Option #1: Assessing the Impact Level for the Loss of Confidentiality, Integrity, and Availability

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Introduction

The CIA Triad consists of three concepts: confidentiality, integrity, and availability. The CIA Triad is the foundation of security objectives for both data, information and computing services (Stallings and Brown, 2014). Confidentiality is the act of protecting information from unauthorized access (Henderson, 2019). Integrity is information that is accurate and consistent (Henderson, 2019). Availability is information that is available when it's needed (Henderson, 2019). In the case of the contracting organization, the pre-solicitation phase contract information and the routine administrative information have certain levels of impact when there is a loss in confidentiality, integrity, and/or availability.



Note. Adapted from Walkowski, D. (2019, July 9). What Is the CIA Triad? F5. Retrieved

November 19, 2021, from

https://www.f5.com/labs/articles/education/what-is-the-cia-triad

Pre-solicitation Phase Contract Information

The pre-solicitation phase contract information is the information of the clients such as email addresses, phone numbers, location, etc. Any loss of confidentiality, integrity, and/or availability would result in a high impact of loss. Stallings and Brown (2014) define a high impact of loss as having a catastrophic negative effect on operations, assets, and/or individuals of the company. Because the attacker now has the information of the client and can now turn the attention onto the client rather than the company and puts the client at risk for his or her information being stolen. That will, therefore, damage the reliability and reputation of the company. That is why pre-solicitation phase contract information needs to be well-secured because human error, carelessness, or inadequate security controls can result in a high impact of loss of the information (Walkowski, 2019).

Routine Administrative Information

The routine administrative information is the contact information of the employees themselves, protocols, and procedures. Any loss in confidentiality, integrity, and/or availability would result in a moderate impact of loss. Stallings and Brown (2014) define a moderate impact of loss as a serious negative effect on operations, assets, and/or individuals of the company. Routine administrative information is still sensitive, but not as sensitive, as the pre-solicitation phase contract information. The exposure of the routine administrative information may not cause as much direct damage to the company as the sensitive data would; however any breach of company data could have the same level of brand damage if the public is made aware of it.

All-Around Information System

The all-around information system is the combination of pre-solicitation phase contract information and routine administrative information. The company is responsible for both their own information and the clients' information and the clients are putting trust in the company to keep their information safe and secure. Losses can cause the company to lose business and even damage its reputation. The company won't be reliable enough to keep other clients' information secure. Any loss in confidentiality, integrity, and/or availability would result in a high impact of loss. This is because not only is the clients' information at a risk for loss, but the company's information is as well. This makes it especially important to keep this information confidential, integral, and available.

Conclusion

The CIA Triad is a fundamental concept in the cyber security world. The three concepts that make up the CIA Triad are confidentiality, integrity, and availability (Stallings and Brown, 2014). An information system used by a contracting company contains pre-solicitation phase contract information and routine administrative information. Both data sets are sensitive but the pre-solicitation phase contract information would result in a high impact for loss and the routine administrative information would result in a moderate impact for loss.

References

Henderson, A. (2019, December 24). *The CIA Triad: Confidentiality, Integrity, Availability*. Panmore Institute. Retrieved November 19, 2021, from http://panmore.com/the-cia-triad-confidentiality-integrity-availability

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