

**3 SIMPLE STEPS BUSINESS OWNERS  
MUST TAKE TO PREPARE FOR NEW  
CYBER INSURANCE REQUIREMENTS**  
(And one tip you've probably never thought of)

# KEEP YOUR BUSINESS FROM BEING HACKED

Simple Mistakes Business Owners Make With Their Data  
That We Need To Talk About



**WHY THE HECK DO YOU  
CARE WHAT I HAVE TO SAY?**



## **JEFF KHAN**

Founder, Senior Solutions Architect, Technical Trainer, Speaker  
*MCT, MCTS, MCSE, MCBSS:CRM, MCDST, CNE, CCI, CCA:Netscaler, CCNP, CCNA, NETWORK+, A+*

Jeff has over 26 years of experience in network systems management, advanced infrastructure and cyber security.

## **KATHY HIRSEKORN**

Founder, Solutions Architect, Technical Trainer, Speaker  
*MCT, MCTS, MCPS, MCNPS, MCDST, MBSS, NETWORK+, A+*

Kathy has designed and implemented technology solutions including Windows Server, Hyper-V, Active Directory, Microsoft Exchange, System Center and Citrix for over 22 years.

# OUR STORY

- We founded Leapfrog Technology Group in 22 years ago after leading various Information Technology teams at Fortune 500 organizations in the prior years.
- We have led many cyber security recovery events including analyzing security events to locate the root cause all the way through recovery, including negotiations with ransomware gangs\threat actors.
- With security moving at such a fast pace today, we design and implement security solutions to increase the security posture of our clients to minimize likelihood and impact of security breaches.
- We help our customers stay in compliance with their insurance requirements as well as PCI, HIPAA, HITRUST and SOC standards.



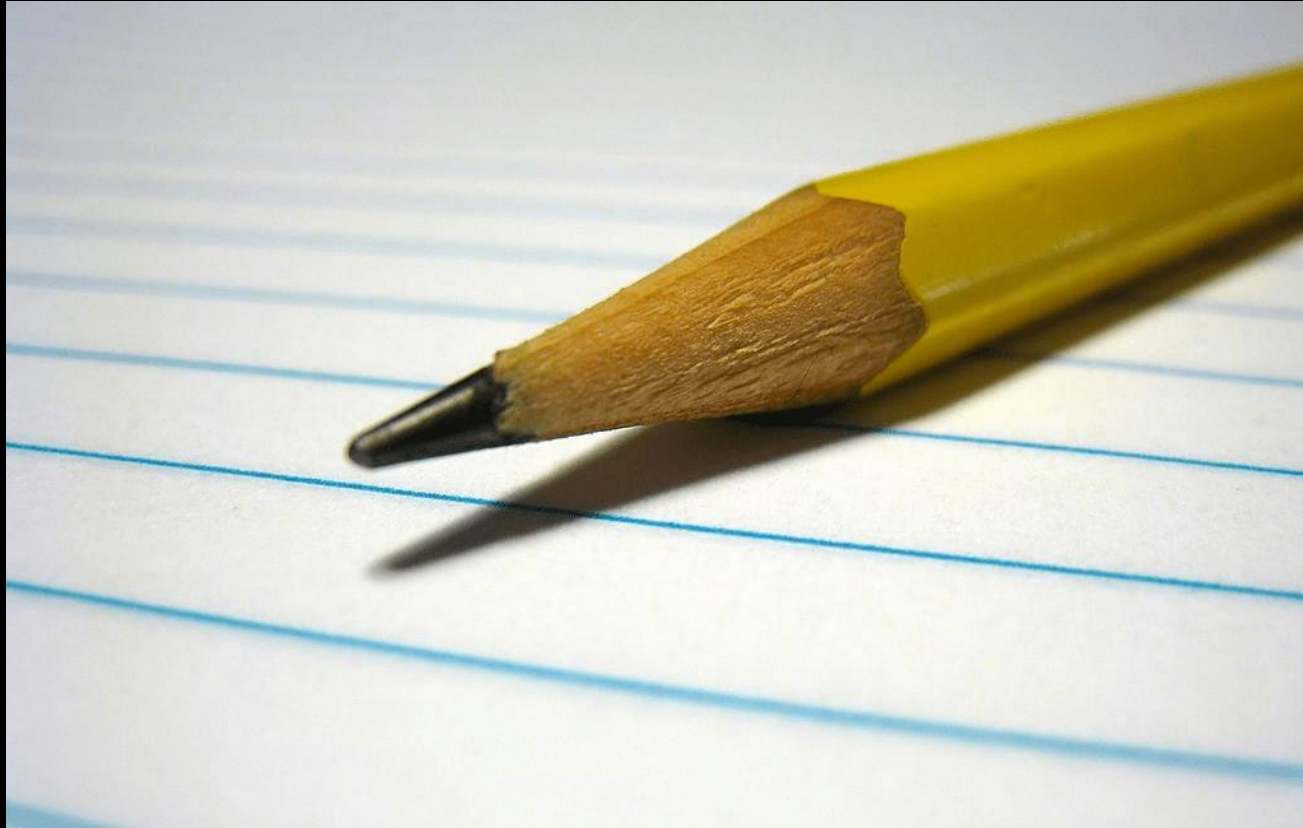
## OUR MISSION

HELP PROTECT  
**SMALL AND MIDSIZE**  
**BUSINESSES**  
LIKE US



**2,265 ASSESSMENTS**  
**IN THE LAST 12 MONTHS**

**GRAB SOMETHING TO WRITE WITH**



**SO WHAT'S GOING ON?**



**DID YOU KNOW:**  
**CYBER INSURANCE COMPANIES**  
**ARE LOSING MONEY RIGHT NOW?**

# SIGNIFICANT LOSS

- **AIG Insurance** cut their coverage in half
- IT forensics **costs are up 40%**
- Credit **monitoring is required**
- Attorney firms **assignments are expensive**

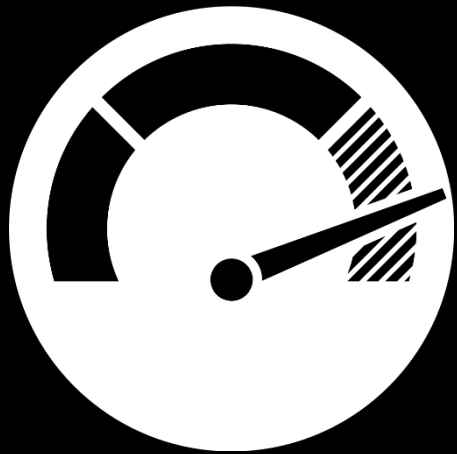
# WHY?

