

During the third milestone, our main goal was to improve the data visualization features in order to offer valuable insights into sales and inventory management. With the help of Plotly, we created interactive graphs to assess sales performance, pricing strategies, and inventory levels within departments. The focus was on creating a user-friendly experience for interacting with data, allowing users to easily examine various metrics and trends.

Three main visual representations were developed: a Bar Chart showing departmental sales data (Quantity Sold and Total Sales) with a dropdown for easy toggling, a Scatter Plot for analyzing the connection between Retail Price and Discount in different departments, and a Grouped Bar Chart illustrating Inventory Levels (Quantity on Hand vs. Needed) based on category. The interactive elements, like dropdown menus and hover data, enable users to concentrate on particular data aspects, such as recognizing top-performing departments, assessing discount effectiveness, and finding understocked inventory categories.

These visual representations act as a link between unprocessed data and business choices, aiding stakeholders in improving sales tactics, enhancing pricing structures, and simplifying inventory management. By allowing interactive data investigation, the milestone supports decision-making based on data, promoting efficiency and profitability in operations.