Presentation and Visualization

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Storytelling

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1. The story & message
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The Titanic, the unsinkable ship, departed from Southampton, England, on April 10, 1912. After stopping in Cherbourg, France, and Queenstown, Ireland, the ship set sail for New York with 1,316 passengers on board. It sank in the early hours of April 15, 1912, off the coast of Newfoundland in the North Atlantic after sideswiping an iceberg during its maiden voyage.

Our main goal for our storytelling presentation is to enlighten the audience about the differences between the survival rates. Not only for the first and second class but also to see that some ideas we thought to be true, weren't exactly so (for example, the idea that not that many children perished, since they were given lifeboats priority - at least in this sample of the passengers of the Titanic). We also hoped to combine the information about the passengers in a simple way that could be understood by everyone.

With this purpose in mind, we define three sentences that the audience should consider:
1. Women have a higher survival rate
2. First-class passengers have a higher survival rate
3. Children have a higher survival rate

We based our storytelling on a modified version of our dashboard, which is more dynamic and easier to use. We decided to do our presentation in the initial dashboard we created because, for our message to get to our audience the way we wanted to, and also to not lose any of its relevance. The best way to present it was by keeping the ability of the users/audience to interact with the dashboard and information available.

We wanted the users to get to the veracity of the statements above by themselves, and our role as presenters and storytellers was simply to guide them to the desired main conclusion.

It can be seen how one of the most important objects in this dashboard is the passengers' figures box, which leads you to choose one immediately and start playing around, with colors and silhouettes that help you choose quickly. After clicking on one silhouette, we will see how data changes as well as the graphs below or the size of the dots in the map, while seeing the information on passenger's class and sex at the same time.

Not only can we choose these two characteristics, but we can also play with the age of the passengers, which allows you to explore in detail the dataset of the Titanic. After that, there is the possibility of exploring these filters also by the embarking harbor if the user clicks on the dots in the map. Once he has clicked, he will be redirected to the second dashboard which shows you a general survival rate pie chart and a histogram by class, which can be also used as a filter.

Finally, it is important to mention that we have created an information button where the user can see how to use the dashboard, even though it is quite straightforward, it is always important to provide the user with an explanatory guide, just in case.
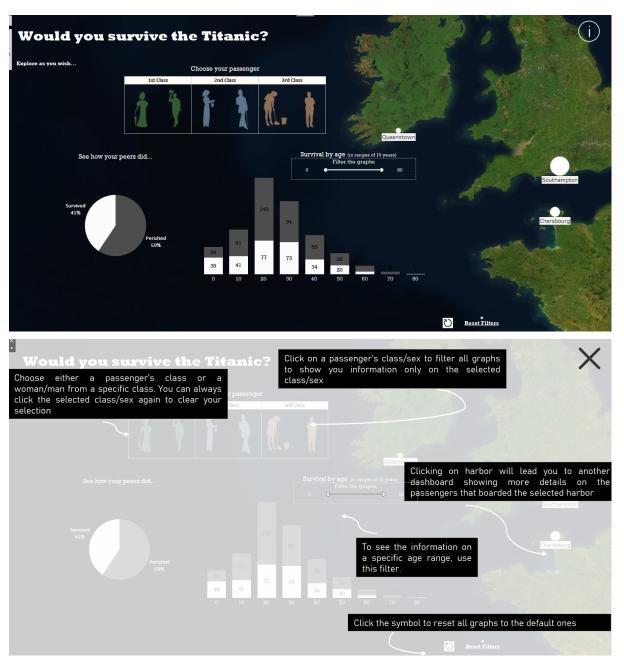
Would you survive the Titanic?

Explore as you wish...

Choose your passenger

| 1st Class | 2nd Class | 3rd Class |

Queenstown

Southampton

Chersbourg

See how your peers did...

Survived 41%

Perished 59%

Survival by age (in ranges of 10 years)
Filter the graphs

0   80

Reset Filters

Overlay

Would you survive the Titanic?

Choose either a passenger's class or a woman/man from a specific class. You can always click the selected class/sex again to clear your selection

Click on a passenger's class/sex to filter all graphs to show you information only on the selected class/sex

3rd Class

Queenstown

Clicking on harbor will lead you to another dashboard showing more details on the passengers that boarded the selected harbor

Southampton

Chersbourg

See how your peers did...

Survived 41%

Perished 59%

To see the information on a specific age range, use this filter.