- Ransomware Risk Increasing
- Rising Response Costs
- Increasing Ongoing Costs
- Inadequate Cybersecurity Hygiene
- Lack of Incident Response Plans
- Business Interruption



# RANSOMWARE RISK IS INCREASING.

The average ransom payment in 2020 was **\$300,000**.



Average ransom payments are up **71%** this year: in the **first 6 months of 2022**, it's

**\$925,162**

**NOT JUST RANSOMWARE**



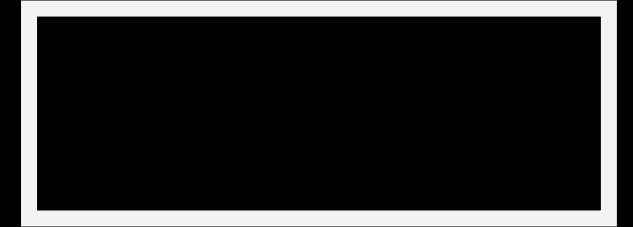
# HEIGHTENED BUSINESS EMAIL COMPROMISE (BEC) RISK

Federal Bureau of Investigation (FBI) said that the amount of money lost to business email compromise (BEC) scams continue to grow each year, with a **65% increase** in the identified global exposed losses between July 2019 and December 2021.

**IN 2020:**

**65% OF ORGANIZATIONS  
SUFFERED A BUSINESS EMAIL COMPROMISE**

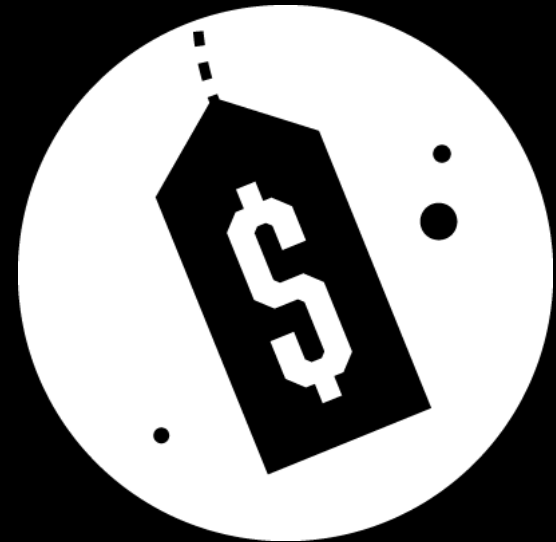
**RISK INCREASING**



# RISING RESPONSE COSTS

The costs associated with **responding to a cyber incident** are rising.

Also have major increases in cost for **security, IT, forensic and legal experts** who deal with the incident and ransomware demands.



# INCREASING ONGOING IT COSTS

44% of businesses planned to increase their technology budget, up 6% from the prior year.

1 in 4 businesses increased their IT spend in 2020 due to a recent security incident.



# INADEQUATE CYBERSECURITY HYGIENE



Most events are preventable with simple user cyber hygiene.

Companies do not even implement tools they **already own** because it's annoying!

With remote users, the **lack of adequate cybersecurity controls on home networks** leads to even more significant exposures as those workers connect to the office.

# LACK OF INCIDENT RESPONSE PLANS

Only **23%** of businesses surveyed reported having an incident response plan that was applied consistently across their organization.

That means **77%** of businesses have inconsistent or no plans.



# BUSINESS INTERRUPTION

The costs associated with a cyber intrusion are not only related to the recovery response.

According to a recent cyber claims study, claims impacting small and mid-sized enterprises resulted in an average of **\$343,000 in business interruption expenses** as the breached organizations worked to get back up and running.



**IF YOU WERE AN INSURANCE COMPANY,  
WHAT WOULD YOU DO?**



# WHAT IS CYBER INSURANCE

- Policies that help cover the financial losses that result from cyber events and incidents.
- Cyber-risk coverage helps with the costs associated with remediation, legal assistance, investigators, crisis communicators, and customer credits or refunds.



# COVERAGE EXAMPLES

- Extortion Demands
- Data Recovery (locked, stolen, altered)
- Legal Fees
- Hiring Forensics Investigators
- Repair or Replace Damaged or Compromised Systems \$\$\$
- Customer Notification Fees
- Restoring Identities to Customers whose PII was compromised

# EXCLUDED PREVENTABLE SECURITY ISSUES

- Cyber events initiated and caused by employees or insiders
- Failure to correct a known vulnerability
  - (Windows 7 being present in your environment, multi factor (MFA) authentication on your user accounts as examples)
- Cost to improve technology systems, including security hardening in systems or applications
- Infrastructure failures not caused by a purposeful cyber attack
- Preexisting cyber events, such as incidents that occurred before the policy was purchased

