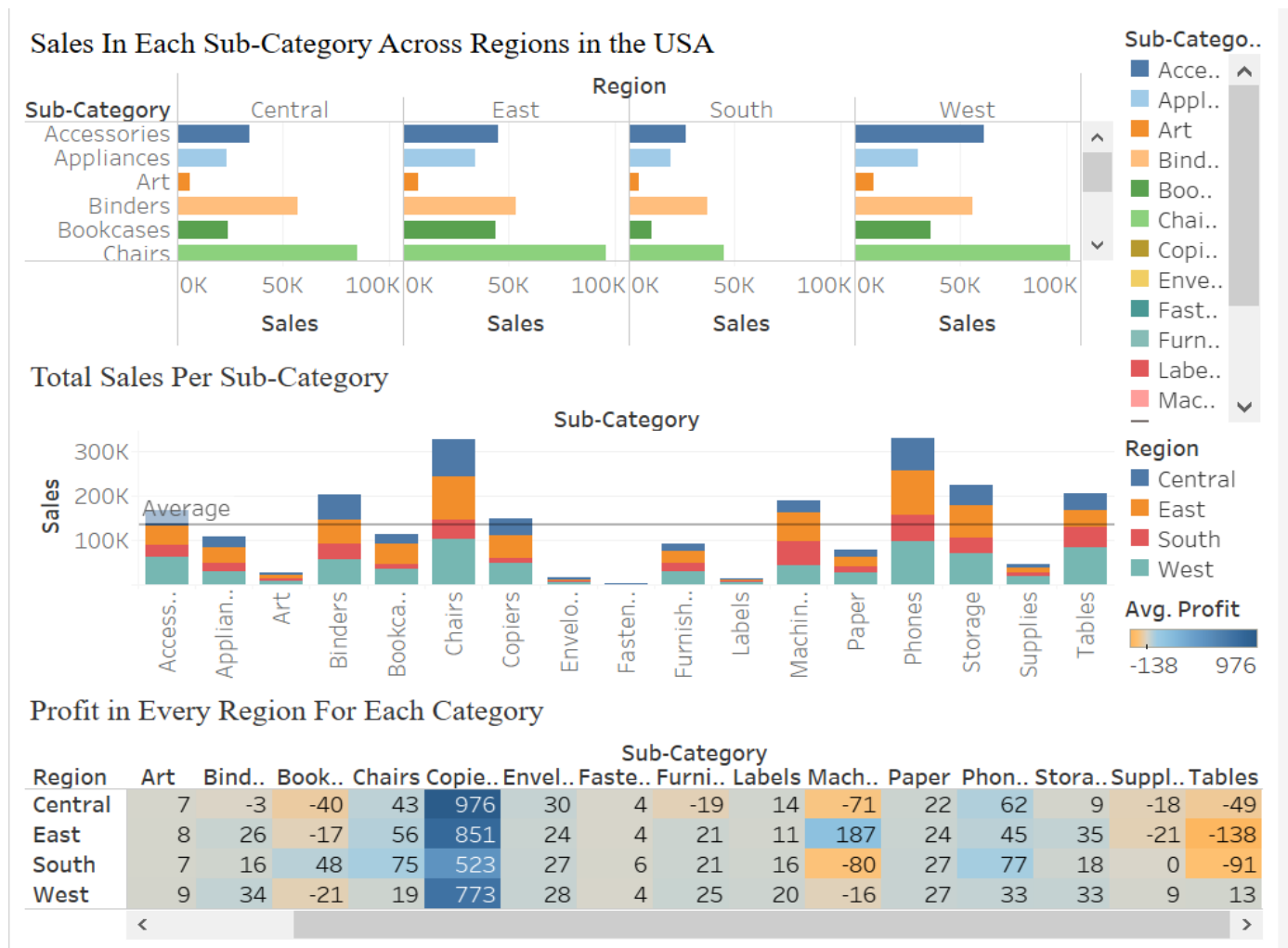
Profit in Every Region For Each Category

Region	Sub-Category															
	Accessories	Appliances	Art	Binders	Bookcases	Chairs	Copiers	Envelopes	Fasteners	Furnishings	Labels	Machines	Paper	Phones	Storage	Supplies
Central	40	-21	7	-3	-40	43	976	30	4	-19	14	-71	22	62	9	-18
East	54	67	8	26	-17	56	851	24	4	21	11	187	24	45	35	-21
South	55	51	7	16	48	75	523	27	6	21	16	-80	27	77	18	0
West	64	61	9	34	-21	19	773	28	4	25	20	-16	27	33	33	9

Figures 1,2, and 3 above show that the top sub-categories with the highest total sales are "phones" and "chairs." "Chairs" total sales are highest in the "Western" region of the USA while "Phones" total sales are highest in the "Eastern" region. Additionally, the reference lines in figure 2 shows that nine categories fall below the average sales (Appliances, Art, Bookcases, Envelopes, Fasteners, Furnishings, Labels, Paper, and Supplies). The average profit is highest for Copiers in the central region, followed by East, West, and South respectively.

The three charts above are used to create a dashboard linked together using filters, allowing the user to filter the data by sub-category and region. To make our dashboard more informative and interactive, I have used reference lines to set a benchmark for the average sales of each sub-category. By linking these reference lines with parameters, the user can adjust the benchmark and see how each sub-category performs against it. This feature can help identify the underperforming sub-categories and take appropriate actions to improve their sales. By analyzing the dashboard, we can determine that the highest-selling sub-categories are phones and chairs, with the highest recorded sales in Eastern and Western regions, respectively. However, the highest net profit is realized in the sale of copiers in all the 4 regions.

Figure 4: Interactive Dashboard



Recommendation and Conclusion

The sub-categories that fall below the average sales benchmark should be given special attention. The company needs to analyze the reasons behind their underperformance and take necessary actions to improve their sales. This could include offering promotions, reducing prices, improving product quality, or redesigning the marketing strategy to target customers' needs better. The sales and profitability of certain sub-categories e.g., tables vary significantly across different regions. It may be helpful to understand the reasons behind these differences, such as differences in consumer preferences, competition, or economic factors. By gaining a deeper understanding of regional nuances, the company can tailor its marketing and sales strategies to better meet the needs of each market. The company should also explore opportunities to improve the profitability of phones and chairs: These two sub-categories are the highest selling, so it may be worthwhile to identify ways to further capitalize on their success. For example, the company could introduce new models or designs, improve their distribution channels, or offer bundle deals with other related products. In conclusion, the interactive dashboard provides valuable insights into the sales situation of the company's sub-categories nationwide. This can help the team make informed decisions on allocating the advertising budget effectively. For instance, by focusing efforts on the top-performing sub-categories and regions and taking steps to improve the sales of underperforming sub-categories, the company stands a chance to drive revenue growth and achieve its business objectives.