Report for Assignment1

TNM111 Information Visualization

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Contents

1 Task1 Popular use of InfoVis approaches

1.1 EU Referendum (2016)

This website illustrates information about the referendum results. The visualization is conducted in the forms of Choropleth maps and Bar graphs.

In general, the visualization is clear. For the choropleth maps, the contrast in colors clearly illustrated the difference in referendum data in different areas. The color coding is intuitive, with darker colors indicating higher percentages. For the bar charts, the distinction between different sides is apparent. The percentages are easy to read and provide a clear numerical understanding of the support level.

But I think this website lacks interaction. So much data is shown on the same map, and I felt it is a little bit abundant. The length of the page is long and observing the data requires sliding the page all the way around, which makes it difficult for users to make comparisons between different maps.

1.2 US Presidential Election (2016)

This website shows data from the U.S. election, and the data visualizations on this page have a variety of interactions. And try updated campaign news on the right side of the site to make sure the data is fresh.

But I think this website still has some cons. From my perspective, the interactions are too much and lack enough text descriptions and tutorial instructions. New Users might feel lost when facing so much colorful and complex interaction.

1.3 Shooting in Sweden (2023)

The visualization on this website makes me feel very comfortable. I appreciate this website for the clear and brief instructions on how to interact with it and the text summary of all the visualized data.

Moreover, this website gives multiple visions of analyzing the data using many kinds of graphs including interactable maps, text tables, bar charts, and line charts. All these graphs provide highly interactive with detailed filtering options. Moreover, it provides direct links to news articles, offering more context.

But I believe it's not perfect. Even with instructions, it's still complex, users need time to learn how to utilize it. And the The accuracy of location information may be limited due to rounded coordinates for privacy.

1.4 Free and Occupied Beds for Covid-19 Patients in Germany (2020)

This website offers a highly interactive map-based visualization of information related to COVID-19 in Europe. The website offers plenty of options in visualization, allowing users to view the data according to their needs. For example, users can add additional landmarks, and customize the case view and the color theme.

However, there are still some cons to this visualization. For instance, this page has a requirement for the performance of the device. When I set up a lot of data that I wanted to display, the page even lagged at one point and I couldn't interact with it.

2 Task2 Good and bad visual design

2.1 Good design

This good visualization is from: https://www.toptal.com/designers/data-visualization/data-visualization-best-practices.

I found this visualization to be very clear and let the reader understand the relationship between GB, TB PB, and ZB. This visualization uses distinct colors to distinguish different units. Moreover, the necessary textual explanation makes this graph more readable and understandable.

