Navigating Cybersecurity Challenges in the Healthcare Sector
醫療行業的網絡安全挑戰

Tony Ma
Chief Information Security Officer, Hospital Authority

October 2025

The Cyber Landscape in 2025

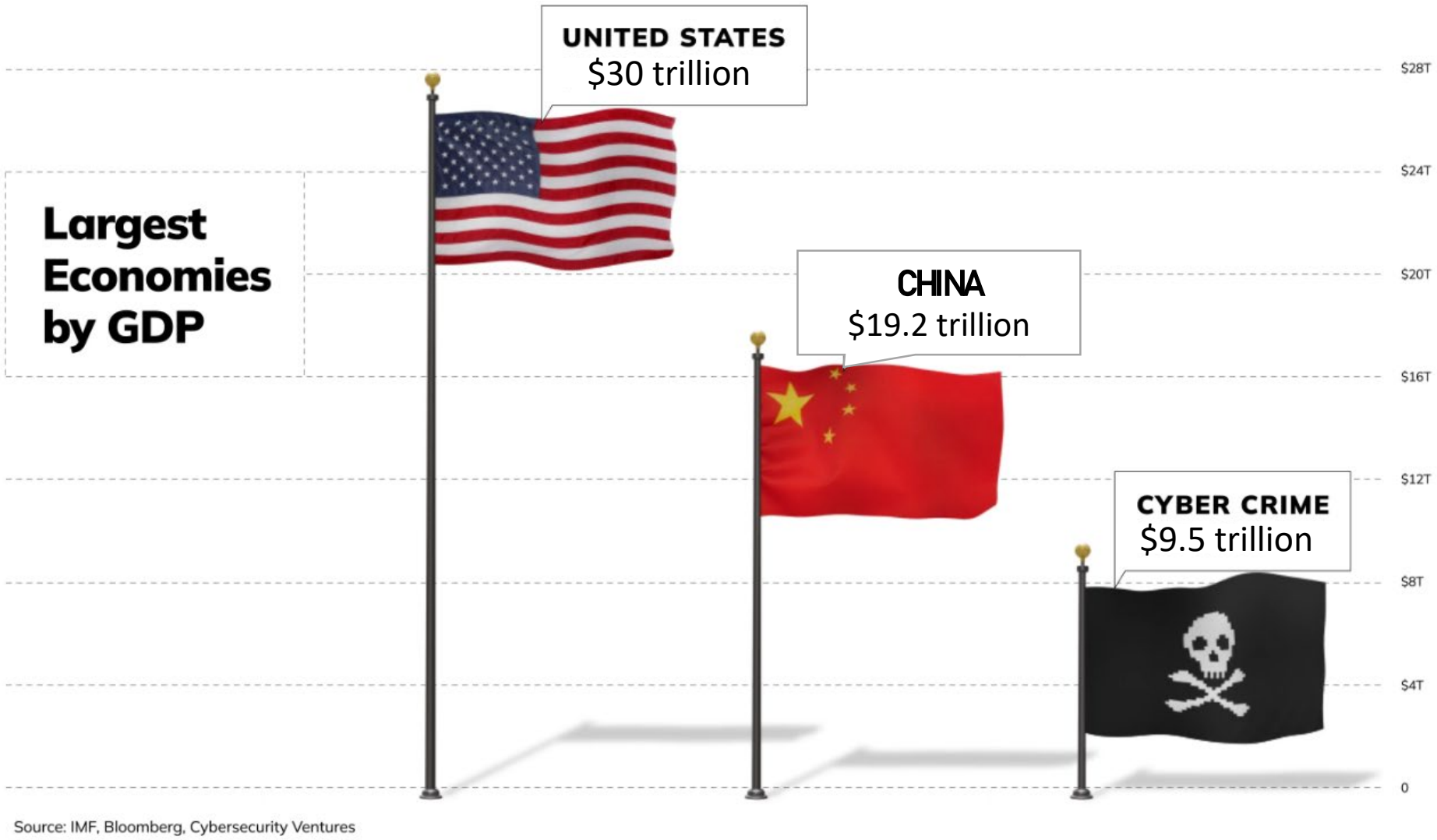
What we saw in 2025

- Cybercrime to cost the world $12.2 Trillion annually by 2031
- Average cost of a data breach in healthcare sector is US$7.5m
- Hong Kong is an attractive cyberattack target
- Ransomware attacks target all companies from enterprise to SME
- Insecure remote access and uninformed end users are still root cause

