USE VISUALS TO COMMUNICATE YOUR STORY BETTER!

BY Muhammed Abdulhadi Kehinde. Tuesday, July 25, 2023

INTRODUCTION

In today's data driven world, visualization is becoming an essenti- al tool for businesses and individuals alike. It is the art of representing data and information in a visual format such as charts, graphs, or maps. Visualization allows us to understand complex datasets, identify patterns, and make informed decisions that can drive success.

What is Visualization?

Visualization refers to the graphical representation of data and information to convey complex ideas, patterns, or relationships in a more accessible and understandable manner. By converting data into visual elements such as charts, graphs, maps, and diagrams, visualization enables individuals to quickly grasp insights, identify trends, and make data-driven decisions. It leverages the human brain's ability to process visual information more efficiently than raw data, making it an essential tool in various fields, including business, science, education, and journalism.



Image: from stock images online.

Why Visualization Matters?

Humans are visual creatures, and our brains are naturally wired to process visual information more effectively than text or numbers alone. Visualization provides a way to present data in a format that is easier to comprehend, making It ideal for conveying insights and telling compelling stories.

Types of Visuals:

1. Charts and Graphs:

- Bar Chart: Used to compare discrete data points or categories.
- Line Chart: Illustrates trends and changes in continuous data over time.
- Pie Chart: Shows proportions and percentages of a whole.
- Scatter Plot: Displays the relationship between two variables, identifying correlations or outliers.
- Area Chart: Similar to a line chart, but the area below the line is filled, often used for cumulative data.

2. Maps:

- Choropleth Map: Represents data using color shades or patterns within defined regions, such as countries or states.
- Bubble Map: Uses bubbles of different sizes and colors to indicate values across geographical locations.

3. Diagrams:

- Flowchart: Represents the flow of processes or steps in a sequence.
- Venn Diagram: Shows the relationship and overlap between different sets or groups.

• Mind Map: Visualizes hierarchical information in a radial, tree-like structure.

4. Infographics:

 Combination of Visual Elements: Infographics blend various visuals like charts, icons, illustrations, and text to present data or tell a story about a particular topic.

5. Heatmaps:

• Color-Encoded Data Representation: Heatmaps use colors to represent the intensity or distribution of data across a grid or map.

6. Tables:

• Tabular Presentation: Although not strictly a visual, tables can be a simple way to organize and display data in rows and columns.

7. Word Clouds:

• Frequency-Based Visualization: Words or phrases appear larger or bolder based on their frequency or importance in a given text.

8.Timelines:

• Sequential Data Display: Timelines visualize events, milestones, or historical sequences in chronological order.

Etc.

Choosing the right type of visual depends on the nature of the data you want to present, the story you aim to tell, and the target audience. Effective data visualization enhances communication, empowers decision-making,

and enables individuals to grasp insights quickly, making it an indispensable tool in the modern world of information.

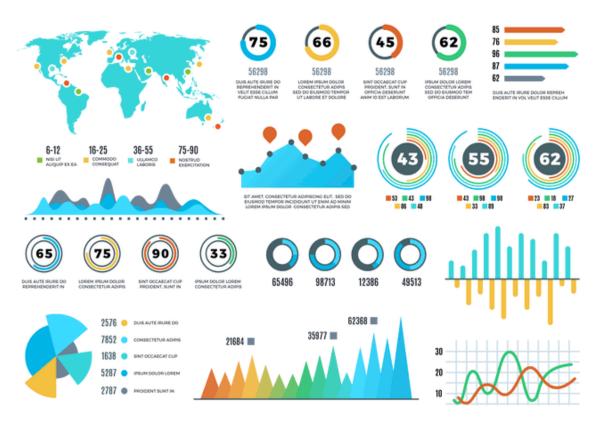
THE POWER OF VISUAL STORYTELLING

Humans have communicated through stories since ancient times, passing down knowledge, values, and experiences from one generation to another. In the digital age, our attention spans have shortened, making it challenging to captivate and retain the interest of our audience. Visual storytelling, of which charts are a fundamental part, bridges this gap by providing a quick and clear representation of complex data.

