

INFSCI 2725 Data Analytics
Assignment 9 – Data Visualization

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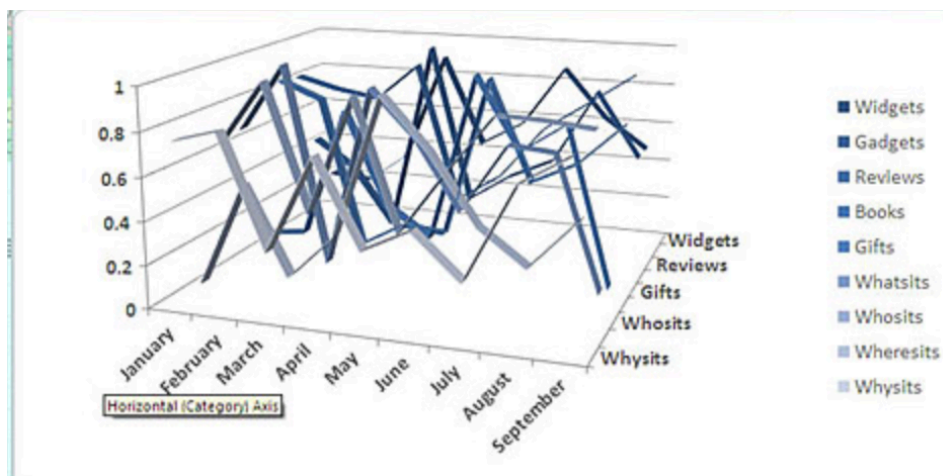
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Executive Summary

Data visualization is a crucial part in presentation. Appropriate data chart can help illustrate author's idea but indecent usage of chart will lead to distortion of author's mind. In the report, we find three charts online and all of them have drawbacks. Then we presented some ways to improve them.

Chart No.1

Picture 1.1 is a 3-dimension chart that shows the data for 9 items from Jan. to Sep. There are several drawbacks of this data chart. First of all, it is not clear. There are 9 lines crossed in the picture and it is hard for us to differentiate these lines. Secondly, it is not efficient in interpretation. In 2-D space, we can clearly find the scale of each point by horizontally viewing its position in y-axis but it is hard in 3-D space. Last but not least, it is hard for us to compare different pieces of data. All lines are intersected in the picture and it is hard for us to compare and interpret them.

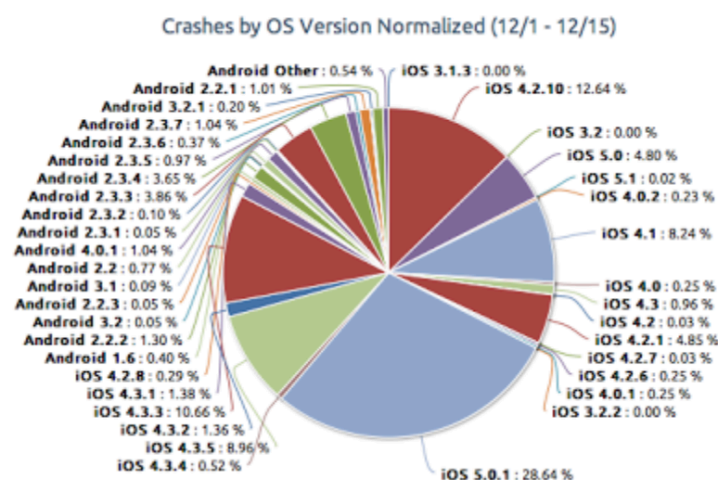


Picture 1.1(<http://www.bengarvey.com/2010/08/22/chart-junk/>)

There are some possible ways to improve this chart. Essentially, it should be drawn in 2-dimension space and dismiss some series. Because 9 series in a single chart will confuse audience.

Chart No.2

In picture 1.2, it shows a pie chart about crashes by OS Version. With too many slices in one chart, it is hard to locate a certain slice and it is thus difficult to compare them. Besides, it is also not good for interpretation, because with so many slices, audience will be confused about which slices should be compared.

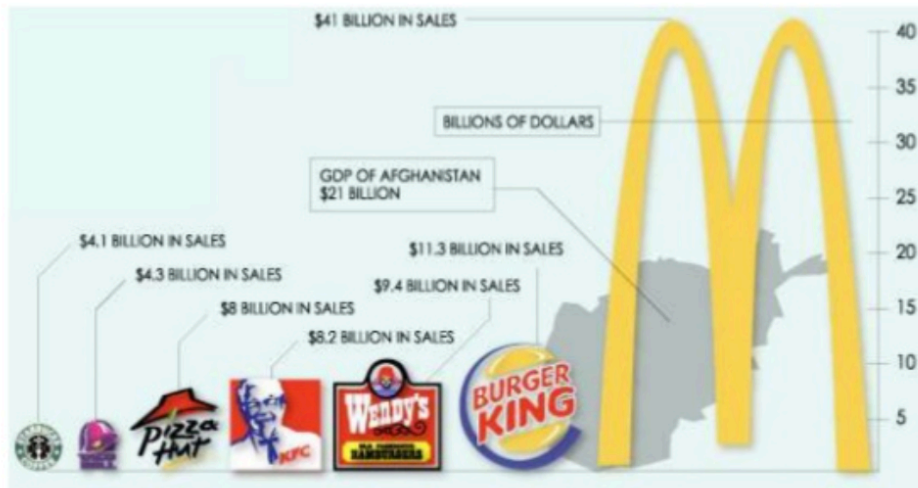


Picture 1.2(<http://susan-stepney.blogspot.com/2013/09/chartjunk-lives.html>)

There are many possible ways to improve it. We can abort useless data in this chart. What I mean is that if author wants to compare only for Android OS, author can just draw a chart only including Android data.

Chart No.3

Picture 1.3 is a chart about sales data for some fast food restaurants. In this chart, the most drawback is that the data-ink ratio is quite low. A good chart should encourage audience to concentrate on comparison of these data included. However, in this chart, audience will be allured by the logo of restaurants. These logos are chartjunk.



Picture 1.3(<http://www.slideshare.net/jenstirrup/data-visualisation-using-ssrs-euclids-royal-road-to-the-numbers>)

In order to improve this chart, the best choice is to replace these logos with bars. Then the effect of this chart can be better.