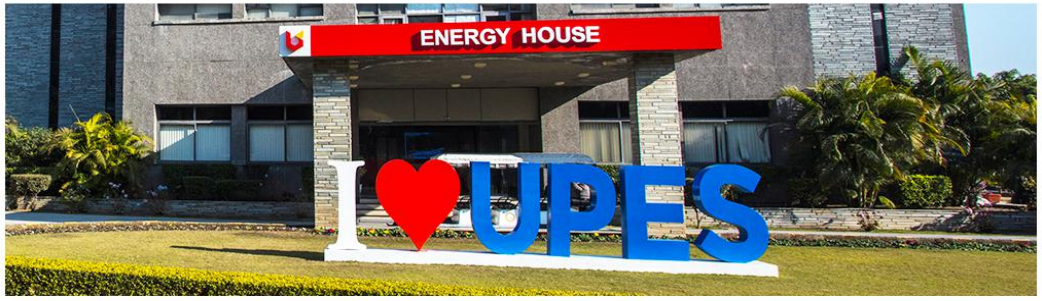


UPES

UNIVERSITY WITH A PURPOSE

Threats and Vulnerability

UPES
UNIVERSITY WITH A PURPOSE

Threats

- '...an indication that an undesirable event may occur' (Parker, 1981).
- '...any potential danger to information or systems' (Harris, 2002).
- '...circumstances that have the potential to cause loss or harm' (Pfleeger, 1996).

"If the objective of information security is to reach and maintain the CIA triad of information assets at a required level, threat is something that potentially can impair the CIA triad in the future."

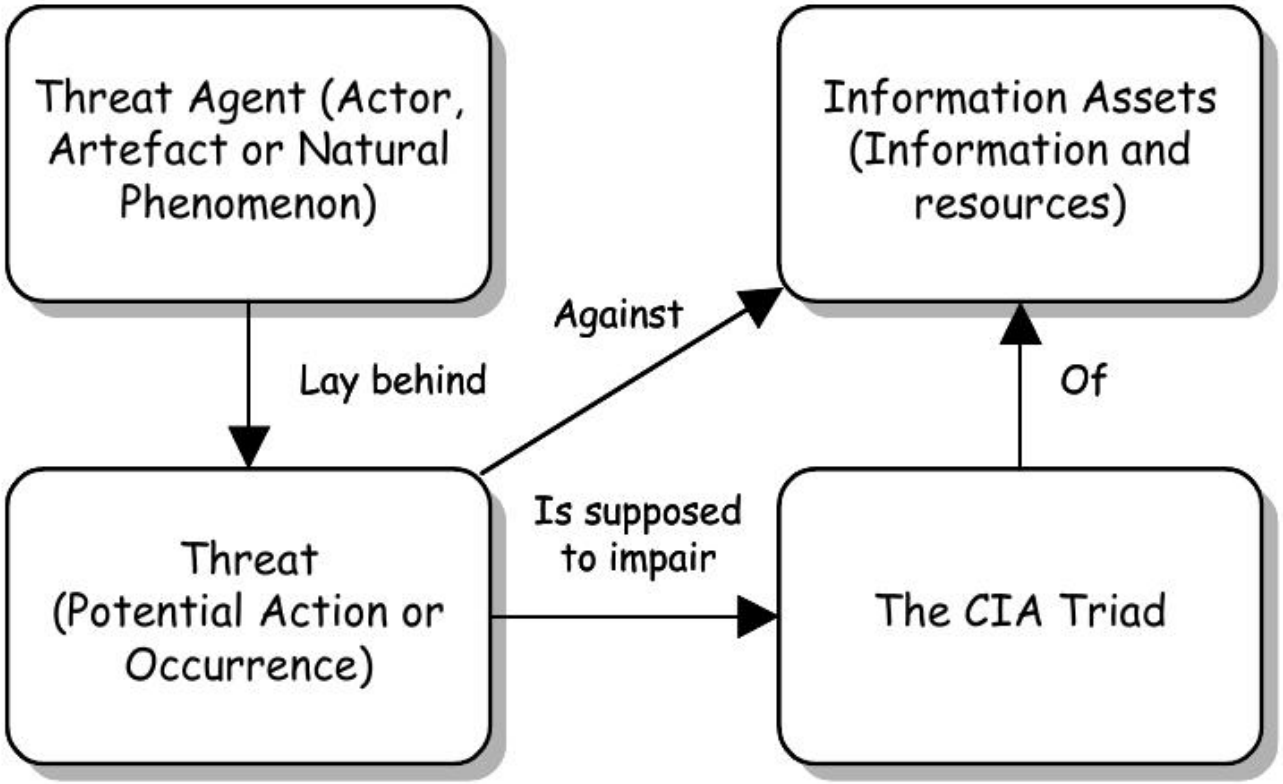
UPES
UNIVERSITY WITH A PURPOSE

“A threat consists of a potential action or occurrence that may affect the information asset’s CIA triad negatively.”

