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AN INFORMATION GUIDE

Awareness: The first step to Cybersecurity

Why are we the targets

Differences Between Cybersecurity and Information Security



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Digital vs. Non-Digital

One good example to differentiate the two areas is that while **cybersecurity only covers digital systems** and the threats related to those systems, **information security also includes non-digital form of data storage.**

For example, **printed files** are covered under an organization's **information security strategy** but **not its cybersecurity strategy.**

Differences Between Cybersecurity and Information Security

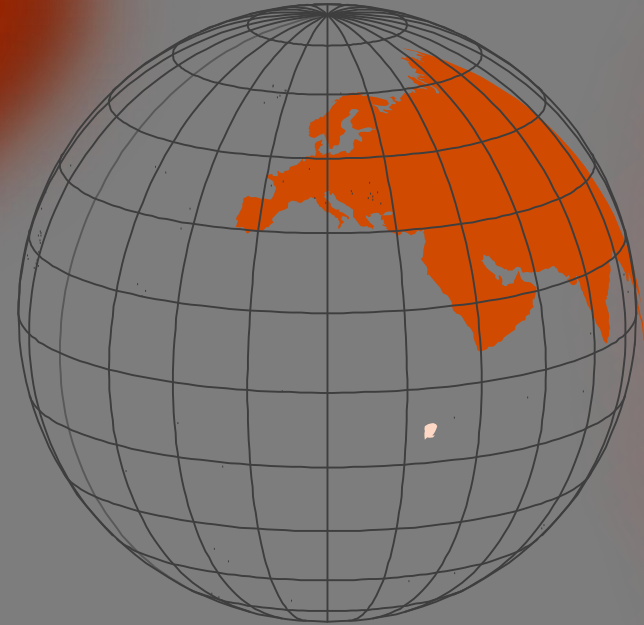
Human vs. Non-Human Threats

One of the ways that cybersecurity and information security **overlap is when we are considering the human element** or in other words human threat actors. An attacker can target the organization's data or systems with variety of different attacks.

However, while **cybersecurity is mainly focused on human threat actors, information security can also consider non-human threats.**

For example, **a fire in a records room may be considered as part of information security policy** rather than cybersecurity since it can also occur without human involvement.

Who is behind Cyber attacks



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What is Cybersecurity?



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Definition

- Is the practice of protecting the data from **outside the organization on the internet.**

Scope

- It deals with threats that may exist in the **cyber realm** such as protecting **social media accounts, personal information** etc.

Purpose

- To protect **against any threat in the cyber realm**

Protect

- Protects **electronic systems, networks and programs** from digital attacks.

Cyber attack threat actors



Activists



Cybercriminals



Opportunists



State-sponsored
attackers &
Terrorists

It used to be that state-sponsored attackers were the only ones that could develop and deploy advanced tactics, techniques and procedures. Increasingly, however, **anyone can be an Advanced Persistent Threat (APT).**

Cyber attack threat actors



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There are all sorts of individuals and groups that might wish to target your Organisation and try to use you as a way in.



Activists



Cybercriminals



Opportunists



**State-sponsored
attackers &
Terrorists**

Objective

- Destruction of data
- Publications of sensitive data
- Media attention
- Denial of access to service/system targeted

Cyber attack threat actors



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Activists



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Opportunists



**State-sponsored
attackers &
Terrorists**

Objective

- Selling stolen data
- Ransoming (data & operability)
- Arranging fraudulent transportation of cargo
- Gathering intelligence for a more sophisticated crime

Cyber attack threat actors



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There are all sorts of individuals and groups that might wish to target your Organisation and try to use you as a way in.



Activists
(including disgruntled employees)



Cybercriminals



Opportunists



**State-sponsored
attackers &
Terrorists**

Objective:

- Getting through security defences
- Financial Gain

Cyber attack threat actors



There are all sorts of individuals and groups that might wish to target your Organisation and try to use you as a way in.



Activists
(including disgruntled employees)



Cybercriminals



Opportunists



**State-sponsored
attackers &
Terrorists**

Objective:

- Gaining knowledge
- Disruption to economies and critical national infrastructure

Risks associated with social media



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Social media can be a tool for cybercriminals to get more information about you or a source of information breaches if you're not careful about what you share.

User information is available to anyone who knows where to look.

A network of known or connected peers, family members or friends may be identified.

Attackers can impersonate a known point of contact of yours to gain additional information.

Anything you put online is there forever and can spread quickly.

If you realize that you are sharing sensitive information on social media that you want to delete - it may already be too late.

