Getting Started

I used data science studio (similar to Voyager and I highly recommend it and it offers a free 15 day trial)

data iku

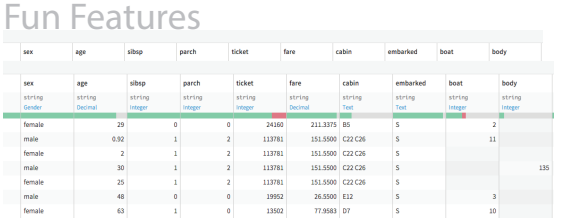
I used the Titanic dataset from http://www.tableau.com/public/community/sample-data-sets (also used illustrator and plotly)

Question:
Is there a relationship between class and the number of survivors?

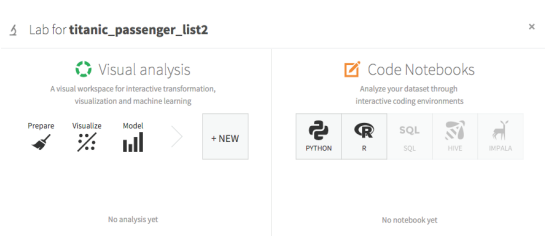
Did the passengers from the uper class have a better chance of survival than those from the lower classes?

Since there are three classes I bet the number of survivors increased from third class to second and from second to first with first having a bigger number of survivors than either second or third class.

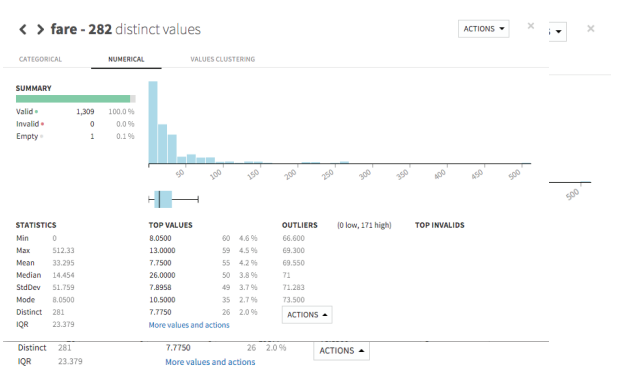
Fun Features



DSS sets up a table of all the data isimilar to excel. An anlysis of the data is also performed such that if the data has some missing or even conflicting infortmation, it is indicated by the red guage below each topic)



It also cleans and enriches the data in addition to creating charts



Here is an example of the fare analyzed.

Titanic dataset

Titanic dataset displays many variables about the passengers aboard the ship including their name, sex, destination, age, fare, class, survivors spouse, etc.)

Titanic Background History

"Rather than the intended Port of New York, a deep-sea grave became the pride of the White Star Line's final destination in the early hours of April 15, 1912. More than 1,500 people lost their lives in the disaster. In the decades since her demise, Titanic has inspired countless books and several notable films while continuing to make headlines, particularly since the 1985 discovery of her resting place off the coast of Newfoundland. Meanwhile, her story has entered the public consciousness as a powerful cautionary tale about the perils of human hubris."

(History, A&E Networks, 2016)

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Constructing Data Visualization

I wanted the data to reflect how the numbers decrease as you discover how many passengers actually survived. The pie chart is more representative of the data in percents if that's what you prefer. I had a little difficulty in thinking of a way to convey a percent within the percent without it looking like another piece of the pie. Also knowing how pie charts are not the easiest to read always I proceeded to do a bar graph. The bar graph does a good job in visually displaying the data as it decreases from the total of passengers, to the total passengers within the class, and then the total of survivors within that class in an easier format. The colors are reflective of the class and how it ascends as well for both. For the bar graphs i felt the second one is more impactful when the total is combined. It looms reminding you how many passengers are in this dataset.