**WHAT CAN YOU DO TO MINIMIZE THE  
LIKLIHOOD OF SUFFERING AN INTRUSION?**

# WHAT ARE YOU DOING WRONG?



**BELIEVING  
ANTIVIRUS IS  
ENOUGH**



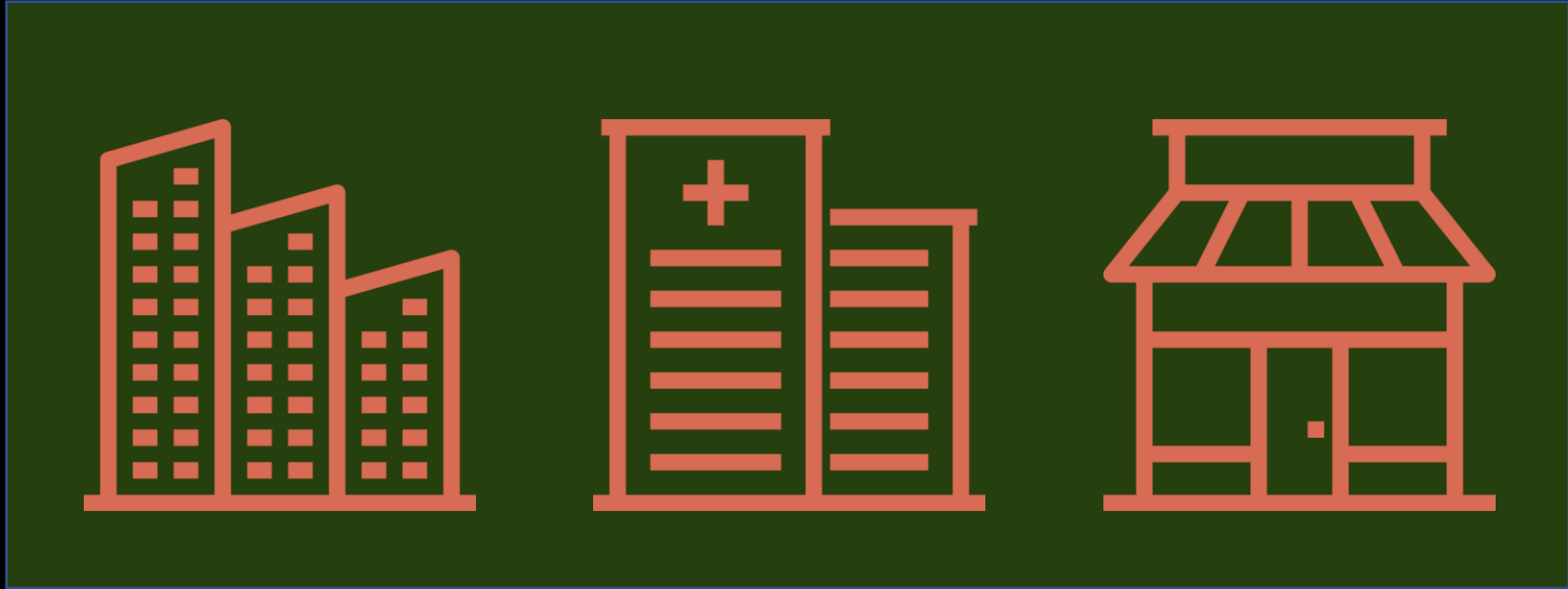
**MISSING THE  
WARNING SIGNS**



**NOT SEEKING  
VALIDATION**

**75 PERCENT OF RANSOMWARE VICTIMS  
REPORT HAVING UP TO DATE ANTIVIRUS**





**WHAT DOES THAT MEAN?**

**THEY THOUGHT THEY WERE SAFE**



**WHAT DOES THAT MEAN?**

**THEY WERE INVESTING IN SECURITY**



**WHAT DOES THAT MEAN?**  
**ATTACKERS STILL GOT IN**

**HOW DOES THAT HAPPEN?**  
**HACKERS ARE**  
**CONSTANTLY EVOLVING**

**HOW DOES THAT HAPPEN?**  
**HACKERS ARE**  
**CHANGING TACTICS**

**HOW DOES THAT HAPPEN?**

**HACKERS BYPASS ANTIVIRUS**

**HOW DOES THAT HAPPEN?**  
**ANTIVIRUS IS LIKE**  
**YOUR IMMUNE SYSTEM**

**HOW DOES THAT HAPPEN?**  
**ANTIVIRUS LOOKS FOR**  
**PATTERNS IN FILES**

**HOW DOES THAT HAPPEN?**  
**IF ANTIVIRUS HAS NOT  
SEEN A FILE BEFORE,  
IT ASSUMES IT IS GOOD**

**HOW DOES THAT HAPPEN?**  
**HACKERS KEEP CHANGING**  
**THEIR FILES AND**  
**ANTIVIRUS JUST CAN'T KEEP UP**

**HOW DOES THAT HAPPEN?**  
**EVEN “ARTIFICIAL INTELLIGENCE”**  
**NEEDS TO LEARN, MAKING IT**  
**SLOWER TO RESPOND THAN THE**  
**HACKERS**

**IN SECURITY, WHAT WORKED  
YESTERDAY DOES NOT WORK TODAY.**



## DARK WEB PRICES 2022:

- PayPal transfers from stolen account = \$15
- Hacked Uber account = \$15
- Hacked Gmail account = \$65
- Credit card details, account balance up to 1,000 = \$80
- 50 Hacked PayPal account logins = \$150

# SMALL FINANCIAL SERVICES FIRM EXAMPLE



**BEFORE COVID, MOST OF THEIR USERS  
WORKED AT THE OFFICE**

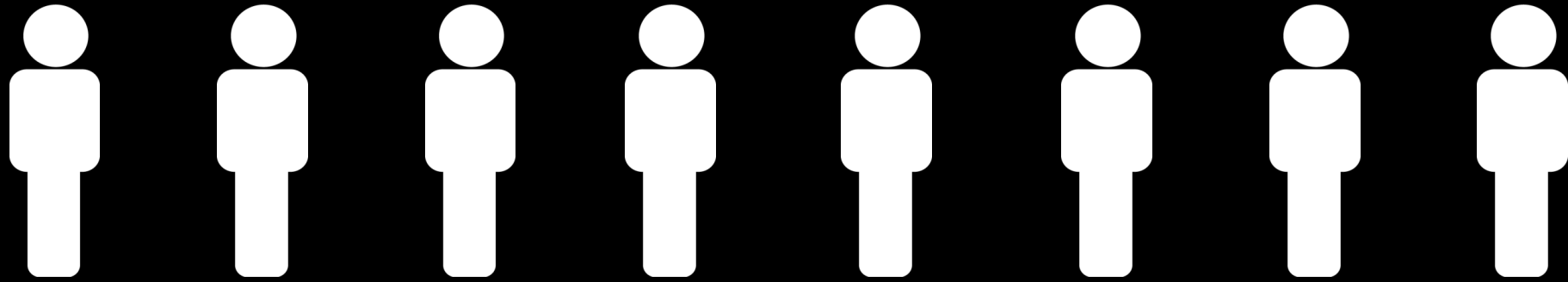
# SMALL FINANCIAL SERVICES FIRM: IN-OFFICE

