

# HKCSS x Green Radar NGO Webinar

How to detect and protect organization from phishing attack effectively

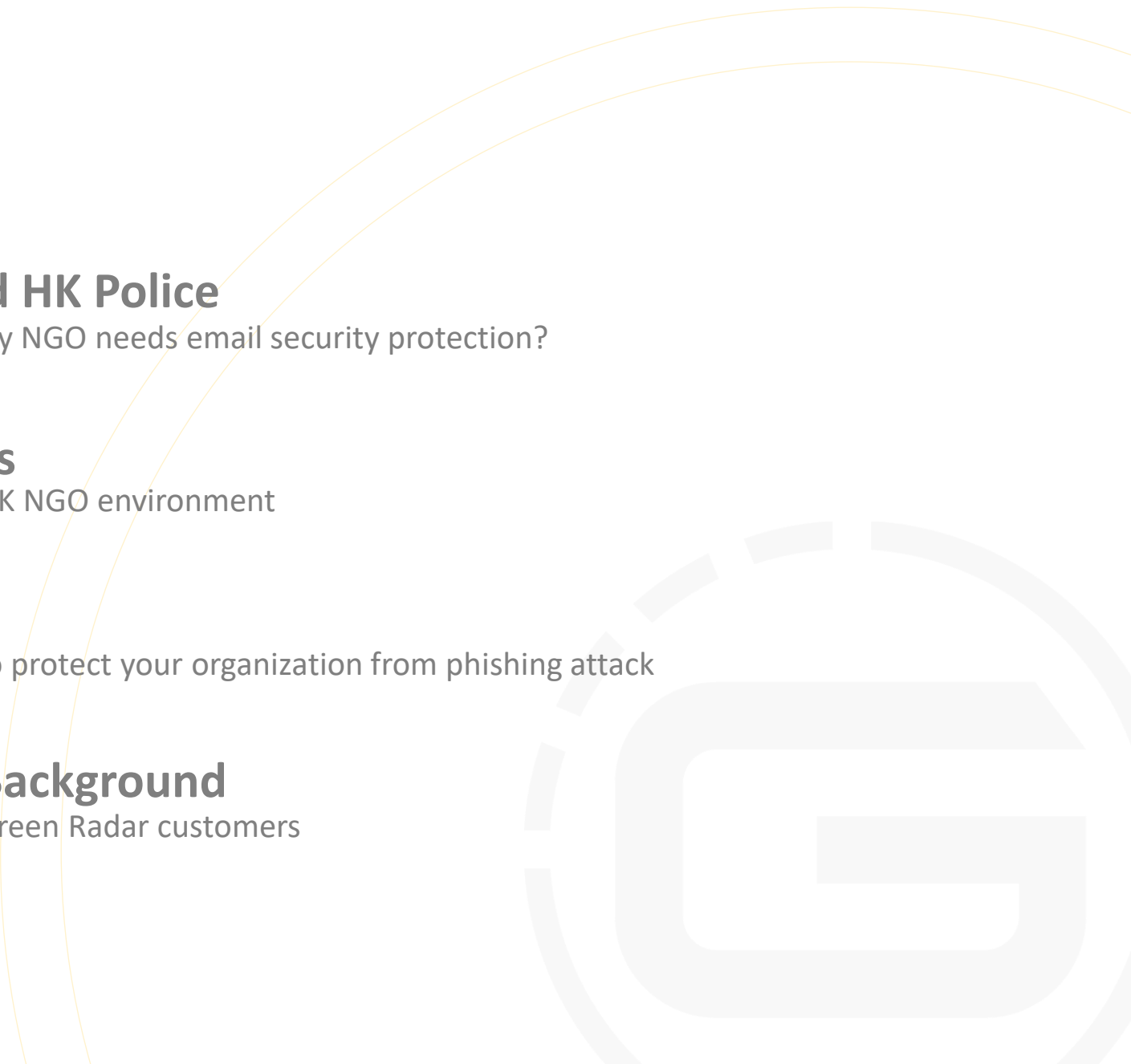
網絡釣魚電郵之防範及保安應對工作坊

Date: 20 July 2022 (Wednesday)