Caption

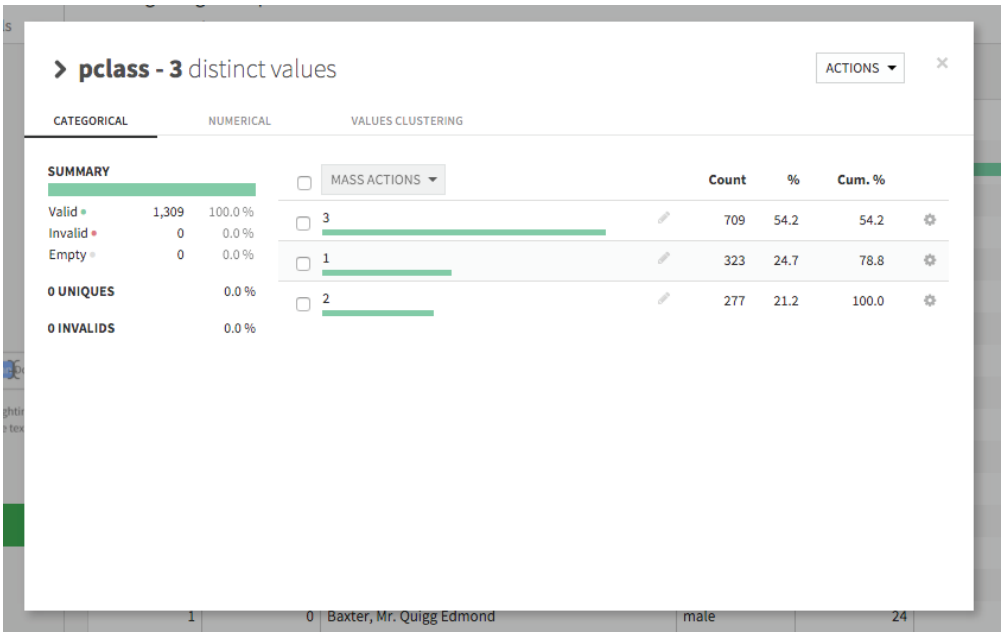
The Titanic the night of its sinking held a total of 2,223 passengers and of those 1,517 died. This data represents 1309 of those passengers and the survivors within each class.

