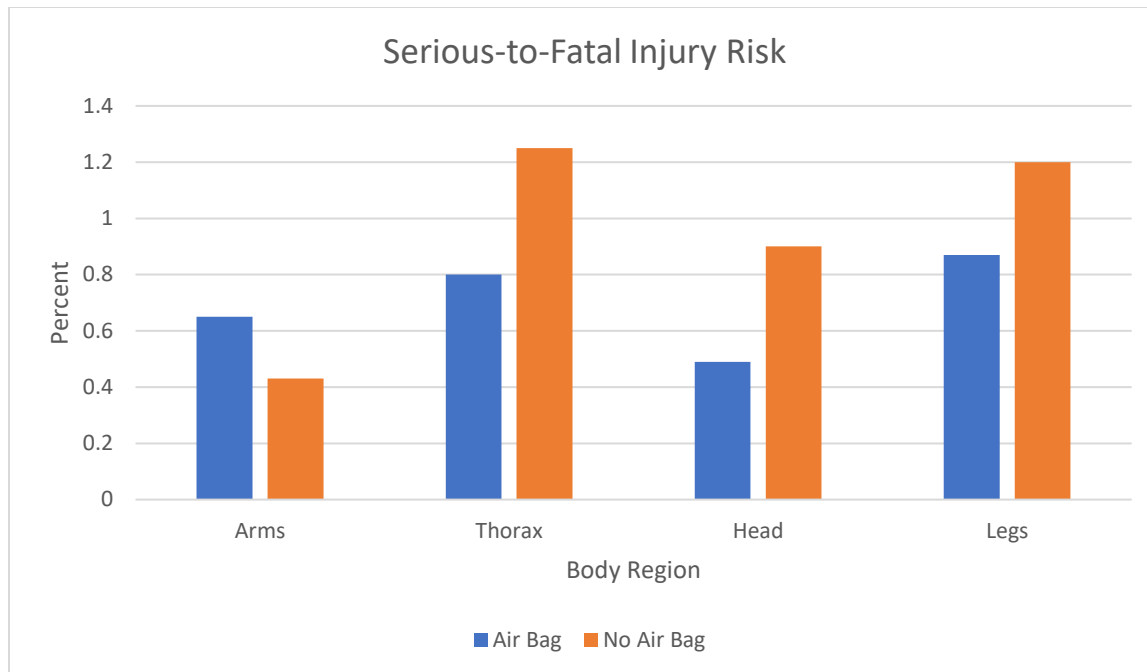


The original chart was too clunky and required too much cross-referencing to get the full gist of it. It repeated data in the bar graph on the table to the right, which is unnecessary. It was also a very bad visual choice of graph for comparing the different crash modes because the bars were angular, hard to compare, and not relative to any whole. In my new chart, I went with a simple and straightforward pie chart. Although pie charts are criticized, because this particular visual represents parts of a whole and the values are distinct enough to be perceived by the human eye, this is one of those instances where I feel a pie chart is a good choice. With my chart, you can clearly see how different crash modes are distributed and nothing is irrelevant.



The original visual used two kinds of charts to represent the same kind of data. It's awkward and confusing, especially the line graph, as a line graph is used to show how something changes over time and not isolated measurements. My chart is a bar graph directly comparing injuries with airbag and without air bag. I omitted the specific percentages because they don't mean much. The point of this second visual is to show how the injury risk with air bag compares to without, and the side-by-side view using the same kind of graph shows that clearly.

Injury Type	Number of Moderate Injuries
Hip	2163
Femur	1657
Knee	5928
Tibia	2051
Foot/Ankle	5880
Total	17669

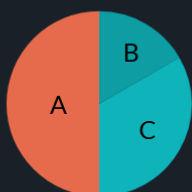
The pie chart in the original visual didn't add anything. I kept the table, though, because I feel it does exactly what Dana wants to show. She wants people to see the scope of the problem, and the best way to do that is to give them the raw numbers. The sight of a large five-digit numbers is what shows the magnitude of the injuries and invokes a sense of concern. I combined the two tibia-related rows, however, because nobody is going to care to differentiate them. In fact, an average person looking at the chart will probably not care much about the injury type at all—just at the total number of injuries. That's why the total is bold: to draw the attention to that number. However, having numbers for each category gives more credence to the visual as a whole.

How to Create Effective Visuals



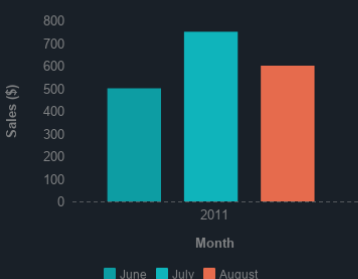
WHAT TO DO

Choose text colors that are easy to read.

