

Brandon Creech

Professor Yalpi

CYSE 201S

November 21, 2023

The Importance of Security Analysts to Society

Career Name - Security Analyst

Overview - The main task for a security analyst is to protect data by monitoring and preventing cyberattacks. Often times they will implement firewalls into the system to protect vital assets of organizations such as data and network. It is a career that is now seeking higher demand due to increasing reliance on technology. They work together in coordination with other employees in the organization to design strategies on how they can strengthen infrastructure and minimize weaknesses (CyberDegrees 2023).

How Professionals in this Career Require and Depend on Social Science Research and Social Science Principles -

Being a security analyst requires elements of social science in order to fulfill the role it has in an organization. A security analyst does not always work alone, but rather it starts with coordinating with other employees to achieve the organization's objective. Not only do they have to discuss and create strategies with employees in meetings, but they also create disaster recovery plans which are formulated plans to help a company recover from a data breach, discover the cause, and prevent it in the future. Aside from coordinated plans and strategies,

security analysts provide top-of-the-line education to employees to knowledge them on scenarios and what to do in certain situations. Best practices may also be taught to optimize the tools they have at their disposal. (Grand Canyon University 2023). When it comes to social science research, they often research and study reports from their own organization and others to study patterns on how secure infrastructures are in order to make improvements. They also stay updated on current forms of malware and hackers through the news which helps them stay alert to constant threats to cybersecurity. The information they learn from these actions helps them develop strategies that they can discuss with fellow employees (Duggal 2023). Without security analysts utilizing social science in their role, organizations would be much more vulnerable because then they would lack the communication needed to defend against cyberattacks. Security analysts have to do whatever they can to maximize their role within cybersecurity and their organization. They are a key role of any organization and have to be one step ahead of hackers so they can protect important assets, including the consumers.

Key Concepts from Class and How Those Concepts are Applied to this Career (How it relates to their daily routines) -

There are many key concepts learned from the CYSE 201S class that apply to cybersecurity as a whole. They are crucial to cybersecurity either by how it helps a person fulfill their role or how they are applied to the field. In this case, social behaviors from Module 10 are one of many vital concepts required in fulfilling the role of a security analyst. Because being social overall is important in the position, possessing the right personality traits show that the person is the right fit. The social behaviors required and fit the most include being a systemic

thinker, team player, technical and social skills, and communications (CYSE 2015 Module 10, slides 22-23). This is how each of them are applied to the daily routines of a security analyst:

Systemic thinker – With being a systemic thinker, security analysts need to be able to vision the right chemistry with the organization's infrastructure, including the employees, framework, and security system as a whole. They also have to think about the consequences and benefits of one action to another for the organization (Slide 22).

Team player – A team player means working with others in the organization to achieve objectives is a vital element and makes up the social aspect of a security analyst. It provides functionality to the organization and the security analyst's role as many of the duties of a security analyst involve working together. It has become a more increasing demand of cyber domains to work together as a team, which means security analysts are less likely to work on their own.

Technical and social skills – As previously already stated, social skills are a key attribute of being a successful security analyst. Security analysts need to be socially active by discussing with other members their expertise and how they can contribute to the team plan, creating a chemistry that benefits the group. The employees are often sought as the most vulnerable component of an organization's infrastructure, which is why technical skills are needed by the security analyst and others to strengthen defenses. Technical skills need to consider all possible scenarios and what improvements are necessary to what parts of the system to eliminate the vulnerabilities. Technical skills can also include education which is what security analysts can provide to employees to give them better knowledge (Slide 23).

(How this Career Relates to Marginalized Groups and Society in General)

A security analyst is one of many positions in the cybersecurity sector that lacks the diversity necessary from marginalized groups to better find problems within critical infrastructures. They are also more deserving of such a position because it has been reported per Aspen Digital Tech Policy that only roughly 9% of experts in cybersecurity in the United States are Black, while 8% are Asian, and 4% are Hispanic. Security analysts and cybersecurity as a whole deserves of more diversity and having security analysts from marginalized groups showcases how open the organizations are to accepting people from all aspects of life (Allen 2022). Security analysts relate to society because they are a key position in a cybersecurity organization that protects the consumer and their personal information. They make the consumer their priority and can contribute to society by working to reduce cyberattacks and data breaches, making the online space safer. Security analysts are part of the frontline of making online safer for consumers and reducing the threat hackers make on that spectrum.

In conclusion, security analysts play a key part in ensuring safety of the consumer, critical infrastructure, and the online world. They use social science effectively to perform their role within the organization to discuss vulnerabilities, implement plans, and improve the knowledge of the employees on a case-by-case basis. Specific attributes such as being a systemic thinker, team player, and having technical and social skills contributes to the overall success of being a security analyst while being an importance to both society and marginalized groups. Security

analysts will continue to be the key to the reduction of cybercrime and a better quality of life online future.

References

Allen, B. (2022, October 12). *Council post: Minorities and the Cybersecurity Skills Gap*. Forbes.

<https://www.forbes.com/sites/forbestechcouncil/2022/09/30/minorities-and-the-cybersecurity-skills-gap/?sh=599709a7f3f4>

Duggal, N. (2023, October 20). *What Does a Cybersecurity Analyst Do? (a complete guide in*

2024). Simplilearn.com. <https://www.simplilearn.com/what-is-a-cyber-security-analyst-article>

Security Analyst Career Overview: Cyber Degrees. Explore Cybersecurity Degrees and Careers |

CyberDegrees.org. (2023, March 20). <https://www.cyberdegrees.org/jobs/security-analyst/>

What Does a Cybersecurity Analyst Do? GCU. (n.d.). <https://www.gcu.edu/blog/engineering-technology/what-does-cybersecurity-analyst>

Professor Yalpi. CYSE 201S Module 10, Social Cybersecurity.