CMT218 – Data Visualization

Coursework - 2

REFLECTIVE EVALUATION

The data I have chosen to visualize include statistics about streaming channels from the popular live streaming social service called Twitch. I decided to make 2 linked visualizations in Tableau, one giving the freedom to the user to play around with and the other focusing on the top streamers on the platform.

Different perspectives give different opinions when it comes to Data Visualization, but when I first tried to brainstorm an idea for this data, I knew it was no doubt going to be super interactive. In my preference, visualizations with a lot of interaction immerse and make me eager to play around with the visualization until there's no more possible combinations.

Once the main idea was in my mind, the next thing to note was what was going to be the message, what purpose would the visualization serve. It was clear to me after doing a bit of data analysis in python that I could use all of data and present it in an engaging way while also giving the freedom to the user to change the attributes they want to compare giving them the power to compare different aspects of Streaming Chanel Statistics.

The first visualization presented is a scatter plot of two variables which are selected by the user using a parameter. With the massive trend of dark mode in present day operating systems, I chose to use dark mode throughout my visualizations, making them brighter and more pleasing to look at. By adding an extra dimension to the plot points, the graph looks even more pleasing.

The user is presented with multiple combinations and hence are inflicted with distinct ideas to interact with the visualization. These different ideas on a first glance at the visualization can be referenced to Tuftes Graphical Excellence rule where the visualization gives the user several ideas in the shortest time.

Talking about Tuftes Rules, another important principle according to him is Graphical Integrity. In terms of dimensions, there are three data dimensions involved in the visualization, the X-axis choice, the Y-axis choice, and the number of followers of each channel. Two of them are represented in a 2d graphic plane, and the size of each plot point represents the number of followers making the whole visualization a 3 dimensional one in terms of information.

The second visualization presented is an interactive visualization, which allows the user to look at the statistics of the top 10 streamers closely, giving information such as, followers, average views per stream, peak viewers, total watch time, stream time and intended audience. This presents a closer look into a streamers statistic and how they may compare to streamers of different languages.

Visualizations are always subjective and hence there are many areas of improvement.

Data specific to the content can also be added in the future to give more variety. These visualizations focus only on the streamer and the viewers.

People can tend to get bored or feel overwhelmed with the number of options they have in terms of interaction. This is an issue I confirmed by conducting a small survey within my friends' group. Some of them did not like the idea of being faced with so many options and would rather skip to the next dashboard than play around with the options.

Many of them preferred the simplicity of the second visualization. This tells me that bloating a visualization with multiple interaction and options is not always a good thing. Keeping the visualization simple is essential. I could do much better in the first data visualization in that aspect.

Visualization made with the target audience in mind tend to much more effective. This is another thing I noticed. For example, twitch fans would be excited to learn more and immerse themselves into these visualizations, but some people found it overwhelming.

Another huge area of improvement would be to reduce the number of items of data shown in the first visualization. The scatter plot looked a bit crowded at some points.

In conclusion, for targeted audience it might serve the purpose of being a good visualization, but in terms of being able to convey the message to everyone, it can be a little lacklustre.

APPENDIX

Dataset Credit: https://www.kaggle.com/datasets/aayushmishra1512/twitchdata