Loss prevention standards

Cyber Security: Social Engineering

Cyber criminals will try anything to persuade organisations and individuals to do things which provide them with access to sensitive information. This document provides guidance on what you should look out for.

Cyber Security: Social Engineering

Introduction

As per the National Cyber Security Centre (NCSC), Social Engineering is defined as: *Manipulating people into carrying out specific actions, or divulging information, that's of use to an attacker.*

Cyber criminals use social engineering tactics in order to convince people to open email attachments infected with malware, persuade unsuspecting individuals to divulge sensitive information, or even scare people into installing and running malware.

The NCSC and Action Fraud, the UK's national reporting centre for fraud and cyber crime, constantly report on cyber crimes, and see actions by an individual which result in criminals gaining access to email, networks, systems, and sensitive data.

The individual:

- May be unaware they've given access, or
- They could have been coerced into giving access, or even worse,
- They could be aware there is a risk, but they have still gone ahead.

One of the most common misconceptions when it comes to cyber security is to misunderstand the threat. Smaller businesses, and individuals, may quite often think "*We are too small to be of interest to cyber criminals*", "*I've nothing of value to cyber criminals*" or "*Cyber security costs a lot of money*"; unfortunately, that's exactly what cyber criminals would like you to think!

Misconceptions

"We are too small to be of interest to cyber criminals"

Sadly that could not be further from the truth. Cyber criminals will look at any possibility to get hold of key data, bank details, etc., anything they can use for financial gain. Cyber crime is certainly not just aimed at the large muti-national companies.

Cyber criminals will endeavour to identify the easiest targets and those with less awareness or understanding of the threat. In such cases there will be less cyber-based protections in place. As a result, instead of attempting to obtain, say £100,000 from a single targetted attack, a mass untargetted attempt could glean a large number of smaller successes, and rather than grab media headlines a lot of of this may well go un-noticed.

"I have nothing of value to cyber criminals"

You may think so, but everyone and all businesses, have a wealth of data and information that cyber crimals can earn money from. They are looking for anything they can use to maximise financial gain. This could mean such things as household bills; passport information; photographs; social media accounts; online purchases; family details and bank information.

Even a small business with a percieved small value at risk, will have employee personal details including salary records, and may well have links to suppliers and customers that may be the bigger target for the criminals.

"Cyber Security costs a lot of money"

Some protections that could be required may well have a cost involved, but tackling the social engineering aspect can be key and involve minimal, if any, costs.

Raising employee awareness of the aspects of social engineering and how to avoid doing the wrong thing, will be essential. Training days and phishing tests, etc. can bring the subject to life, and show great increases in awareness. Also, robust procedural controls should be established which should result in improvements in cyber security. Password management, Multi-Factor Authentication, and making it imperative employees activate software updates on their devices, which include security updates, should not cost anything to introduce, but will make it much more difficult for systems to be infiltrated.

"Cyber crime is all high-tec and by organised international teams"

Action Fraud reported on 18 July 2020 the following crime:

The Crown Prosecution Service has warned the public to beware of fraudsters exploiting the COVID-19 pandemic after a man was today jailed for 30 weeks for offering fake Government refunds. The person in question was 20 years old, and sent more than one thousand texts claiming to be from the authorities offering refunds to people as part of the Government's response to the pandemic. He obtained 191 sets of personal details, used 49 for fraud and the total loss to his victims was £10,019.17. One text message read: '*UKGOV: You are eligible for a Tax Refund as a result of the COVID-19 pandemic. Please fill out the following form so that we can process your refund.*'

This incident shows that cyber criminals can be an individual, a small group, all the way upto large organised crime. This individual had little in the way of sophisticated technology, but was able to put together a mass untargetted infiltration attempt and obtain 191 sets of key information.

Cyber crime is not only committed by highly organised teams of hackers.

Types of Social Engineering and Attacks

Phishing

Mentioned in a number of Aviva Risk Management Solutions Loss Prevention Standard documents, phishing is a mass untargetted attempt by cyber criminals, to obtain valuable information. The attempt is usually by text message or email and hopes to get people to visit fake websites or click on links that introduce malware to devices.

Spear phising and whaling are more targetted attacks with similar purpose:

- Spear phishing would be targetting a specific individual(s)
- Whaling would be directly targetting a key person in a high position in an organisation

Baiting

Baiting can be online or physical and is the act of a criminal offering a person(s) some form of reward for taking a course of action. This course of action, such as "*Click on this link to claim your £25 discount"* etc. will allow the criminal access to key data or systems.

Physically, a USB stick marked *CONFIDENTIAL* could be left in a position where a person would find it, for example, and insert it into a computer, taking the 'bait' to see what the confidential information is, and so introducing malware into the system. Other such examples include USB sticks being given away free, or provided containing information one may perceive as important, interesting or containing a reward or prize.

