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“What is Cybersecurity?”

Foundations of Cybersecurity - CYBS 3213

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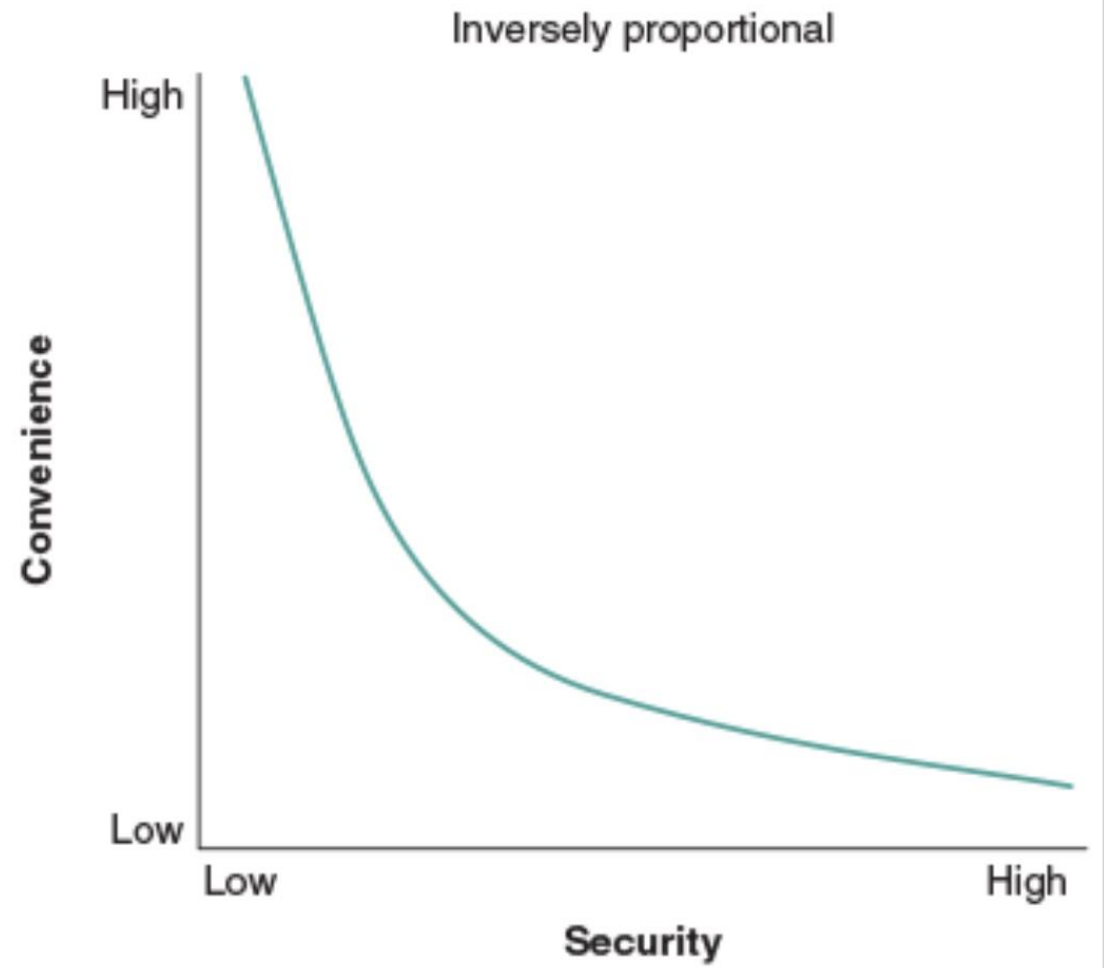
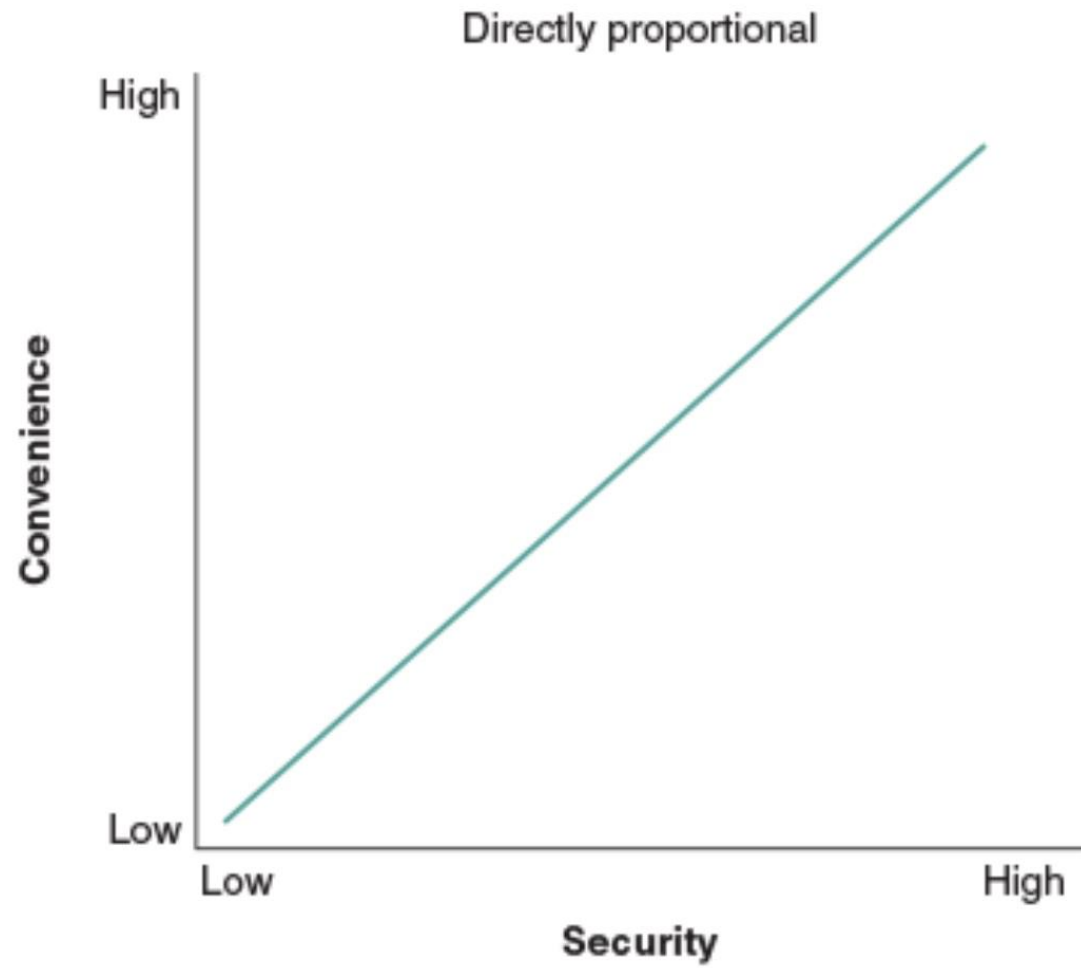


