# Cybersecurity for Senior Managers and Risk Officers

## in Housing Associations

A mini Webinar from CalQRisk

# **Cal::Risk**

Manage the effect of uncertainty on objectives

18<sup>th</sup> October 2022, presented by

Gerard Joyce, CTO, CalQRisk

#### Outline

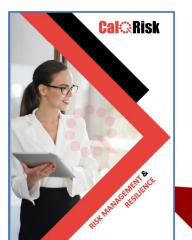


- Introduction Who we are
- What is Cybersecurity
- What are the Risks
- Standards and Guidelines
- Elements of Cybersecurity
- The NIST Approach Identify, Protect, Detect, Respond, Recover
- Risk Management and Senior Manager's responsibilities
- Reporting to and Assuring the Board

#### Introduction



- Experienced Risk & Compliance Professionals
- Members of IRM, ACOI, IoD, IoB, ACCA, ISACA
- Involved in the Development of Standards
- We supply a Governance, Risk & Compliance Software Solution
- called CalQRisk
- CalQRisk is used by 200+ regulated organisations
  - Financial Services, Solicitors, Local Authorities, Universities, Schools,
  - Housing Associations, Charities, Sports Organisations..



#### **Published a White Paper on Risk Management and Resilience**



# "There are only two types of companies: Those that have been hacked, and those that will be."

FBI Director Robert Mueller

- The UN reported a 600% increase in malicious emails during the pandemic
- Cybercrime will cost the world \$>10 trillion annually by 2025

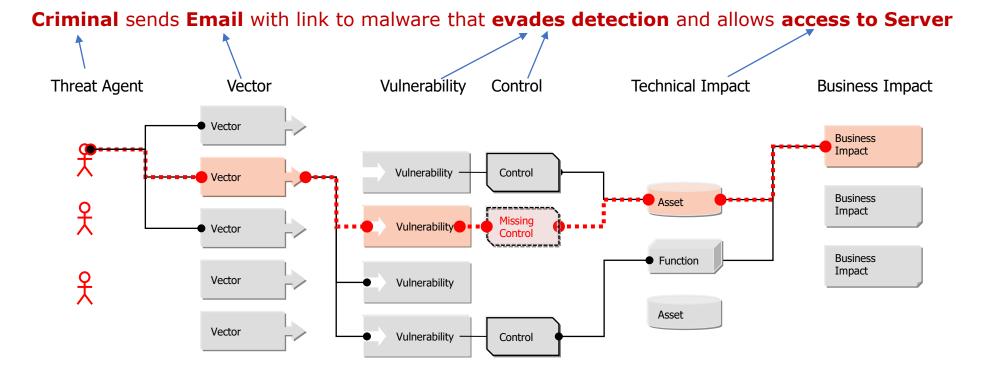
# **Stakeholder Expectations**



- Cyber risks are understood and prioritised
- IT capability matches organisational ambitions
- Systems are secure
- Policies and procedures are appropriate
- Staff are trained on cybersecurity risk
- There is a plan for when things go wrong

#### What is Cybersecurity?





Source: Aspect Security

John Levden 24 February 2022 at 15:25 UTC

Updated: 07 March 2022 at 10:15 UTC

# What are the Risks?

- Data Breach
- Loss of Assets  $\bullet$
- **Data Altered**
- Extortion
- Spyware
- Identity Theft
- Distributed Denial of Service (DDoS) lacksquare



#### **Redcar and Cleveland Council: Four** serious data breaches reported

## **Attack Techniques**



- Email, links, attachments
- Social Engineering
- Social Networking
- Websites
- Wireless Hotspots
- USB Devices (Memory sticks)

# **Social Engineering**



- Spoofing
- Phishing
- Spear Phishing
- Vishing
- Watering Hole
- Bogus Inspectors

john@Royal\_Housing.net john@Royal\_Housing.net

These two are NOT the same

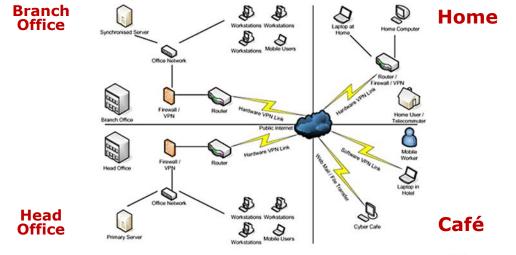
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#### **Vulnerabilities**



