



# QinetiQ Cyber: Working Together for a Safer World

Mark Gittins  
Business Development Director  
Cyber, Information & Training

QINETIQ

# Cyber Team – Working Together for a safer world

Cyber security is the threat real or made up by salesmen ?

- 13<sup>th</sup> May 2017, Global **ransomware** attack hits countries and organisations including:
  - Hospitals
  - Fedex
  - Governments
- The next slide shows how far the virus had spread 13 minutes after first alert

# The Reality: Cyber Threat Rising



Minute 1

Minute 13

# Anatomy of an Advanced Cyber Attack

## Reconnaissance



Find names of employees and set up email accounts in their name

## Delivery



Sent a phishing email with a link to a malicious ZIP file sometimes hidden as a pdf

## Exploitation



Back door opened by link being clicked on by employees.

## Control



Access through back door, then pass-the-hash or password dumping to escalate privileges

## Act on intent



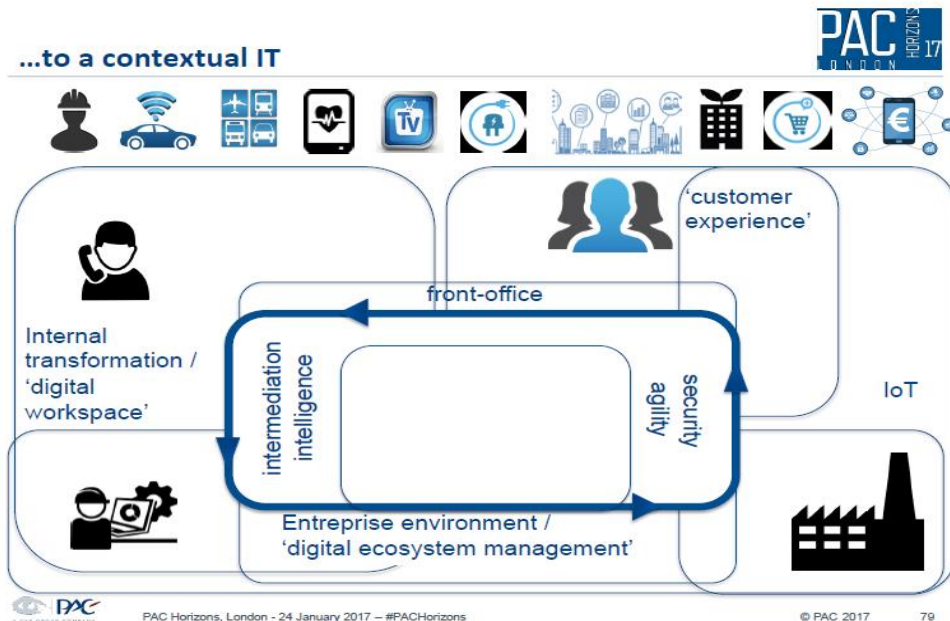
Navigate laterally around the network and gather up IP, business contracts, negotiation tactics, internal comms.

## Egress



Extract info from network and share with companies / organisations to get commercial and diplomatic advantage.

