



## Learning Objective 2 - Technology

Presented by

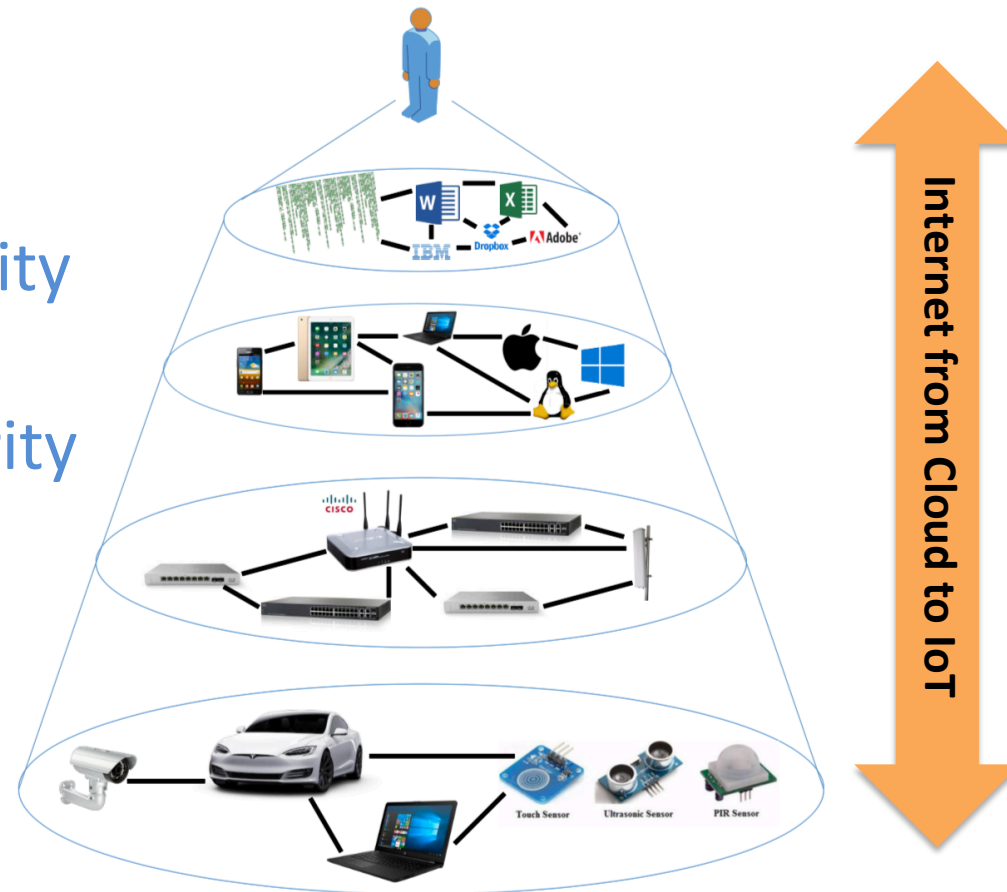
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# Concordia CS Holistic Approach

- User-Centric Security
- Application/Data-Centric Security
- System/Software-Centric Security
- Network-Centric Security
- Device-Centric Security



# Concordia Industrial Sectors

- Telecommunications (threat intelligence)
- Finance (risk assessment, fraudulent behavior detection)
- Transportation / e-mobility (connected and autonomous vehicles)
- E-health (cross-border data exchange, hospital digitalization)
- Defence (unmanned aerial systems, external interfaces)

# Reminder: Certification Survey – Technologies

	Telecom	Finance	Transport	Defence	Health	Overall
Internet-of-Things	8	2	1	2	1	14
Cloud	7	2	2	1	1	13
Artificial Intelligence	7	2	0	1	0	10
Mobile Devices	3	0	2	2	0	7
5G	5	1	0	0	0	6
Quantum	1	1	0	0	0	2