July 2022



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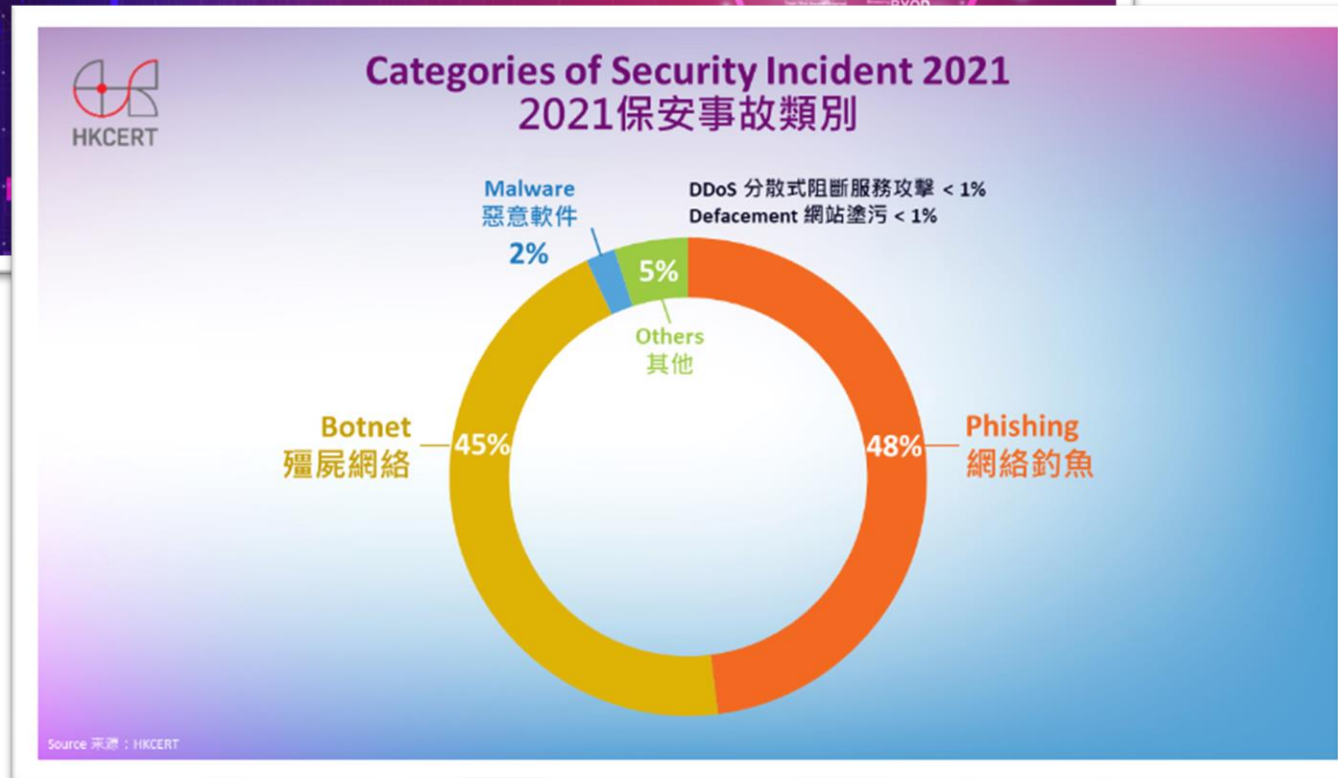
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# Phishing – Major Security Incident in 2021

## 網絡攻擊趨複雜及多元化 網絡釣魚事故創新高 HKCERT 呼籲全民資訊保安意識要提高

香港生產力促進局（生產力局）轄下的香港電腦保安事故協調中心（HKCERT）今日總結 2021 年香港資訊保安狀況並發布 2022 年保安預測。過去一年，疫情仍然肆虐，大大改變了企...

