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CYSE 200T

Cybersecurity Technology and Society

Human Factors and Budget Allocation

Cyber security departments are often limited by budgets which leads to making hard decisions on what can be achieved and what cannot. Both training and technology are expensive. When it comes to balancing a budget, training should be prioritized and technology should be upgraded when absolutely necessary.

Human Contribution to Cyber Threats

Cyber threats are not completely made up of computers and networks. There are human contributions that go into making them possible. While weapons can be digitized and used in attacks there must be someone behind the attack. Humans have to plan, engineer, and carry out the attack. The technology is nothing without someone to put it to use. Oftentimes the humans behind the systems are forgotten. When, in fact, it is very important that they are understood to mitigate cyber threats (Pomerleau, 2021).

Importance of Training

Cyber security training helps prevent careless human error in an organization. For example, attackers often use phishing emails to gain access to a system. After going through proper training employees will be more vigilant about what they are opening on work devices. This could stop easy access and save the company money in attacks and breaches. In addition training on compliance, insider threats, and data management is also necessary (*What Is Security Awareness Training and Why Is It Important?*, n.d.). While this training is necessary it can be costly depending on the size of an organization. Training is usually calculated per employee per year, although it can be bundled depending on the provider (*Cybersecurity Awareness: How to Plan Your Budget*, 2022).

Importance of Cybersecurity Technology

In addition to human factors, cybersecurity technology is extremely valuable to an organization and is what allows the department to do their job. Adding additional technology when necessary allows the organization to stay efficient and proactive. Staying up to date with technology allows for faster response times, vulnerability patches, and increased situational awareness. Technology is constantly evolving so staying up to date can be difficult and expensive (*Why Being Up-To-Date on Cyber Security Is Important*, 2018). It is important to assess what additions are necessary and what is not.

Allocation of Limited Budget

When dealing with a budget balance is of utmost importance. As a CIO I would prioritize training over additional technology in most situations. Human factors carry a lot of weight and the budget should reflect that. In addition, if new technology is added there will have to be training on how to handle it. I wouldn't want to add something new if there is no budget to train employees on how to use it. Adding new technology can be very expensive and take up a lot of room in the budget so it may have to take up more by default. There would have to be a very good reason to spend money on new technology. I would want to make sure I am not throwing money at a problem that doesn't even exist. Nevertheless, I would make sure to prioritize training and not cut corners on it.

Conclusion

In conclusion, it is important to have money allocated for both aspects of cybersecurity. Having the proper technology and employees with the knowledge to operate it is essential to be effective. Overall, I would prioritize training over additional technology. The technology wouldn't be very useful if there is no one to operate it.

References

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