

Cambridge Centre for Risk Studies

The Future of Cyber Risk

# CHANGING WORKPLACE BEHAVIOUR: IMPROVING THE HUMAN FIREWALLS OF ORGANISATIONS

Stephen Burke

CyberRiskAware.com

Centre for  
**Risk Studies**



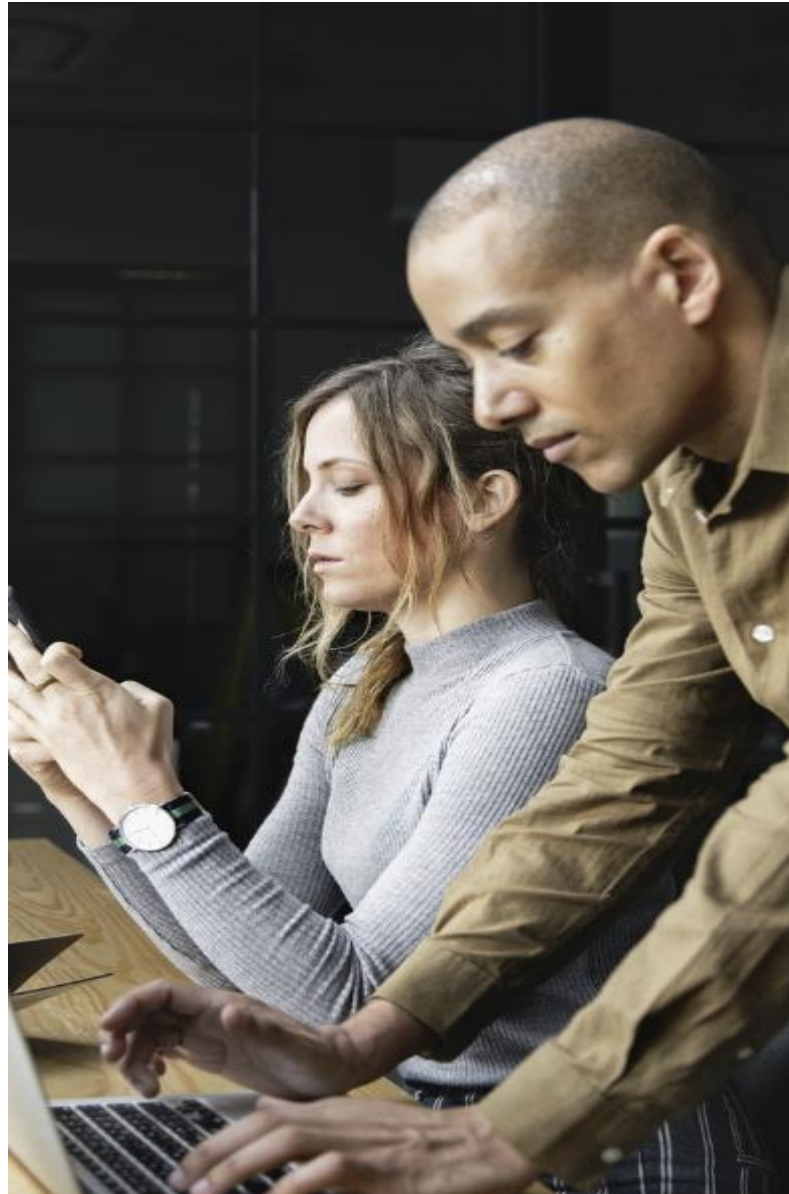
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# Cyber Criminals Target People, NOT systems !!



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**“If you’re going to be attacked, the chances are that initial compromise, the gap in the fence the attackers sneak through, is going to be created by **social engineering** rather than anything technically sophisticated...”**