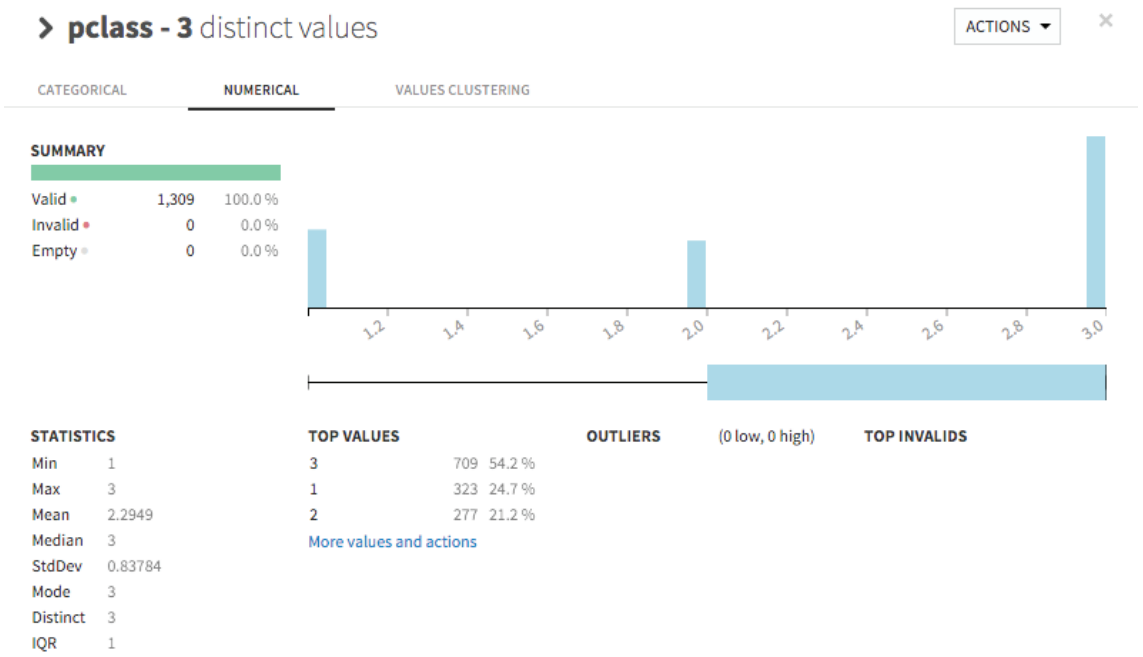
The Graphic and My Findings

Initially I wanted a pie chart because I was going to solve this problem from a percentage perspective. This mostly was for the fact that from the data, of the 1309 passengers 24.7% were from first class (323 passengers), for the second class 21.1% (277passengers), and for third class 54.2% (709 passengers). Then from these percents you derive to the percent who survived. For first class 61.9% of the 323 passengers survived (200 passengers) , for second class 42.9% of the 277 passengers survived (119 passengers), and lastly for third class 25.5% of the 709 passengers
survived (181 passengers).
Seeing as pie charts are hard to read sometimes I proceeded to a bar chart that visually displays the totals within the totals just considering the passengers. The data in the bar chart is the same data as stated above without the percents. The data revealed a number of things. First that there is a connection between class and survivor rate. The higher the class the higher the survivor numbers with first class having a littl well over half of there passengers surviving. Second class almost had have of their class surviving with third class at about 25%. I didn't know or expect that the data to show that the second class had lower numbers than first class and for the third class to be so big in total. The only expectations I had concerned a whole different variable gender (with women having the highest survival numbers). In conclusion very interesting dataset and if I were to proceed I think I would add age as a variable.

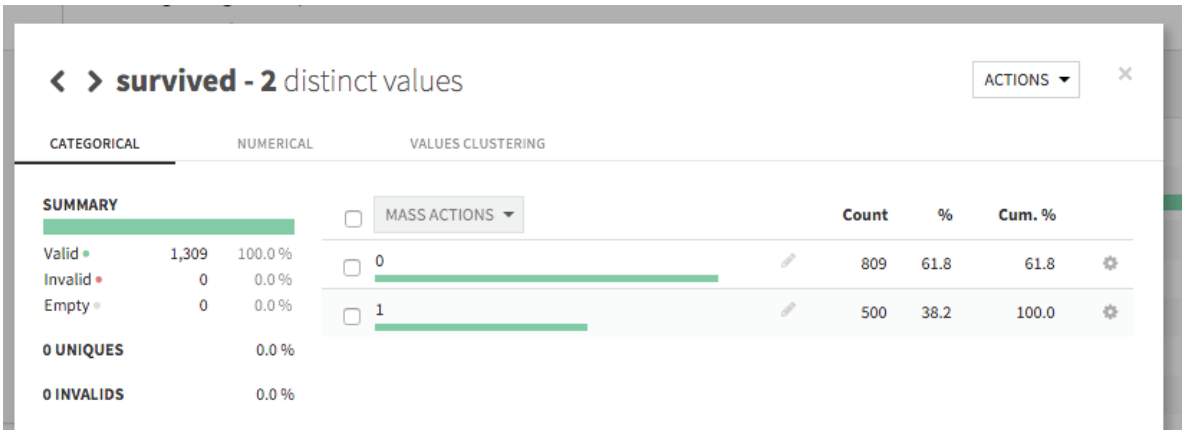
Passenger class (visual 1&2)

According to the data:
1st class made up only 24.7% of the passengers listed of the1309 (323 passengers)
2nd class made up 21.2% (277 passengers)
3rd made more than half of the 1309 passengers with 54.2% (709 passengers)





Analysis of the survivors



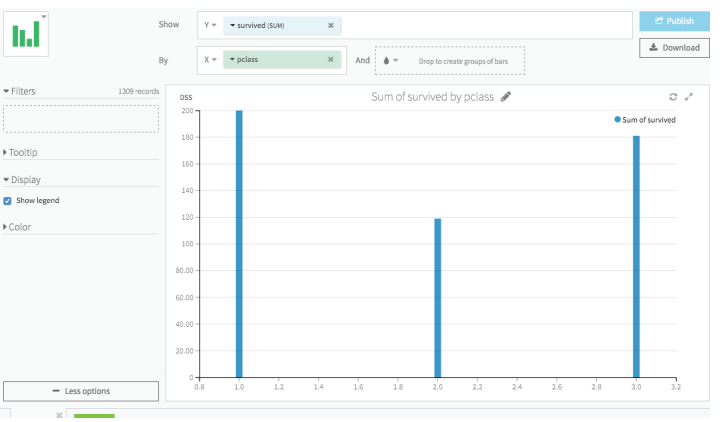
Analysis of the survivors
0= did not survive
1=survivor

of the 1,309 passengers listed
only 38.2 % survived (500 passengers)
while 61.8% died (809 passengers)