[了解更多](#)



Full article on [HKCERT website](#)

# Advice from Hong Kong Productivity Council (HKPC)

## 釣魚電郵肆虐 企業宜定期進行網絡安全事故演習

至於在過去12個月企業面對的**五大網絡攻擊**，分別為**釣魚電郵（82%）**、勒索軟件（42%）、假冒高層騙案（29%）、阻斷服務攻擊（DDos）（28%），以及其他惡意程式包括殭屍網絡（21%）。生產力局數碼轉型部總經理陳仲文表示，企業需要加強非技術性的網絡保安措施，並提高員工網絡保安意識。企業應定期為員工提供培訓，認識最新的網絡安全事故趨勢。另外，釣魚網站肆虐，企業務必要提醒員工妥善管理電郵，尤其應該即時刪除可疑電郵，還要教導員工如何分辨勒索電郵的真偽。除了提供培訓，企業亦應定期進行**網絡安全事故演習**，測試員工是否充分準備應對常見的網絡攻擊，藉以提升員工辨別和舉報可疑電郵的意識。

[Source: hket](#)





## 【電郵騙案】警方釣魚電郵演習7成企業有員工中招 今年首季錄145宗損4.8億元滬公司失7,600萬元

社會 03:00 2021/06/01

讚好 3

A+ A- 關注文章 儲存文章

分享: f d e

熱門 雪嶺 第五波疫情 COLLAR 升中面試 小一派位 靚太安樂窩 校長專欄 兒童健康 MIRROR星蹤 超市大搜查



▲ 警方進行釣魚電郵演習行動，希望透過加強訓練及宣傳，提升機構員工的警覺性、敏感度，提防被黑客入侵。(管權攝攝)

### 釣魚電郵演習結果

參與者數目	1,388 人
參與公司數目	46 間
「中招」人數	169 人 * / 點擊率：12%
「中招」公司 (至少一名員工點擊電郵)	32 間 / 點擊率：70%

註：\*169 人中有 29 人開啟多於一封電郵的連結或附件  
資料來源：警務處

警方認為其中一個有效提防電郵騙案的方法，是提升大眾分辨可疑電郵的敏感度。網罪科4月初舉辦了釣魚電郵演習，邀請46家銀行、公營機構等界別，共逾1,388人參與，當中32間公司至少有一名員工中招。網罪科網絡安全組總督察葉卓譽稱，逾三分之一中招者點擊「雲端文件分享」的電郵，「疫苗接種」及「稅務退還」也各佔2成多，情況與外國同類調查相若，顯示如騙案涉及社會熱話，更易令人受騙：「員工已事先知悉有演習，否則情況可能更差」。