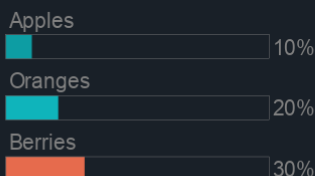


Label axes and titles.

Lemonade Sales in Summer

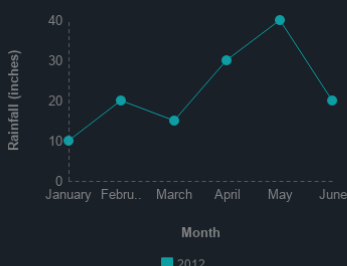


Choose fonts that are easy to read; be consistent.



Choose the appropriate visual for the data.

Rainfall During First Half of 2012

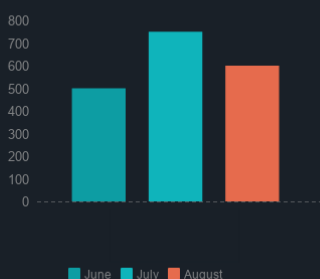


WHAT NOT TO DO

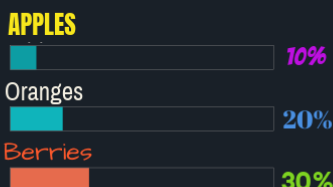
Choose text colors that are hard to read.



Leave axes and titles blank.

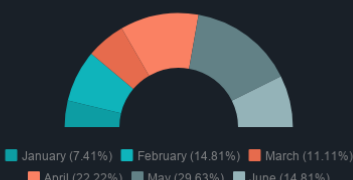


Choose fonts that are difficult to read; change fonts and sizes randomly.



Use any visual for any data; they're all the same.

Rainfall During First Half of 2012



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ENGL 334W – Design

For my infographic, I decided to go with a compare-and-contrast template. When it comes to showing what you ought to do to create effective *visuals*, I concluded the best way is to have visual examples. Instead of just showing an example of what needs to be done, however, I opted to show the results of what happens when you go against a piece of advice. My infographic allows the audience to see both the positive effect of a good practice and the negative effect of a poor practice. Using a line in the middle, I split the infographic in half in order to group the positive visuals on the left side and negative visuals on the right side. I also included some stars along the line to highlight the beginning of each point, making for easier navigation.

The skeleton of the infographic has a color palette that remains consistent throughout. I chose beige, dark grey (almost black), and orange as my palette. Any of these colors goes well against the other two, so the three together allow me to switch between them for backgrounds, titles, and text while “provid[ing] an appealing reading experience for [the] audience” (Purdue OWL). In addition to consistent colors, I also used a consistent font for the description of each point. This repetition “provides cohesion,” as McGee puts it. I only used a different font in the title to catch the reader’s attention. Following Patel’s advice about the importance of the headline, I wanted the gist of the infographic—“Effective Visuals”—to be the most important thing, so it’s bigger, bolder, and orange.

The audience of my infographic are the scientists in the case study, showing them how to make effective visuals. Because of this, the visuals in my infographic are all charts and graphs—things that these researchers would likely use in their own work. I use them to specifically show my audience what their works should and should not look like. Even though they’re all different

graphs and charts, the same guidelines that apply to graphics in general very much apply to these kinds of visuals.

The first point deals with the importance of color contrast so that readers don't have to "pause or squint in order to read [the text]" (McGee). A pie chart on the left demonstrates how contrasting colors are easier to read against each other than similar ones. Meanwhile, the one on the right is difficult to read because the colors blend too much.

The second point deals with the importance of accurately labelling graphs and charts. It's important to give context to the viewers. Perhaps even more important, however, is to "be honest with your viewers with your visual data" (Purdue OWL). Not labelling visuals is a good way to lead viewers to believe that there is some deception going on, and viewers who are not careful can misinterpret a visual (whether by the creator's intention or not).

The third point is more of an aesthetic point. Similar to how the color palette and consistency of the infographic itself, consistency in visuals helps group similar data and allows for easier understanding of data. It also makes the piece as a whole look organized, polished, and professional. Using varying fonts and colors is highly distracting.

The last point directly relates to one of the example visuals provided by the researchers. McGee points out that "there are numerous types of graphs and charts that you can use." But not all of them are equal. As in Figure 12.2 supplied, a line graph was used where a line graph doesn't belong, leading to confusing representation of the data. In my example, I showed how rainfall works well as a line graph because it shows a pattern. However, as a gauge, it does little to give any insight into the trend of the graph.

References

“12 Infographic Tips That You Wish You Knew Years Ago” Kissmetrics Blog.

Data Visualization Best Practices. *Purdue OWL*.

McGee, Katherine. “Data Visualizations.” *Writing Commons*.