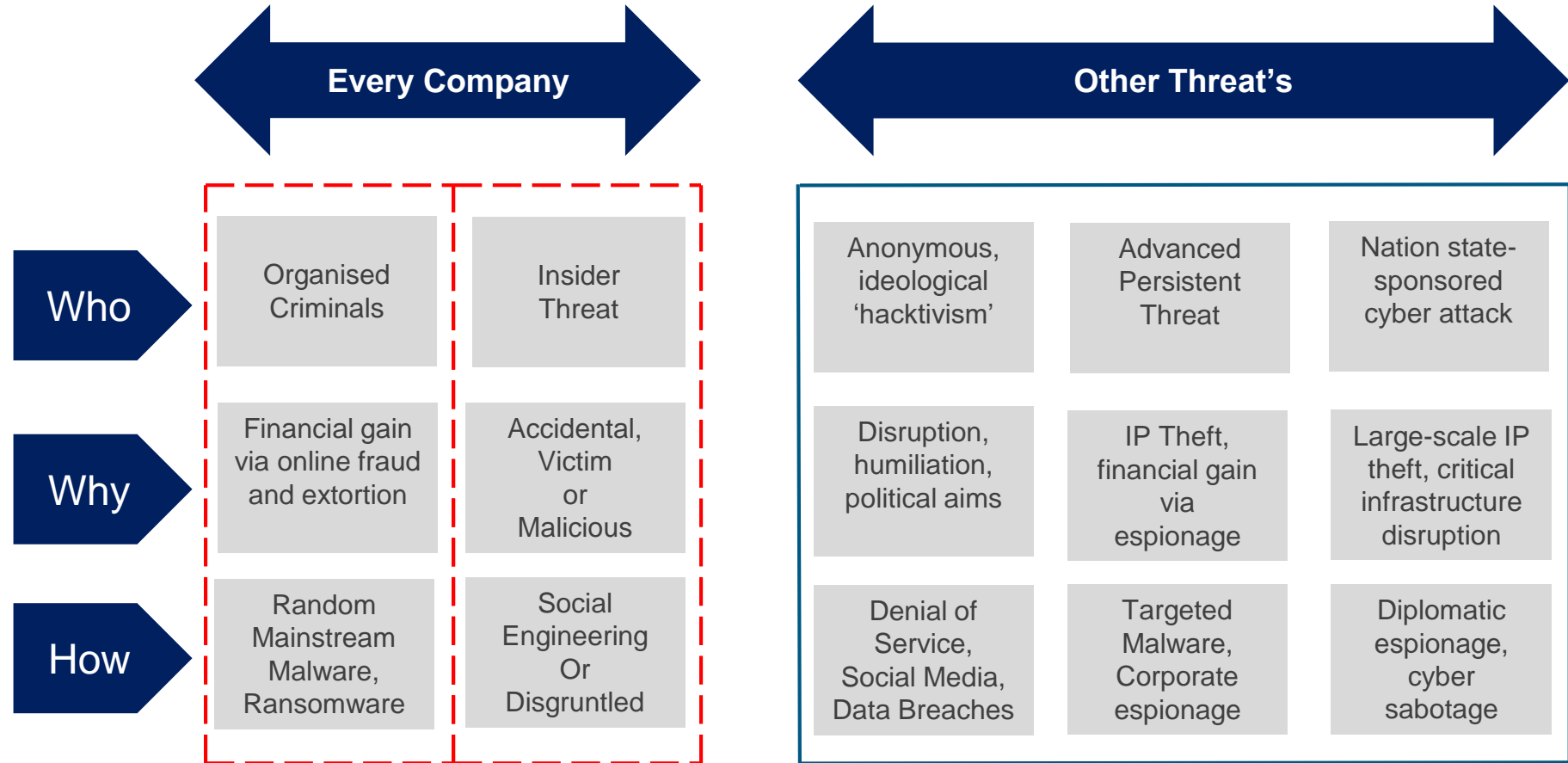
**- Symantec Internet Threat Report 2018**



# Cyber Criminals Target People



# Cyber Threatscape



## The Compromised Insider

- Malware victims
- Impersonated users

## The Malicious Insider

- Rogues employees
- Criminal actor employees

## The Accidental Insider

- Inadvertent actors
- Convenience seekers





# Yet we keep investing in Technical Defense's...

Solutions are Failing  
Despite **\$71.1 B**  
investment in  
security

- Next Gen Firewall
- Secure Web Gateway
- Intrusion Detection & Prevention
- Advanced Threat Protection
- SIEM
- Network Forensics
- Data Loss Prevention
- Unified Threat Management

SOURCE: Information Security, Worldwide, 2012-2018, 2Q14 Update, Gartner

**“Security Culture  
is what employees do  
when the security team  
isn’t looking”**





# Common Workplace Behaviour(s)

- **Clicking on links and opening Email attachments**
- **Reusing Passwords across accounts**
- **Dept's sharing accounts with passwords stored in XLS!**
- **Password - Incrementing a number by 1 ☺ (Yes, we know!)**
- **Downloading Free Software**
- **Unsafe Web Browsing**
- **Risks when traveling “Outside the Office”**
- **Weak Data Protection Practices**
- **Little to no understanding of Security Policies**