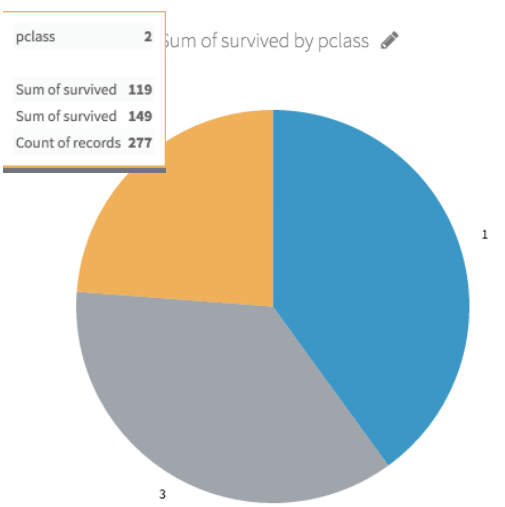
The graph depicted on the right took into account the survivors but a better graph would also include the total number of passengers within each class and how many from that number survived (a crucial characteristic i'll rectify in my final graph in order to fully grasp the imapct of the numbers)

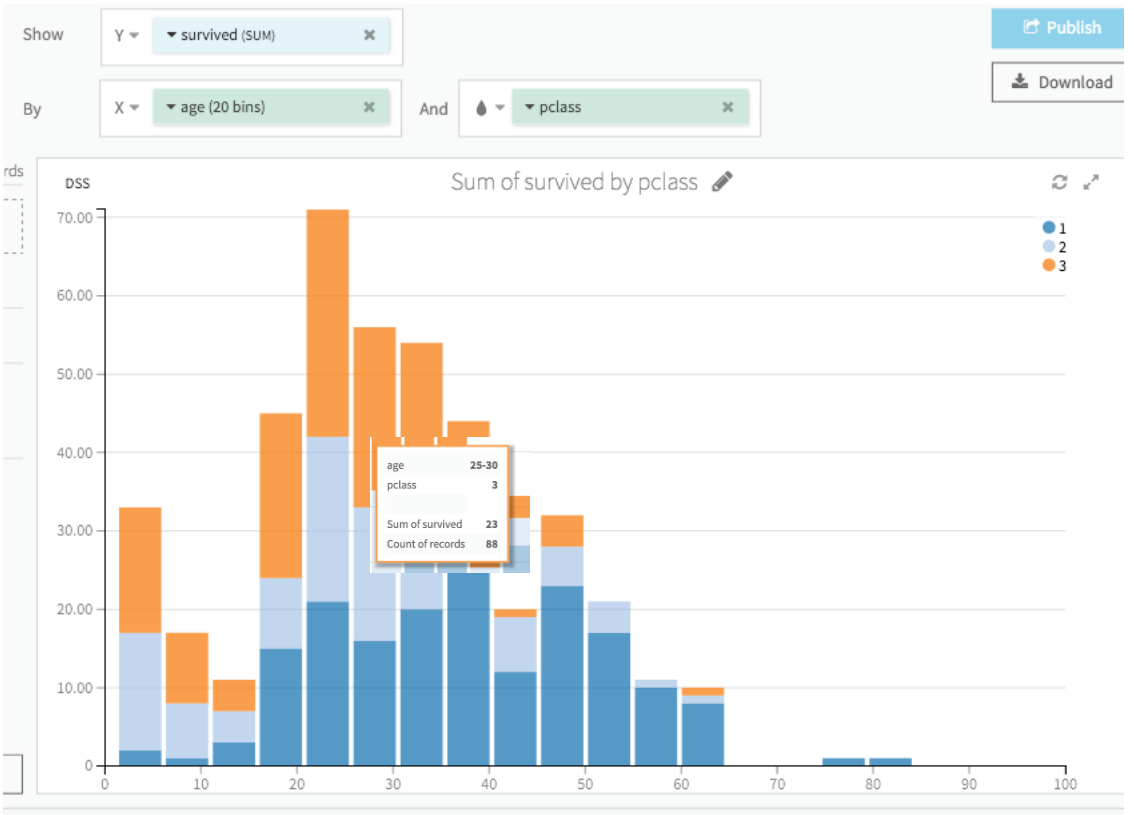
It also fails to make color distinctions between each class (something I would also rectify with the final graph)

