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Reflection #2

## **Internship Reflection – Researching Goldilock Firebreak**

Over the past three weeks of my internship at KALO, I have been given a research-oriented task that has allowed me to understand the process of evaluating the effectiveness of cybersecurity technology before a company decides to enter into a business deal with the company. My task was to research a company called Goldilock and one of the company's main products, called Firebreak. This research will help the company understand if they should enter into a potential business deal with the company. Specifically, I have been asked to research the potential profitability of the product, the reliability of the product in terms of cybersecurity, and the potential compliance of the product with the military if they were to enter into a government contract.

The Firebreak technology is an interesting cybersecurity hardware device since it is intended to remain dormant until such time that there is a detected cyber threat or abnormality in the system. The device is not constantly interfering with the operations of the system but is essentially waiting in the background while keeping an eye out for any abnormalities in the network. When there is an abnormality detected in the network, the device is then capable of launching a response payload that is intended to counteract the detected threat and prevent the escalation thereof. The idea behind this technology is to essentially provide a barrier that is intended to activate only in response to the detection of an emergency or threat.

One of the major aspects of my research was essentially determining if this technology would prove to be reliable in practice. Being reliable is extremely important in the context of dealing with cybersecurity technology, especially if this technology is intended to be used in scenarios that involve sensitive information and national security interests. I essentially looked into how the Firebreak technology operates from a conceptual standpoint and how this technology would

essentially help minimize unnecessary system interference while providing an effective defense. The advantage with this technology is that the hardware essentially operates independently from the system and could prove to be more difficult to disable in the event of an intrusion attempt.

Another significant part of my research was looking at the issue of profitability. KALO is interested in contracting its Firebreak product with the United States military to combat foreign cyber attacks. This means that I had to think about how valuable this technology could be. The reality is that cybersecurity attacks by foreign entities are becoming increasingly sophisticated. This means that a technology that can automatically respond to these types of attacks, keeping them at bay, could be incredibly valuable. If it is effective, it could be a huge boon for KALO, as well as Goldilock.

Military regulations were another part of my research. The reality is that any technology that is going to be used in a military context must be capable of meeting certain regulations. This means that I had to think about how well a technology like Firebreak could meet these regulations. The reality is that, as a hardware-based solution, it could be advantageous in terms of meeting these regulations. The reality is, however, that any technology that is going to be used by the military must be tested, certified, and approved.

This assignment has given me a better understanding of how cybersecurity solutions are being evaluated from a technical and business standpoint. In many instances, the cybersecurity expert is not only responsible for protecting the organization from threats, but they are also responsible for helping the organization decide which solutions are worth investing in. Being able to analyze a product in relation to security, dependability, and profitability is a skill that is necessary in the cybersecurity industry.

## **Conclusion**

My experience over the past three weeks at KALO has given me a better understanding of the role of cybersecurity in the overall defense of the organization and how it extends beyond the technical level of defense. Researching the company Goldilock and their product Firebreak has given me the opportunity to learn more about how new security solutions are being evaluated in relation to dependability, profitability, and compliance. The possibility of using this product to help protect the U.S. military from international cyber threats is just another example of how the cybersecurity industry is affecting the world at large.