# Ever increasing Connectivity across Digital Surfaces



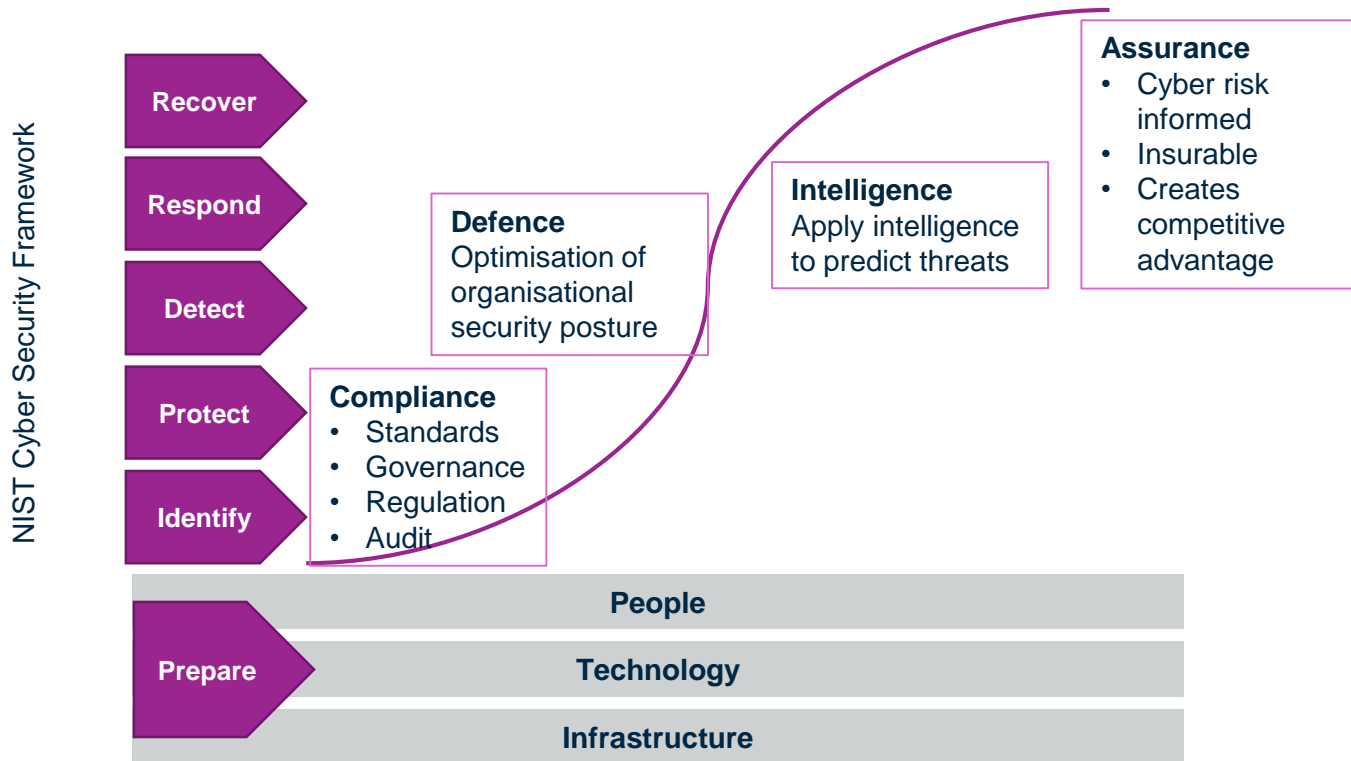


# Cyber Security, Why Bother?

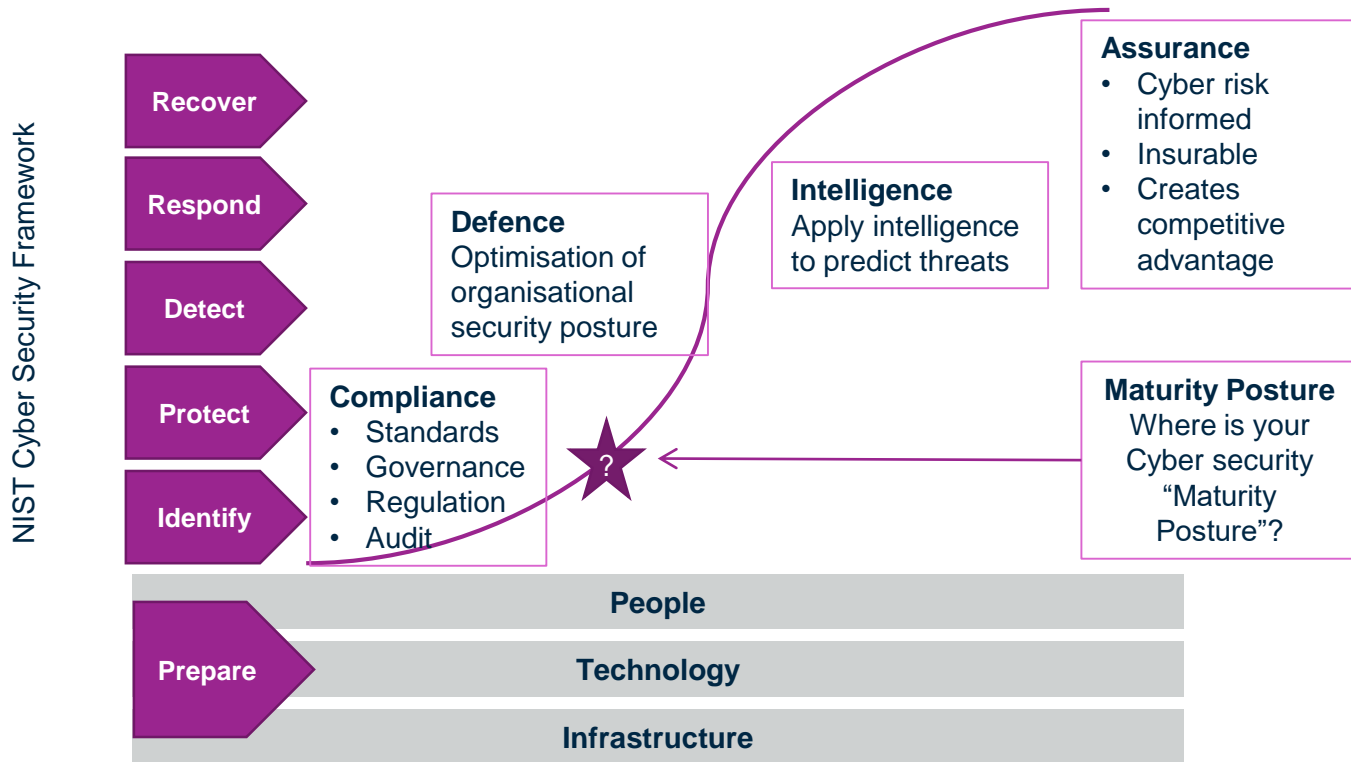
Other recent attacks include:

