

Presentation and Visualization Final Exam – Lorenzo Andrés Vigo del Rosso

Question 1

The message that we are trying to portray is that in a greatly fatal accident like the one of Titanic (almost two thirds of the passengers died), the rate of survival is not linked to age or gender. Instead, the rate of survival is rather influenced by social class.

We chose a pie chart because it is a great tool to see the proportion at first glance in a binary classification such as the survival rate. The color encoding in this chart works as a preattentive property of intensity: the most important data (deaths) is in a darker tone, more highlighted to the user.

We decided to use a simple vertical column graph to show the number of passengers in each ticket class. The decision relies on how efficiently this graph is at showing absolute values. It benefits from the length preattentive property. We decided not to order it by 'rank' because it would disorder the passenger classes, which is a key element in our message.

We resorted to stacked vertical column graph to show the distribution of passengers in the different age groups defined by the dataset. Stacked columns are very useful because it allows us to divide the passengers according to other features (gender) apart from the main distribution (age). Preattentive properties: length and color.

Finally, we show the embarkation port of all passengers in a map. Maps are the conventional way to show geographical data. We use the preattentive properties of size and color to rank the ports with the most travelers.

Design principles applied: G5.1, G5.2, G5.11 (map: size and color), G5.3, G6.1

Question 2

Color encoding is used in both the pie chart and the map in the same way: higher values are represented by higher saturation in a single hue scale. A single hue scale is used because there is an order (otherwise, we would be using separate hue colors) in what we are measuring (quantities) but there is no neutral value in the middle (if there was, we would be using a diverging scale).

It is appropriate to note that we chose the light gray / dark gray colors in the pie chart because in our culture death is generally represented by black.

It is very convenient to consider several connotations that colors have: the mood they may portray, cultural meanings, the consistency among colors in the whole dashboard, visual clarity, etc. Also, elderly people and those who suffer from color deficiency perceive difference in contrast/luminosity than in hue. It should be commented that in the stacked bar, despite the difference in hue, there is also a difference in saturation that may not be evident at first.

Also, we chose different hues for each one of the charts.

Question 3

The table can be checked below, in the annex. For sake of time efficiency, not the whole table has been completed with data, just one age group as a sample and some of the totals.

We detail some of the decisions we have followed: getting rid of borders for visual clarity, except those that divide the header from the content. As there is a subgroup in the columns, we added a guiding border that shows where the supergroup starts. Titles are aligned with the data. Columns are sized adjusted to its content width. The titles provide whitespace for most of the columns. Text is left aligned; numbers are right aligned. Constant precision of one decimal in percentages. Text repetition (“Total”, “M”, “F”) is unavoidable. Summary rows are bottom right (both of each subgroup and of the whole table). More rows than columns.

Question 4

All charts are connected to each other so that the user may select any feature of the passengers (class; age; gender; embarkment location) and see the survival rate in that specific passenger class.

Axis and chart titles were polished. Also, a numerical label and a tooltip including information of each port was added to the map for a more informative approach.

Question 5

It is important to get the feedback of pilot users: they work as representatives of your audience. Their criticism is very constructive because it is a preview of what your real audience would have thought in the actual presentation. This way, you may act in advance to improve your presentation and focus on smaller details in each one of the iterations.

When building your group of pilot users it is important to be diverse so that each one of the users will contribute with different kinds of concerns. In our development of the slides, we asked for feedback to a young man and an older marriage. The first user’s concerns were more about how solid the business was and legal issues, while the latter were more interested in the usability of the platform. We adapted the topics and the contents in a way that the questions of any kind of member of the audience would be answered.

In terms of design, they were very useful too. In general, all of them liked a more modern and minimalistic design and their ideas always led to the same direction. With a larger user pilot group, we may have found more discrepancies. In any case, they helped us see aspects of our presentation that we, as designers, did not see, such as an accidental satanic symbol in one of our slides.

Question 6

He tells a personal story about a course he had to teach, which works as an introduction to the data presentation. He makes it sure to distribute funny comments along the speech to keep the audience’s attention. To do so, he first jokes about himself (the utility of himself and the course) and then about the results given by the students.

A twist is developed when the student’s answers are displayed. At first, he shows the questions assuming the audience will answer by themselves, and then compares the results to those a group of chimpanzees would have. When he explains the source of the mistakes, he talks in first person, making himself part of the audience.

When displaying the data, he resorts to visuals full of motion that make the data visualization more dynamic and attention-captivating.

Annex (Table for question 3)

Age group	Gender	Survival Rates			
		Class 1	Class 2	Class 3	Total
0-9	F	0%	72.7%	44.4%	51.3%
	M	66.6%	90.9%	48.0%	55.8%
	Total	50%	81.8%	42.9%	53.7%
10-19	F				
	M				
	Total				
20-29	F				
	M				
	Total				
30-39	F				
	M				
	Total				
40-49	F				
	M				
	Total				
50-59	F				
	M				
	Total				
60-69	F				
	M				
	Total				
70-79	F				
	M				
	Total				
80-89	F				
	M				
	Total				
All groups	F				
	M				
	Total	52.9%	45.8%	29.1%	38.5%

(Sorry for using Calibri...)