

Overview of Cybersecurity Landscape of 2023

Where are we today?



- Networks are evolving to more locations, higher speeds and more devices.
- Connectivity is a part of every industry: Healthcare,
 Finance, Construction, Retail, Government, etc.
- Wireless rules the day.
- Ignorance, impatience and apathy are all around us.
- What could go wrong?





- Physical threats remain an issue, insider threats with employees leaking, stealing or sharing data.
- Phishing or other social engineering attacks are evolving.
- Cyber Attacks: Ransomware, Malware, APT(Advanced Persistent Threats), DDOS(Denial of Service Attacks).
- Supply Chain Vendors, partners, etc. have risks too.





- Artificial Intelligence and Machine Learning (AI/ML) Mis/Dis information, Increased social capabilities, potential for bias are here now.
- 5G Networks Attack surface increasing, a virtual decentralized network and devices exponentially more (Critical Infrastructure, Internet of Things, Autonomous Vehicles).
- Quantum Computing potential to exploit encryption vulnerabilities;
 cryptography for a post-quantum world.
- Edge Computing Bandwidth/Latency impact security capabilities.
- Cloud Security Access control, Identity management, Insecure Interfaces and APIs(Application Programming Interface), Configuration.
- Staffing/Training Insider threats are always an issue, but shortages are creating a costly environment for organizations as they fight for talent.

Threats are growing

And likely won't stop anytime soon!



Organizations today are increasing the pace of IT/OT convergence. What does this mean?

- Information Technology or IT allows for communication with remote assets.
- Operations Technology or OT impacts the physical world (physical assets, people, data, etc.). Often with decades of



deployment.

Something new is going on or off!

Growing Threat Landscape



This leads to often dramatic impacts in many industries:

- Smart Cities/Smart Military Bases
- Connected Communities
- Smart Buildings and Warehouses
- Smart Fleets, Logistics, Inventories, etc.
- Autonomous Vehicles
- Smart Agriculture





Operational Capabilities are exploding:

- Cities can control traffic, air quality, public safety
- Monitor video surveillance, alarms, grant access, etc.
- Control HVAC, monitor water or power usage
- Vehicle location, status, etc.
- Monitor soil, rainfall, temperature, etc.
- We can turn lots of things on or off





- 1. Guard the perimeter
- 2. Limit access
- 3. Have surveillance of assets and record it
- 4. Use authentication at change points
- 5. Extra security/scrutiny for administrative capabilities
- 6. Segment access
- 7. Strictly enforce policies and procedures (constantly train)





Have physical and virtual security plans

Some things are consistent



- Work with experts
- Have a plan
- Spend a few minutes each day on cybersecurity and you will do better than most!

For great support

go to: Home Page

CISA





Active Cyber Attacks

Let the Machines do it





Paul Wertz CEO 770-331-5494 or Paul@SherpaWerx.com

On the web at: https://sherpawerx.com

LinkedIn: https://www.linkedin.com/company/77826673/admin/



Reach out to us!

Let's start a conversation to see how SherpaWerx can help you.