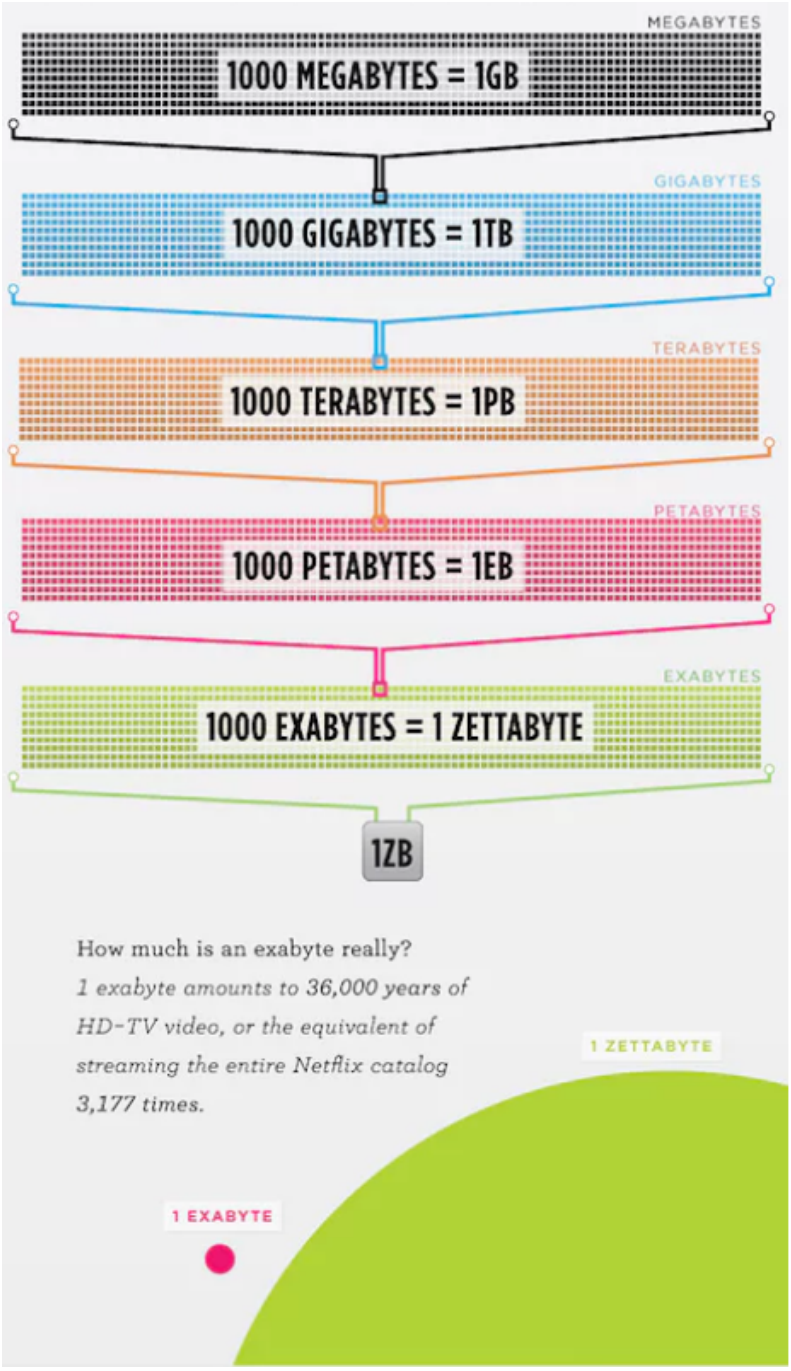

Figure 1: Good example of data visualization

2.2 Bad design

This bad visualization is from: https://careerfoundry.com/en/blog/data-analytics/data-visualization-examples/.

I appreciate the clever design of this graph, but I found some key disadvantages of it. First of all, the font is too small, making it hard to read. Moreover, the color scale on the right is a gradient from blue to red and the grayscale is too big for both color, which may be difficult for color-blind users to distinguish.

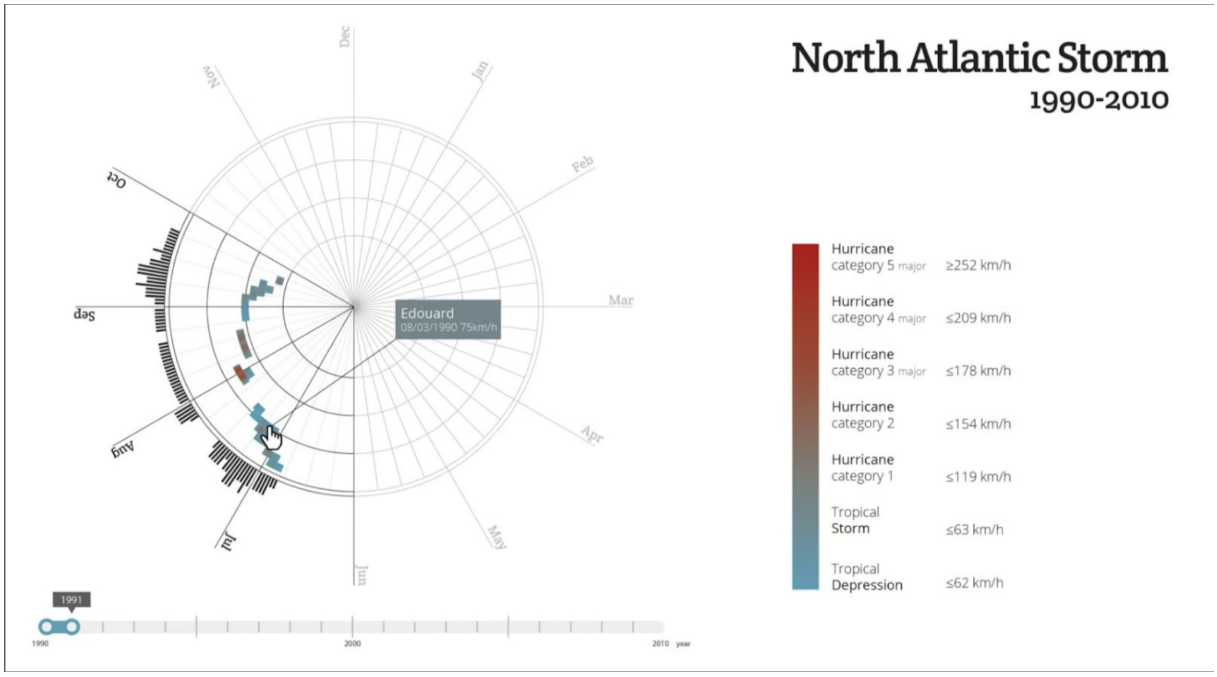

Figure 2: Bad example of data visualization