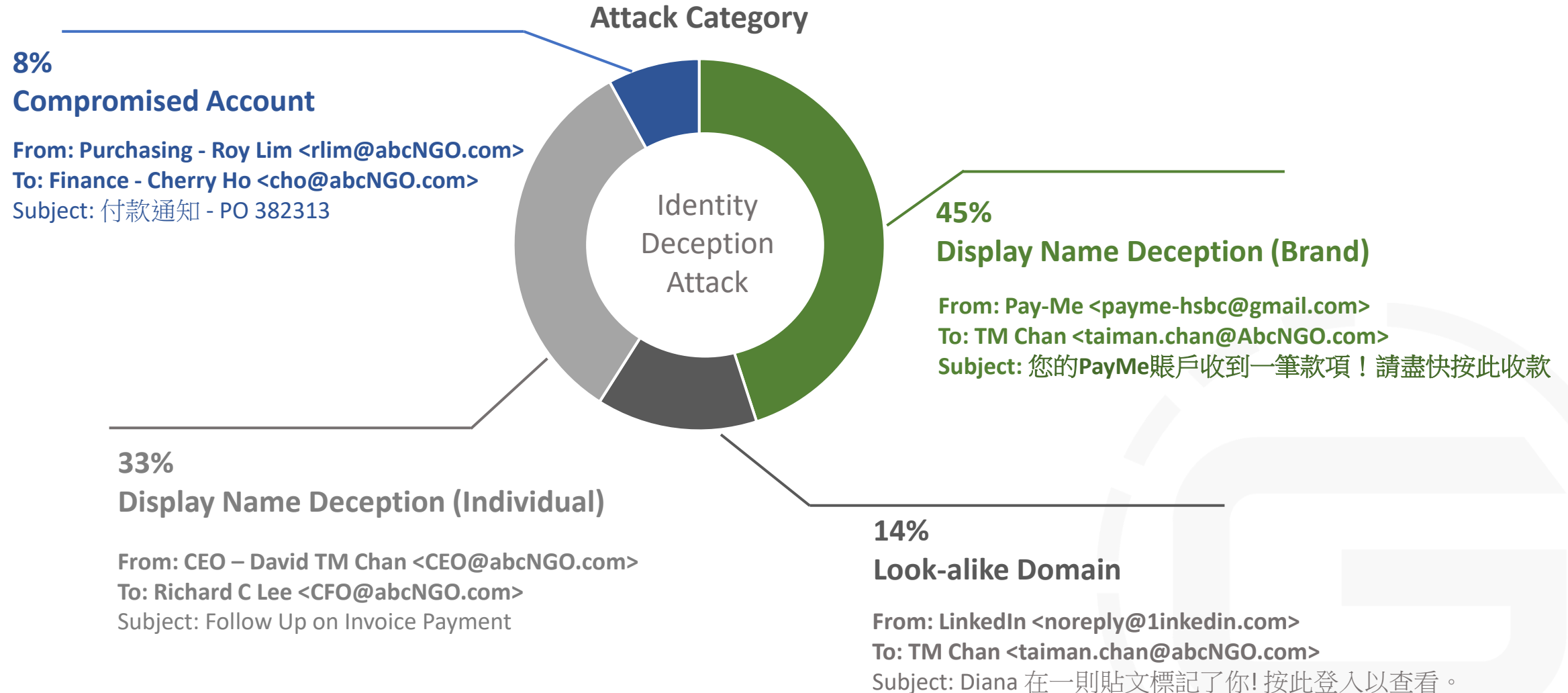
Source: [Topick](#)



# Common Attack Samples

Phishing attacks commonly seen in HK NGO environment

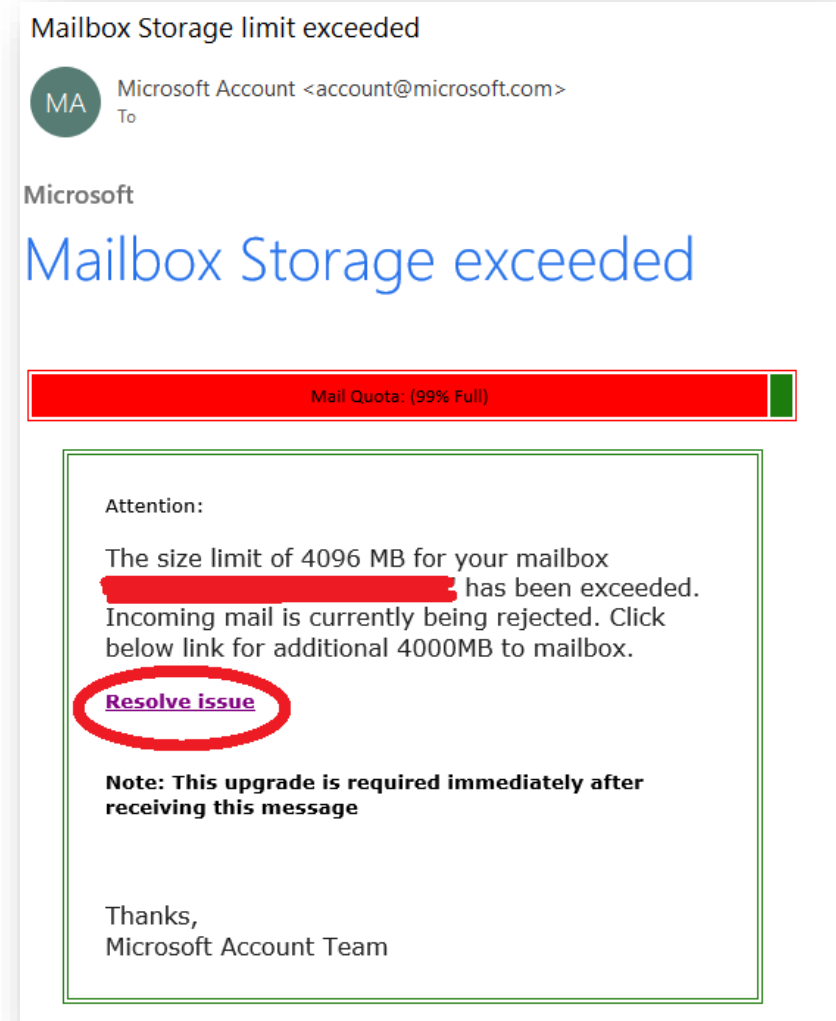
# Typical Scenarios of Phishing - Impersonation



