

Data Mining Lab Activity #4

Reflection

1. How did your visual choices shape the story?

The visuals helped tell the story by making the data easier to understand. The bar chart displayed which product categories generated the most money, while the scatterplot demonstrated how things sold are related to sales. The line chart demonstrated how discounts varied with sales, while the pie chart revealed which payment methods clients preferred.

The tree map made it simple to identify which locations contributed the most to sales. Using the same colors throughout the visuals also made the dashboard appear more orderly and easy to navigate. Overall, the images clarified the content and helped illustrate the sales story step by step.

2. What ethical considerations did you apply?

One of the first things that we as data analysts should consider when working with these types of datasets is data privacy and confidentiality. The dataset contains the transaction ID and the payment method used by the customers but neither should be disclosed when presenting the report. This is to prevent the individuals from potentially being traced through this potentially identifiable information.

It is also important that we present this type of information with unbiased and neutral labeling. For example, customer types should be distinguished using objective terms like "new" or "returning" as opposed to sensitive or stigmatizing ones like "cheap" or "low-value". This is also to avoid making assumptions on the data that is based on personal bias that can cause misconceptions.