



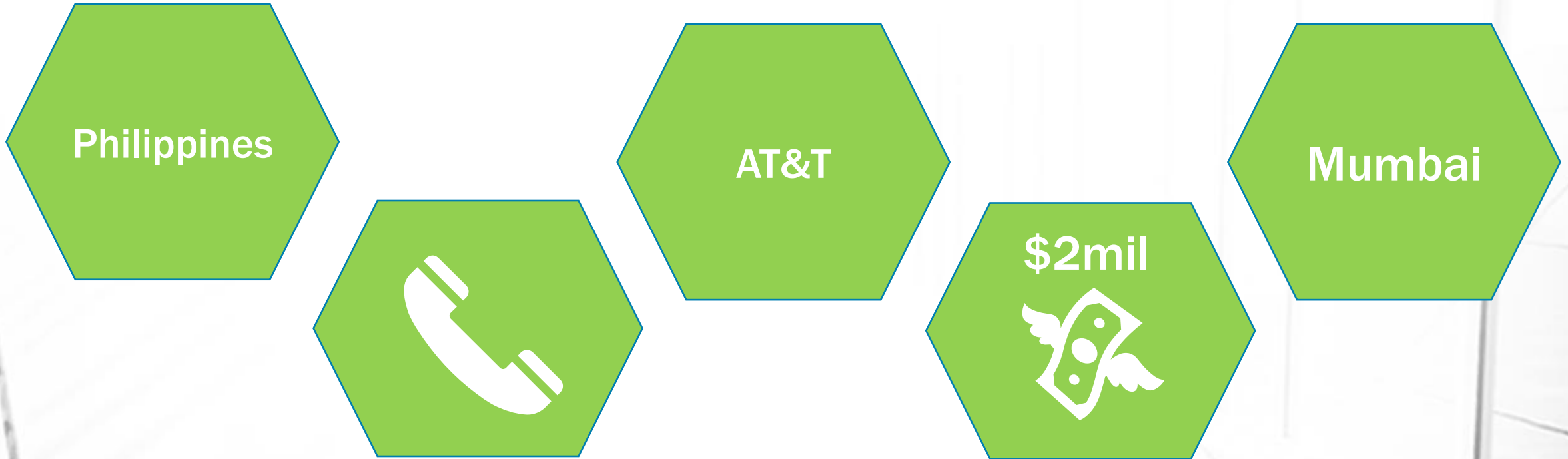
How to protect your business against cyber terrorism in the evolving norm?

Presented by Dex Yuan

Poll Questions

- Does your company has a website?
- Does you company uses email?
- Does your company uses cloud storage (e.g.dropbox)
- Is any of your company's equipment, systems, devices connected to the internet?
- Have you been the target of a cyber attack?

Back in 2011 ...



Is this a Cyber Terrorism incident?

What is Terrorism?

“ The threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation.”

Source: Global Terrorism Index 2020

What is Cyber Terrorism?

Cyberspace + Terrorism

= **Cyber Terrorism**

Means of Attack

Traditional Terrorism



Arson



Chemical, Biological,
Radiological



Bomb



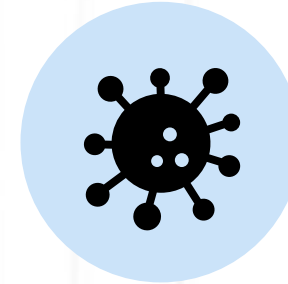
Armed Assault

Via Physical Space

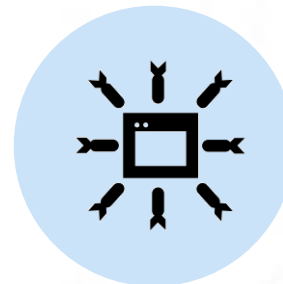
Cyber Terrorism



Ransomware



Malware



Denial of Service



Phishing

Via Cyber Space

Objectives of Attack

Traditional Terrorism



Injury



Death



Destruction

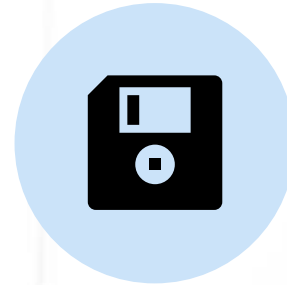


Disruption

Cyber Terrorism



Financing



Information



Destruction



Disruption

Fear, Coercion, or Intimidation

Cyber Attack Versus Cyber Terrorism

	Similarity	Differences
Cyber Attack	<ul style="list-style-type: none">• Illegal• Crime• Steal information• Means of Attack<ul style="list-style-type: none">• Malware	<ul style="list-style-type: none">• Monetary gain• Cause disruption• Cause embarrassment• Fun• Show-off
Cyber Terrorism	<ul style="list-style-type: none">• Ransomware• Phishing• Website defacement• Denial of Services	<ul style="list-style-type: none">• Terrorism financing• Coordinate physical attack• Physical destruction