- **Protection** was easier and centralized
- **Antivirus** protected the computers
- If an attacker got past the antivirus (which they often do) the **corporate firewall** stopped them from exfiltrating data out

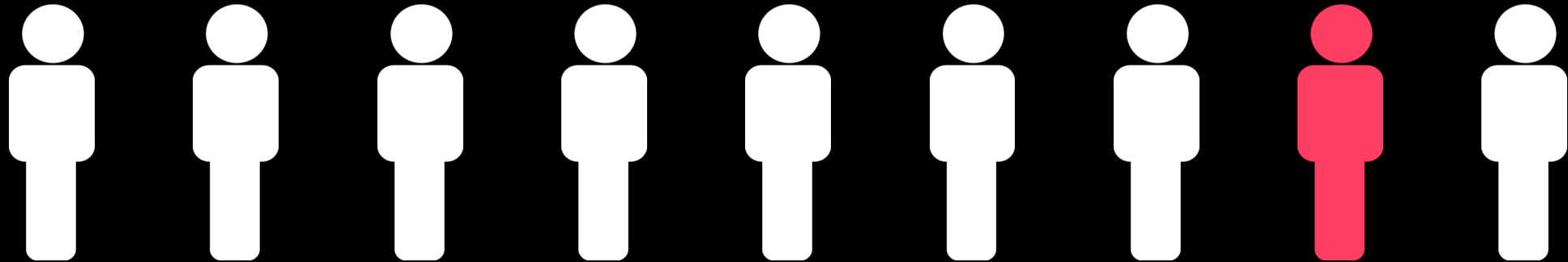
## SMALL FINANCIAL SERVICES FIRM TODAY:

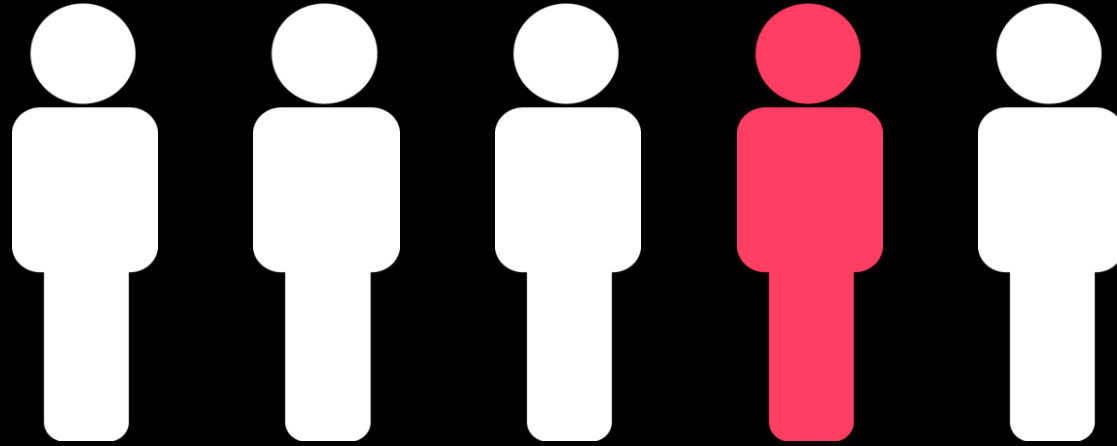
### USERS WORKING AT HOME, COFFEE SHOPS, AND THE OFFICE

- People use very **inexpensive firewalls** at home or none at all
- When the hacker gets past the antivirus, there's **no corporate firewall** or **configurations** to **stop them**