I will probably proceed to do a stacked graph and get rid of the awkward spacing inbetween the bars



same graph as depicted above withe clear color distinctions but again I want to emphasize how many passengers out of the total class survived my having the total number of passengers of each class (not just the survivors) included in the visual





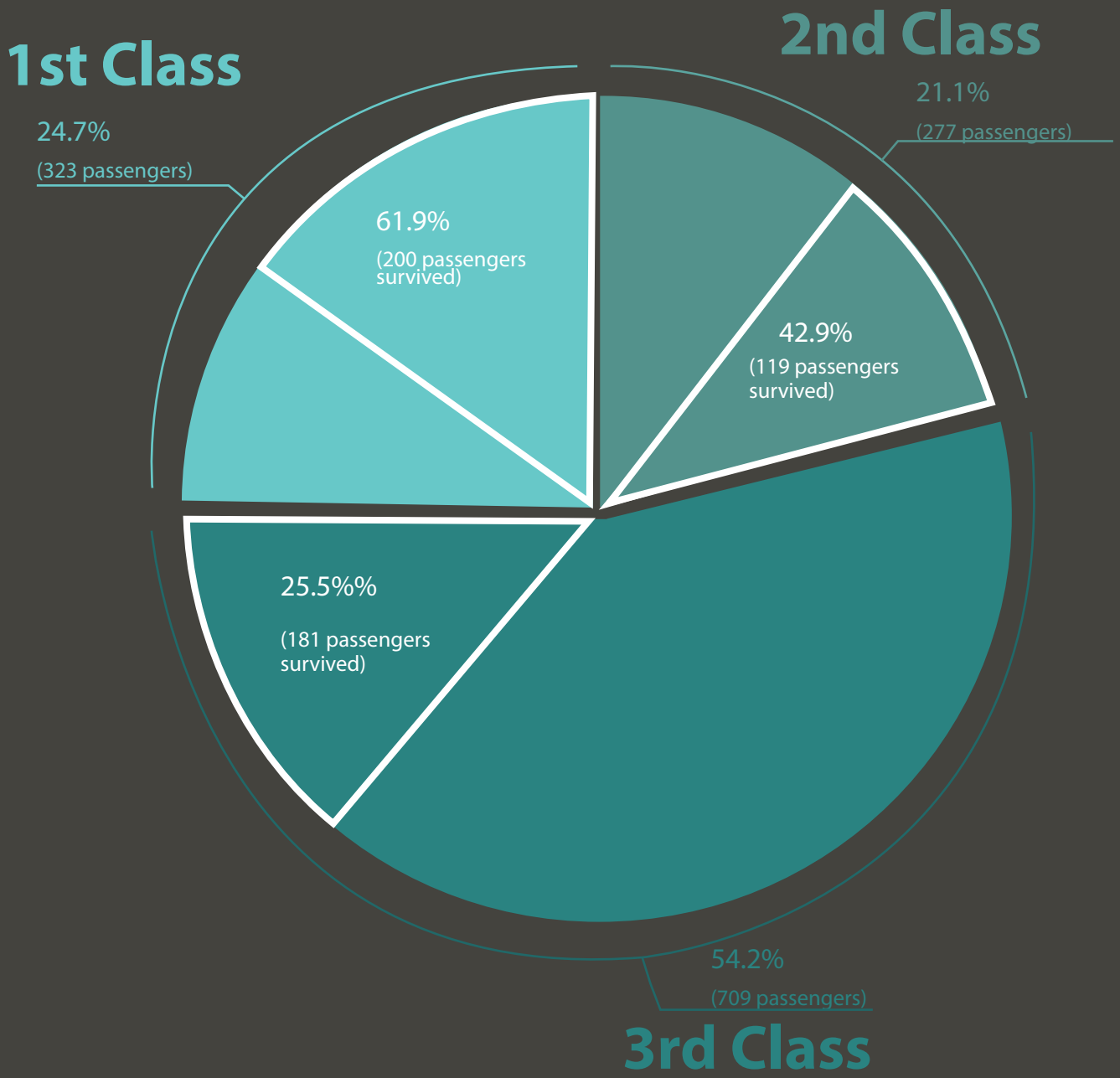
I added an extra variable of age in a stacked graph because I was just curious of other variables (for sex as a variable, I already knew that women would highly exceed the men so I decided to go with age)

From here I think my question was fully answered. It is surprising I'll admit to see the size of third class in comparison to the other classes and how many lives were truly lost. I also didn't perceive that second class would have a smaller passenger size than first.