- Banks numerous
  - Syphoning money
  - System malfunction
- Numerous data thefts
- National Security Agency
- The biggest bank job in 2015 was completely digital
- Business disruption:
  - PayPal, Twitter, Playstation, Netflix, Yahoo

# The stages of Preparedness

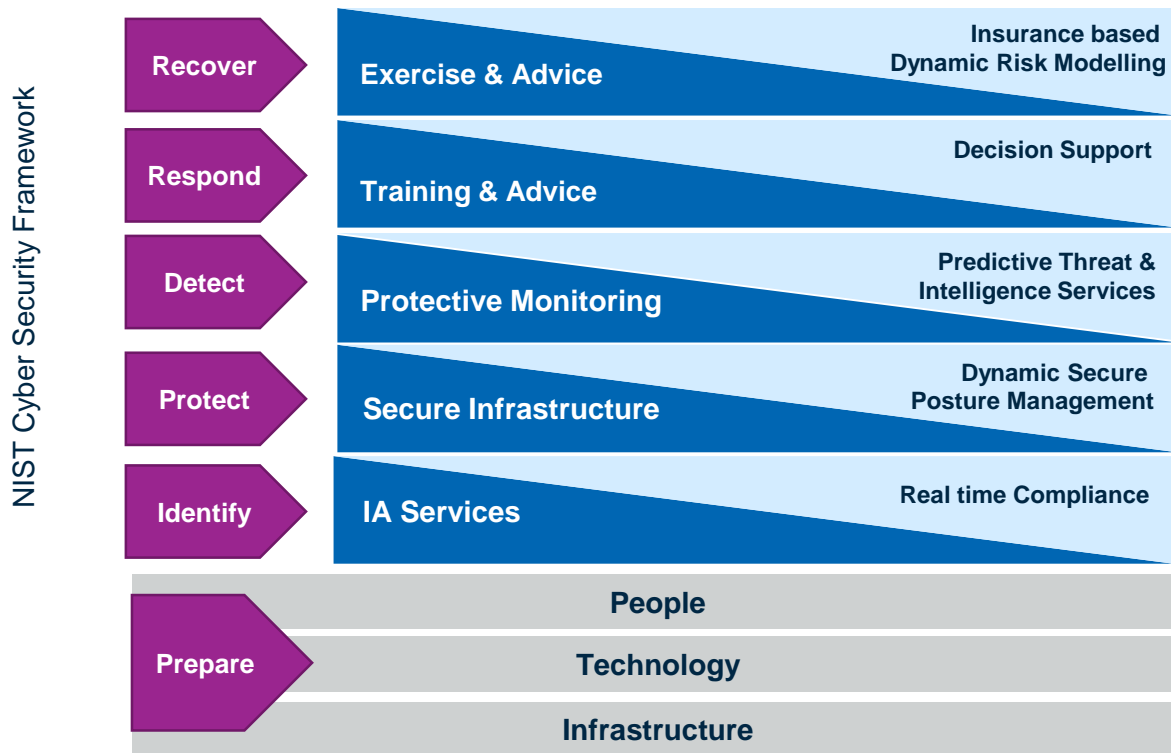


# Transaction to Partnership



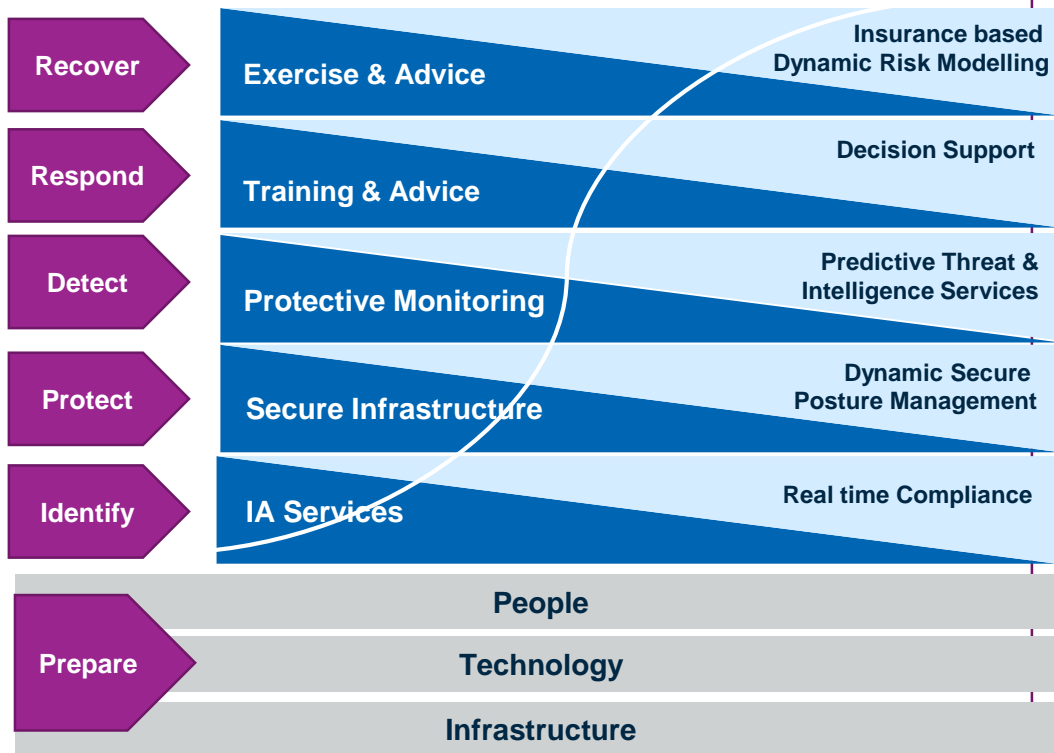


# The new cyber - partner relationship



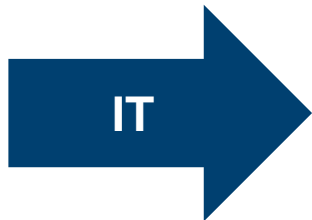
# Improving your Cyber Security Posture

NIST Cyber Security Framework