**1 OF THEIR 17 USERS WAS PHISHED**



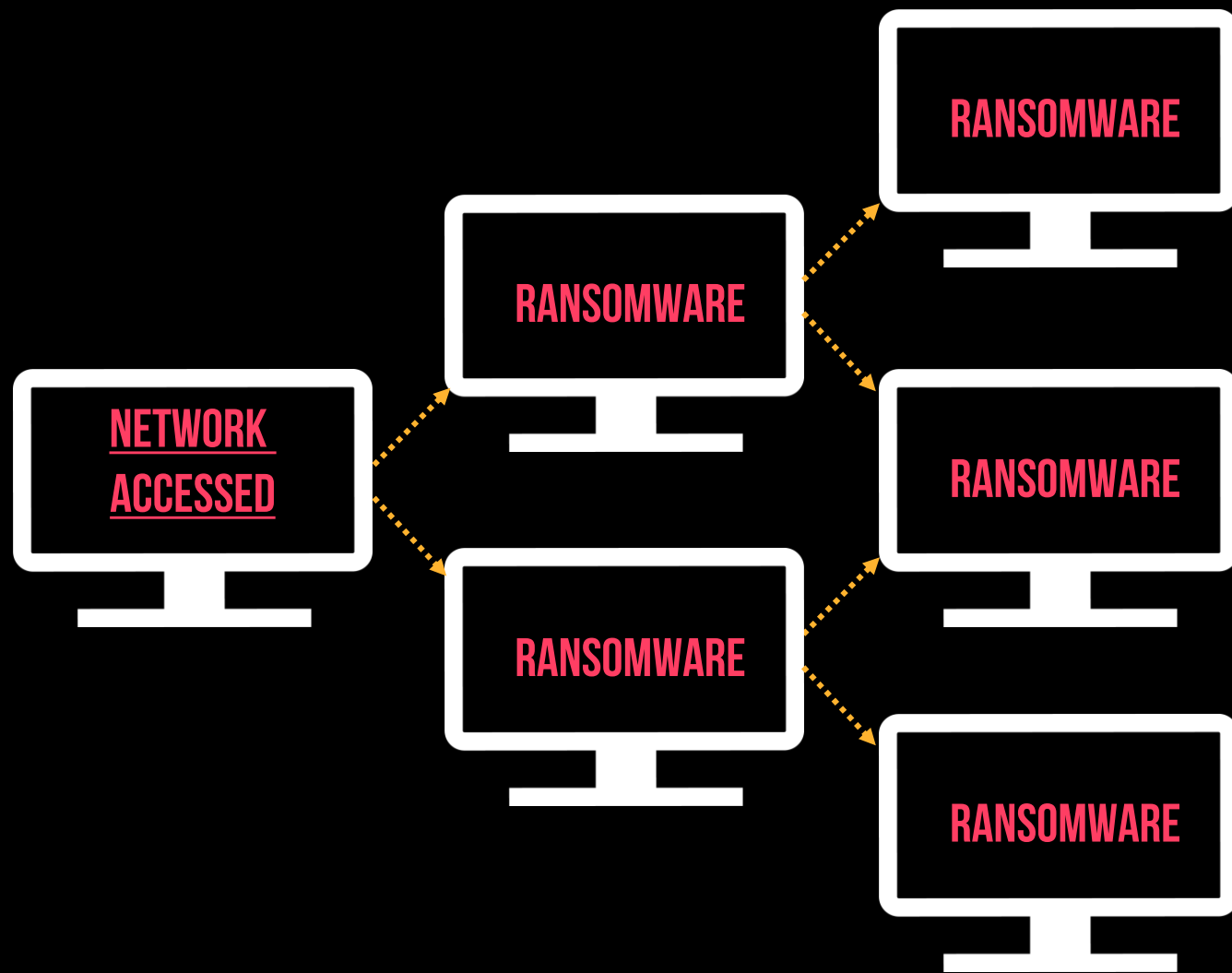


**1 OUT OF 5 USERS**  
**WILL CLICK A MALICIOUS LINK**

**THE HACKER GOT  
PAST THEIR ANTIVIRUS**

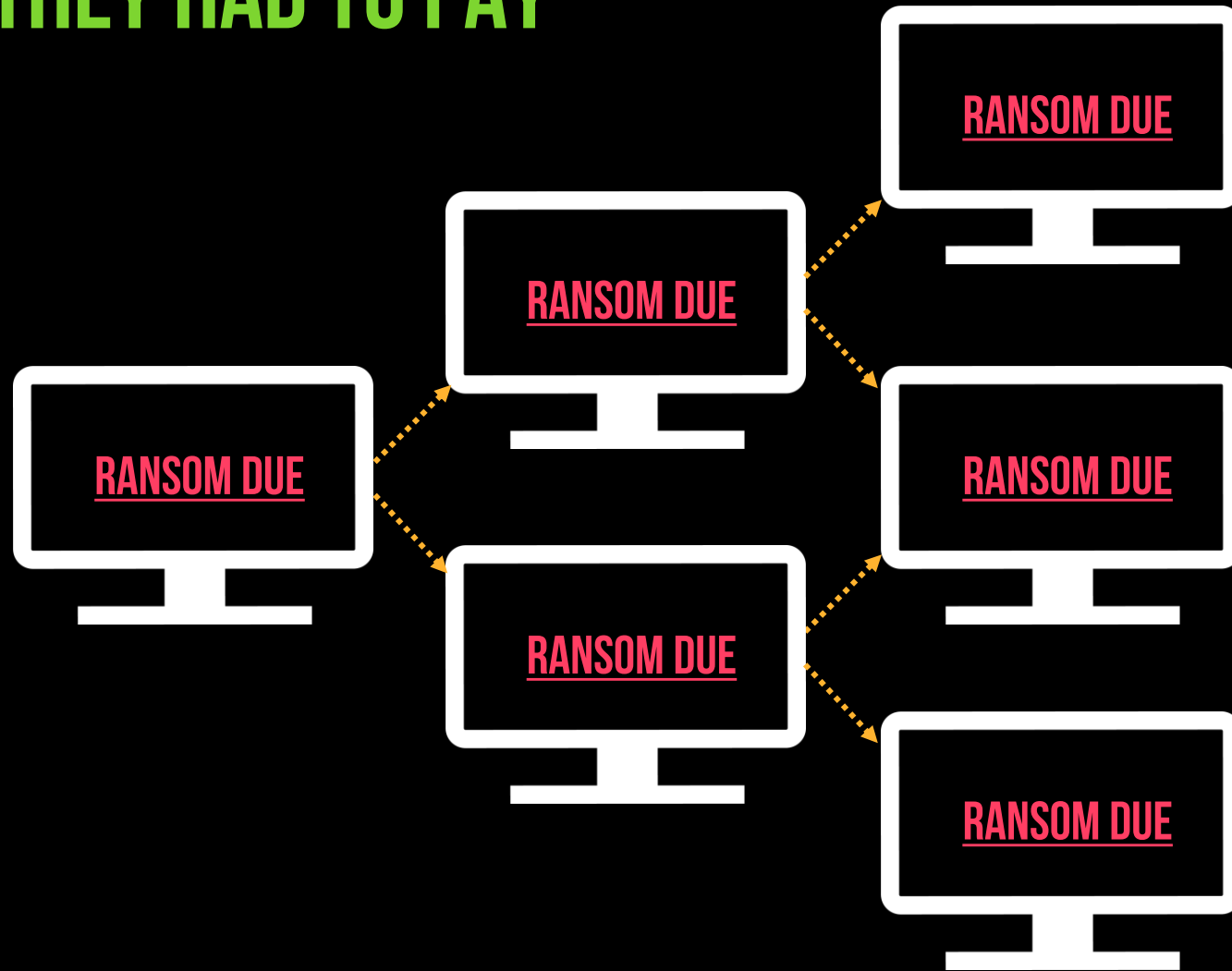
# ACCESSED THEIR NETWORK





**THE RANSOMWARE  
SPREAD TO  
ALL CONNECTED  
COMPUTERS**

# THEY HAD TO PAY



**13 DAYS**  
DOWNTIME

+

**PAID**  
THE RANSOM ITSELF

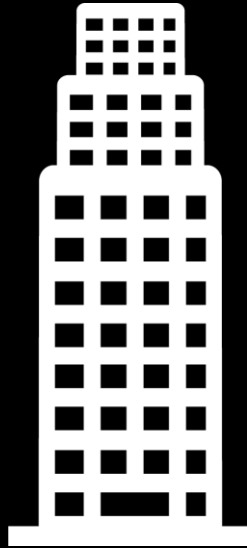
+

**LABOR**  
INTERNAL STAFF WORKING  
24x7 TO RECOVER

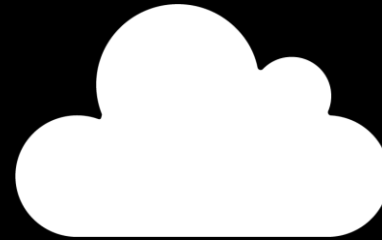
# ALL BUSINESSES ARE AT RISK



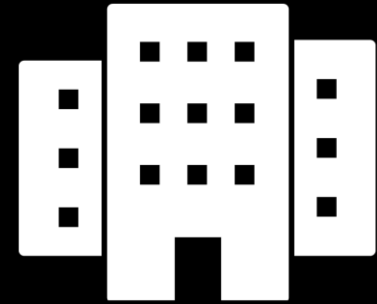
Small  
Business



Big  
Business



Business in  
the Cloud



All  
Businesses



**HAVE TO PAY THE RANSOM**



Small  
Business



Big  
Business



Business in  
the Cloud



All  
Businesses

**WHAT CAN YOU DO?**

**MAKE SURE MORE THAN ANTIVIRUS IS  
PROTECTING YOUR USERS, DATA AND REPUTATION.**



# HOW TO PROTECT

What you  
are probably  
doing

What you  
should be  
doing

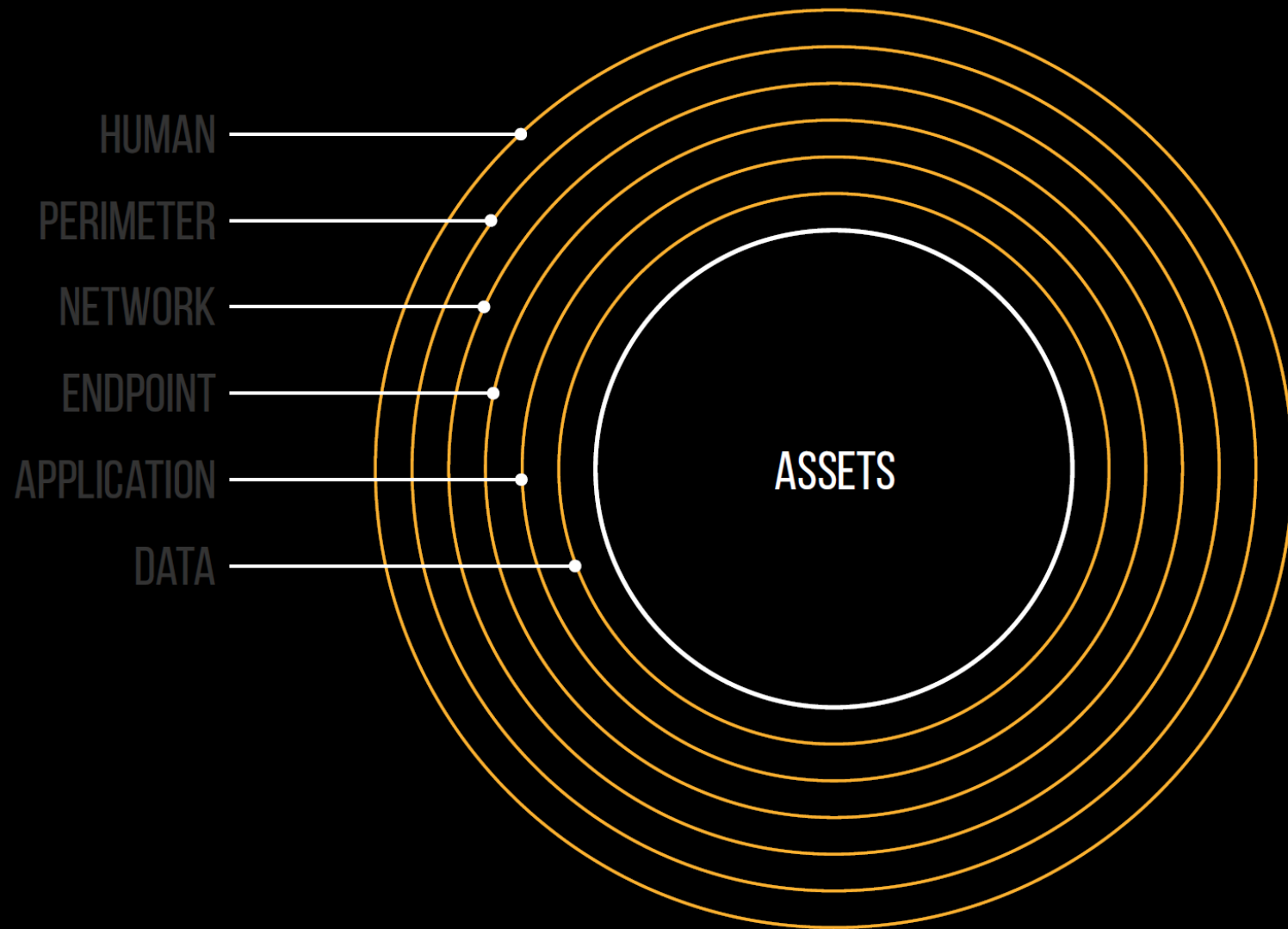
Not Enough

Essentials

Advanced

Premium

Desktop Antivirus	✓	✓	✓	✓