Threat Agents:

- Actors (humans or organizations)
- Human made artefacts
- Natural phenomena

UPES
UNIVERSITY WITH A PURPOSE



Human Threats

- Intentional
- Unintentional

Non-Human Threats

- IT Artefacts - Virus etc.
- Natural

UPES
UNIVERSITY WITH A PURPOSE

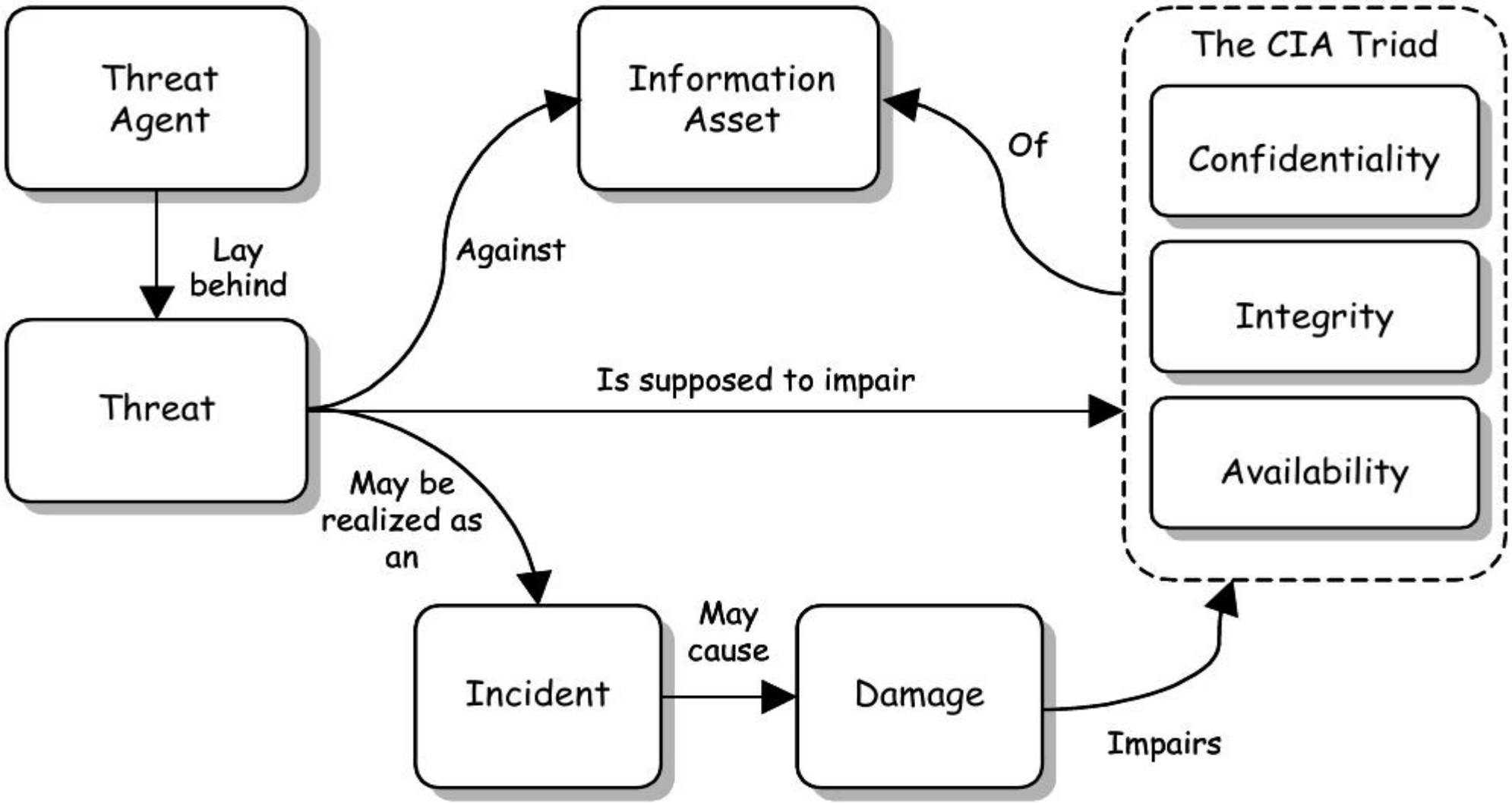
Physical Threats

- Floods
- Thefts
- Fires

Non-Physical Threats/Logical Threats

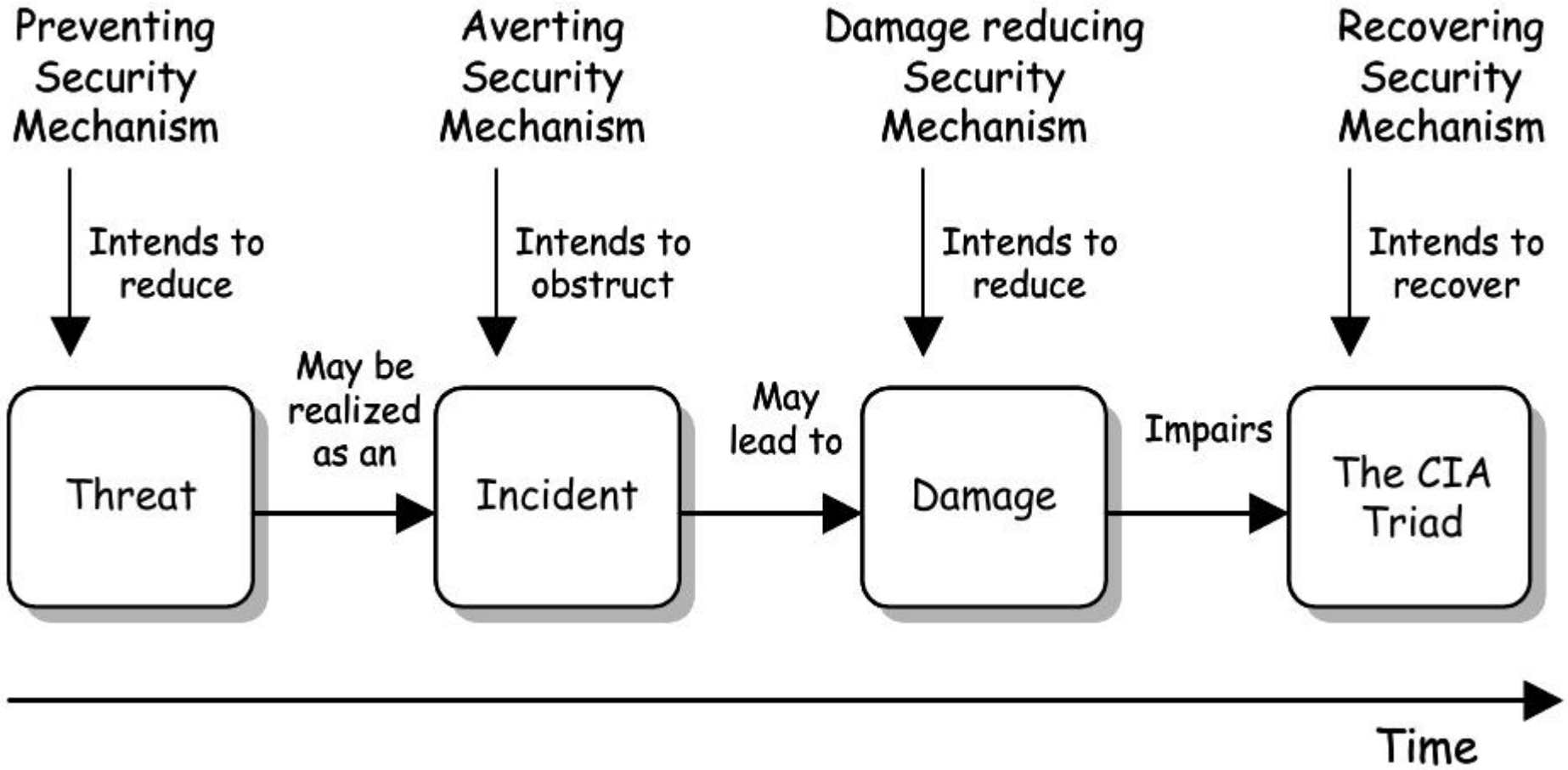
- Viruses
- Computer intrusion
- User's software mistakes.

