CYB 410 Project Three

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August 18th, 2022

Tools

There are many tools at the disposal of cybersecurity practitioners that allow them to make informed decisions about the risks they deal with every day. Tools that security practitioners are tasked with creating, such as risk registers and business impact analyses, exist so they may be referenced in the event that a risk becomes a realized threat. A risk register, for example, is in effect a list of all risks that have been identified for a given project or organization (Reciprocity, 2022). Once identified, the risk register will be updated with the category the risk belongs to, the likelihood of the risk becoming a threat, and the various steps necessary to stop or mitigate the threat. This tool lives as a sort of breathing entity in that it is understood to never be finished or complete. It is the job of the people in charge of it to continuously search for and identify risks so that the project can be maintained as securely as possible.

Resources

Many resources that assist in decision-making exist as well for cybersecurity professionals. Resources like the Center for Internet Security (CIS) Critical Security Controls help by outlining and setting standards for security controls across the industry. For example, CIS Control 6 outlines standards and best practices for creating, assigning, managing, and revoking accesses and privileges for users and administrators (CIS, 2021).

Bias

Bias is a concept that is known for being incredibly difficult, if not impossible, to avoid on a personal level. Everyone is subject to their own biases and making decisions or recommendations free of bias is something that takes a fair amount of effort to achieve. I believe the first step to minimize bias is to acknowledge that the bias exists in the first place. From there, one can take steps and make efforts to avoid and/or minimize how much that bias effects a decision. In an article in Harvard Business Review, Wolf (2012) details a list of methods decision makers can utilize to attempt to minimize biases when making decisions. The first recommendation Wolf makes is to relentlessly search for new evidence that will disconfirm any biases you may hold. Wolf also suggests seeking diverse opinions to counter any existing overconfidence. These methods allow for bias when making decisions, but act as ways to balance them out so it does not take control of the decision making process.

Impact

One way of defining systems thinking is to say that it is a way of thinking that takes an entire system into consideration, rather than only the individual pieces. Another definition is that systems thinking is used to investigate what factors contribute to a possible outcome (Morganelli, 2020). This is to say that systems thinking can be used to consider the impact of decision making on people, processes, and technology by examining each individual element of a system and analyzing how a decision might potentially affect that element. This opens up the opportunity to examine the impact that a decision can have across an organization, rather than only considering a single part of a system.

Evidence

When evaluating whether a good decision was made, a great source of evidence would likely be the people the decision affects. As discussed previously, we can use systems thinking to examine the individual parts of a system in order to get a picture of how those parts work together. Likewise, we can examine how a decision affects those individual parts to determine whether or not the decision was overall beneficial. Also discussed previously was the concept of bias, and how one solution to overcoming bias is to source opinions and suggestions from a wide array of diverse opinions. This same method can be used to source opinions on a recently made decision. While it is impossible to please everyone, and not everyone will always approve of a decision, one can gather an overall feeling on a decision by sourcing opinions from a diverse pool.

References

CIS. (2021, October 28). *CIS control 6: Access Control Management*. CIS. Retrieved August 20, 2022, from https://www.cisecurity.org/controls/access-control-management

Morganelli, M. (2020, March 18). *What is systems thinking?* Southern New Hampshire University. Retrieved August 21, 2022, from https://www.snhu.edu/about-us/newsroom/business/what-is-systems-thinking

Reciprocity. (2022, March 9). *What is a risk register?* Retrieved August 21, 2022, from https://reciprocity.com/resources/what-is-a-risk-register/

Wolf, R. F. (2012, September 24). *How to minimize your biases when making decisions*. Harvard Business Review. Retrieved August 21, 2022, from https://hbr.org/2012/09/how-to-minimize-your-biases-when