

# You know cyber security is more important than ever, but how do you practically identify and plug the gaps

**CAANZ May 2024** 

## **Todays Presentation – in 60 Seconds**

- Key technology risk issues for your firm
- Cyber and incident response procedures
- Our work on recent matters
- Next steps and how we can help you



## **Cyber is Contextual – Accounting Firms**

- Cyber security is one of the major business risks worldwide, with leaders citing cyber attacks and data breaches as the top two risks businesses face.
- Many small and medium businesses (SMEs) face an existential threat from a critical cyber security incident and with the accounting profession growing increasingly reliant on online systems, a cyber security threat is not a question of if, but when.

## Cyber Snapshot according to the Accounting Industry

- Cyber threats are increasing, and pose serious and continuous risks to organisations and individuals everywhere.
- Everyone must take responsibility for the data, software and devices we use. One person can bring down a network with a careless error.
- Strengthening your cyber security posture and maturity is a continual iterative process.
- Invest in best-practice security. Cyber threats are a major risk whatever the size of your business or organisation.
- Too few organisations plan both to prevent cyber incidents as well as respond to and recover from them. It's when, not if, they occur.
- Focus on people and process, not just technology. You need people to be aware of threats and with knowledge and skills to respond effectively.

## **Technology Risk Management**



#### Theft of Information

Hackers and dissatisfied employees try to obtain personally identifiable information (PII), or steal credit card information, customer lists, intellectual property, and other sensitive information.



#### **Password Theft**

Attackers steal passwords to access company systems.



#### **Phishing Attacks**

Email designed to look like legitimate correspondence that tricks recipients into clicking on a link that installs malware on the system.



#### Ransomware

Malicious software blocks access to a computer so that criminals can hold your data for ransom.



#### **Natural Disasters**

Data loss occurs due to natural events and accidents like fires and floods.



#### **Defacement and Downtime**

Attackers force your website or other technology to no longer look or function properly. This could be as a joke, for political reasons, or to damage your reputation

#### Thinking Ahead. Being Prepared

In October 2018, the New Zealand National Cyber Security Centre (NCSC) published the results of its survey of 250 nationally significant organisations.

#### **Key findings include:**

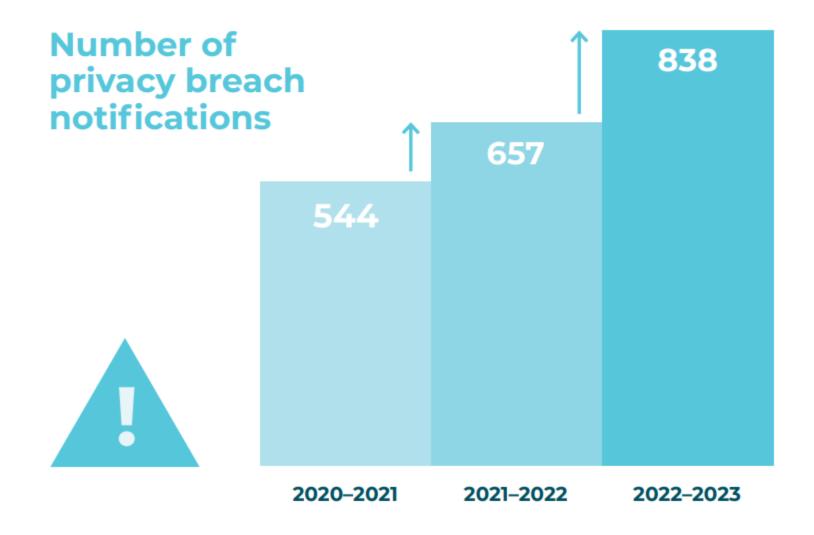
i. An area of good practice that was identified is:

Readiness – Preparing the organisation to detect, respond and recover from a cyber-security incident.

- ii. When an organisation becomes aware of an incident, being ready to respond can reduce its impact of a compromise.
- iii. Having an up-to-date plan allows an organisation to react quickly and decisively when an incident occurs and serves as a framework to preserve evidence in the event legal action is sought following an incident.
- iv. 63% of New Zealand's Nationally Significant Organisations have an incident response plan, but 33% have not tested their plan in the last year.

We are proud to be a 100% New Zealand owned and operated business.

## **OPC Notifications**



## Statistics at a glance

#### Globally

exposed by cyber incidents in 2021 78% up on 2020.

150% increase \$145 billion

in data breaches from a year earlier.

