The CIA Triad

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What is the CIA Triad?

CIA stands for Confidentiality, Integrity, and Availability in cybersecurity. The CIA Triad is the foundation for companies to solve problems and create security systems. Confidentiality, Integrity, and Availability have differentiation which help organizations solve problems based on their needs, which is why this system was setup.

Confidentiality

Confidentiality job is to make sure certain data is only available to authorized users, which also means to keep the information secret and private. An example would be a gaming company only having access to their unreleased game and not some individual who hacks into their system and leaks the game and information.

Integrity

Integrity means that no information/data should be altered and stays accurate. This strategy also falls under Confidentiality, because only authorized personnel can access this information, and if it is altered, only certain people can be blamed for the problem. An example would be an authorized user of information giving access to someone who does not have the proper permissions to access the information and change it around. The authorized user would be blamed for the problem and most likely let go of their position.

Availability

Avalibility is very important because the authorized user should be able to access the information/data any time they need to. An example would be when a power outage happens and the power company needs to access the power to turn the city back on. If they cannot access the information they need, there is nothing that could be done, which would cause major problems for the company.

Real-world example of Confidentiality

A great example of confidentiality would be the recent leak of Rockstar Games' GTA IV. A leaker by the name of CyberLeek got hold of the entire copy of GTA IV and leaked hours of gameplay, which the entire fan base of GTA saw. Rockstar Games put out a tweet which they addressed the leak and not sure how he got access to the game. Even though CyberLeek released earlier game footage, they were still able to get an entire copy of the game, which is not available for months on in. This example proves that organizations were not able to keep their data of the game secure enough, and someone was able to breach inside and leak the game, which also cost the company money, fan-base lost, and backlash.

How Can Problems Like This Not Happen Again?

Companies like Rockstar and other organizations can avoid hacks like this from happening by strengthening their security systems that detect when data is being accessed by unauthorized users when it shouldn't be. Organizations should use more strategies rather than just relying on the older techniques they use, which would help strengthen access, detect voulnerbilites, and they should secure their data more efficiently. Using better security

techniques would prevent situations like this from happening again, which cost companies millions.

"What Is the CIA Triad and Why Is It Important?" *Fortinet*, 2026, www.fortinet.com/resources/cyberglossary/cia-triad

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