Envision IT Partners

NoCO Manufacturing Partnership

The Importance of CYBERSECURITY for MANUFACTURERS

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What is a Hacker?

A **Security hacker** is someone who seeks to breach defenses and [exploit](#) weaknesses in a [computer system](#) or [network](#).

Hackers may be motivated by a multitude of reasons:

◆ Profit (Cryptoware)

◆ Protest

◆ Information gathering

◆ Challenge

◆ Recreation

◆ To evaluate system weaknesses to assist in formulating defenses against potential hackers

Tactics

There are several recurring tools of the trade and techniques used by computer criminals. Here are just a few:

◆ Security exploits - A security exploit is a prepared application that takes advantage of a known weakness

   – As exploits are identified software vendors are typically quick to patch the exploits. It imperative that your IT team deploy the patches across your network (Servers, desktops and tablets)

   – The CEO of Equifax blames their massive breach on a single person in the IT department who failed to deploy the patch that could have prevented the breach

How

◆ Brute-force attack – A trial-and-error method used to obtain information such as a user password or personal identification number (PIN). In a brute force attack, automated software is used to generate a large number of consecutive guesses as to the value of the desired data.

– The following measures can be used to defend against these attacks

- Require users to create complex passwords

- Limiting the number of times a user can unsuccessfully attempt to log in

- Temporarily locking out users who exceed the specified maximum number of failed attempts

Passwords

It is NOT okay to use an easy to remember password

Your password should be at LEAST 8 characters and must contain 3 of the following characteristics

- Numbers – 1, 2, 3, 4, 5, 6, 7, 8, 9

- Capital Letters – A, B, C, D...

- Lower Case Letters – a, b, c, d...

- Symbols - ! @ # $ % ^ & *

Do **NOT** use names, words or numbers that have a personal connection to you

Tip: Make up a phrase you can remember then use part of the phrase to create your password

Example: phrase - "I went to the store at 11:00 am" password – Iwtts@11a

Never share your password – and if you do, change it!

How

◆ Spoofing attack (phishing) - A spoofing/phishing attack involves one program, system or website that successfully masquerades as another by falsifying data and is thereby treated as a trusted system by a user or another program

- Email attachments are the number one risk for infection

  - Spam/Virus filtering

  - Train your users to spot suspicious content and have policies in place on how to handle such content

- Spear Phishing has become more prominent

Hottest Scam
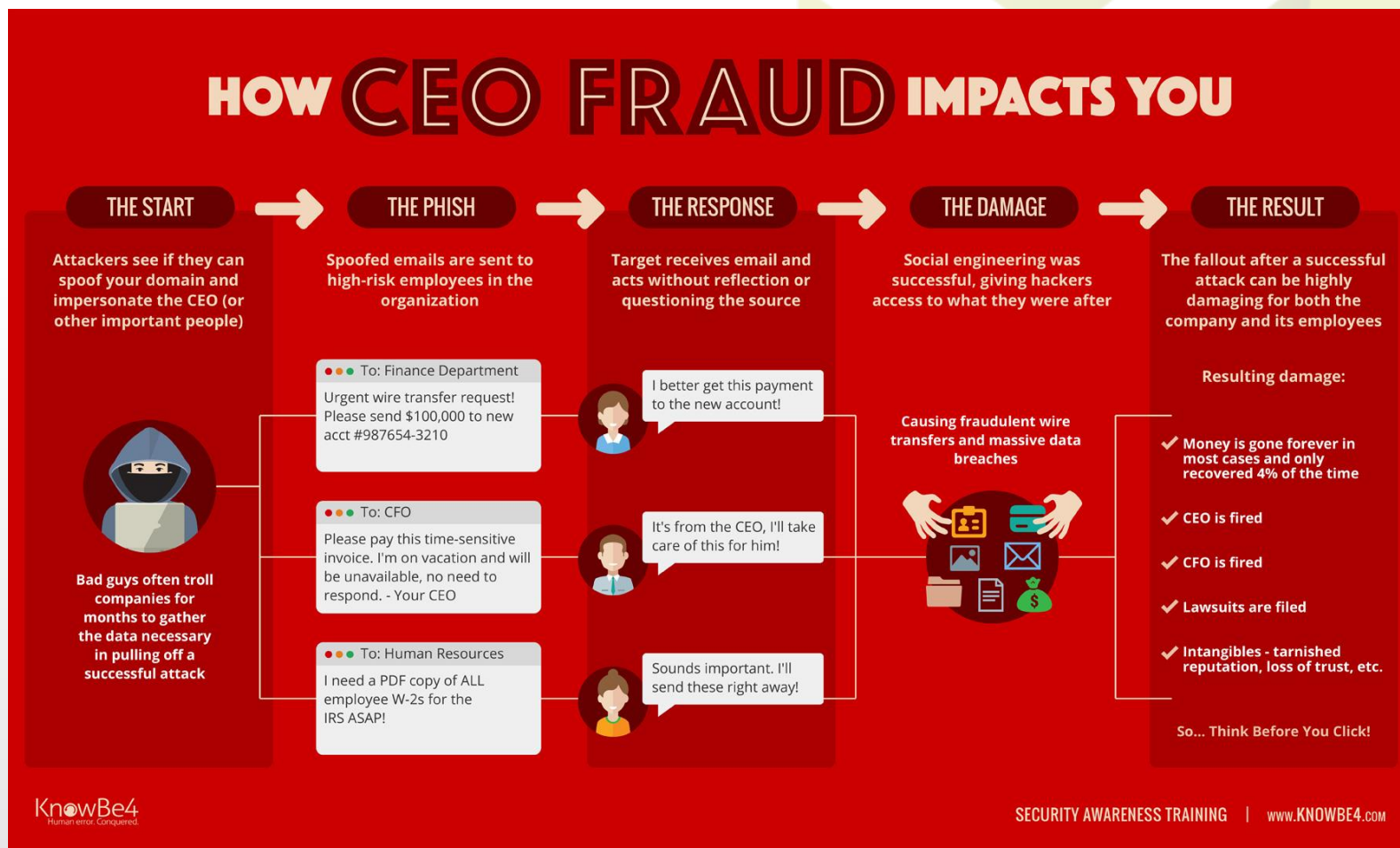
How

◆ Computer virus - A [virus](#) is a self-replicating program that spreads by inserting copies of itself into other executable code or documents.

– Have up to date Antivirus on all systems

• Centrally managed it so you can insure it is always up to date

• Schedule your scans outside of normal working hours to insure the users don't stop scans

– Have and communicate to your users your policies regarding internet usage, email usage and how to report suspicious activity

Thank You!