COVID-19 increases Cyber Security Risk

Work From Home


- Personal devices/network
- Less secured
- Network not protected
- Devices not protected

THE STRAITS TIMES


TECH

LOG IN SUBSCRIBE PDF

Working from home blamed for rise in cyber hits on organisations



About eight in 10 public-and private-sector organisations here attributed work-from-home arrangements to a rise in cyber attacks, said a report by software company VMware. ST PHOTO: CHONG JUN LIANG

 **Kenny Chee**
Senior Tech Correspondent

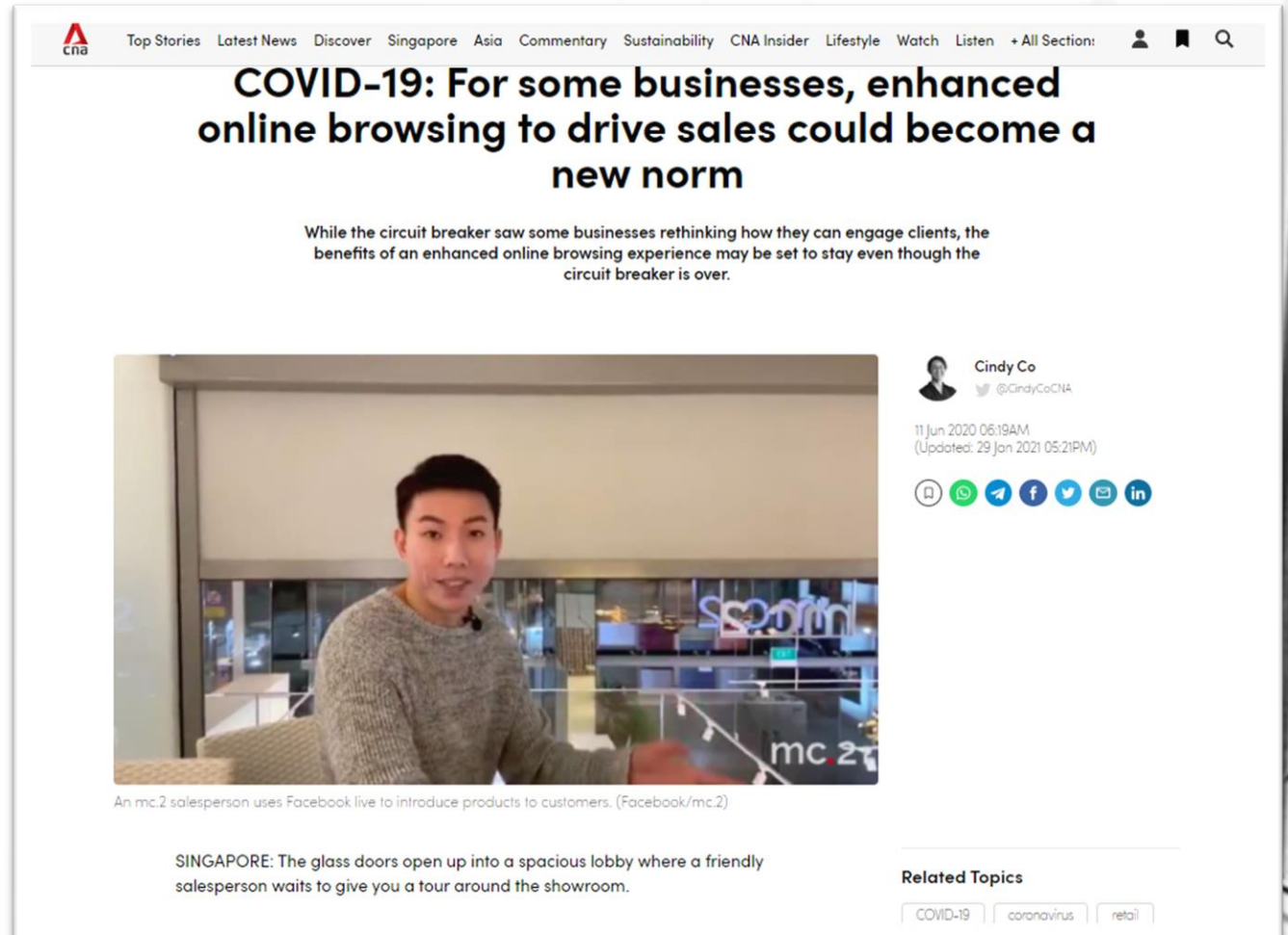
PUBLISHED JUN 8, 2021, 5:00 AM SGT

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COVID-19 increases Cyber Security Risk

