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The CIA Triad

What is the CIA Triad?

The CIA Triad is a model of policies followed by organizations for purposes of information security. It contains the trio of policies: confidentiality, integrity, and availability, all of which serve as the important foundation for every IT department in an organization. Understanding the meaning of each policy and its significance to the world of cybersecurity is crucial to any employee in terms of protecting an organization's assets. (Chai, 2022, pg. 1)

Confidentiality- Rules set by the organization that restricts access only to certain people.

- Relative to the meaning of privacy, confidentiality is essential to documents or data that contain important information to the organization and want to keep it from the public by concealing it.

Integrity- Relying on the information being truthful and credible.

- Organizations need to often make sure that the data they are exchanging has strong validity and they aren't giving data to unauthorized personnel. (pg. 2)

Availability- The ease of access of this information people of authority.

- Always ensuring that people that have great authority within the organization is able to access this classified information, as they are one of the first ones that should be able to view it.

All together, these three policies have a connection to each other. This forms a pyramid that if followed, it creates a strong security system. It also helps organizations figure out how much value is being put into these key areas. (pg. 2)

Authentication & Authorization

Authentication and authorization are both very important processes that the employees must take to protect their vital information. To put it simply, authentication evaluates the identity of the user trying to access the information and authorization determines if they should be able to access it or not. Both of these processes play their own role in a connection system and connect with each other. However, it's important to note the differences between the two. (Andrioaie 2022)

Differences-

- A simple way of understanding the key difference between authentication and authorization is that authentication involves the gatekeeping of data/information through means of passwords and codes, whereas authorization involves a set of rules set by the organization.

- A good example to represent this is by thinking of those CAPTCHA tests you see on Google that determine if you are a bot or not. The CAPTCHA test itself serves as the authentication and by solving it, you are proving you are not a bot. The authorization is Google letting you access the information as they have determined you are indeed not a bot.

All in all, both the topics of the CIA Triad and Authentication vs. Authorization serve a purpose in the industry of Cybersecurity. They are the basic building blocks of knowledge that should be learned if one were to pursue this field.

Works Cited

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