# Phishing Example – Fake Microsoft Warning

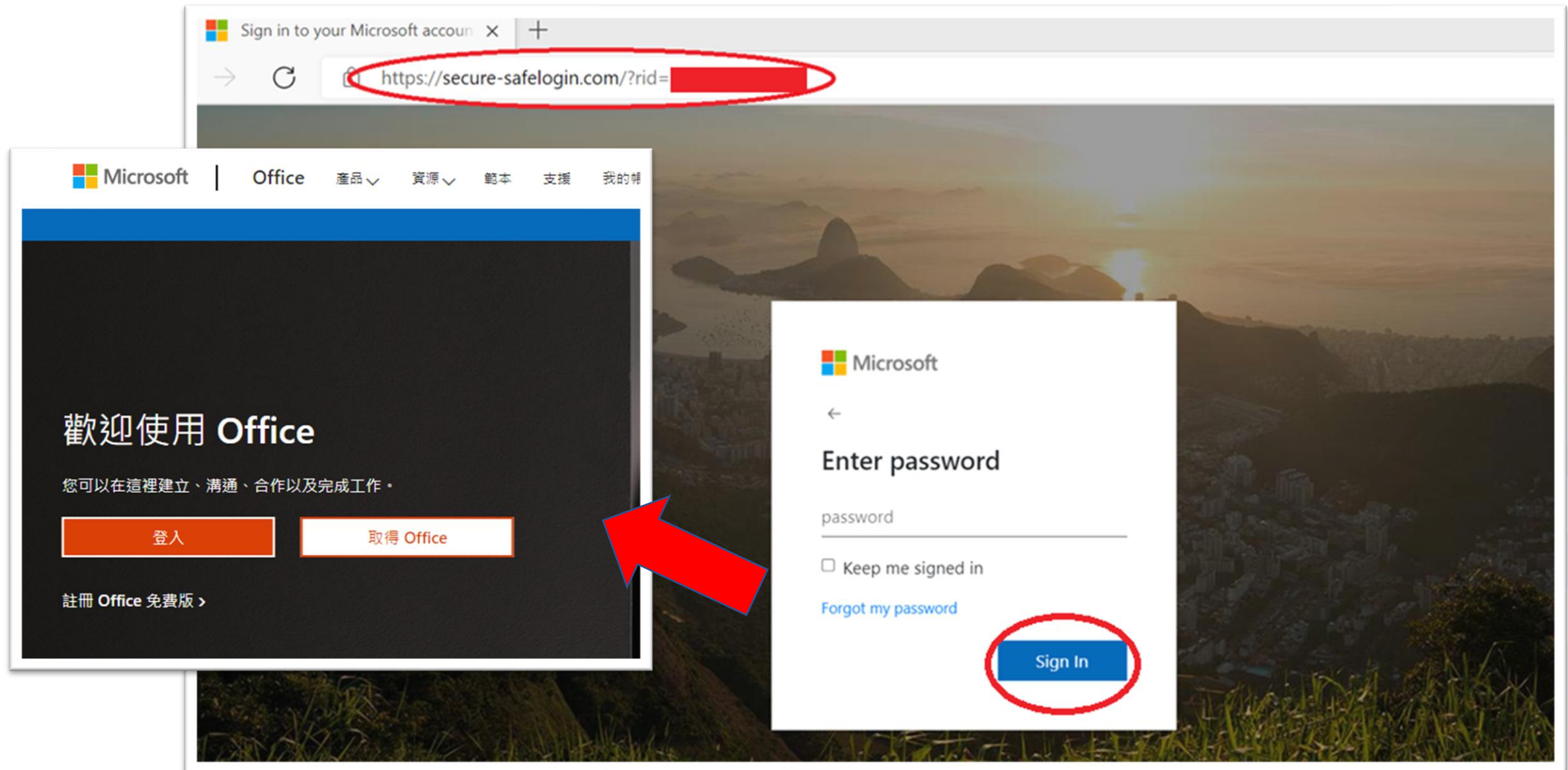
## Common Case Scenario:

