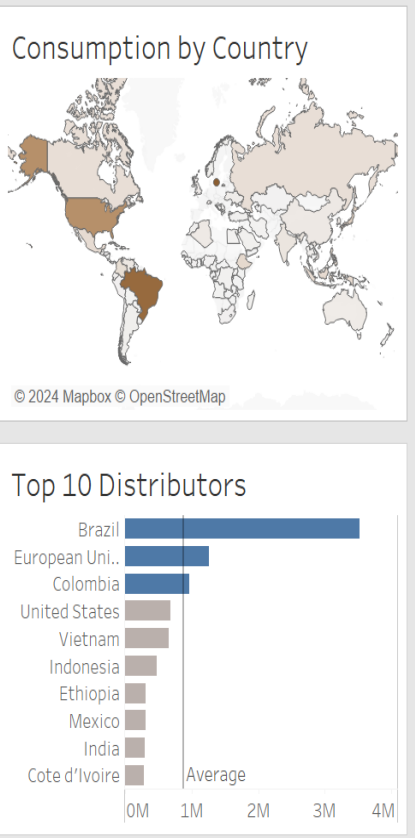
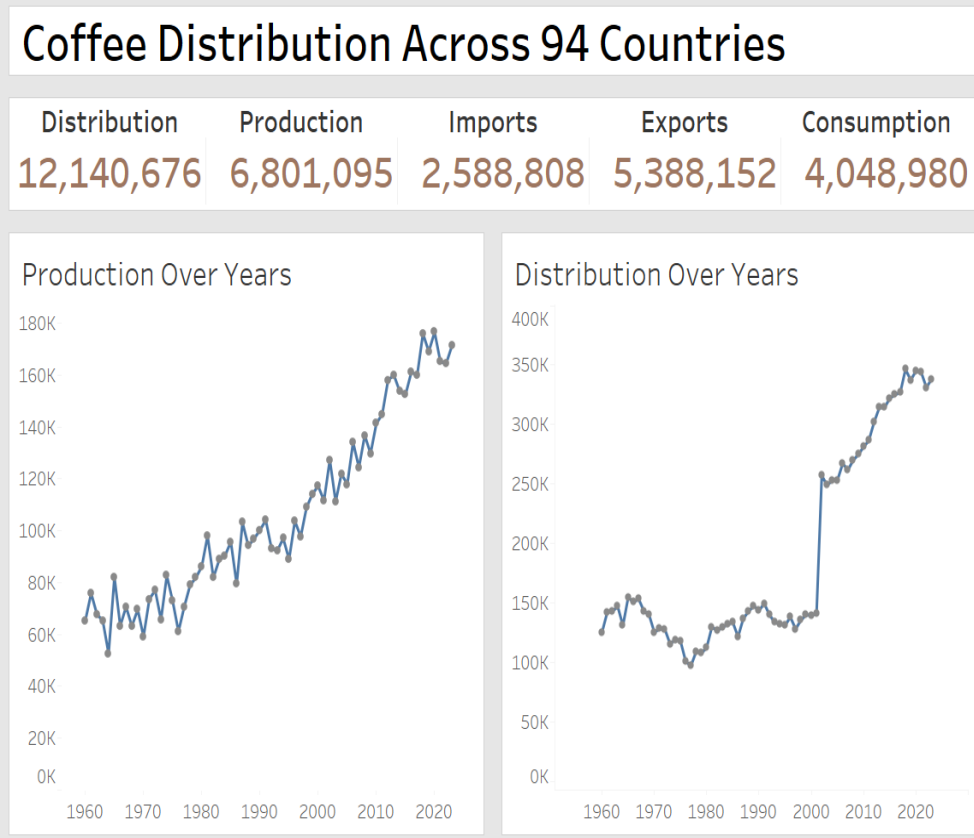


Coffee Distribution Across 94 Countries



Introduction:

The Coffee Distribution Dashboard represents a wealth of information regarding coffee production, distribution, imports, exports and consumption across 94 countries from 1960 to 2023. This dashboard is created to convey the key message on the analysis of production and distribution of coffee which includes a line graph and a world map to show the coffee consumption to the stakeholders in the coffee industry who are interested in the understanding of global distribution trends for strategic decision-making. Understanding the level of expertise and interest of the audience is crucial, as it dictates the complexity of the visualisations and the degree to which data needs to be simplified without undermining its integrity.

