

Executive Summary of Research Assessment #6

As I begin to work on my Final Product for ISM, I wanted to expand my knowledge on data visualization as it will be the main focus of my project. This research assessment covers my introduction into data visualization.

Research Assessment #6

Date: January 25, 2021

Subject: Understanding Data Visualization

MLA Citations: "Data Visualization Beginner's Guide: A Definition, Examples, and Learning Resources." *Tableau*, www.tableau.com/learn/articles/data-visualization.

Assessment:

As I begin my research into data visualization, I wanted to begin with an overview of data visualization to better understand the topic before I begin my Final Product. Prior to beginning my research for my Final Product, I had the opportunity to talk about the potential plans for my Final Product. That's when I was first introduced to data visualization. To begin my research, I read an article called *Data Visualization Beginner's Guide: A Definition, Examples, and Learning Resources* by the Tableau Software company.

In the first two short paragraphs of the article, it provides a decent background about data visualization. I came to know that data visualization helps people represent information and data in a graphical manner using a variety of graphs, charts, and maps. With the use of the various types of graphs, charts, and maps, let people visualize and make connections between the trends in the data. According to the article, data visualization is highly "essential" to the world we live in today because it allows people to

“data-driven decisions” (Tableau). As an analytical person myself, I make data-driven decisions based on how a certain event will affect my future rather than actual data helping me make decisions. However, I know that data visualization will pique my interest just as much as project management did.

After going through the basic idea of data visualization, the Tableau article goes on to discuss the advantages associated with what is typically considered good data visualization. The article highlights the fact that all people are drawn to patterns (both color-related and not) which makes it easier for people to visualize a trend when they see one. In contrast, one cannot simply “[stare] at a massive spreadsheet of data and... see a trend” because it’s easily visualized in the human brain (Tableau). I can definitely attest to the previous statement because whenever I see a table on a Microsoft Excel spreadsheet (or something similar), my mind immediately tries to create the trend as an imaginary graph, but that never really works because there is just too much information to analyze without any visual representation of the information - this experience was definitely true when I took the AP Statistics course in the 10th grade! The article also emphasizes the fact that the visualization of the information is not to make it look pretty, rather it's supposed to be “storytelling with a purpose” (Tableau). As a former AP Statistics student, I can assure you that this is very true - the

reason is we need to understand the data in order to make the right decision.

Next, the Tableau article addresses the importance behind data visualization potentially for any career (this section of the article was the last section that was relevant to my research). The article talks about the fact that as the world becomes more developed and dependent on technology (and as a result - data), careers will become more data-dependent as well. It continues to mention that people will need to “use data to make decisions and use visuals to tell stories” about the information that the data provides (Tableau). With the use of these stories, people can analyze the data and then make their decisions that best suit the project or company - this actually may be the key unlocking the secret behind the project success rate (which is the basis of my Original Work).

Finally, the article provides a list of the different types and methods of data visualization while also discussing the ways people can learn data visualization on the Internet.

As I continue my research into data visualization, I think the next step is to look at a new article that is associated with the article I read. The new

article focuses on creating effective data visualizations - which will be essential for my Final Product!