Cybercrime to cost the world $12.2 Trillion annually by 2031

Source: Cybersecurity Ventures

Cybercrime is the Third Largest Economy just after USA and China



Source: IMF, Bloomberg, Cybersecurity Ventures

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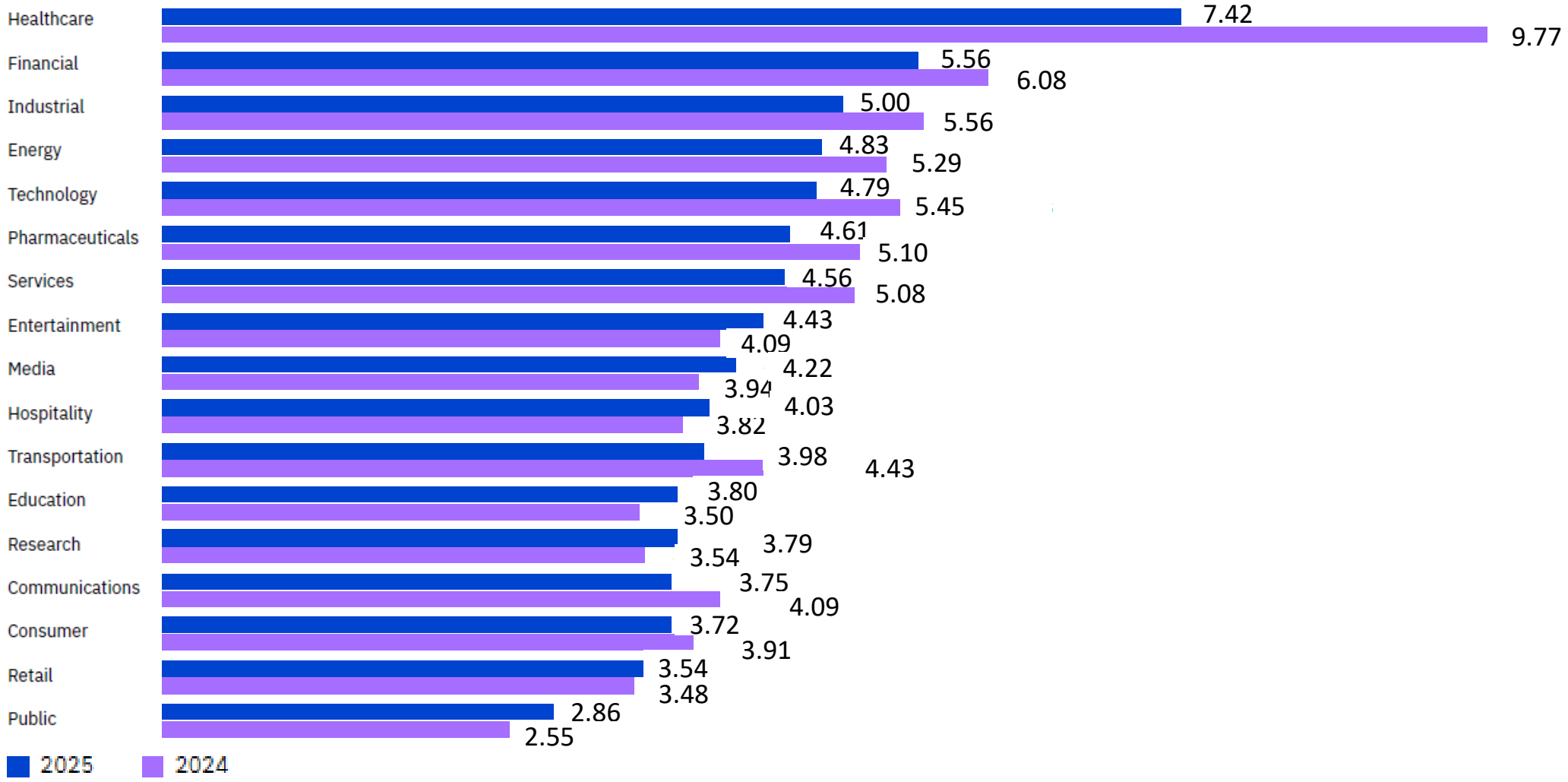
Average Cost of a Data Breach of Healthcare Sector is the Highest among all industry for 12th Consecutive Years of US$7.5m