Effectiveness Of Visualisation:

The visualisation dashboard is highly effective as it clearly illustrates patterns and trends in the coffee distribution along with the interaction with the sub-visualisations. This helps in providing a detailed understanding of variation in Key Performance Indicators (KPI) with respect to a country or a specific year addressing the key message. The interactivity feature in the dashboard enables the stakeholders to view and interact complex underlying data using sub-visualisations such as charts – like line chart and bar chart, maps – world map, or even text – KPI’s typically on a single display to get the desired data for their analysis (Alhamadi 2020). The visualisations are designed to reflect true proportions and relationships without exaggerating or diminishing the impact of the data. This honesty builds trust with the audience and ensures that conclusions drawn are based on accurate representations.

There are certain design guidelines from many case studies and scholars that a dashboard should not show too much data, avoid clutters, selection of KPI's, have both functional features (i.e., what a dashboard can do) and visual features (i.e., how information is presented), interaction affordances and managing complexity, organising charts symmetrically (Bach et al. 2022). The chosen visualisations stand out for their clarity and precision. By employing a clean layout and distinct colour contrasts, the visualisations avoid visual clutter, allowing the audience to focus on the key trends without distraction. Symbols or shapes are used to highlight significant data points and trends, making it easy for viewers to draw insights at a glance.

The world map is utilised to show the consumption of coffee and it contains only 94 countries whereas other countries are washed out a bit to avoid confusion for the stakeholders. Explorations of maps as practices of power-knowledge and geographic visualisation will explore, analyse, and visualise geographical datasets with an intent to effectively understand patterns (Crampton 2001). With this strategy, the map can reclaim its connection to a crucial human geography. In addition, one of the main arguments for using colour in maps is aesthetics, whereas colouring a map means it emphasises, distinguishes, highlights or balances specific areas or given content (Moser and Meyer 2019). In this dashboard brown colour in the map is playing a prominent role as it is the colour of coffee raising the readability and efficiency in map interpretation.

Data trends and distributions are communicated through the application of line graphs, which are used to show data or information that varies over time (Orlov et al. 2016). The stakeholders' desire for the variation of overall production and distribution over years are represented with line chart, and dots for each year ensuring visibility and clarity. As they are interlinked with other sub -visualisations, the stakeholders can see a particular country distribution and production or a specific year's top 10 distributors. The scale is divided evenly in both the charts, which is a good sign of integrity and accuracy. The appropriate font size of the title in both the charts will assist the stakeholders to easily grasp the key information. The comparison between production and distribution will be easier as it is placed next to each other with symmetry.

To quickly assimilate the information in brief, a bar chart is incorporated with an average line for the stakeholders to analyse the top distributors with a colour association. Generally, bar charts show comparison at different times, locations or conditions (Orlovskiy and Kopp 2020). This chart efficiently demonstrates differences in distribution between the top countries to improve their decision-making skills. Identification of KPI's will consolidate the relevant information (Kumar and Belwal 2017) managing and optimising the accurate results for the audience.

Conclusion:

In conclusion, usage of line and bar charts is also mentioned in the Book, Essentials of Business Communication (Orlovskiy and Kopp 2020), and it suggests that a visualisation should be simple to understand and should not include a lot of text or unnecessary components that could overwhelm the viewers. This dashboard helps the stakeholders to analyse the data in the business point of view to increase the distribution or production depending on the previous study observed which enhances decision making and policy implementation. The visualization techniques utilised in this project are effective because they are tailored to the audience's needs, ensuring clarity, accessibility, and integrity. These techniques not only aid in making complex data understandable but also engage and inform the audience effectively.

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