Click the symbol to reset all graphs to the default ones

Reset Filters

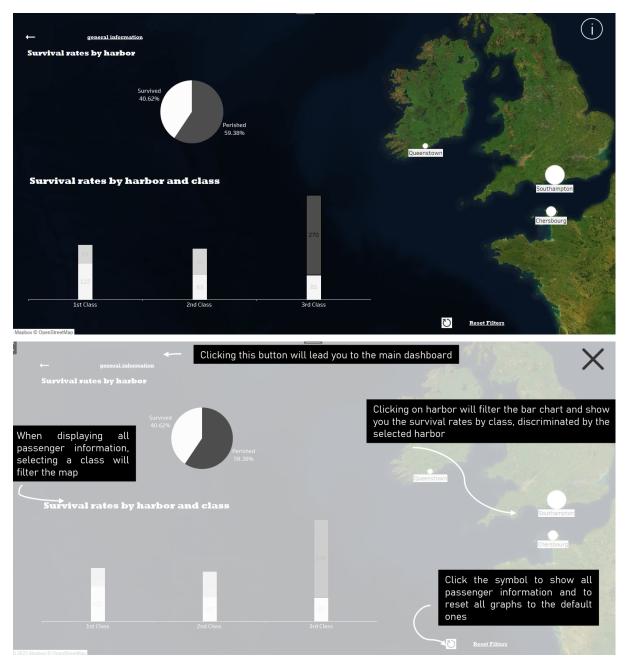*Fig.1 First dashboard and corresponding overlay*

Fig.2 Second dashboard and corresponding overlay

2. Main / Secondary audience

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We have created a dashboard to serve our purpose when analyzed by a variety of audiences. This includes those who are interested in general information about the passengers, as well as those who are researching specific aspects of the disaster for a project or news article. Because the fame of the movie Titanic hasn't gone away, there are still cinephiles out there that seem to enjoy the movie Titanic itself, and that can find some pleasure in continuing the research and impact of what was the main originator of the plot of the movie: social disparity.

We have designed our dashboard to be accessible to those with basic knowledge of technology and chart interpretation, but who are not necessarily data scientists. Our

visualizations are intended to be viewed a few times by the audience we have previously described. While a researcher may need to refer back to the data for accuracy, and a film enthusiast may want to review the information multiple times, the visualizations will remain unchanged unless there is a notable alteration in the dataset.

Someone with historic interests in the outcome of the Titanic maiden voyage also fits best our audience profile.

Ultimately, even though other profiles fit our storytelling idea, our dashboard is meant for those who want to get information on the difference between classes' survival rates specifically since the final project is greatly focused on this characteristic of the passengers; so, even someone who is not interested in the disaster of the Titanic from a general point of view but from a social, political, and, arguably, historical point of view can enrich their arguments on historical social-economical differences between classes with our dashboard.

3. Where our visualization will be held

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Our visualizations will be displayed on visual analytics platforms, such as Tableau Public, and are meant to be viewed about 3 times, as they provide valuable information about the passengers and the factors that may have impacted their survival. However, the visualizations will not change unless there is a significant change in the dataset.

It is fun to think that this visualization can serve multiple purposes, and could, for instance, be present as a small example in a conference on how the disparity between social classes is ever-present and, at the end of the day, dictates the survival outcome of all individuals. The conference scenario could easily be switched with a classroom.

4. Pilot tests

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In the making of our dashboard, we consulted with friends and family and put to the test the interactivity of the dashboard.

1st round: from the initial set of statements that were presented as the initiator of our story, we asked our pilot users their thoughts and if they believed the sentences to be true. Then, we allowed them to play with the dashboard that contains charts that are related and also linked, making the experience very dynamic and fluid.

In this first round, we saw that we needed to change the questions we were posing because they were not well-defined based on the dashboard. For this reason, we decided to propose questions, which we thought were the most typical stereotypes and used them to build the first prototype of our dashboard for the storytelling task,

2nd round: even though our dashboard was already "pre-made", we added more functionalities to it based on our experience with the pilot tests. Our main goal was for the users to realize that these statements, although true, conceive important and relevant facts that truly show the difference between classes and the magnitude of the shift in the likelihood of survival when the class of a "phantom" passenger - one invented by the pilot user - changes.

Based on their suggestions and reactions, we built our final dashboard, which can be viewed in the images above.

3rd round: In this validation round, we saw that the position of our graphs was really important and we decided to make some changes, which lead to the configuration of our final

presentation, with the passengers' figure being the key figure of the dashboard. Now, we invite them to play with the dashboard and start clicking the passenger to see how data and graphs change, and they quickly learn how to use it without a lot of help, in general.

5. Division of tasks
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Since we're only two members, we both participated in all tasks involved in the work made throughout the semester; all tasks were equally separated, and all the work sessions were made in person. Work was not made fast because we're a group of two, which is why we almost always worked on the same task simultaneously and moved on to the next one as a group as well.

Only extremely small details were left as a task for one of the members, either Margarida or Jordi.