- 1. Simplify Complex Information: Charts have a unique ability to simplify intricate data sets and convey the main points concisely. Instead of overwhelming your audience with raw numbers, charts offer a bird's-eye view, allowing them to grasp the big picture effortlessly.
- 2. Enhance Data Understanding: Different people have varying degrees of data literacy. Some might find it challenging to interpret data presented in spreadsheets or paragraphs, whereas charts present information visually, making it accessible to a broader audience. Visual representation helps individuals grasp patterns, trends, and correlations that might be missed in text form.
- 3. Grab Attention and Create Impact: Humans are naturally drawn to visuals. A well-crafted chart can capture attention instantly and leave a lasting impression on your audience. Whether you're preparing a sales pitch

or delivering a scientific presentation, incorporating charts can make your content more engaging and memorable.

CHOOSING THE RIGHT CHART TYPE



Src; from stock images.

Selecting the appropriate chart type is crucial to effectively communicate your story. Different types of data call for different chart formats. Here are some common chart types and the scenarios in which they shine:

1. Line Charts: Ideal for showing trends over time, such as stock prices, temperature variations, or population growth. Line charts effectively illustrate continuous data and are excellent for highlighting patterns and changes.

- 2. Bar Charts: Perfect for comparing categories or discrete data points. Use bar charts to present survey results, sales figures, or any data with distinct categories. They make it easy to compare values at a glance.
- 3. Pie Charts: Useful when showcasing proportions and percentages. However, exercise caution when using pie charts, as they can be less intuitive to interpret than other chart types, especially for complex data sets.
- 4. Scatter Plots: Great for displaying relationships and correlations between two variables. Scatter plots help identify patterns and outliers in data and are commonly used in scientific research and data analysis.
- 5. Area Charts: Similar to line charts but with the area under the line filled. They are effective in showing cumulative values or representing part-to-whole relationships.

DESIGNING EFFECTIVE CHARTS

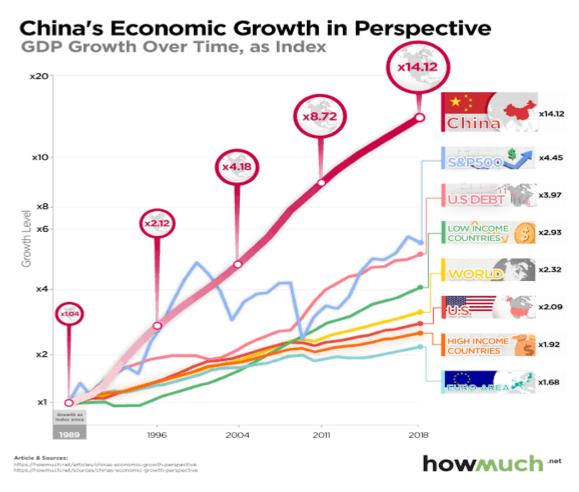
Creating visually appealing and informative charts is an art that requires attention to detail. Here are some tips to ensure your charts effectively convey your story:

- 1. Keep It Simple: Avoid cluttering your charts with unnecessary elements that can confuse the audience. Stick to the essential data points and use clear labels and headings.
- 2. Use Appropriate Colors: Colors can enhance the visual impact of your chart, but they should serve a purpose. Choose colors that make it easy to differentiate data points and emphasize important information.
- 3. Provide Context: Always include clear titles, axis labels, and legends to give context to your charts. Without these elements, your audience may struggle to understand the significance of the data presented.
- 4. Be Honest and Accurate: Misleading charts can do more harm than good. Ensure your charts accurately represent the data and avoid distorting information to fit a particular narrative.
- 5. Test for Clarity: Before presenting your charts to a wider audience, share them with a colleague or friend to ensure they convey the intended message clearly. Feedback can help you refine your charts for maximum impact.