Going forward I will experiment with various ways in which to express this data accurately.

Titanic Survivors within each Passenger Class

(1309 passengers total)



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This data represents 1,309 of those passengers and the survivors within each class.

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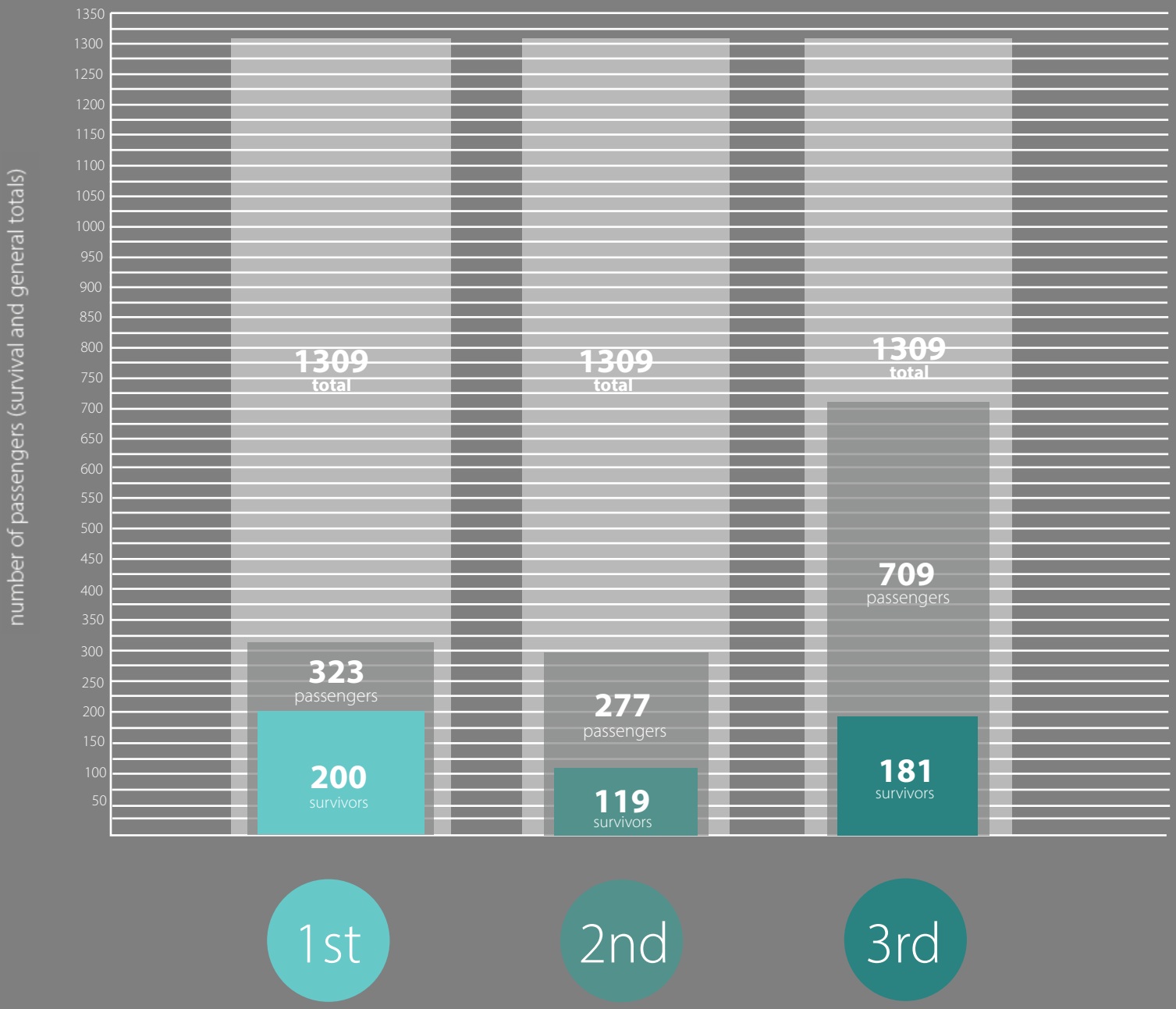