- Unwitting Employees
- IT System Misconfiguration
- Unpatched Flaws in Op Systems
- Mobile Devices
- Storage of Data in the Cloud
- Service Providers / Partners





# **Mitigate the Risks**



#### • Enforce your information security policy

- Classify data according to sensitivity
- Encrypt sensitive data in transit / at rest
- Manage the use of personal devices / Prevent
- Require strong passwords / changing of passwords / two-factor authentication
- Train employees to recognise suspicious activity
  - Departure from agreed protocol / instructions
- Conduct Due Diligence on partners you rely on
- Document your procedures and stick to them
- Monitor adherence to procedures

### **Standards and Guidelines**

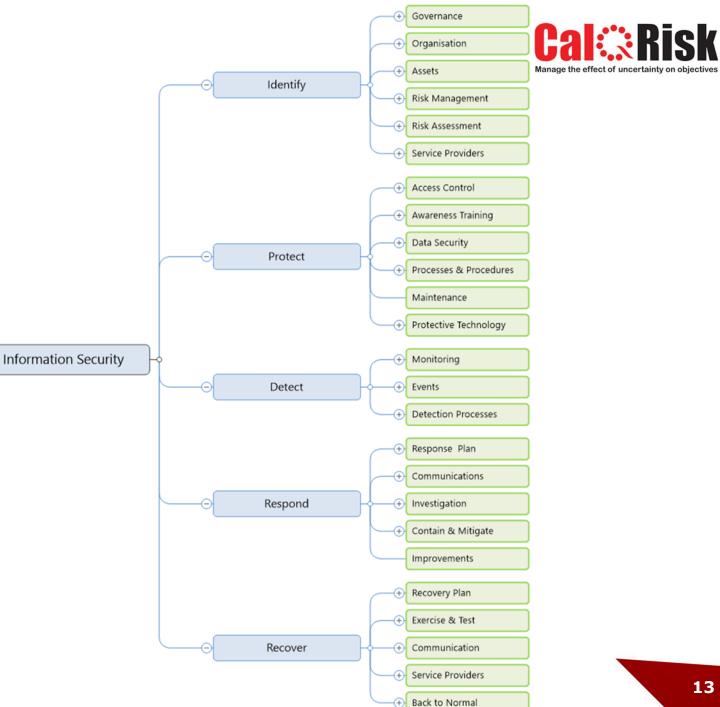


- > NIST Cyber Security Framework
- ≻ ISO 27001
- CIS CSC (Critical Security Controls)
- ➤ COBIT
- Cyber questionnaire (PRA)

