**Link to tableau public –** [Riddhi Raut-D23125251 | Tableau Public](https://public.tableau.com/app/profile/riddhi.raut8418/viz/Assesment1-RiddhiRaut-D23125251/Dashboard1?publish=yes)

**Intended Audience –**

**Market Researchers –** They can use this dataset to analyse the sales data, customer preferences, customer behaviour, market trend and market segmentation to identify the opportunities for the growth.

**Business Analysts –** Business Analysts can refer to the dataset for improving the business operations, optimizing pricing strategies and enhancing customer experience. In addition, they can examine the transaction data to make data driven decisions for business improvements.

**Digital Marketers –** They can improve the online advertising strategies, optimize social media campaigns, and enhance customer engagement by referring to the dataset. It can also help analyse customer demographics, click-through rates, and conversion data to refine digital marketing strategies.

**Entrepreneurs/Startups -** Entrepreneurs can use the dataset to get information about business strategies, identify niche markets, understand customer needs, analyse market trends, consumer preferences, and competitor data to make informed decisions when entering the e-commerce space.

**Academic Researchers -** They can conduct studies on e-commerce trends, consumer behaviour, and the impact of technology on commerce for analysing historical e-commerce data to identify patterns, trends, and contributing factors in academic research.

**Data Exploration –**

**Quantity saled per week based on category –** Visualization method used here is Stacked Bar Graph. Here bar graph is used to denote how many quantities are saled per week for all different categories by applying the mentioned category filter. The height of each bar represents the quantities and each bar corresponds to dates on per week category**.** Kurta and set where the maximum quantities saled.

**Quantities defined by size and category -** Visualization method used here is Stacked Horizontal Bar Graph. It gives an insight about all the sizes available for each categories present. The length of each horizontal bar represents the quantity whereas each bar corresponds to the different sizes available.

**B2B Sales Quantity -** Visualization method used here is Table format. From the table we get to know that amazon made more B2C business rather than B2B. We can remove an insight that 99.27% of overall products were selled directly to the consumer**.**

**Quantity for sales change** - Visualization method used here is Table format. The similar observations can be made from the quantity for sales change table where approximately 99.82% products were selled from amazon.in website and made the profit.

**Quantity by courier status and category** - Visualization method used here is Pie chart. Pie charts are great for showing the distribution of parts and the percentage wise information based on certain categories. It shows the courier status for each category. As we can see that approximate 94 percent of the products are out for shipment and no order has been cancelled.

**Revenue generated per week based on category** - Visualization method used here is Line graph. Line graphs are always useful in visualizing data trends over a continuous interval or time series. The visual gives an idea about the overall revenue generated per week by each category. From all the category, set generated the maximum revenue.

**Top 10 states for quantity and category based on shipment status** - Visualization method used here is Horizontal stacked bar graph. It gives an overall idea about the Ship state of all the 10 Top states for each category.

**Quantities by State** - Visualization method used here is Map. Map visualization is a powerful method for representing geographical or spatial data. The visual gives an idea about the quantities present in each state of India. The state with maximum quantity was Maharashtra with approximate 20k quantities.

**Description about the dataset** – The dataset used for visualization is an amazon e-commerce sales data from different channels covering a variety of products. It provides an in-depth look at the profitability of the sales made all over India across various states which help retailers and digital marketers measure the performance of their campaigns more accurately and differently. There are various columns in dataset such as Order Id, Date, Status, Ship-servicelevel, SKU (stock keeping unit), category, size, courier status, Qty, amount, ship-city, shipstate, ship-postal-code which gives the overall insight of the data.

**Observations -**

The tableau dashboard gives an overall idea about the e-commerce sales data represented in the form of a bar-graph, line-graph, pie-chart, map and tables.

The very first horizontal row in the dashboard gives a jest about the transactions made in INR (Currency), the total sum of amounts of the products, the sum of total quantities, the distinct count of categories, the distinct count of sizes and the total number of unique products available. In addition, there is a Category filter which can be used to filter out the sales made from each category of product which gets applied on the below shown graphs to find the insight about the particular category.

The top five states with maximum quantities were Maharashtra followed by Karnataka, TamilNadu, Telangana and Uttar Pradesh which can be observed from the given Map.

If we take a look on the quantities selled per week based on category, Set and Kurtas made the maximum number of sales per week. The revenue generated per week was highest for the set and kurta, for set it went upto 3832434 in May 2022 which was later seemed to be declined. For kurta the sales boosted upto 2035262 in April 2022.

The top 5 available sizes for overall categories are M, L, XL, XXL and S. The top 10 states for quantity and category based on shipment status are Andra Pradesh, Delhi, Gujarat, Karnataka, Kerala, Maharashtra, Tamil Nadu, Telangana, Uttar Pradesh and West-Bengal.

The total of 94.21% of overall quantities appeared to be shipped and rest 5.79% were unshipped from observations made by the pie chart.

As Amazon is both a B2B and B2C company, we can conclude from the dataset that the overall business made by the amazon was B2C as the overall percentage of B2B was just 0.73% from the overall products which can be considered to be negligible. Hence, we can conclude that 99.27% of overall products were selled directly to the consumer. The similar observations can be made from the quantity for sales change table as approximately 99.82% products were selled from amazon.in website and made the profit.