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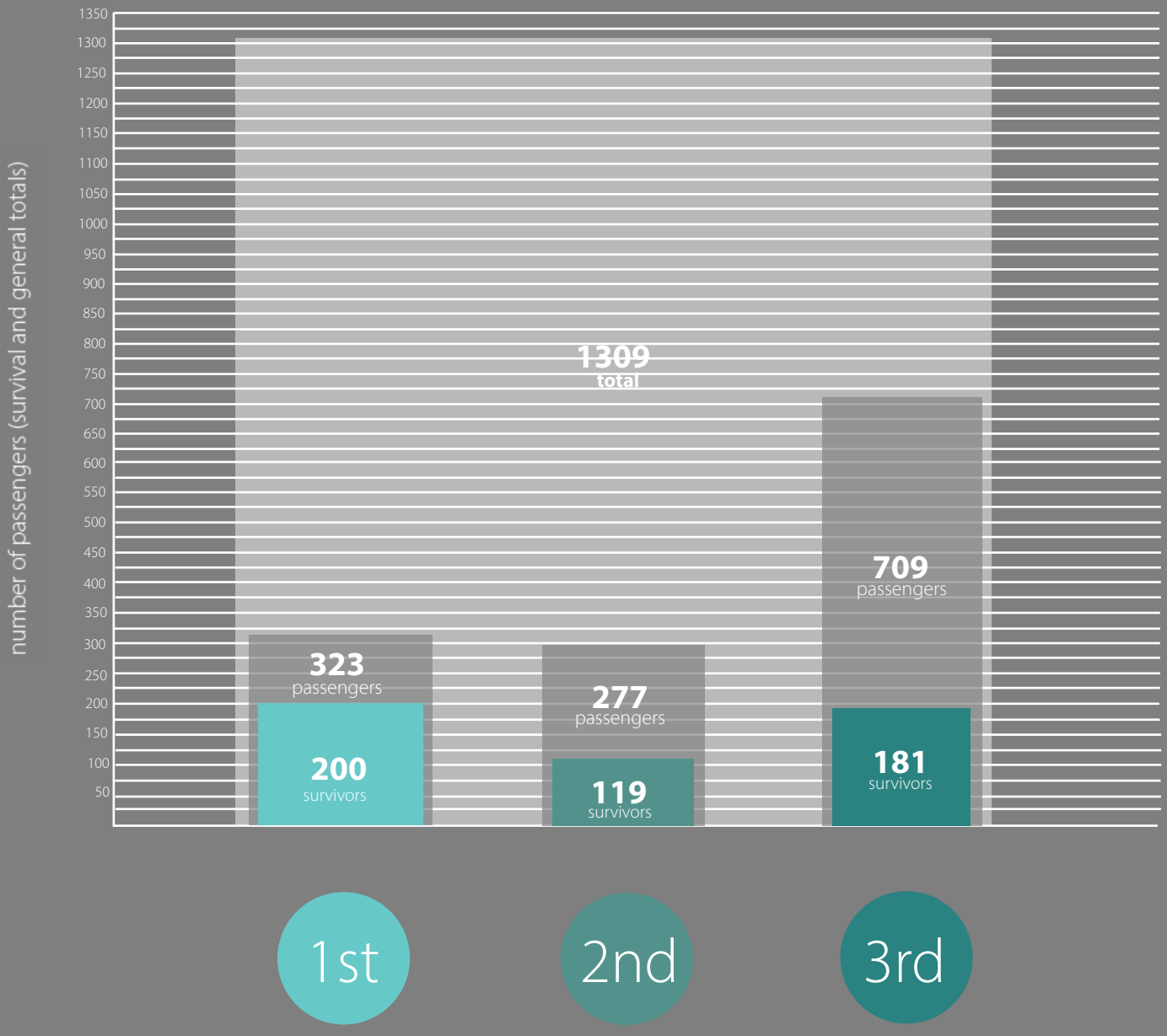

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