# **NIST Approach**

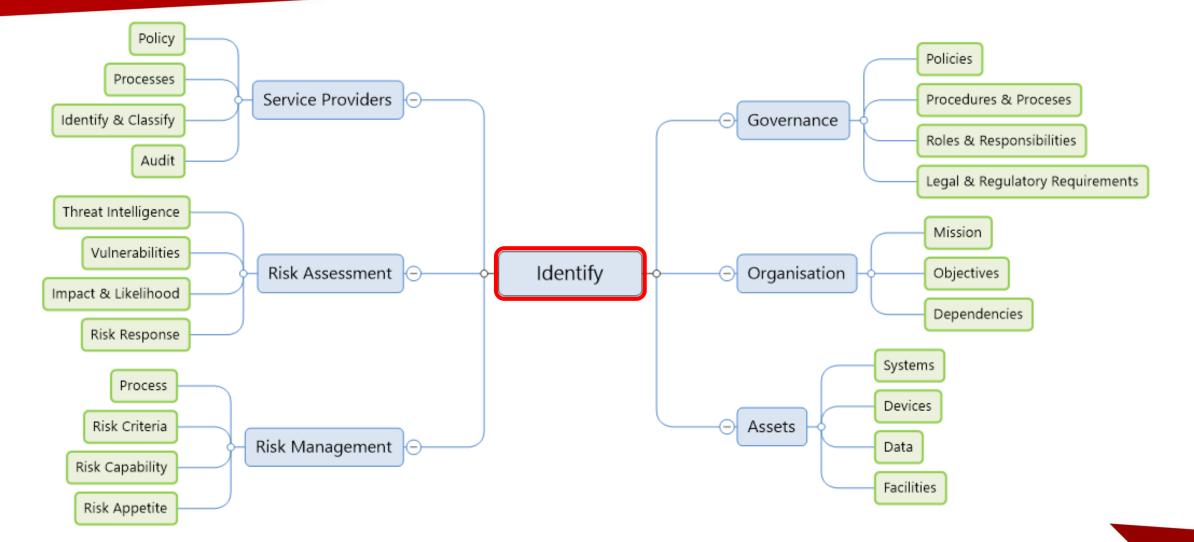
#### **The NIST Approach**

- Identify  $\bullet$
- Protect ۲
- Detect
- Respond  $\bullet$
- Recover lacksquare