Examples of Using Charts to Tell a Story

1. Economic Growth and Development:

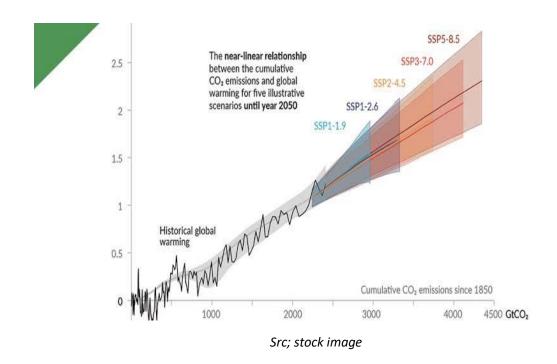
A line chart can be used to show the steady rise in GDP (Gross Domestic Product) over the years for a country. By adding annotations or callouts to significant events such as economic crises, policy changes, or major milestones, you can tell a compelling story of the country's economic growth and development.



Src; Howmuch.net

2. Climate Change Impact:

A combination of line charts and bar charts can help communicate the impact of climate change over the past century. Line charts can show the rising global temperature trend, while bar charts can display the increasing frequency and intensity of extreme weather events, such as hurricanes and heatwaves. By overlaying these charts, you can visually depict the correlation between temperature rise and extreme weather events, emphasizing the urgency of addressing climate change.



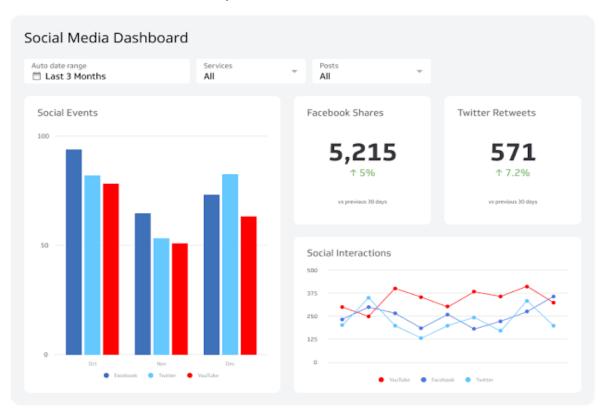
3. Healthcare Trends and Outcomes:

Using a combination of bar charts and scatter plots, you can illustrate healthcare trends and outcomes in a particular region or country. Bar charts can show the prevalence of various diseases over time, while scatter plots can represent the correlation between health indicators (e.g., life expectancy, infant mortality) and factors such as GDP, healthcare expenditure, or education levels. This visual narrative can highlight the

importance of investing in healthcare and education for better societal well-being.

4. Social Media Engagement:

A combination of pie charts and line charts can be employed to tell the story of social media engagement for a business or brand. Pie charts can represent the distribution of engagement across different platforms (Facebook, Twitter, Instagram, etc.), while line charts can show the growth of followers and engagement metrics over time. This visualization can reveal the most successful platforms and highlight the impact of social media efforts on brand visibility.



Src; klipfolio.com

5. Financial Performance of a Company:

A combination of bar charts, line charts, and area charts can be used to present the financial performance of a company. Bar charts can display revenue and expenses for different quarters, line charts can show the trend in profit over time, and area charts can depict the cash flow. This combination of visuals creates a comprehensive narrative about the financial health and stability of the company.

Financial Performance Data Visualization Dashboard



YTD: Year To Date

This graph/chart is linked to excel, and changes automatically based on data. Just left click on it and select "Edit Data".

Src; Slide team

Conclusion

In an era where information overload is a constant challenge, charts offer a powerful way to communicate your story effectively. By simplifying complex information, enhancing data understanding, and creating visual impact, charts can captivate your audience and leave a lasting impression. Remember to choose the right chart type for your data, design with clarity in mind, and use visuals responsibly to build a compelling narrative that resonates with your audience. Embrace the art of visual storytelling through charts, and you'll elevate your communication to new heights.