UPES
UNIVERSITY WITH A PURPOSE



UPES
UNIVERSITY WITH A PURPOSE

Security Mechanisms

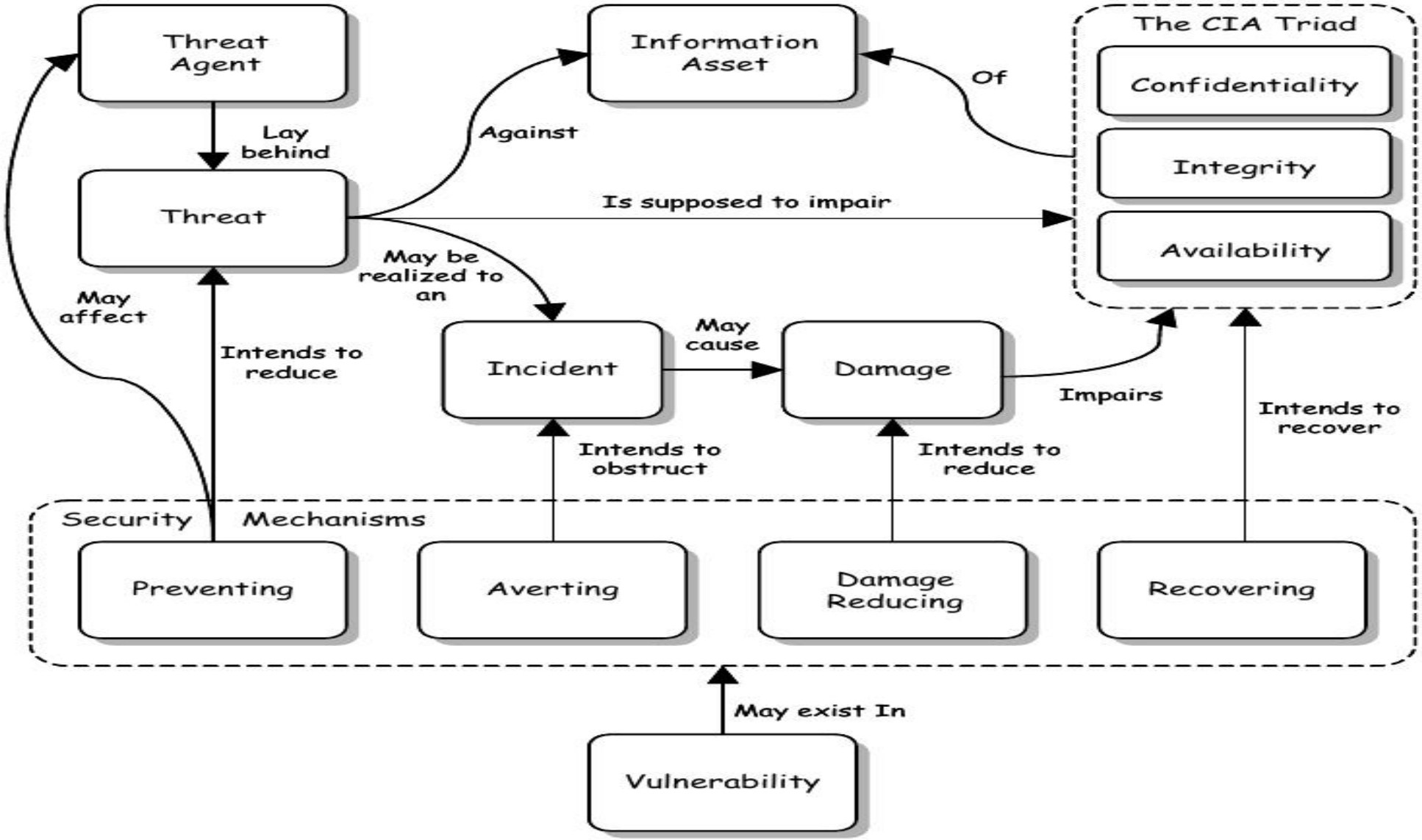


UPES
UNIVERSITY WITH A PURPOSE

Vulnerability

- Vulnerability is absence of security mechanisms, or weaknesses in existing security mechanisms.
- Vulnerability may exist in all of the categories of security mechanisms that are mentioned in the previous section, and may be known or unknown.

UPES
UNIVERSITY WITH A PURPOSE



UPES
UNIVERSITY WITH A PURPOSE

THANK YOU

UPES

UNIVERSITY WITH A PURPOSE