Title: Six New Metrics Visualized (Task 4)

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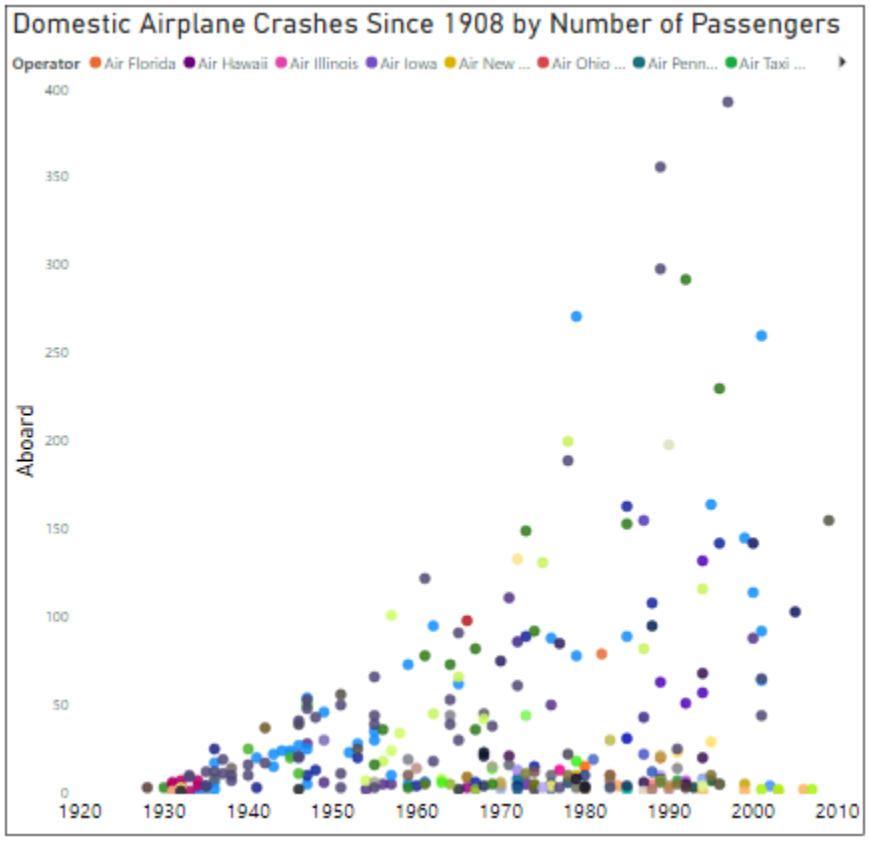
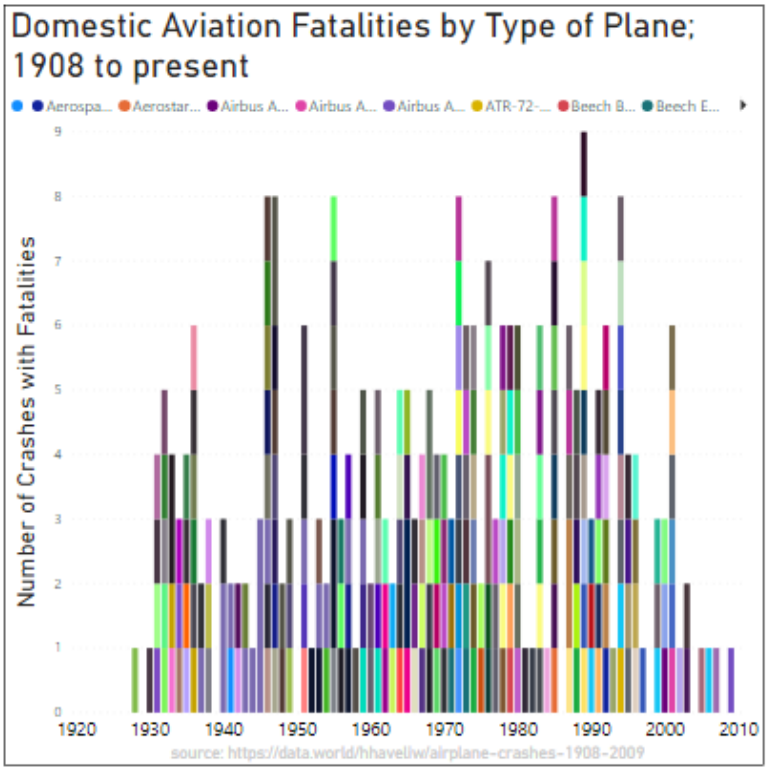
Course: DSC640