Source: IBM Cost of Data Breach Report 2025

Hong Kong is an Attractive Cyberattack Target

▸Apr-24 ▸May-24 ▸Jun-24 ▸Jul-24 ▸Sep-24 ▸Feb-25 ▸Jul-25

Union Hospital

Union Hospital confirms cyber attack; sources say hackers want US$10m ransom

Local | 20 Apr 2024 1:18 pm

EMDS

機電署疑部份網絡系統被入侵　多項網上服務暫停　未發現資料外洩

School of Continuing and Professional Studies (CUSCS), The Chinese University of Hong Kong

Over 20,000 affected as CUSCS falls victim to cyber attack

Local | 13 Jun 2024 7:00 pm

(File photo)

The Hong Kong Institute of Architects

建築師學會遭黑客攻擊 私隱署：7000人受影響

【明報專訊】香港建築師學會及建築師註冊管理局秘書處的電腦系統及網頁上周受到黑客攻擊，網頁至昨晚仍未恢復。私隱專員公署昨回覆本報表示，上周三（3日）收到學會通報資料外泄事故，初步顯示或有7000人受影響，已根據既定程序展開調查。香港建築師學會會長陳灝斌向本報表示，事發後已隨即公布及通知會員，已應網絡安全專家意見，切斷伺服器對外連繫，正計劃將資料改為存放在雲端系統，減再受攻擊風險。

Hong Kong Programming Society

香港編程學會系統疑遭入侵　黑客網售會員資料　私隱署審查

InvestHK

InvestHK computer hit by ransomware, probe launches for possible personal info leak

BREAKING NEWS

HK Post

Cyber attack on Hongkong Post might expose personal data of EC-Ship users

HONG KONG NEWS

ARUP

Arup named as victim of £20m deepfake scam

By Dave Rogers | 20 May 2024

Cyber attack believed to have originated in Hong Kong

Arup has confirmed that it was the victim of a deepfake fraud after an employee was duped into sending HK$200m (£20m) to criminals by an artificial intelligence-generated video call.

Oxfam Hong Kong

Personal data of over 470,000 people at risk after breach at Oxfam

Local | 14 Aug 2024 11:24 am

LVHK

Hong Kong investigates Louis Vuitton data leak affecting 419,000 customers

By Reuters

Hong Chi Association

黑客入侵｜匡智會地區支援中心昨發現遭黑客入侵　即時中斷伺服器連結

科技

Hong Kong's Fire Department

Hong Kong fire department reports potential data leak, marking third gov't data breach in less than a week

The data left exposed by the breach included the surnames and telephone numbers of approximately 480 people who had reported tree collapse incidents during the Super Typhoon Saola last September.

Urban Renewal Authority

市建局所使用雲端平台免密碼登入　200名登記出席人士資料恐外泄

Cathay Pacific Airways Asia Miles

Cathay Pacific apologises to customers after 1,000 Asia Miles accounts hacked

Hong Kong flag carrier says no credit card information was leaked despite the hack

Reading Time: 3 minutes

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2024 HK Cybersecurity Situation