Virus Email Alert Monitoring	✗	✓	✓	✓
Business Cyber Insurance Policy Review	✗	✓	✓	✓
Email Phishing Tests	✗	✗	✓	✓
End-User Security Awareness Training	✗	✗	✓	✓
Dark Web Scan	✗	✗	✓	✓
Identification of PII	✗	✗	✓	✓
Internal Penetration Test	✗	✗	✓	✓
Malware Removal and Remediation	✗	✗	✗	✓
External Vulnerability Scan	✗	✗	✗	✓
Internal Vulnerability Scan	✗	✗	✗	✓
Microsoft 365 Analysis	✗	✗	✗	✓



**OUR SECURITY TEAM BUILT ONE OF THE  
MOST COMPREHENSIVE CYBER INSURANCE  
ANALYSIS AVAILABLE**



**COMBINED OVER 13 DIFFERENT CYBER  
SECURITY INSURANCE ASSESSMENTS**



# WHAT DO THEY EXPECT NOW?

- Do you restrict logins based on geography?
- Do you use 3-2-1 backup for data?  
3 copies, 2 types of media, 1 off site
- Are your backups air-gapped – separate from your network?
- Does 'all' corporate access require MFA or biometrics?
- Do all employees attest to security training annually?
- Are permissions to data and old user accounts reviewed monthly?
- Do you encrypt your operating system drives?
- No user accounts have admin access on the same account they login with daily?