Date: February 21, 2021

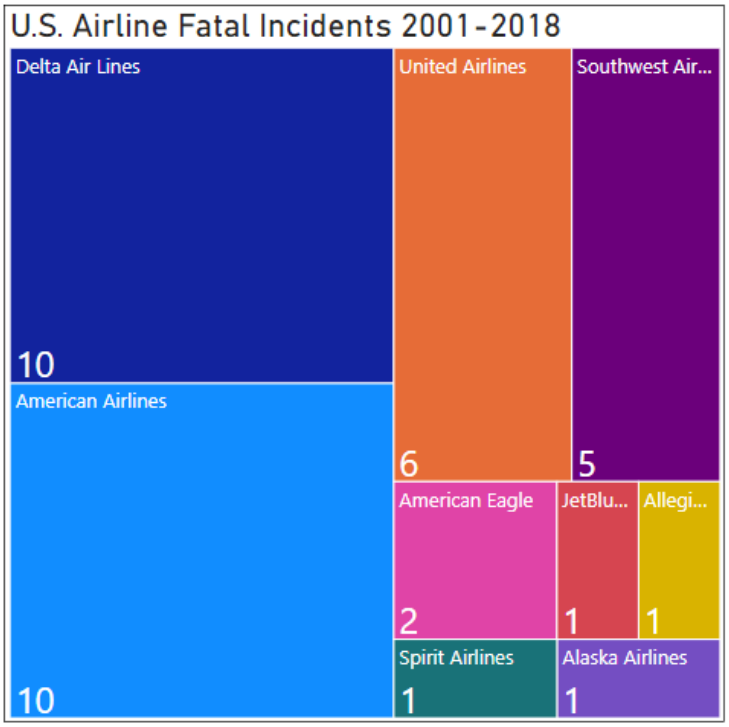
Description: Six new metrics, with design methodology defended/justified, sources, link to Github repository



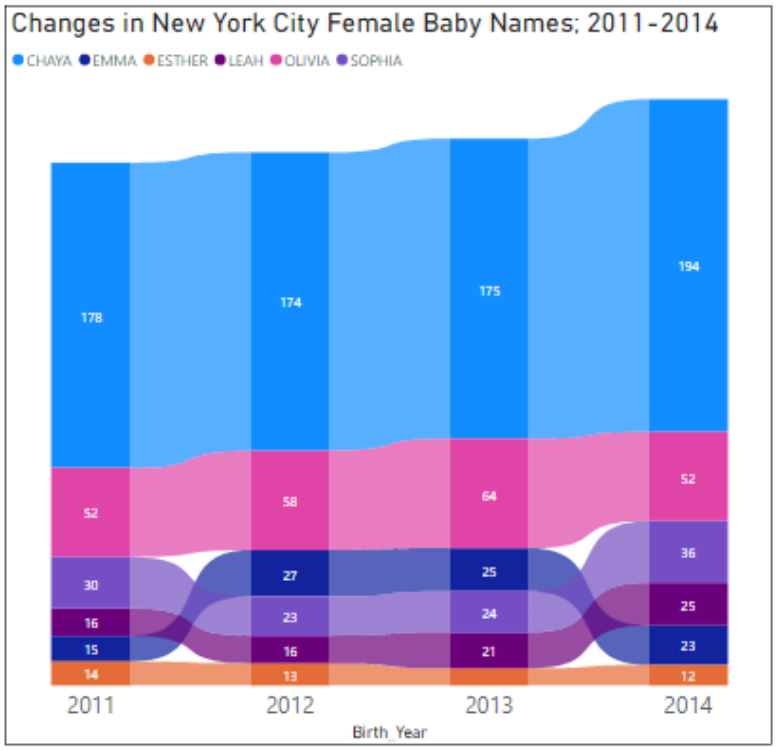
I've tried working with this dataset a couple times now. I think there are too many carriers, making it challenging to differentiate among the many colors. For a color-blind person, this chart would be terrible. I removed the x- and y-axis gridlines, as no one needs to be able to line up the dots perfectly. If they want exact numbers, I would include a data table. What I think is interesting about this graphic is that it reflects the increasing count of number of passengers on board over time. This makes sense, as airplanes have increased in size since 1908.