Source : HKPFCSTCB Cybersecurity Report 2024

$25.5M
Total losses

$38.8M
Highest ransom demand

$4.6M
Losses due to DDoS

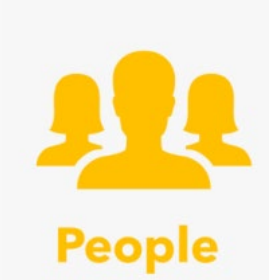
65%
Hacking activities increased

Cyber threat intelligence (TI) processed — **25M**

TI targeting Hong Kong — **440K**

Phishing-related — **280K**

醫療服務行業的網絡安全威脅與挑戰



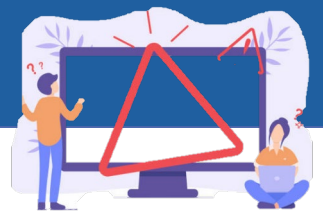
- 醫療服務員工的網絡安全能力較低
- 缺乏網絡安全人才以確保系統安全

- 高價值醫療數據成為網絡罪犯目標
- 臨床系統變得重要，成為勒索軟件攻擊對象

- 對醫療設備和老舊系統的控制不足
- 新興技術帶來新的風險


ARE
YOU
READY?

Why Cybersecurity Awareness Is Important?

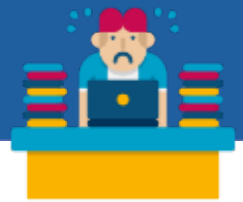


Work Disruption

Strong cybersecurity habits protect both your work and personal accounts and devices.

Impact on Patient

Delaying care risks patient lives



Round-the-Clock Restoration

Working off hours limits family time

Data Loss

Vigilance in cybersecurity safeguards your identity from theft

Impact on Network

Breaches can lead to identity theft

Potential fine

Your leaked information may lead to financial fraud

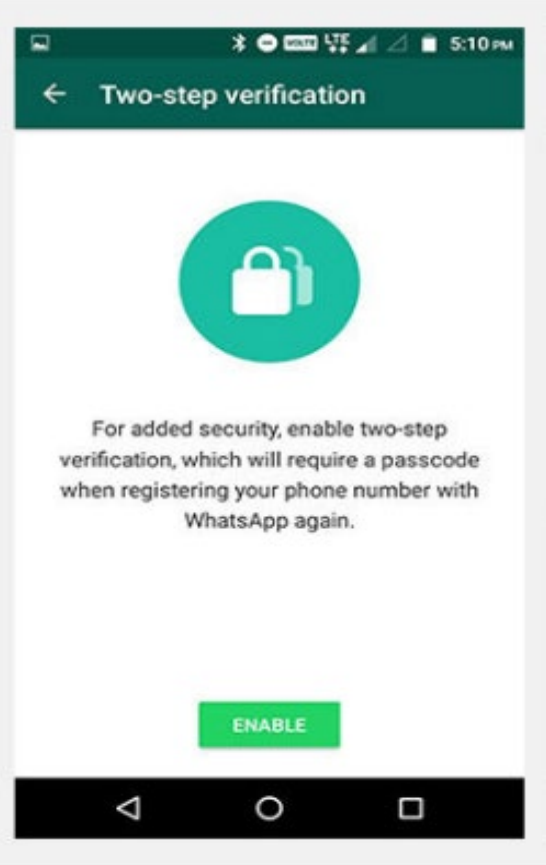
Why It Matters to You Personally?

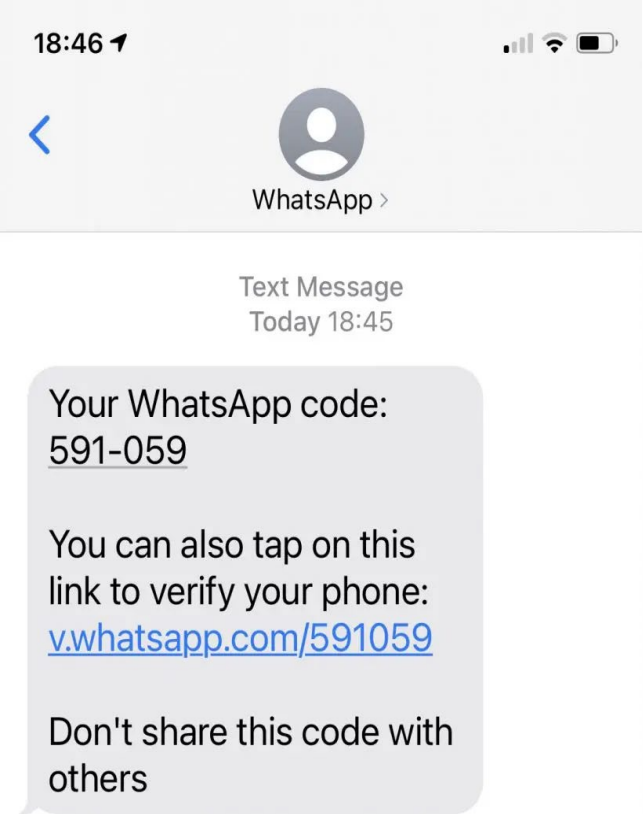
Get the Basic Right to Avoid Being Low Hanging Fruit