## WHAT DO THEY EXPECT NOW?

- Do you perform anti phishing email tests quarterly?
- Are security cameras on a separate secured network?
- Does your email system prevent PHI\PII from being emailed?
- Do you have a documented disaster recovery plan?
- Do you have a documented incident response plan?
- Do all employees attest to security training annually?
- Based on your plan, # of hours to restore full business operations?
- How often do you test the recovery procedures?
- Are all users required to change their passwords?

# SECURITY AWARENESS TRAINING EXAMPLES



## BEC - Phishing the Stream

Life has been hectic for Mike's family with his daughter spending 3 months in the hospital, but things are starting to look up – until a crucial loan is denied. Mike discovers

**Duration:** 4 minutes



## BEC - You Never Call...

After her husband's wrongful arrest, Megan desperately researches what might have led to his stolen identity. She uncovers a case of Business Email Compromise, and hurries to

**Duration:** 4 minutes



## BEC - You Never Call... (ANIME STYLE)

After her husband's wrongful arrest, Megan desperately researches what might have led to his stolen identity. She uncovers a case of Business Email Compromise, and hurries to

**Duration:** 4 minutes



## Breach Awareness - Breach Avoidance

This course presents scenarios of typical phishing and malware attacks that can lead to breaches, and guides the user through the risks to the preferred avoidance

**Duration:** 10 minutes



## Breach Awareness - Introduction

This introductory course presents the concept of data breaches by looking at some different types of breaches and typical consequences of breach incidents. Best

**Duration:** 10 minutes



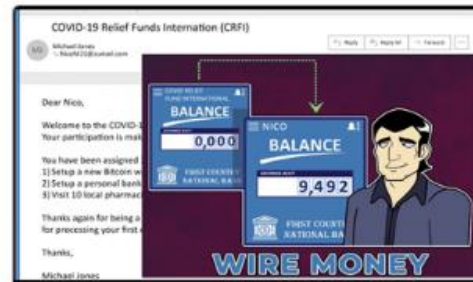
## Breach Awareness - Readiness and Response

Data shows data breaches at small businesses are mainly caused by negligence



## Callback Scam - Call Me

Flagstar Bank was compromised in a data breach that stole the personal information of more than 1.5 million customers. Call



## Charity Scams - Charity Case

Hackers trick people into becoming money mules by creating fake organizations or charities as a front for their criminal



## Credential Hygiene - Sleuth or Consequences

Networking & security giant, Cisco, revealed a threat actor breached their network by



## Cryptomining - Cryptominer Pants on Fire

In this episode, a phone overheats and explodes. It might have been a product

# PHISHING TESTS

## UPS In Transit Notification

UPS My Choice®

This message was sent to you at the request of TELFON BANK to notify you that the following shipments is/are in transit.

**Important Delivery Information**

**Shipment Details**

Tracking Number:	1Z18-617-200004050000
Ship To:	BRUNSWICK, GA 30109 PORTLAND OR 97058 US
UPS Service:	UPS NEXT DAY AIR GUARANTEE
Number of Packages:	1
Weight:	0.0 LB
Reference Number 1:	4000001234
Reference Number 2:	8,4070492 89552

Customize Template

## Bank of America Account Lock

Bank of America

Online Banking Alert

Message From Customer Service

Due to our new upgrade to servers, Your online account will be locked at [Call: 811-811-001-201](#).

If you want to continue using our online banking service, Simply click on the web address below to update your online account.

Confirm Now

Customize Template

## Facebook Account Locked

facebook

Hi [FIRSTNAME],

Your account has recently been compromised and, as a security precaution, we have locked the account.

Please [click here](#) to reset your password and unlock your account.

This message was sent to [EMAIL] because we think you may have used Facebook on the device. Please [unsubscribe](#) Facebook, Inc., Attention: Community Support, 1 Hacker Way, Menlo Park, CA 94025

Customize Template

## FedEx Last Reminder

FedEx

Dear [EMAIL],

We would like to inform you that your package could not be delivered due to incomplete information of your physical address.

Please use the button below to update your personal address.

Update my address

The original item sent to [EMAIL]

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Customize Template

**DO YOU EVER GET  
X-RAYS AT THE DENTIST?  
ABSOLUTELY**

**WHY?**

**PROBLEMS YOU CANNOT  
DETECT WITH THE NAKED EYE**



**HAVE YOU EVER HAD AN  
X-RAY OF YOUR NETWORK?**



**HAVE YOU EVER HAD YOUR  
SECURITY ANALYZED?**



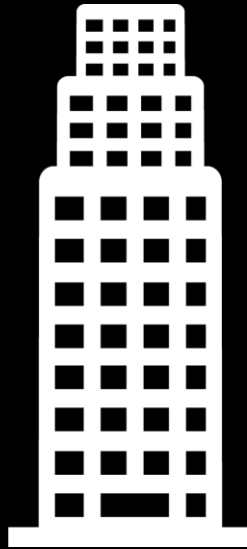
**YOU MIGHT BE THINKING**  
**YOU ARE TOO SMALL**



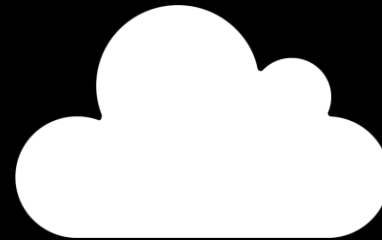
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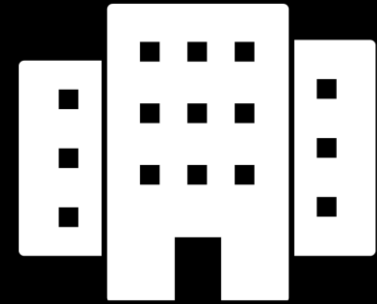
Small  
Business