Checking In...

- Last time, we discussed the question, “How do people learn?” (Known Knowns; Practice; Outcomes; Goals)
- What was the most important concept that you learned in the last class?
- What was the muddiest (most unclear) point during the last class?



SECURITY



What is Cybersecurity?

- How would you define it?
- What are the elements of understanding cybersecurity?
- Why is cybersecurity important?
- **Why does it exist?**
- How long have we been dealing with Cybersecurity, in general?



Computer Fraud and Abuse Act of 1986

Created new Federal criminal offenses of:

- (1) property theft by computer occurring as part of a scheme to defraud;
- (2) altering, damaging, or destroying information in, or preventing the authorized use of, a federal interest computer; and,
- (3) trafficking in computer access passwords.
 - (a) Investigators have to prove the elements of a crime.
 - (b) Company cybersecurity personal can help with this.

Which of the following accounts for the greatest difficulty in preventing attacks?

a. Availability and simplicity of attack tools

b. Delays in security updating

c. Distributed attacks

☒ d. User confusion

Cybersecurity Definitions - 1

Academic:

“Cybersecurity is the organization and collection of resources, processes, and structures used to protect cyberspace and cyberspace-enabled systems from occurrences that misalign de jure from de facto property rights.”

Cybersecurity Definitions - 2

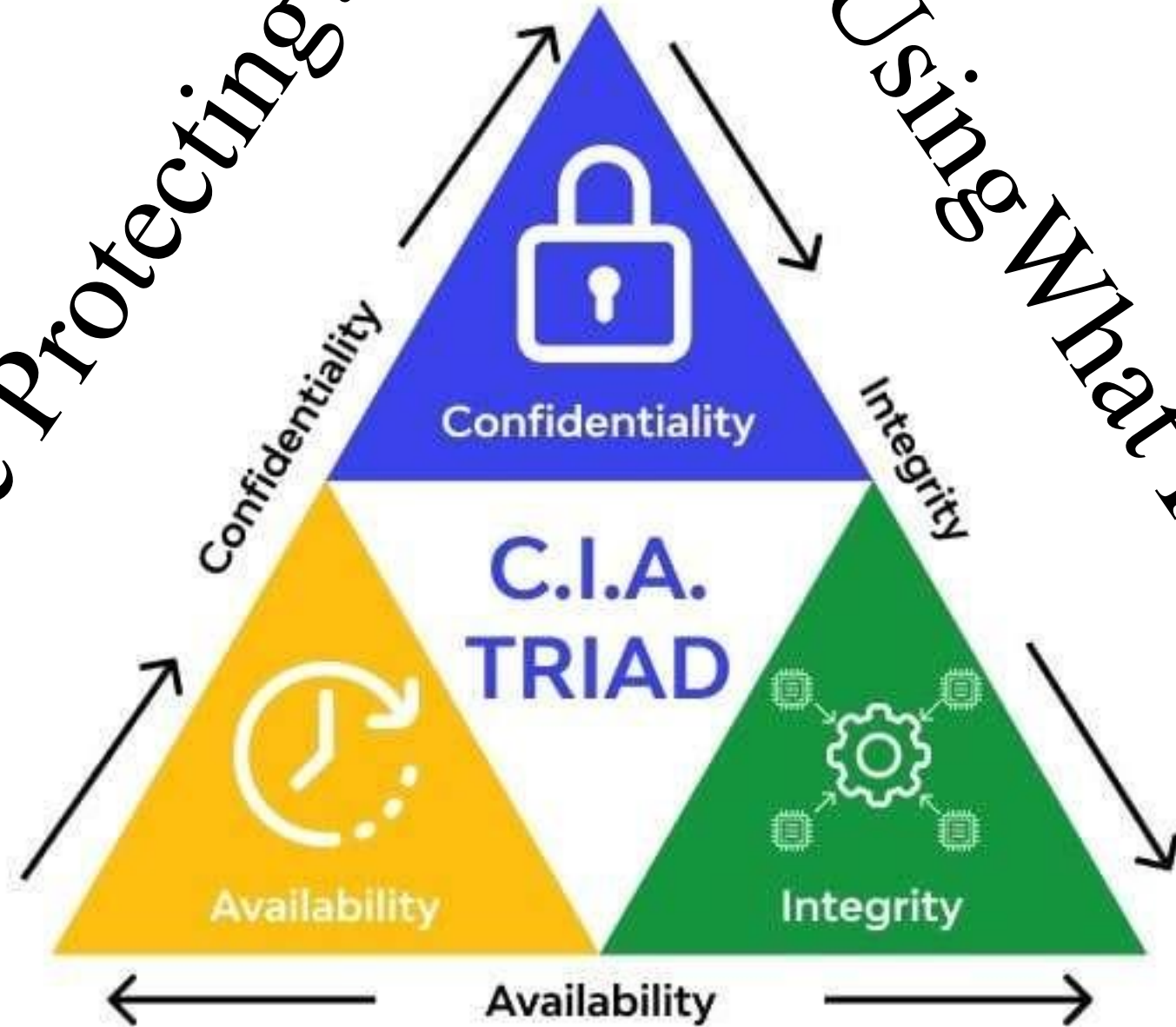
Ciampa:

“Cybersecurity is that which protects the confidentiality, integrity, and availability of information on the devices that store, manipulate, and transmit information through products, people, and procedures.”

Cybersecurity Definitions - 3

“Cybersecurity is the security of cyberspace.”

What Are We Protecting?



Using What Framework?

What Protections are Necessary to Accomplish the Triad?

1. Authentication – person is who they claim to be (why we use passwords and MFA).
2. Authorization – permission to use resources (hardware and software)
3. Accounting – record of who accessed what, from where, and at what time.

Which two statements are correct?



1. Some attacks can vary their behavior so that the same attack appears differently.

2. Attack tools still require a degree of skill and knowledge to use them.



3. The single difficulty that accounts for the greatest difficulty in preventing attacks is user confusion.

Which two statements are correct?

a. Cybersecurity is directly proportional to convenience.



b. Confidentiality ensures that only authorized parties can view the information.



c. Authentication ensures that the individual is who she claims to be and not an imposter.



CDK

CDK Hack Attack

<https://cybersecuritynews.com/cdk-hack-attack/>