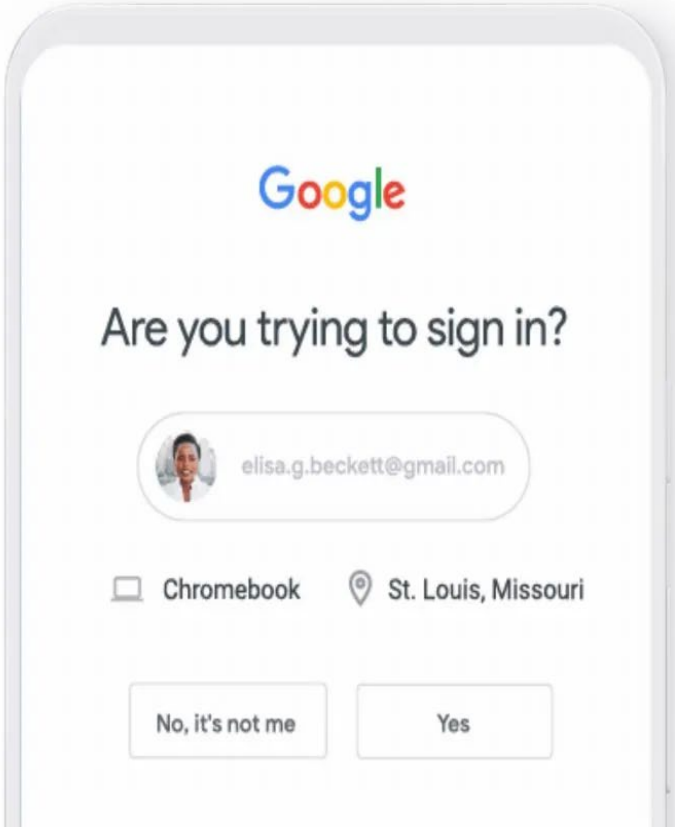
Source: HKCert.org

Enable 2-Factor Authentication

… and never disclose your OTP to anyone!