Big  
Business



Business in  
the Cloud



All  
Businesses

**WOULD YOU EVER  
PROOFREAD YOUR OWN WORK?**

**DON'T ALLOW YOUR  
I.T. PEOPLE TO DO IT EITHER**



**IF YOU HAVE EVER HAD A  
BREACH, DATA LOSS OR RANSOMWARE**



**IF YOU CAN LOG INTO YOUR BUSINESS EMAIL  
WITHOUT BEING PROMPTED FOR  
AN ACCESS TOKEN ON YOUR PHONE**



**IF YOU ARE GETTING  
WARNING MESSAGES OR POPUPS**

**IF YOU ARE ONLY USING ANTIVIRUS**



**IT IS TIME TO GET A SECURITY ANALYSIS**



# I KNOW YOU ARE THINKING “THAT ISN’T MY JOB”

- Who will be responsible for **communicating to your clients** if you have a breach?
- Who will deal with **negotiating the ransom** if you get ransomware?
- These responsibilities usually fall on the **business owner’s shoulders**

**HELP PROTECT**  
**SMALL AND MIDSIZE BUSINESSES**



# We will:

Analyze your network

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Meet with you and review the results

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Give you simple steps you can take to  
protect yourself and your data

We will not need

**ADMINISTRATIVE CREDENTIALS**

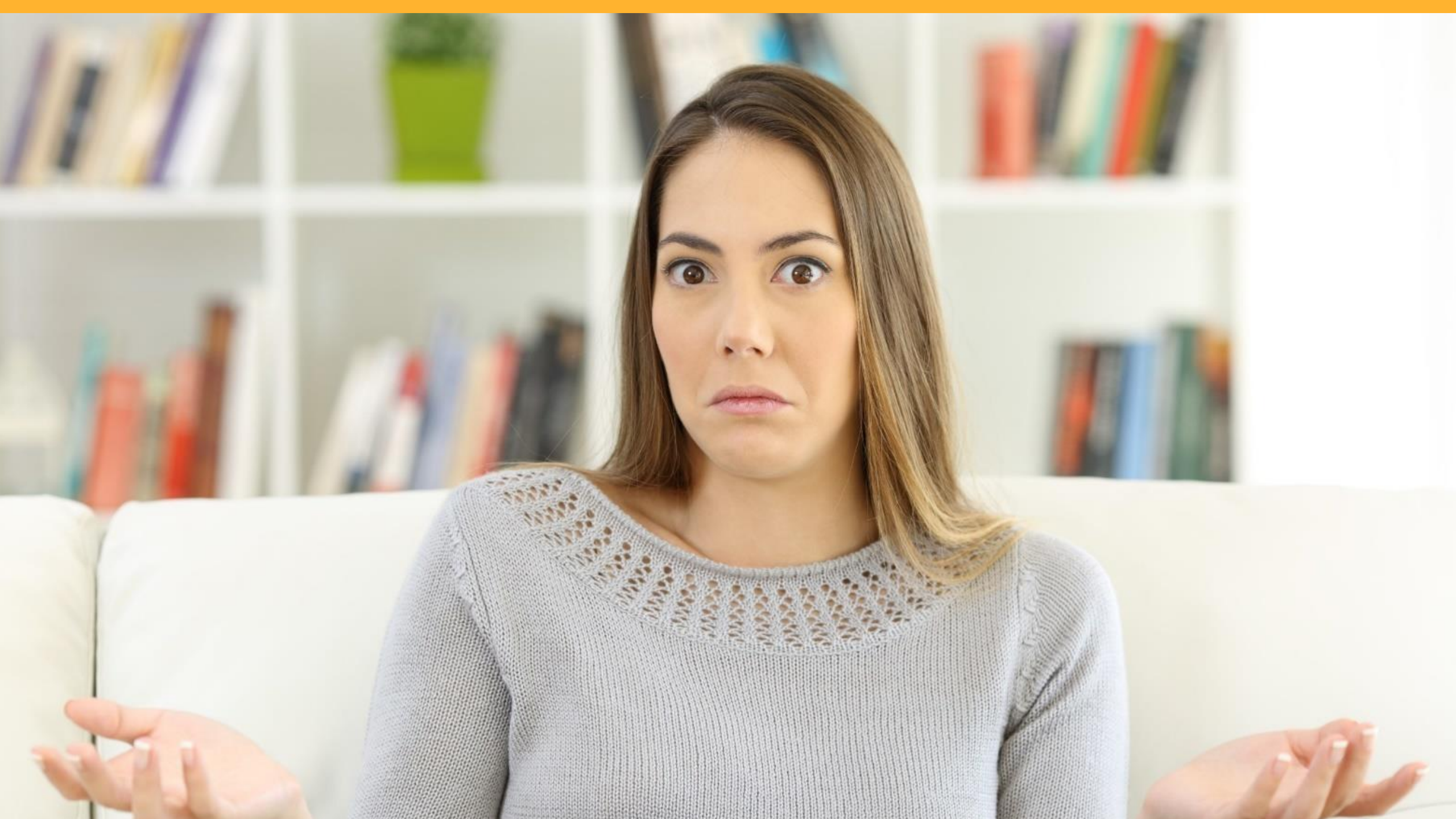


Will you have to get  
**YOUR IT DEPARTMENT INVOLVED?**



We will not  
**INSTALL ANYTHING**







Here's what you can do:

# GET A FREE 3RD PARTY CYBER SECURITY NETWORK ANALYSIS

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[WWW.INEEDLEAPFROG.COM/ANALYSIS](http://WWW.INEEDLEAPFROG.COM/ANALYSIS)





Here's what you can do:

# GET A FREE 3RD PARTY CYBER INSURANCE READINESS ASSESSMENT

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[WWW.INEEDLEAPFROG.COM/INSURANCE](http://WWW.INEEDLEAPFROG.COM/INSURANCE)



**QUESTIONS?**  
**SECURITY OR INSURANCE**