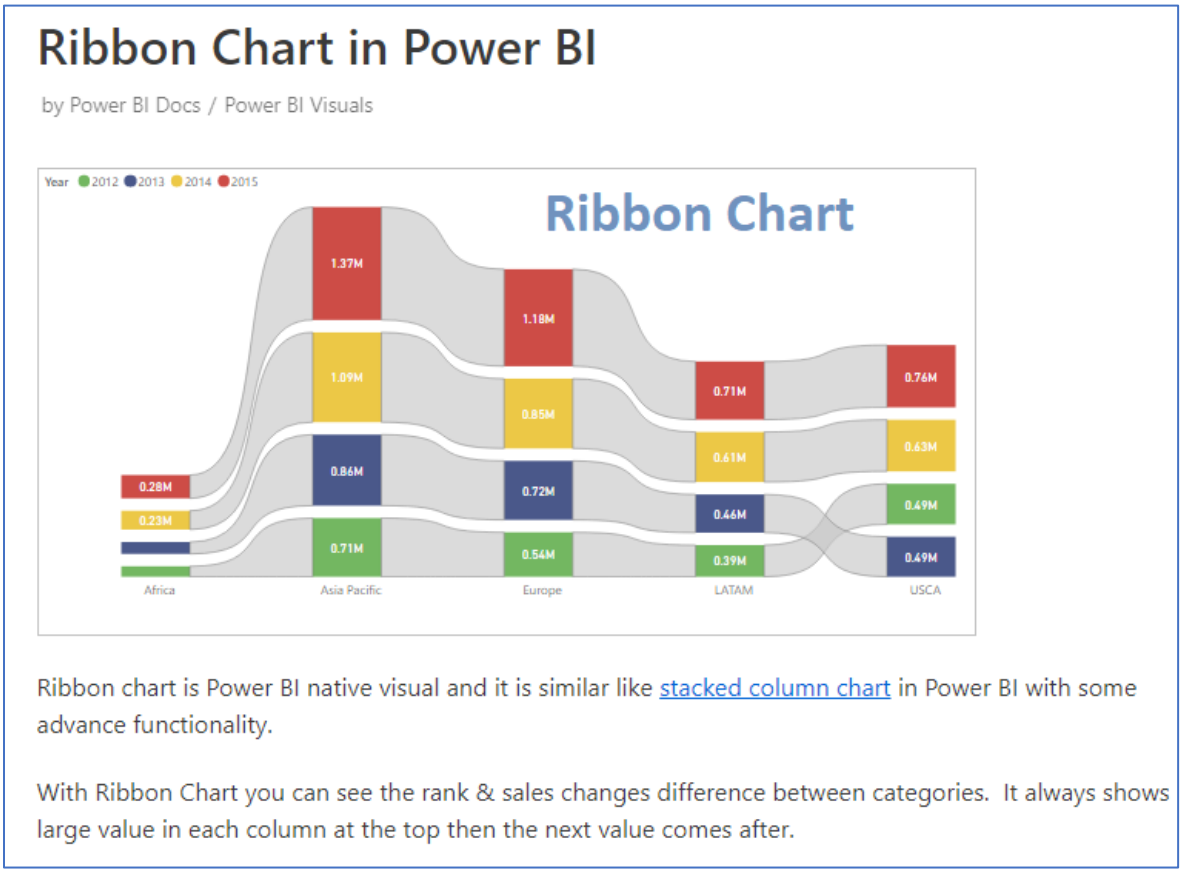
At first glance this might look impressive, but it is impossible to trend over time. Perhaps a ribbon chart? There might just be too many different types of aircraft involved. Maybe a couple line charts? Without other context, such as a metric based on miles flown, this chart has little use.