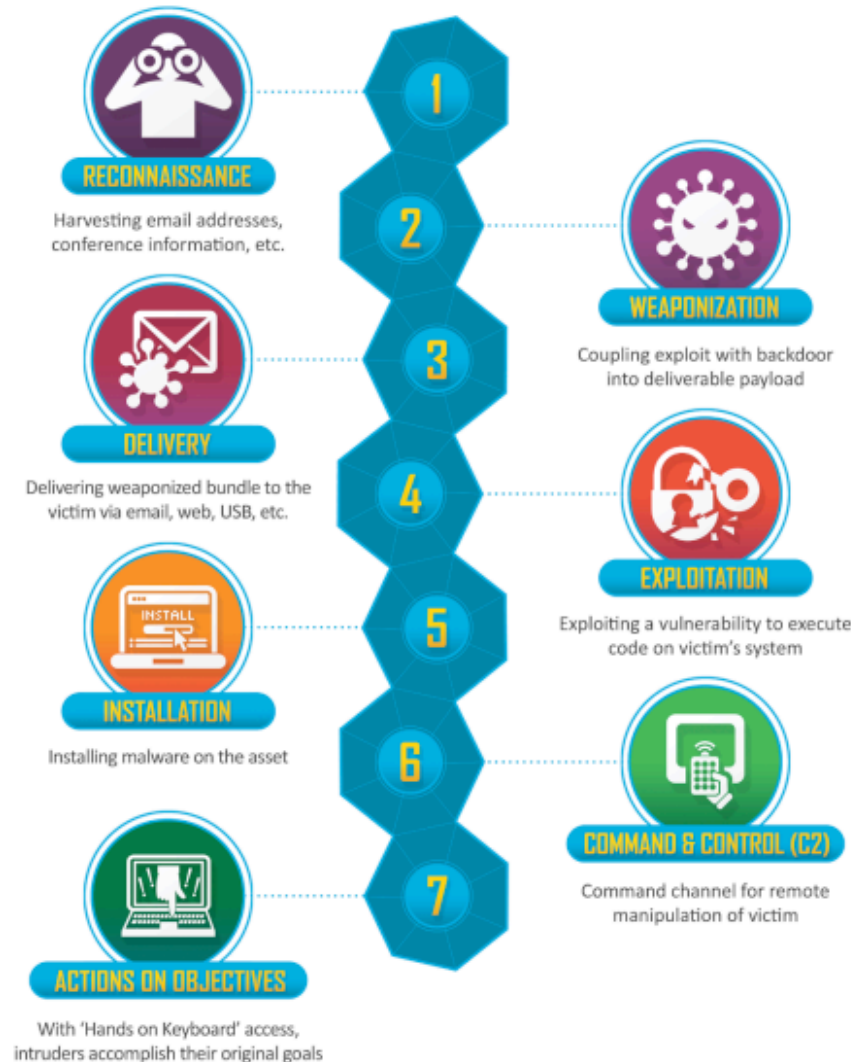
# Cyber-Defense Methods (NICE)

- Analyze
- Collect and Operate
- Investigate
- Operate and Maintain
- Oversee and Govern
- Protect and Defend
- Securily Provision



# Cyber-Kill Chain (CKC7)

- Reconnaissance
- Weaponization
- Delivery
- Exploitation
- Installation
- Command and Control
- Actions on Objectives