# CONVERGENCE

What is going on in your world?



**Information  
Technology**

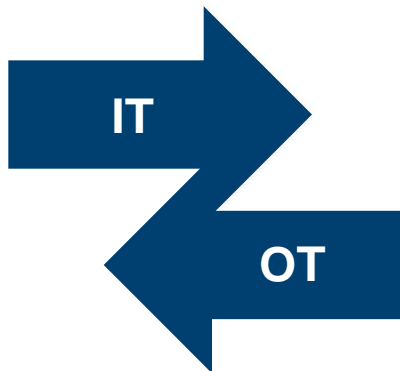


**Operations  
Technology**

# CONVERGENCE

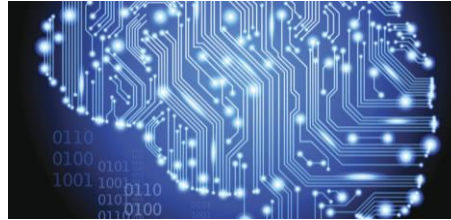


**IP World**

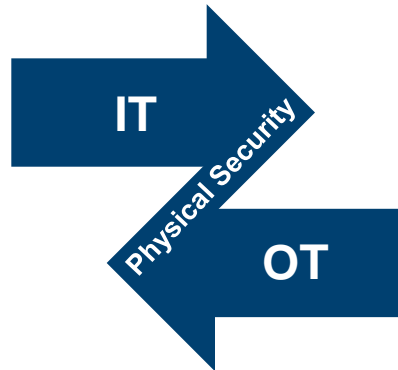


**Analogue World**

# CONVERGENCE IT & Physical Security



**IP World**



**Analogue World**

# The Present: Cyber Threat Management



Certification



Monitoring



Alerts



Reporting

**The Future: Better Training, Sharing Threat Intelligence**

# QINETIQ

[migittins@qinetiq.com](mailto:migittins@qinetiq.com)