OTP is One Time Passcode

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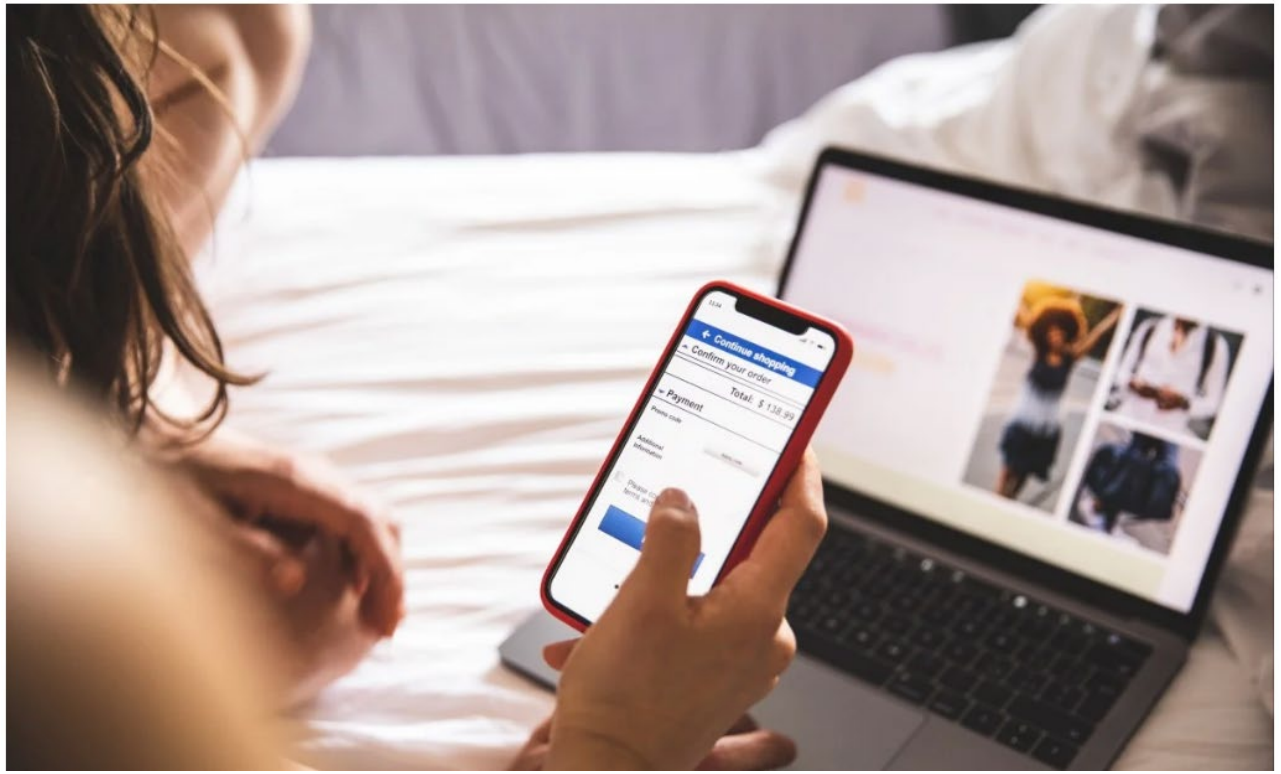
Beware fake apps and sites—stay alert and protect yourself.

Online Job Scams Surge 92% in Hong Kong (Jan–May 2025)

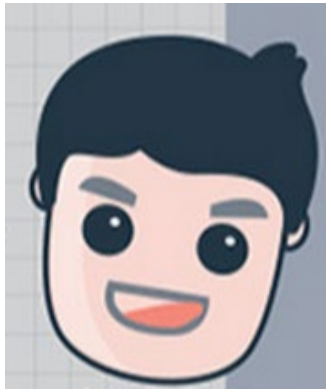
- Scammers offer rewards for simple online tasks
- Tasks escalate, victims pressured to pay fines or penalties after 'mistakes'
- Losses increased 89% to HK$480 million (~US$61.1 million)

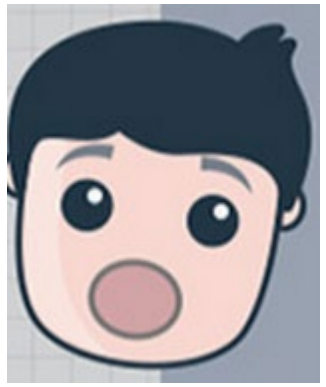


90% of all Cyber Attacks Begin with a Phishing Email

Tips to spot Phishing Email 網路釣魚 全攻略

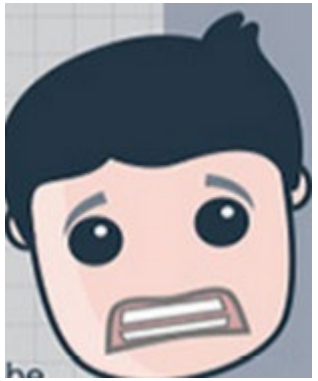
Greed
邊有咁大隻
蛤蜊隨街跳





Urgency
十萬火急
幫緊你

Curiosity
開心些牙



Fear
怯 你就輸成世

Practice Makes Perfect!