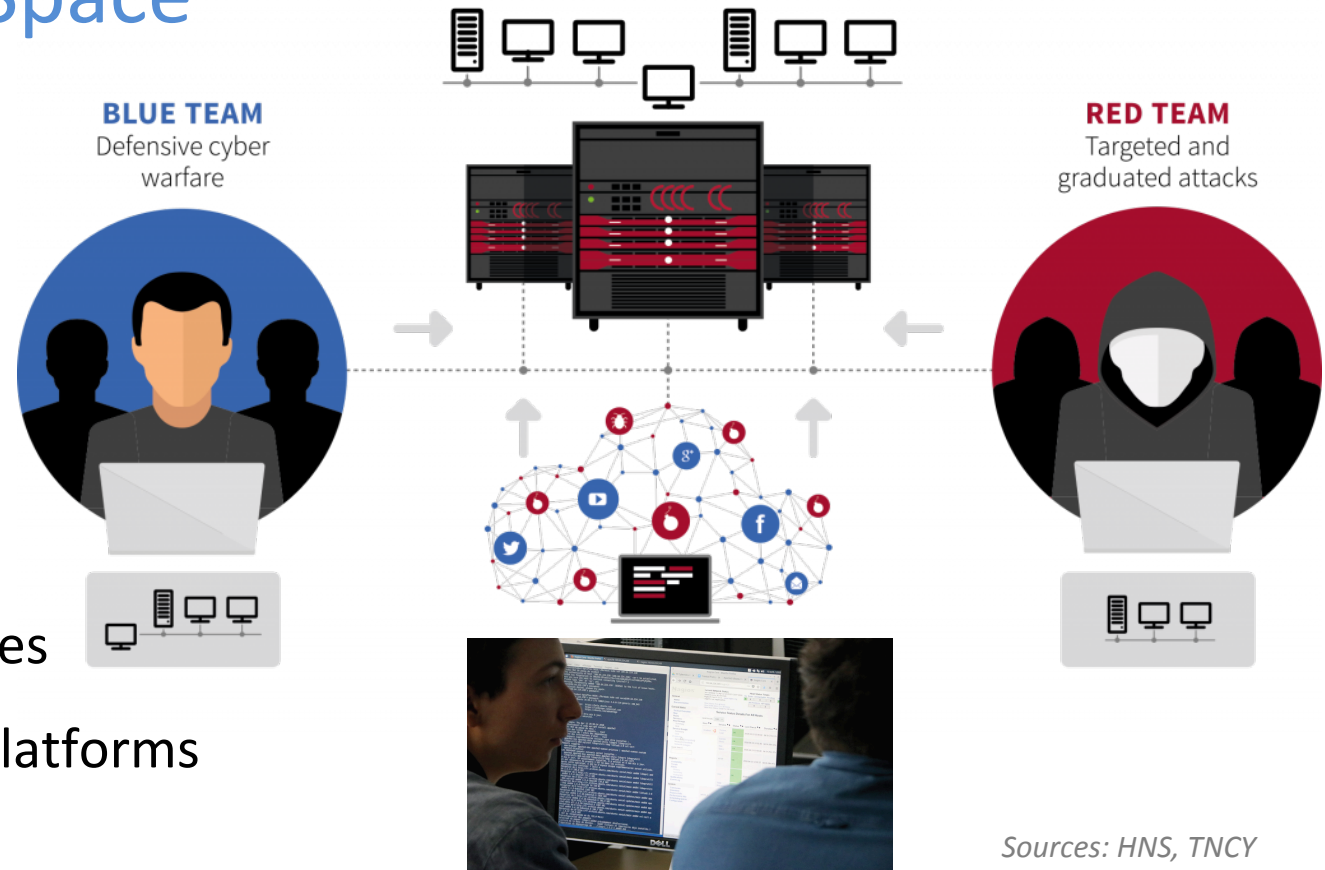


Source: LockHeedMartin

# Cyber-Ranges (in link with Task 3.3)

## • Simulators for the Cyber-Space

- Virtualized infrastructures (networks, servers, workstations)
- Training and experimentation
- Offensive and defensive sides
- Possible isolation to contain malwares, viruses, malicious activities
- Interconnection with other techn. platforms



Sources: HNS, TNCY

# Survey Analysis and Refinement

- Top-10 Skills related to Technologies
  - Overall Ranking, Ranking Per Industry, Examples
- Top-20 Knowledges related to Technologies
  - Overall Ranking, Ranking Per Industry, Examples
- Top-3 Technologies
  - Overall Ranking, Ranking Per Industry, Examples



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