# Human Firewall's – Choose to go to the Moon! ...

We choose to go to the Moon in this decade and do the other things,  
**not because they are easy, but because they are hard;**

because that goal will serve to organize and measure the best of our  
energies and skills,

because that challenge is one that we are willing to accept, one we are  
unwilling to postpone, **and one we intend to win.....**

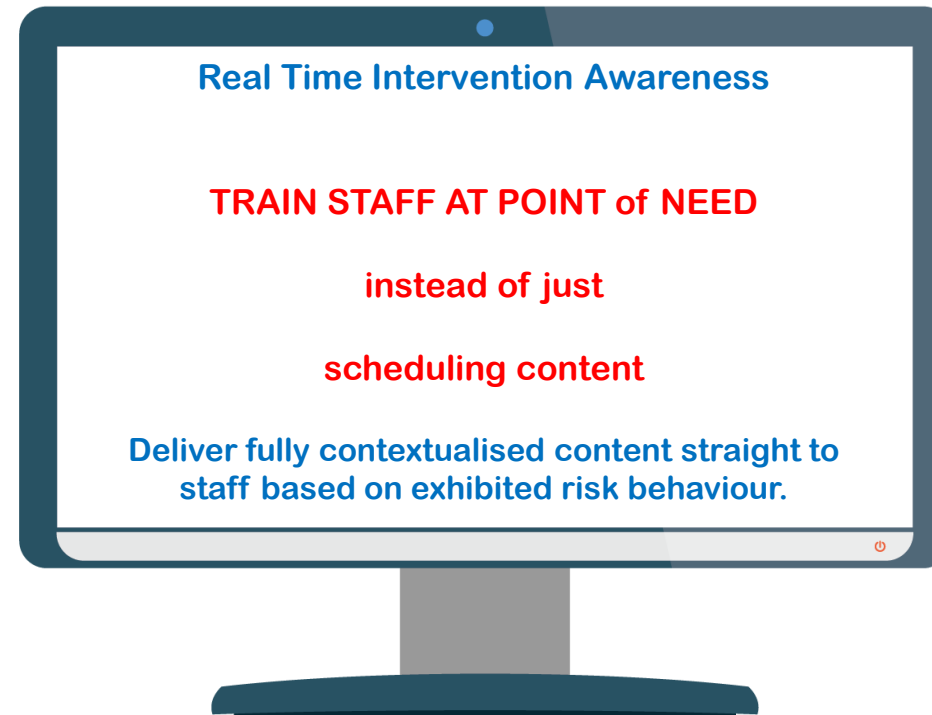
**JF Kennedy Sept 12 1962**

# Positive Behaviour Change

## ➤ “Scheduled” Security Awareness Program



## ➤ “Holy Grail”



# USER TRIES TO DOWNLOAD FREE SOFTWARE



**What will the user do now ?**



# USER TRIES TO DOWNLOAD FREE SOFTWARE



## Unapproved Software Detected!



Hey Stephen

We have detected an attempt to download or install unapproved software.

Whilst your intentions are good you may not realise that this creates a very high risk for the company.

Installing or downloading software which has not been approved by your IT Team can lead to malicious computer programs infecting the network and causing all sorts of problems such as Ransomware or Data Theft leading to fines or loss of our customers.

If you need any assistance with obtaining software or would like to see what software is on the approval list please click the button below.

Stay Safe!

# ACCESS SENSITIVE DATA THEN DROPBOX?



## Unapproved File Sharing Detected

Hey Stephen

We have detected that you attempted to browse or upload information to an unapproved file sharing site. At McDonalds we have chosen to use a specific File Sharing site as it allows us to track and secure both company and customer information.

When we use 3rd party sharing sites we risk exposing company sensitive information to the public domain which can cause all manner of issues.

If you have any issues accessing our approved sharing site, please click the link below



[Need Help?](#)

# AUTOMATE STAFF ON-BOARDING



## Welcome To The Team!

Hey Stephen

Welcome to the team!

As this is the first time you have signed into the network we would like you to review the company security policy by clicking on the green button below. If you need any assistance please do not hesitate to contact [it@yourcompany.com](mailto:it@yourcompany.com)

WELCOME ABOARD!



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