Mock Phishing Exercise 網路釣魚郵件模擬演習

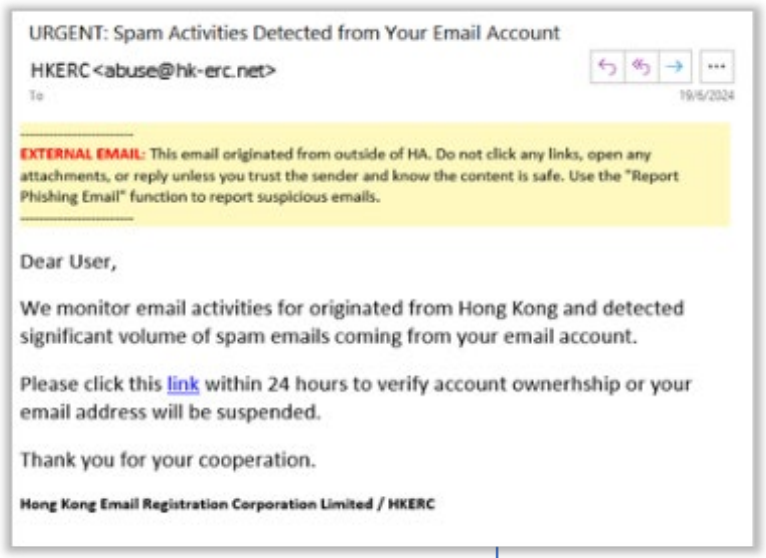
Objective

- Part of overall Cybersecurity Awareness Programme
- Provide a safe and real-life setting for users to experience phishing email
- Create staff awareness on risk of phishing email and best practices

Summary of the Exercise

- Target for staff who have Internet email address
- Leverage a professional phishing campaign platform for the exercise
- Ran for few days for each hospital or healthcare services provider
- Need supports and coordination efforts from management and IT dept

Scenario – “Spam Activities Detected from your Email Account”


URGENT: Spam Activities Detected from Your Email Account

HKERC <abuse@hk-erc.net>

To 19/6/2024

EXTERNAL EMAIL: This email originated from outside of HA. Do not click any links, open any attachments, or reply unless you trust the sender and know the content is safe. Use the "Report Phishing Email" function to report suspicious emails.

Dear User,

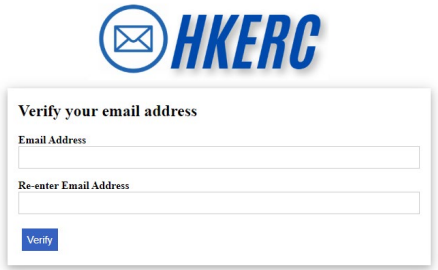
We monitor email activities for originated from Hong Kong and detected significant volume of spam emails coming from your email account.

Please click this link within 24 hours to verify account ownerhship or your email address will be suspended.

Thank you for your cooperation.

Hong Kong Email Registration Corporation Limited / HKERC

Click link


HKERC

Verify your email address

Email Address

Re-enter Email Address

Verify

Submit data


IT&HI

網絡保安貼士 - 網絡釣魚

Cybersecurity Tips - Phishing

網絡釣魚是一種網絡攻擊：使用偽裝的電子郵件誘騙受害者點擊連結或下載附件，從而使他們交出個人資料或將惡意軟件下載到他們的裝置。

Phishing is a cyber-attack that uses disguised email to trick victims to click a link or download an attachment, which would get them to handover sensitive information or download malware into their devices.

