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Introduction

The career field of cybersecurity has a vast array of positions to choose from with positions like security analyst, penetration tester, security auditor and many more. While this job field can be quite rewarding it can also be pretty complex to solve its problems. Many of these problems have to deal with social sciences when it comes to learning how people tend to act, react and plan their next move when it comes to hacking.

The position that depends on social science principles would have to be the position of security analyst. As a security analyst you are tasked with searching for improper technology use, active and potential threats and finding patterns that may lead you to a critical vulnerability in your system. Social sciences can be used to aid this search in order to have a main suspect. The study of this topic has been given the name social cybersecurity. “Social cybersecurity is focused on humans and how these humans can be compromised, converted, and relegated to the unimportant.” (Carley, 2020). You are basically trying to find the ways humans negatively interact with their online environment in order to keep your technology enterprise safe and secure.

Challenges

One of the main challenges is of course identifying who is a threat to your organization. Social sciences can be used to aid this search in order to have a main suspect. “We explore who promotes attacks, who is threatened, what conditions increase the likelihood of attack, and

how to respond to or mitigate the impact of attacks." (CMU, 2019). Social sciences gives you the ability to spot these potential threats in order to easily mitigate the problems from happening.

The mitigation of social engineering is another challenge all security analysts must face. The interaction between people who are sending out fake messages and the people on the receiving end can be analyzed by using the study of social sciences. "A social engineering campaign is the psychological manipulation of individuals to get them to perform specific actions, such as divulging confidential information or state secrets." (Kandias, 2019). You are analyzing the way people interact with fake messages in order to see who is the most at risk and to see what training is needed in order to keep your organization's cyber hygiene clean. Without this you will be looking at victim precipitation, which is when a victim's actions are what brings them harm.

The last challenge that analysts have to face is configuring the tools in order to keep the infrastructure secure and safe. Doing this you have to tune the system in a way where certain actions cause red flags. In order to find these red flags you must study how your company operates and how the people interact with each other in order to know what is safe and what isn't safe. For instance when you set up an email server where everyone communicates you have to be able to identify what is acceptable communication. This is a great example of social science because you are researching human interaction.

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Marginalization

Lastly, the idea of marginalized groups in cybersecurity is a very important topic. In these tests and procedures you can draw up some false positives on people. Your systems may flag someone on because of how you tuned these products. This can cause controversy within your workplace with people being singled out in accidents. You must make sure to study the work environment before you start putting in serious policy or else it will create a toxic place to work at.

Conclusion

To conclude this writing I can fairly say that the security analyst position is quite important when it comes to the utilization of social sciences. You have to research your own peer's activity in order to keep your organization's infrastructure in check. Without the act of monitoring your employee's activity you can be left with a quite large amount of risk and damage to your company.

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