Use social media safely

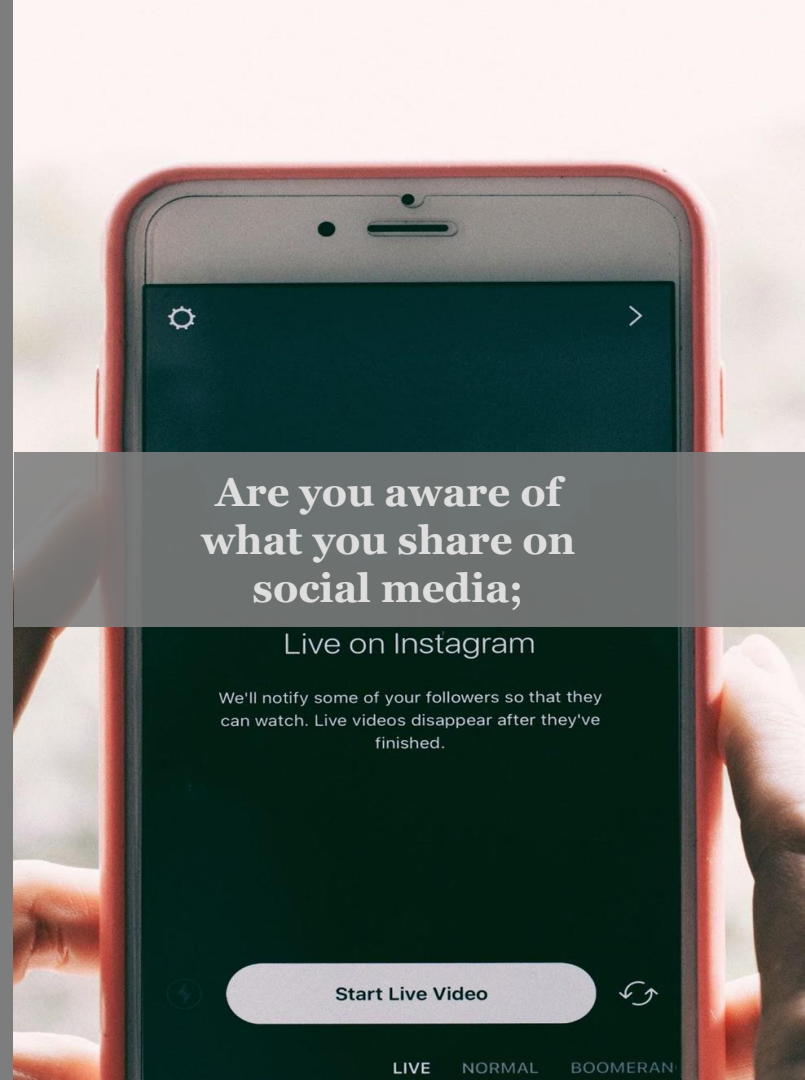
Social media can be used by criminals to obtain information about you and leverage it for a targeted phishing attempt. Also, sharing information on social media can be a breach if you're not careful.

A few tips for using social media...

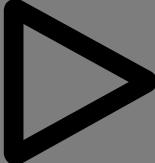
Use common sense while using social media.

Always keep separate business and personal accounts.

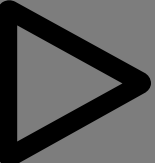
Define your profile privacy settings to control the type of personal information you share.



Passwords



Treat your password
like your toothbrush.
Don't let anybody else
use it, and get a new
one every six months.
--Clifford Stoll--



The Use of AI

What is Artificial Intelligence(AI) ?



These systems work with large amounts of data to learn from and analyze the data for correlations and patterns which then will be used to make predictions.

Can it be used against me?



AI can be employed by cybercriminals to craft advanced and challenging phishing attacks. For instance, they can utilize AI to produce authentic-looking fake emails or websites swiftly. In a matter of seconds, the AI has the capability to replicate a website and tailor it to create the illusion of authenticity.

Is AI already in our lives?



Yes it is! AI can be found almost everywhere and some of us already use it for daily assistance, such as Siri (iOS) or Google Assistant (Android). AI is also commonly found in business, education, finance, law and many other fields with the sole purpose of making our lives easier.

The Use of AI

Can it be used against me?



Obviously it can !
With the use of deep fake they can impersonate you.

How will it be used against me?



Cyber attackers have the ability to pinpoint specific individuals or entire organizations as targets. AI can track email addresses and generate highly personalized dynamic emails with the intent of evading countermeasures.

The Use of AI



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Do you have
any questions?