Write-up

Titanic was a passenger liner sank in the North Atlantic Ocean in 1912, after it collided with an iceberg during its voyage from Southampton to New York City, less than 800 people survived the accident.

In my project work, I analyzed multiple factors that could influence the survival rate of the passengers, including gender, class and age. Based on the results, gender has the biggest effect on survival, so I included this factor throughout my whole analysis. At first, I examined the relations between gender, age and age groups, after that I concentrated on gender and class, comparing the proportion of survivors in each group.

Final Tableau Story, after feedbacks:
https://public.tableau.com/profile/anik.lengyel#!/vizhome/Titanic_Final_2/Story1?publish=yes

Initial Tableau Story:
https://public.tableau.com/profile/anik.lengyel#!/vizhome/Titanic_Original/Story1?publish=yes

Design

I decided to use three different color sets, as my visualization consists three main sections, where I analyze the survival rates based on gender, age groups and class. I used color blind palettes to design colorblind-friendly visualizations.

I focused on the proportion of people who survived/perished, the slides are built up and organized to show a comparison based on these main factors. As gender is played the most important factor in survival, I included it in most of my dashboards.

The final story consists of 6 slides:

- Two pairs of slides showing the gender and class among passengers and survivors, to help the viewer develop a story on the survival rates.
- One slide that shows the distribution of age among all the passengers and survivors, so the viewer can get a more detailed picture of the distributions.
- There is one dashboard that shows the proportions of age groups and gender. It is split into two parts, the left side shows a plot before the accident, the right side shows another plot after the accident.

I used histograms, bar charts, pie charts and tables during my visualizations as I wanted to make the visualizations entertaining and diverse as well and highlight the different relations in one slide. I used tables to show the exact numerical values and I also added plots and histograms with percentages to help the viewer interpret the results. I also used color coding corresponding to the values.

I created age groups to highlight some interesting facts and simplify some of my diagrams. I also discovered that the code of conduct “women and children first” might not include for boys over 14 as the survival rates between the sexes in the teen age is different while there is no difference among the children under 14.

The age groups are the following:

- Young Age: 0-13
- Teen Age : 14-20
- Middle Age: 21-55
- Older Age: 55-

Feedback

I shared my initial story with two of my friends. The following feedbacks was shared with me:

1. As this is an explanatory visualization, I should hide the null indicators.

2. I should use plots and histograms with percentages as it is easier to grasp the basic information based on the percentages than on numbers of the y-axis.

3. The dashboards, showing the rates before the accident should be also included as it is important to build a story and show the comparison the viewer.

4. At the panel, showing the distributions of ages and passengers/survivors, I should use histogram instead of line area chart.

5. More color sets can distinguish the multiple factors and parts, besides, it would organize the comparisons, too as I use the same color charts for the same factors (class, gender, age).

Resources

Titanic on Wikipedia: https://en.wikipedia.org/wiki/RMS_Titanic