21.957

common vulnerabilities and exposures<sup>2</sup>

0+ billion records \$945 billion

Losses to businesses in 2020 from cybercrime.3

spent on cyber security by businesses in 2020, more than double 2018.4

of data breaches reported are ransomware attacks5

of cyber attacks target small business.6

6 PurpleSec 2021 Cyber Security Statistics The Ultimate List of Stats

Australia<sup>7</sup>

\$33 billion

Losses to cybercrime by Australian businesses in the 2020-21 financial year.

67.500 cybercrime reports

An increase of nearly 13% from the previous financial year.

25% of cyber security incidents

responded to by the Australian Signals Directorate last year were against critical infrastructure, such as energy, water, telcos and health.8

22,000 calls received

by the Cyber Security Hotline, an average of 60 per day and an increase of more than 310% from the previous financial year. New Zealand

28%

The number of cyber incidents in New Zealand linked to foreign state-sponsored computer network exploitation groups.9

404 cyber incidents

Nationally significant organisations impacted in the 2020-21 financial year, a 15% increase from a year earlier

8,831 incidents reported

The number of incidents reported to CERT NZ in 2021, a 13% increase on 202010



<sup>2</sup> Tenable website. These figures are for the year to October 2021 and 5 2020-2021 NCSC NZ Cyber Threat Report By the Numbers are based on an analysis of publicly disclosed information

<sup>3</sup> McAfee Hidden costs of cyber crime

<sup>4</sup> McAfee

<sup>7</sup> ACSC Annual Cyber Threat Report 2020-21.

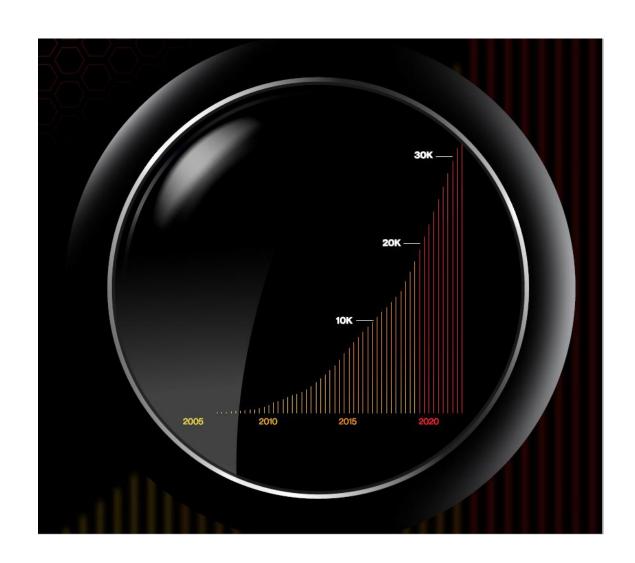
<sup>8</sup> Australian Sionals Directorate website

<sup>9</sup> NCSC

<sup>10</sup> CERT NZ's Quarter Four (Q4) Report

## Verizon Data Breach Investigations Report (16th Edition)

- 16,312 security incidents that compromised the integrity, confidentiality or availability of an information asset.
- 5,199 breaches that resulted in the confirmed disclosure of data to an unauthorised party.
- Total Set
  - *953,894 incidents*
  - 254,968 breaches



## What Verizon Found – Key Statistics

- 74% of all breaches include the <u>human element</u>

  Error, Privilege Misuse, stolen credentials or Social Engineering
- 50% of all Social Engineering incidents used <u>pretexting</u>

  An invented scenario that tricks someone, that may result in a breach
- 24% of all breaches involved <u>ransomware</u>

  Maliciously encrypting data and demanding a ransom to return or unlock it
- 19% involved <u>internal</u> actors

  Intentional and unintentional harm through misuse and simple human errors
- 95% of breaches are <u>financially</u> driven It's (almost) always about the money

## What is Social Engineering





Social engineering is when an attacker gains a person's trust and tricks them into giving them access or information they shouldn't have; or

Researches a person and gets enough information to be able to either guess their passwords or get them reset.

In the context of information security, social engineering is the psychological manipulation of people into performing actions or divulging confidential information.

A type of confidence trick for the purpose of information gathering, fraud, or system access, it differs from a traditional "con" in that it is often one of many steps in a more complex fraud scheme.

## Social engineering attacks

Firms are frequently targeted because:

- They are perceived as wealthy
- Firms receive, control and process large sums of money
- Clients often have accounting firms act for them

Most of our cyber incident response work is conducted within the professional services sector, including Business Email Compromise and Ransomware, often perpetrated via Social Engineering.

## Research



### Phishing page



#### Email sent



## Request



#### Information harvested



Attackers identify targets and objectives and get a list of email addresses. The attacker creates a phishing page by compromising a domain or using a similar domain name to a common brand.

The email targets are sent a message to trick them into visiting the website. The target enters information into the phishing page (credentials information) or is tricked into downloading malware.

