

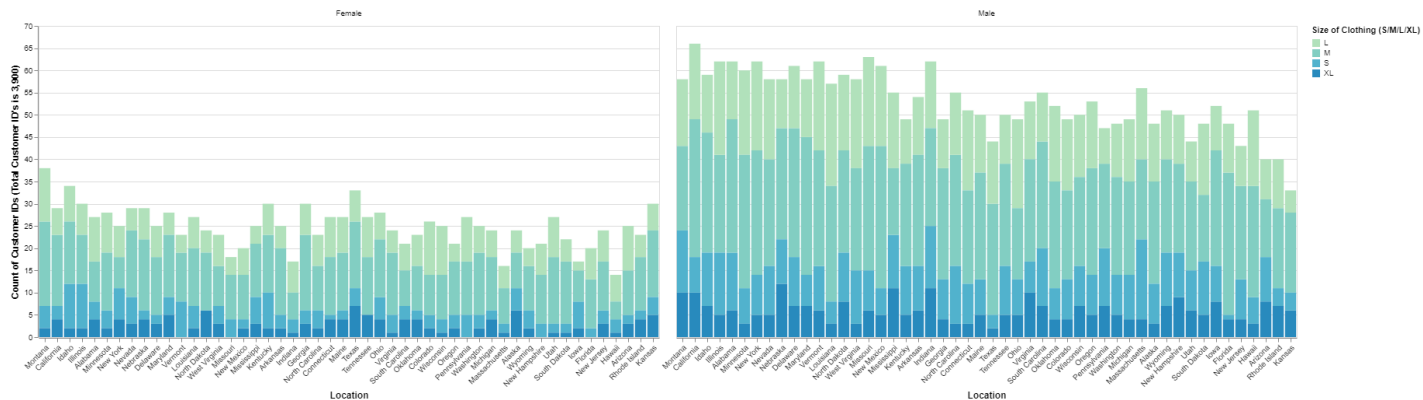
1st Data Visualisation

Goal

The goal of this visualisation is to explore and understand trends in customer behaviour based on location, gender, and clothing size.

Image

Shopping Trends by Location, Gender, and Size (Size Of Clothing Purchased by each Customer: Medium: 1755, Large: 1053, Small: 663, Extra Large: 429)



Insight

The visualisation provides a clear representation of shopping trends, highlighting customer preference based on location, gender, and clothing size. This visualisation is suggesting that an M size is the most popular in both genders and that it is a largely a male customer base company.

Data Abstraction

The dataset comprises of tabular data where it is representing a multidimensional table with one quantitative value attribute, two categorical keys, and two attributes (size and location). The data type is qualitative and nominal, essential for understanding customer shopping habits. It focuses on the company's shopping behaviours, specifically analysing trends among shoppers in the USA. For instance, the comparison of genders reveals a higher proportion of male customers, indicating a potential orientation toward male clothing. Moreover, the location analysis shows that the most popular size M, is in many locations such as Florida and Alabama for male and female consumers.

Task Abstraction

The task abstraction involves comparing gender distributions, analysing categorical data (size preferences), and extracting insights to understand the company's customer base and shopping trends in the USA market. The tasks include utilising a marked bar chart for distribution comparison, employing encoding with descending order to highlight the trend of M size popularity, and presenting different bar colours saturation of the colour in a green-blue hue scheme to distinguish sizes. Additionally, two

additional dimensions are perceptible in the visualisation: the bar chart's size represents spatial regions, while the aspect pertains to the two-dimensional shapes. The titled angle of the location serves to mitigate the spatial requirements of the visualisation and without it, the visualisation would demand even more space. The visualisation is useful for stakeholders and the public, setting a target to cater more to the male audience, especially in producing M size clothing, considering its higher popularity. The primary goal is to observe trends and distributions among clothing sizes and gender disparities in purchases. The analysis indicates a preference for size M across both genders, suggesting a target audience preference towards male and female customers. The ultimate target is to understand and cater to these preferences, informing potential business strategies and product offerings.

URL

The dataset, obtained from [Customer Shopping Trends Dataset \(kaggle.com\)](https://www.kaggle.com/datasets/itajsbors/customer-shopping-trends-dataset). Within the downloaded archive the updated version of CVS was used for this visualisation. The data includes detailed information on customer IDs, product categories, and the purchase amounts. Moreover, the tool that has been used for this visualisation was Altair as it brings out a clear representation to bring out the desired results. The data is organised in a structured format which provides efficient analysis and enables to create a meaningful visualisation.