Another example would be requesting completion of an online form, to go into a prize draw for a "*holiday of a lifetime".*

Pretexting

This is the use of a story or pretext to grab a person's attention, before taking it further. Once the target is hooked, personal information is obtained, or other items of value, cash, or key data is taken.

An example could be an email advising a person they are a beneficiary in a will. They will then need to provide personal information to prove their identity to ease the process of inheritance, and doing so could result in criminals getting information regarding bank details, etc.

Vishing

Effectively the voice version of phishing. The most common attack being an urgent voicemail requesting that you call back as soon as possible with a key detail, to avoid a set of circumstances. Examples would be, "*call back on the following number to avoid a £80 parking fine before 5pm".*

Complying would see criminals gain access to bank accounts, etc. This type of attack results in success because of the threat aspect.

Quid Pro Quo

This scam involves an exchange, giving the target the impression it's legitimate and gives them a good deal. One example seen is request for computer login details by a supposed IT Consultant calling to fix an issue, software, programming, etc.

"*If you can supply X, I can give you Y*" always making it look a deal slightly loaded in the target's favour.

Tailgating

This is a very basic type of social engineering and involves actual physical access into a building, by following closely behind someone with an accredited access. This act relies on the trust of the target, weak security measures or access systems or the fact that few people would actually challenge others.

Contact Spamming

This is a commonplace scam that gets into an individual's email or social media account and messages the contacts, usually with links or advice to visit a website, etc. As a result, any person doing so introduces malware onto their device and possibly further.

This scam relies on people being more likely to act upon a message from a person or business they know.

Water-holing

This is where criminals infiltrate and infect a target website that attracts a good amount of traffic. Any person visiting invites malware into their own systems.

The Human Element

All of these examples of social engineering rely on the actions of a person or persons, either consciously or subconsciously, to allow a criminal to proceed and obtain the valuable items they require. They can be very believable and use recognisable company logos, online stores, large supermarkets, clothing brands, GOV.UK, World Health Organisation, etc.

How Can You Minimise Infiltrations Due to Social Engineering?

The key to protecting against this type of cyber crime is awareness, both as a business and as individuals. Time spent providing training to employees on what to look out for will be invaluable.

Either careless, accidental or willful provision of access to systems can be catastophic for a business or a person. Ransomware attacks are becoming more commonplace.

On a personal level anyone and everyone could be a target, so ensuring no personal, sensitive, bank details or data, etc. are passed on is imperative.

The following are a few tips:

- ✓ Have an employee training event advising everyone of what type of things to look out for

Raise people's awareness of what social engineering looks like.

Repeat the training and provide refesher training.

- ✓ Restrict access to USB ports in company provided equipment

Not allowing USB access reduces the chance of a virus being installed.

- ✓ Use Multi Factor Authentication

If a password for example, is compromised, this arrangement provides other levels of access control before systems are breached and information could be at risk.

- ✓ If it sounds too good to be t**rue....**

...IT IS!

Basic but very true. If you can't remember entering a competition to win a sports car or holiday, do not click on any unsolicited links telling you that you've won it.

"*Complete these 3 easy steps to your £1000 prize"* seems like a simple way to a nice windfall, but in reality its highly unlikely.

"*Just provide your passport number as proof identity to claim your prize?"* - not many competitions require divulging this type of detail so why does this one?

As indicated earlier, a 2020 phishing attack saw an individual text over 1200 people offering tax refunds from the UK Government due to COVID-19. The Government are not likely to text you, so this type of activity should put people on alert.

✓ Antivirus Software

This will help protect your systems from most forms of attack, should criminals get past your access credentials.

✓ Be Vigilant

Many phishing attempts come from overseas, so check things such as:

- Spelling and grammar
  - While it seems a simple step, this might be an indicator to the fact that what you're reading isn't genuine
- The email address, where did the email come from?
  - If you hover over an email address it highlights the actual email address/string and not the 'dummy' name in the 'from' field
  - A recent phishing attempt on customers of Nationwide Building Society asked for responses to a '.com' email address, where all Nationwide email addresses are '.co.uk'. If it doesn't look quite right, do not click on anything, check it and report it
- Possible cyber crime on search engines or with Action Fraud
  - There may be reports of the same type of attack or similar

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Aviva Risk Management Solutions can offer access to a wide range of risk management products and services via our network of Specialist Partners who are reputable companies offering agreed discounted rates for Aviva customers.

For more information please visit:

Aviva Risk Management Solutions – Specialist Partners

Sources and Useful Links

- CyberSmart
- The National Cyber Security Centre
- ActionFraud

Additional Information

Relevant Loss Prevention Standards include:

- Pandemic Planning & Coronavirus
- Pandemic Recovery: 'New Normal' and the Post-Pandemic Business World
- Cyber Security – Top 12 Tips to Protect Against a Cyber Attack

To find out more, please visit Aviva Risk Management Solutions or speak to one of our advisors.

Email us at riskadvice@aviva.com or call 0345 366 6666.*

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