The attacker uses information in attacks or sells it. Attackers use malware to steal information or money, or to use the computer for other attacks.

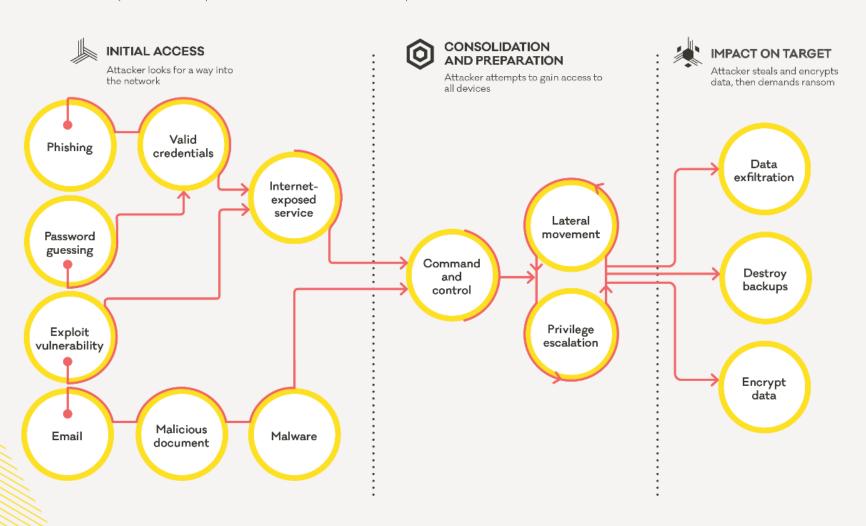
## **Current Ransomware Activity**



#### LIFECYCLE OF A RANSOMWARE INCIDENT

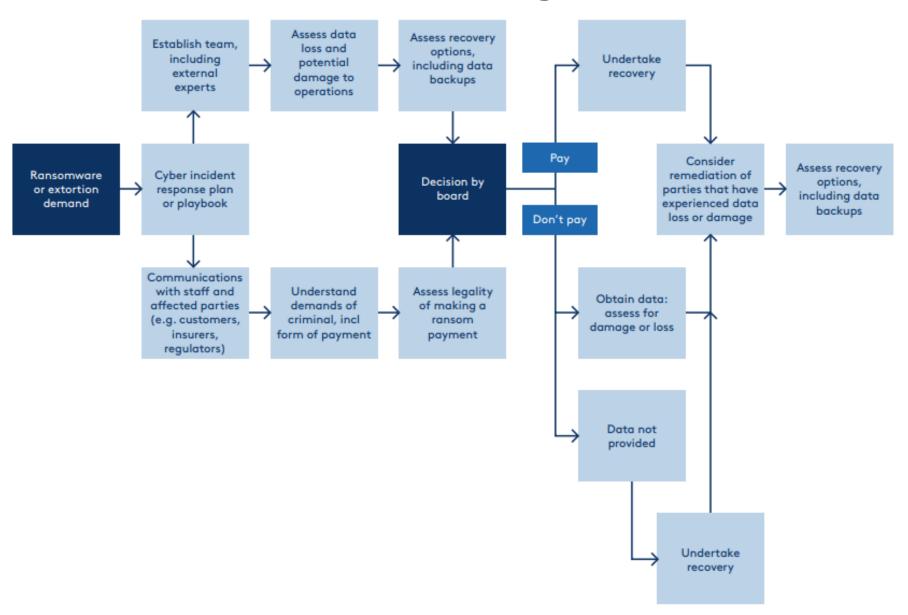


The common attack paths of a human-operated ransomware incident based on examples CERT NZ has seen.



New Zealand Government

## **Example Ransomware Decision Making Process - AICD**



## **Technology Supply Chain Management**



The House Loses: Caesar's Entertainment paid a rapsom after being subgrattacked. CETT

Within weeks, two of the world's largest casino-hotel companies—MGM Resorts and Caesars—were hit with ransomware attacks. One met the hackers' demands, while the other is resisting.

ALPHV reportedly bragged that it took 10 minutes to infiltrate MGM's system after identifying an MGM tech employee on LinkedIn and then calling the company's support desk.

Scattered Spider gained entry to Caesars' system by deceiving an employee at a third-party vendor.

