

Executive Summary of Research Assessment #8

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 research on the benefits of using data visualizations.

Research Assessment #8

Date: February 1, 2021

Subject: Ways That Data Visualization Benefits Decision-Making

MLA Citations: Ingram, David. "4 Ways Data Visualization Can Improve Your Decision Making." *Visual Workforce*, Visual Workforce, 31 Dec. 2019, www.visualworkforce.com/blog/4-ways-data-visualization-can-improve-your-decision-making-kx5ly.

Assessment:

As I continue my research into data visualization, I wanted to learn about the most common ways that data visualization can aid in the decision-making process in regards to the business world. To further my research, I read an article titled *4 Ways Data Visualization Can Improve Your Decision Making* written by David Ingram.

Based on my previous research, I know that data visualization helps people/companies make better decisions. However, I wanted to understand how data visualization really makes a difference for those same people/companies.

In the first several paragraphs of the article, Ingram provides a comprehensive introduction to Big Data and decision making. He talks about how people/companies make key decisions that influence their future in many different ways. Simultaneously, Ingram highlights the importance of Big Data and its growing role in the decision-making process in the modern

world. After introducing the two ideas of Big Data and decision making, the author brings in the main topic - data visualization. There is a brief, yet dense section that details the importance of data visualization and the fact that it brings the two ideas (Big Data and decision making) together into one larger category. Then, Ingram dives into the four different ways that data visualization is truly beneficial to the business world today.

According to Ingram, the first way that data visualization is beneficial to people/companies is the increase in the pace of work completed. The article mentions that due to the "fast pace" of the modern world, people (specifically managers) are asked to make "critical decisions in short periods" of time (Ingram). Ingram also mentions that the use of data visualization increases speed due to the fact that people are able to "draw actionable insights from massive amounts of data" to come to conclusions quicker and make effective decisions faster (Ingram). As a person who likes to get things done as soon as possible in the most efficient way possible, I can totally understand the urgent nature of companies needing information quickly as possible.

The second way that is mentioned as a benefit with data visualizations is that they can help improve the effectiveness of the decisions that are made. Ingram emphasizes that people are flawed by mentioning that people

can make decisions by “[leaning] on [their] biases” when they don’t have the full picture with the data that is provided to them (Ingram). This can be disastrous because if the decision turns out to be poor, then it will come at a cost. However to prevent any issues from arising in the decision-making process, data visualizations are used to provide the decision-makers with all of the information - this “[reduces] the need to fill the gaps with their personal biases” (Ingram). I really believe that the use of data visualization will change the way that the consulting industry is currently structured - this goes back to my Original Work (which focused on the project success rate) - and eventually bring the project success rate closer to the 70 to 80 percent range in the near future.

The next way that Ingram highlights as a benefit of data visualization is the simplification of the message sends to the audience. As Ingram previously mentioned the need for quick decision making, it reinforces the idea that data visualization needs to be delivered in a speedy way - and to do that the visualization needs to be simplified for easy understanding. Ingram mentions that people need “will carry out the subsequent steps” of a decision that is made - whether that be good or bad. Data visualization allows the decision maker to get the people to fulfill “effective action” only when the decision that they make is clear and isn’t ambiguous (Ingram). Good communication is a vital skill in the business world and I don’t quite

understand how people can give a presentation (or a variant of a visualization) without providing a clear understanding of what they discuss to their audience especially when it comes to the data - I am actually guilty of this myself, but I digress.

Moving onwards, the final benefit that is associated with data visualization is the ability to enrich collaboration with others. Ingram mentions that managers tend to “seek the perspectives of others to enhance their decision-making process” and to do so, their team needs to understand what the data entails for the future of the company through the use of data visualizations (Ingram). I tend to ask for my team’s perspective when I meet with them for our officer meetings for the Entrepreneurial Non-Profit Club whether that includes data or not - but more than likely it does.

As I continue my research into data visualization, I think the next step in my research is to look into the technologies that project managers use in the world today because those very same technologies might be what I will be using for my Final Product.