From Physical Space to Cyber Space

- More customers shopping online
- Businesses pivoting to online business model
- Website, E-Commerce, Online-Transaction, Mobile Apps



The screenshot shows a news article from CNA. The headline is "COVID-19: For some businesses, enhanced online browsing to drive sales could become a new norm". Below the headline is a sub-headline: "While the circuit breaker saw some businesses rethinking how they can engage clients, the benefits of an enhanced online browsing experience may be set to stay even though the circuit breaker is over." The article features a video of a man, identified as an mc.2 salesperson, using Facebook live to introduce products to customers. The video is set in a modern, brightly lit showroom with large glass windows. The man is wearing a grey sweater and is looking towards the camera. The background shows a spacious lobby with a "mc.2" sign and a "scorin" sign. The article is dated 11 Jun 2020 06:19AM and was updated on 29 Jan 2021 05:21PM. The author is Cindy Co (@CindyCoCNA). The article includes social media sharing icons for WhatsApp, Telegram, Facebook, Twitter, Email, and LinkedIn. The article is categorized under "Related Topics" with tags for COVID-19, coronavirus, and retail.

COVID-19: For some businesses, enhanced online browsing to drive sales could become a new norm

While the circuit breaker saw some businesses rethinking how they can engage clients, the benefits of an enhanced online browsing experience may be set to stay even though the circuit breaker is over.

Cindy Co
@CindyCoCNA

11 Jun 2020 06:19AM
(Updated: 29 Jan 2021 05:21PM)

WhatsApp Telegram Facebook Twitter Email LinkedIn

An mc.2 salesperson uses Facebook live to introduce products to customers. (Facebook/mc.2)

SINGAPORE: The glass doors open up into a spacious lobby where a friendly salesperson waits to give you a tour around the showroom.

Related Topics
COVID-19 coronavirus retail

COVID-19 increases Cyber Security Risk

- Digitalisation is a double-edged sword
 - Create business opportunity
 - Increases the Cyber Terrorism Risk
 - **Increase threats** due to increase assets accessibility & bigger attack surface
 - **Increase vulnerability** due to weakness in new systems & new operating environment

More online
presence /
activities

=

↑ Cyber-
Attack
Surface

=

↑ Cyber
Security
Risk

**What is the risk of cyber threats
to your company?**

What are your assets?

- People
- Property
- Information
- Intellectual Property
- Personal Data
- Money

Threat Ratings

Threats Criteria	Score (1 to 3)
Access to Resources	3
Knowledge	2
History of Threats	3
Asset Accessibility	2
Asset Symbolic	1
Average Score	2.2

Scores	Threat Level
0 to 1	Low
1.1 to 2	Medium
2.1 to 3	High

What are the Vulnerabilities?

- Susceptibility
- Size of attack surface
- Security Measures (e.g. Anti-virus, Firewall)
- Redundancy (e.g. No backup data, no alternate systems)
- Recovery Period



How vulnerable is your company?

Vulnerability Ratings

Vulnerability Criteria	Score (1 to 3)
Susceptibility	2
Size of attack surface	2
Security Measures	2
Redundancy	3
Recovery Period	3
Average Score	2.4

Scores	Vulnerability Level
0 to 1	Low
1.1 to 2	Medium
2.1 to 3	High

What are the Impact?

- Money
- Loss of customers
- Disruption to Business
- Reputation
- Injury / Loss of Life

**How does it impacts your company if
your company is attacked?**

Impact Ratings

Impact Criteria	Score (1 to 3)
Money	3
Loss of customers	3
Disruption to Business	3
Reputation	2
Injury / Loss of Life	1
Average Score	2.4

Scores	Impact Level
0 to 1	Low
1.1 to 2	Medium
2.1 to 3	High

What is the overall cyber terrorism risk to my company?

