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The CIA Triad

The CIA Triad is a model that was created for organizations which guides policy for information & data security (Chai). CIA stands for Confidentiality, Integrity, and Availability. The word confidential means to keep something private or secret. Having confidentiality means that you are essentially protecting sensitive information. For example, things we humans keep confidential are government information, financial information, health information, and social security numbers (Chai). Integrity means ethical, transparent, or trustworthy. If sensitive data is tampered with or changed, then the integrity is questioned. If sensitive data or information remains the same for example during a transaction, then the integrity of the data remains secure (Chai). The word availability means accessible. If information or data is inaccessible for any reason, then problems could arise. For example if a healthcare system goes offline or a tv provider goes offline during a main event, then there is a lack of availability which creates problems (Chai). All components in the (CIA) work together to ensure data and information is secure, accessible, and trustworthy for users.

Both authentication and authorization have to deal with the access of users (Okta).

Authentication is a verification process used to identify if the user is secure. There are plenty of

examples in the online world of authentication like face ID or fingerprint, username & password of course, and additional apps which provide services like 2-factor authentication (Okta).

Authorization confirms that the user has permission to access data, information, or resources.

Authorization means “you are able to” for example, when given access to a document only some “are able to” edit the document only if they have been authorized by the creator (Okta).

So in conclusion, the CIA ensures accessibility, privacy, and trust for organizations (Chai). As well as authentication and authorization, which both control the access a user has (Okta). All of these components work together to ensure that an organization is as secure as possible for users and runs smoothly all together.

Works Cited

“Authentication vs. Authorization.” *Okta*, Okta, Inc,

www.okta.com/identity-101/authentication-vs-authorization/. Accessed 13 Sept. 2025.

Chai, W. (2022, June 28). *What is the CIA triad? Definition, explanation, examples*. TechTarget.

<https://www.techtarget.com/whatis/definition/Confidentiality-integrity-and-availability-CIA>