Added title to tree chart. Then, because there was nothing really connecting the title to the chart (which violates one of the Principles of Gestault), added a border to the chart.



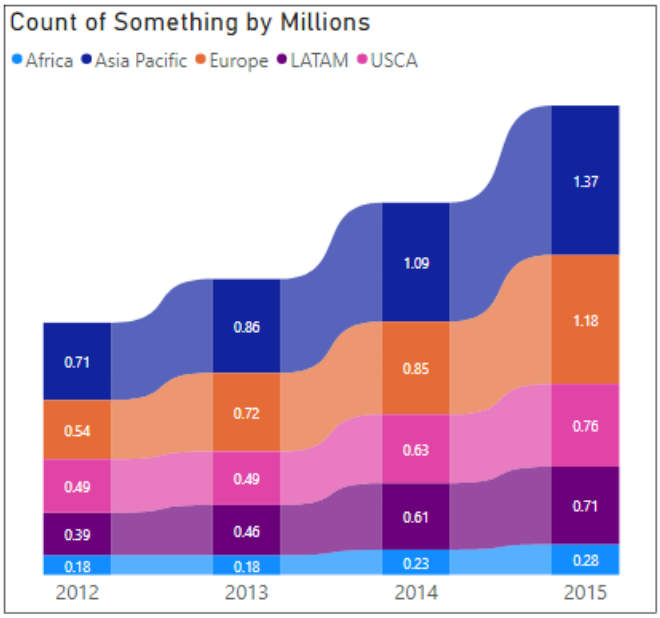
I'm not a fan of the purple-ish colors being so close in color. I wanted to add the category names directly to the ribbons. I searched 'Power BI add data labels to ribbon chart' and found this perfect example of when a ribbon chart is NOT needed(!):

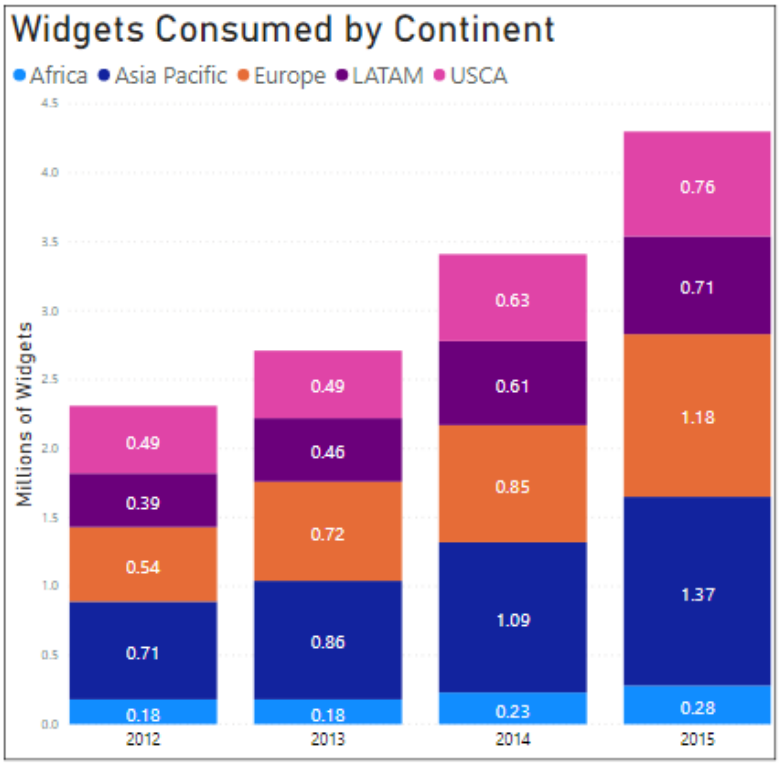


Source: [Ribbon Chart in Power BI – PowerBI Docs]

