Firstly, the definition of data visualization, “is the presentation of data in a pictorial or graphical format. It enables decision makers to see analytics presented visually, so they can grasp difficult concepts or identify new patterns.” When it comes to data visualizations, they can be seen as the bridge between the data side of a business to the operational side of a company. A format for those who work with the data but those who can make future decisions based on the visualization that is being presented to them. At the same time, before these visuals make contact with these decision makers, data scientists can use these visualizations to monitor any processes and perform some quality control to make sure everything is still running accordingly.

In our current society, we are in a place where we have visuals surrounding us on a daily basis that can have more of an effect than a few words. With the technological boom that continues to expand within companies, such as them adapting machine learning, they are now able to handle immense amounts of data about their customers, products, and any other aspect of their company. However, this does not mean anything if you cannot contextualize all of this information that you can now process at a much higher rate. Because of this need, the importance of data visualizations has grown in being able to represent all of this information in a format that multiple audiences can consume at the time.

To better understand this situation, I always imagine that data scientists and analysts speak a language that they can only understand and know how to communicate amongst themselves, but where does this leave those stakeholders are business operators. Data visualizations would operate as that interpreter between the two groups allowing messages to be understand overall. Author Adam Heitzman mentions the importance of this practice in saying, “…from teachers trying to make sense of student test results to computer scientists trying to develop the next big thing in artificial intelligence, it’s hard to imagine a field where people don’t need to better understand data.” With this skill of being able to visualize the data, it allows you have another advantage in being able to communication to various types of audiences.

With data visualizations, being able to communicate to various audiences is not the only advantage that a team or individual could have with this skill. With having data visuals that attached to a source of data that is continuously being updates, business leaders now have the ability to observe trends as they occur in a quicker time and be able to seek possible opportunities from any possible patterns that may be present. Looking at another advantage, one of my favorites that I have worked with in the past, the ability to drill down to see much more detailed analysis of the data. With drilling down into certain categories or areas on a map, you gather information about a single category and information relevant to that specific area compared to the entire analysis.

In the end, data visualizations have become a tool and platform to allow those who handle the data to be able to interpret and communicate how their current situation is at the time or possible trends towards the future for the company. A fun thing about these visualizations is that there are so many different ones to design and develop, it truly can be a mix of your analytical and artistic side.

References:

Data Visualization: What it is and why it matters. (2020). Retrieved March 23, 2020, from <https://www.sas.com/en_us/insights/big-data/data-visualization.html>

Heitzman, A. (2019, January 28). Data Visualization: What It Is, Why It's Important & How to Use It for SEO. Retrieved March 23, 2020, from <https://www.searchenginejournal.com/what-is-data-visualization-why-important-seo/288127/#close>

Insights, V. (2018, April 17). 10 Advantages of Data-Visualization. Retrieved March 23, 2020, from <https://visualrsoftware.com/advantages-data-visualization/>