網絡釣魚的四大手法 Four Phishing Techniques

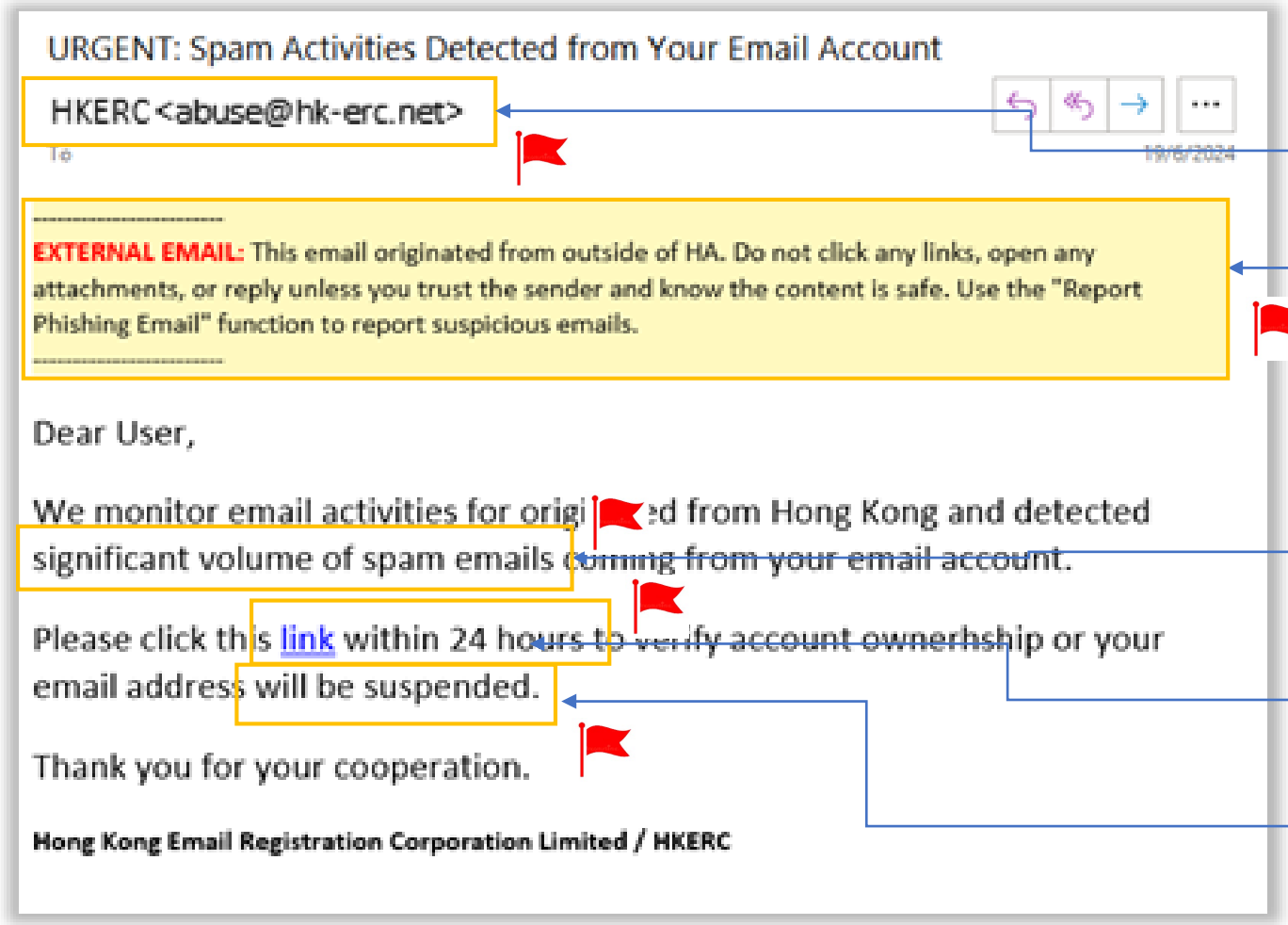
真實的網絡釣魚電郵例子及其特徵

Real-life Phishing Email Example and Red Flags

Red flags inside

Only users who clicked the link **AND** submitted data would be regarded as “clicker”

Phishing Email with Red Flags



Fake company

External email

Imaginary scenario

Suspicious link with urgency

Fear

Collaboration with Your Trusted Partners

Health Bureau
The Government of the Hong Kong Special Administrative Region
of the People's Republic of China

Digital Policy Office
The Government of the Hong Kong Special Administrative Region
of the People's Republic of China

醫院管理局
HOSPITAL AUTHORITY

醫健通
eHealth

香港警務處
網絡安全及科技罪案調查科
Hong Kong Police Force
Cyber Security and Technology Crime Bureau

香港個人資料私隱專員公署
Office of the Privacy Commissioner
for Personal Data, Hong Kong

Thank you!