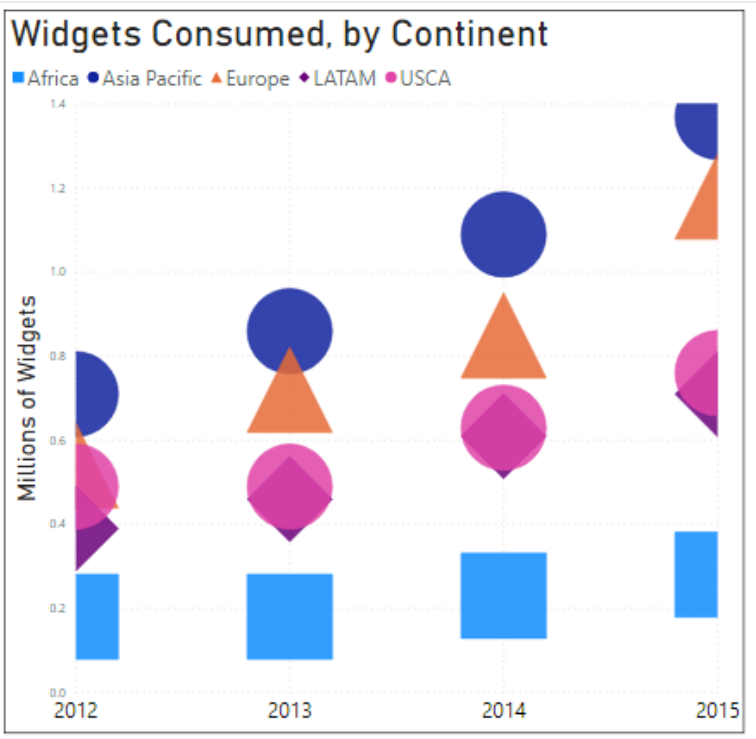
The chart above would be super if they simply flipped the x- and y-axis. Otherwise, there is no reason to connect continents! It is like having them connected on a line chart.

Flipping the x and y axis:





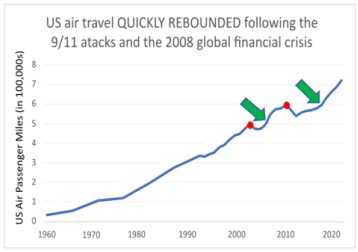
I tried this next one a couple ways. When it was all circles, the Latin America category was almost completely obstructed by the USC. The different shapes helped with that problem, but I think they add unnecessary distraction to the chart. (I would stick with either the ribbon or stacked column chart for this dataset).



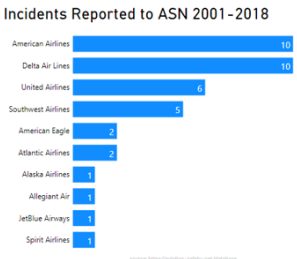
Github: https://github.com/jobranch2019

References:

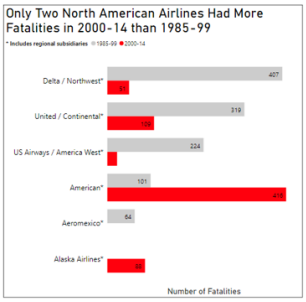
Deane, S. (2020, September 29). *Fear of Flying Statistics (2020 Data)*. Stratos Jet Charters, Inc. https://www.stratosjets.com/blog/fear-of-flying-statistics-trends-facts/.



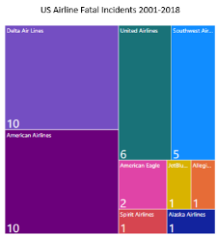
https://www.bts.gov/content/us-passenger-miles



https://www.aviation-safety.net/database

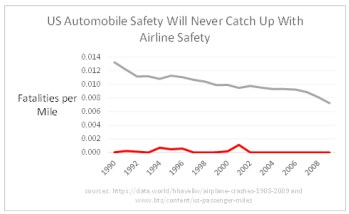


[data/airline-safety at master · fivethirtyeight/data · GitHub]



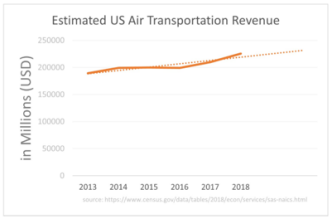
https://www.aviation-safety.net/database

https://www.ntsb.gov/_layouts/ntsb.aviation/index.aspx



https://data.world/hhaveliw/airplane-crashes-1908-2009

and www.bts/content/us-passenger-miles



https://www.census.gov/data/tables/2018/econ/services/sas-naics.html