## **Cyber Governance and Risk Management - Controls**

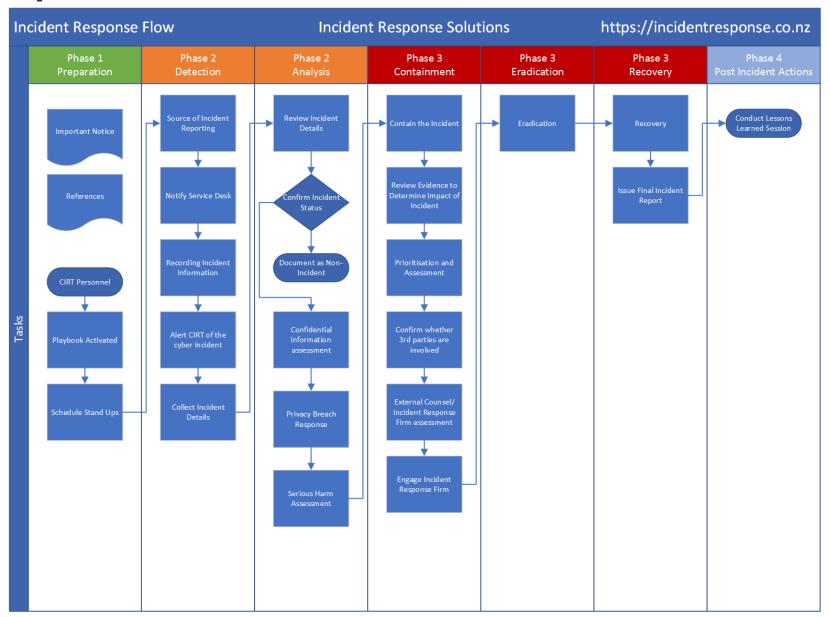


## **Cyber Risk Management – Security Awareness and Skills Training**

# 14 Security Awareness and Skills Training

14.1	Establish and Maintain a Security Awareness Program	•	•	•
14.2	Train Workforce Members to Recognize Social Engineering Attacks	•	•	•
14.3	Train Workforce Members on Authentication Best Practices	•	•	•
14.4	Train Workforce on Data Handling Best Practices	•	•	•
14.5	Train Workforce Members on Causes of Unintentional Data Exposure	•	•	•
14.6	Train Workforce Members on Recognizing and Reporting Security Incidents	•	•	•
14.7	Train Workforce on How to Identify and Report if Their Enterprise Assets are Missing Security Updates	•	•	•
14.8	Train Workforce on the Dangers of Connecting to and Transmitting Enterprise Data Over Insecure Networks	•	•	•
14.9	Conduct Role-Specific Security Awareness and Skills Training		•	•

## **Incident Response Plans and Simulations**



## What services are clients engaging in

- Cyber Governance
- Cyber IR plans and testing
- Breach response
  - Incident controller
  - Data Breach assessment (DART)
  - Communications
  - Ransomware response
  - Dark web and data leak monitoring
- Forensic technology
- Hosting / eDiscovery / GPT "ASK"



## **Further Resources**

#### CA ANZ

- Why CFOs should take the lead on cyber security
- · Cyber and the CFO
- · Protect our cyber future
- Cyber security for SMEs and practitioners

#### Standards

- ISO 27001 is an internationally recognised Information Security Management System (ISMS) standard
- National Institute of Standards and Technology (NIST) Cyber Security Framework

#### Australia

Australian Cyber Security Centre

- Small & medium businesses
   Cyber.gov.au
- Essential Eight

#### Australian Tax Office resources

- Top cyber security tips for businesses I Australian Taxation Office
- How to prepare for a cyber security incident | Australian Taxation Office

#### Australian Government Department of Business

Create a cyber security policy

#### Office of the Australian Information Commissioner

 About the Notifiable Data Breaches scheme

#### Australian Securities and Investments Commission

<u>Cyber resilience good practices |</u>
 <u>ASIC - Australian Securities and</u>
 <u>Investments Commission</u>

#### **New Zealand**

New Zealand Cyber Security Centre

- Guides | CERT NZ
- Charting Your Course

New Zealand RASCI approach to cyber security

 A Guide to the Project Management Body of Knowledge (PMBOK Guide) (5th ed.). Project Management Institute.

#### **United States**

US's National Institute of Standards and Technology

 Framework for Improving Critical Infrastructure Cyber Security, 2018

#### Assessment Tool

 <u>Self-assessment tool</u> compiled by Continuum Cyber for CA ANZ

#### United Kingdom

UK's National Cyber Security Centre (NCSC)

- 10 Steps to Cyber Security 2021
- Small\_Business\_Guide 2020

#### Singapore

The Singapore Government's Cyber Security Awareness Alliance Go Safe Online website SMEs

#### Reporting Obligations

Office of the Australian Information Commissioner

- About the Notifiable Data Breaches scheme
- Australian Privacy Principles listed in the Privacy Act of 1988

New Zealand, the Privacy Act 2020

Principle 5



DIFFERENCE MAKERS™

## Thank you

**Campbell McKenzie** 

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