Risk = **Threat** rating
x **Vulnerability** rating
x **Impact** rating

Risk Rating

Risk Criteria	Score (1 to 3)
Threat Ratings	2.2
Vulnerability Ratings	2.4
Impact Ratings	2.4
Risk Rating	12.7

Scores	Risk Level
1 to 9	Low
10 to 18	Medium
19 to 27	High

The strategy to protect your company against cyber terrorism is to **reduce vulnerability** and **impact**.

SGSecure 3Ps Approach



PREPARE YOUR WORKFORCE



PROTECT YOUR WORKPLACE

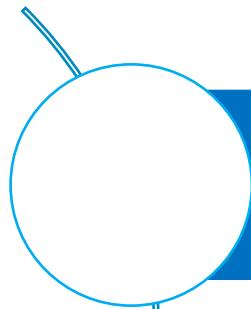


PARTNER YOUR COMMUNITY

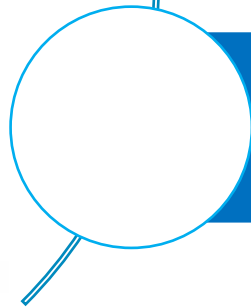
Source: <https://www.sgsecure.gov.sg/docs/default-source/default-document-library/sgsecure-guide-for-workplaces.pdf>



PREPARE YOUR WORKFORCE



Train Your Employees



Appoint a Cyber Security Lead

Train Your Employees

Awareness

4 Tips

- Strong Passwords & 2FA
- Spots signs of phishing
- Use Anti-Virus Software
- Update software

Source: <https://www.csa.gov.sg/gosafeonline/go-safe-for-me/homeinternetusers/bettercybersafethansorry>



**Better
cyber
safe
than sorry**

You wouldn't use a weak door lock to keep your home safe.

Use strong passwords and enable 2FA to secure your accounts.

Get more cyber tips at go.gov.sg/bettercybersafe

In support of:  In association with: **SG:D | GET READY!** Brought to you by:  An initiative of:  Supported by:  

Train Your Employees

Training

- Free
 - No Accreditation
 - Limited information
- Paid
 - Accreditation
 - Comprehensive
 - Basic, Intermediate, Advance

*Personal
Data
Protection*

*Basic
Computer
Security*

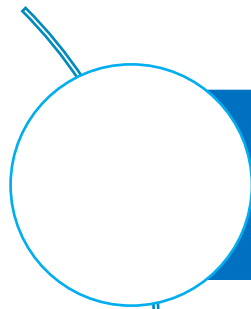
*Information
Security
Protection*

Appoint a Cyber Security Lead

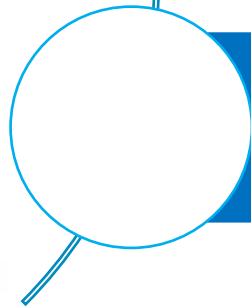
- Appoint someone to take charge of Cyber Security
 - IT Department
 - HR / Operations
 - In-House or Outsource
 - *SGSecure Representative*
 - Data Protection Officer
- Drives the 3Ps initiatives



PROTECT YOUR WORKPLACE



Plan ahead for business continuity



Protect your IT systems & data

Plan ahead for business continuity

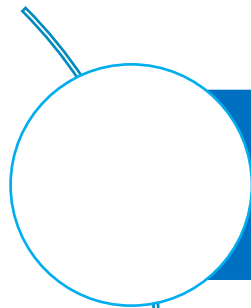
- **Develop Business Continuity Plan (ISO 22301)**
 - Assess cyber terrorism risk
 - Develop response plan
- **Adopt best practices**
- **Get Certified**

Protect your IT systems & data

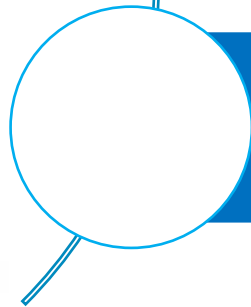
- Install Anti-virus software
- Update Operating Systems & Applications
- Backup data regularly



PARTNER YOUR COMMUNITY



Develop Your Support Networks



Enhance your communication capabilities

Develop Your Support Networks

- Join SGSecure network
- Subscribe to cyber security alerts
- Join your industry network

Enhance Your Communication Capabilities

- Create call directory for your employees and stakeholders
- Update the call directory regularly
- Use different communication means
 - E.g. WhatsApp, Telegram, SMS



End

enquiry@security40.com