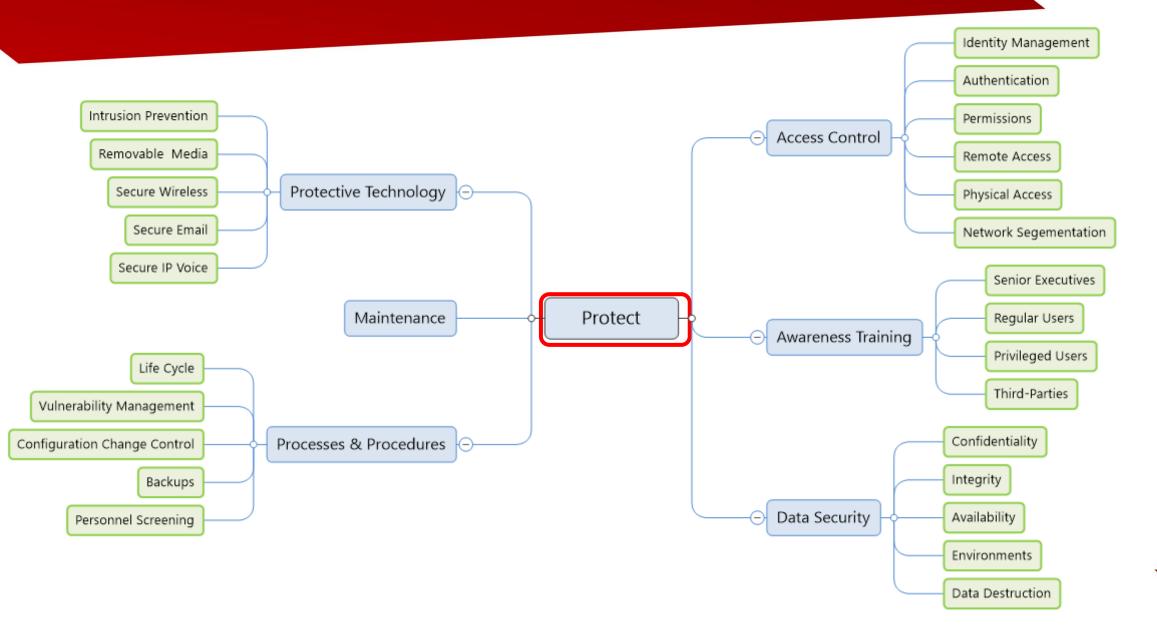
### Identify





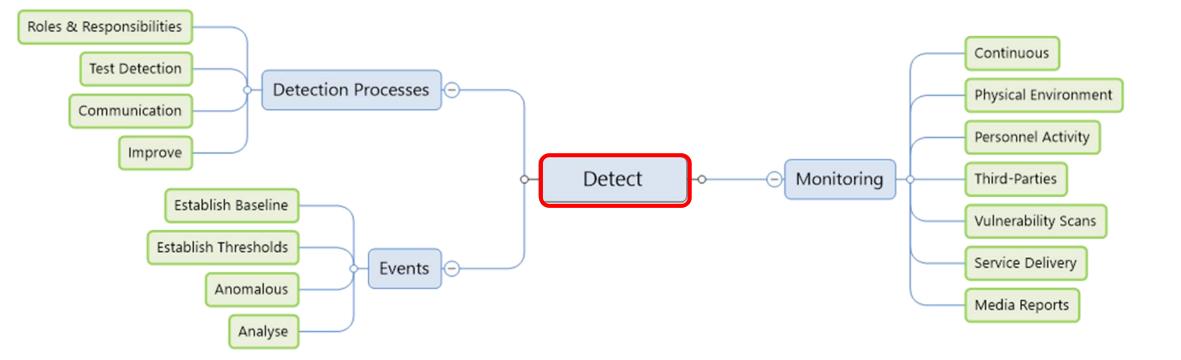
#### Protect





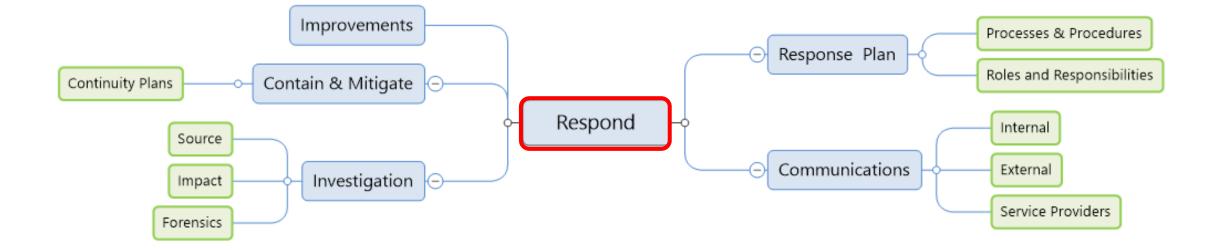
#### Detect



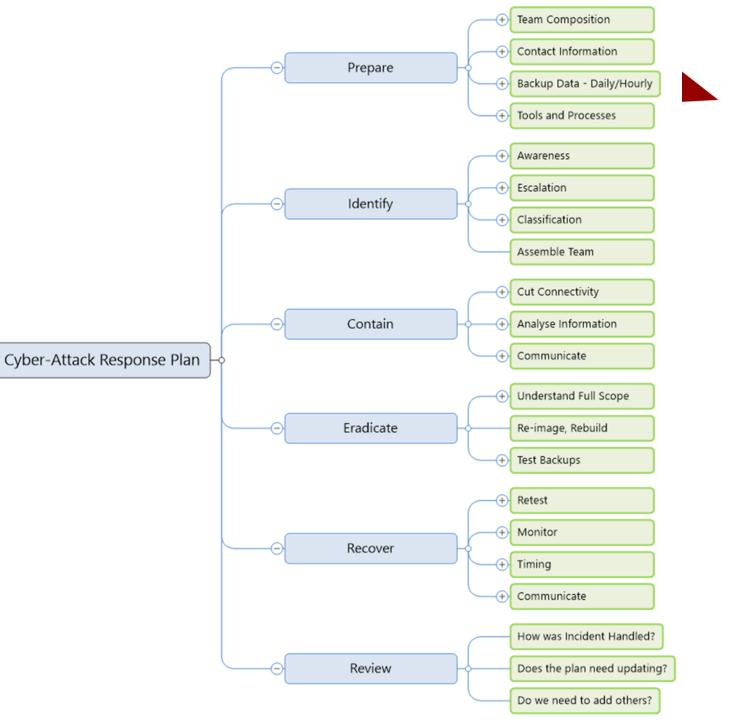


#### Respond





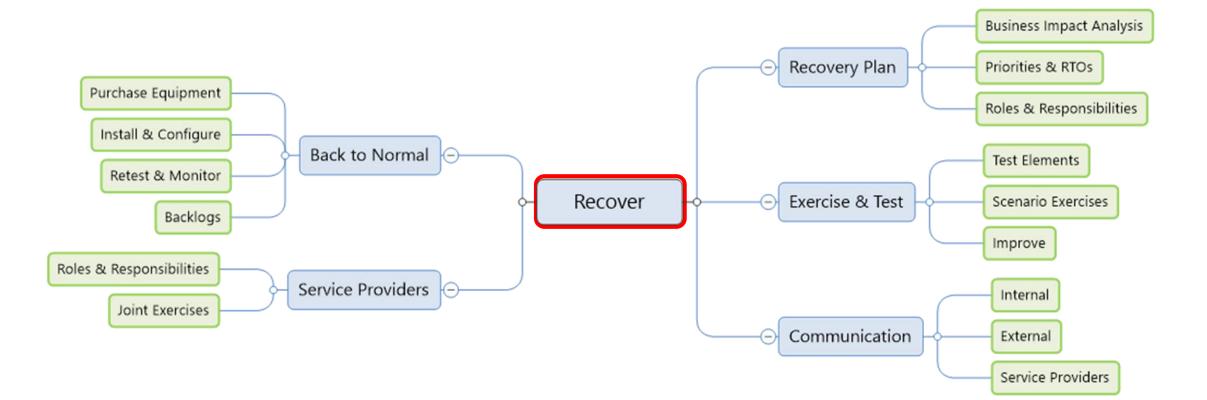
#### Response Plan





#### Recover



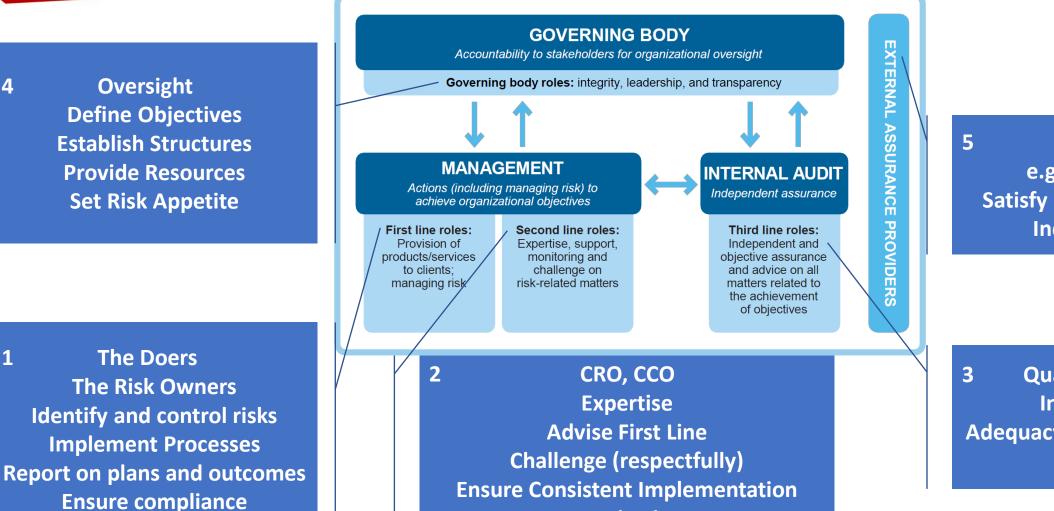


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#### Responsibilities

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Monitoring

**Reporting Adequacy and Effectiveness** 

e.g. Pen Testing Satisfy reg requirements Independence

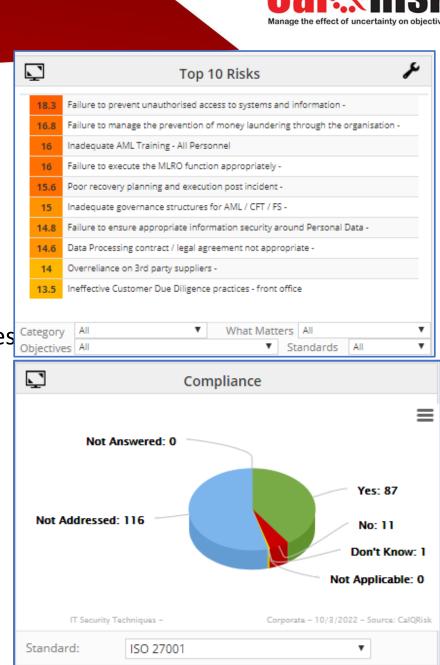
**Expertise** 

**Quality Control** Independent **Adequacy and Effectiveness** Advise

#### **Reporting** – Assuring the Boards



- What are the Top 10 risks?
- > What is threatening the Objectives?
- Are existing controls working / effective?
- Have there been any near misses / incidents?
  - Errors & Omissions, system outages, accidents, policy breaches
- ➤ Where are the gaps?
  - Confirmation of the overall compliance position
  - What is being done to address the gaps?
- Have we tested / exercised our Response Plans?
- Key Risk Indicators







#### Thank You

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