- Hacker used any excuse and asked staff to click the **phishing URL**.
- Victim being directed to a phishing website and asked to enter his/her company email address and **password**.
- Hacker took over (**compromised**) victim's company email account.
  - **Internal:** leverage the **stolen** account to send **malicious** emails (e.g., phishing, ransomware) to **infect other colleagues**.
  - **External:** study the **email communication** of the compromised account and send phishing emails to **other NGOs**.
- **Related NGOs would be the next victim** especially if they set the compromised NGO as **"Trusted Sender"** unless they have **email security protection for Advanced Phishing protection**.
- **Potential Consequences:**
  - Damage on Reputation,
  - Financial Loss
  - Company Privacy / Confidential Data Loss...





# Phishing Example – Hacker trying to steal staff's Microsoft Login Password



# Security Challenges

## No Zero-Day Malware detection

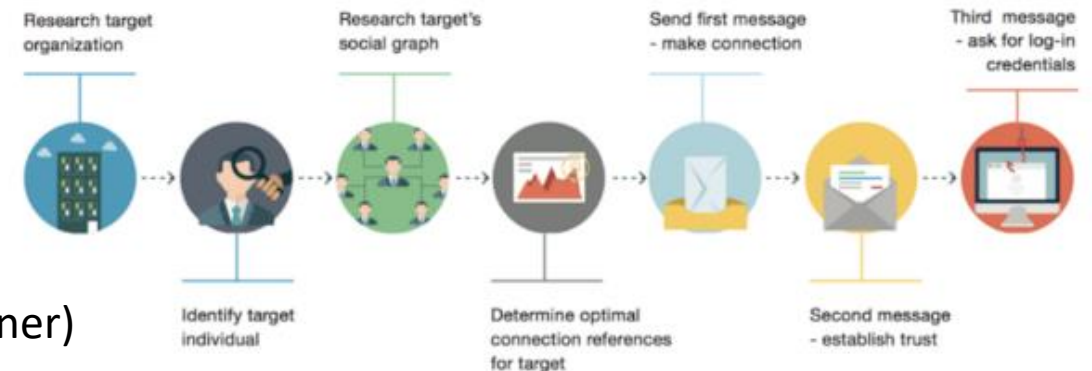
- Traditional anti-virus engine cannot detect Zero-Day Malware. Free mailbox service doesn't include advanced protection like Sandboxing for free.

## Inefficient URL analysis


- Zero-Day phishing URL cannot be blocked by traditional anti-spam engine.

## Targeted phishing

- Pretend from a trusted source
  - (e.g., your NGO domain/staff/ Other NGO Partner)
- May not have malware/phishing link
  - (e.g., VIP spoofing)



# Follow Green Radar Social Media Page for Latest Attack Update

 **METAMASK**

Features ▾ Support ▾ About ▾ Build ▾ [Download](#)

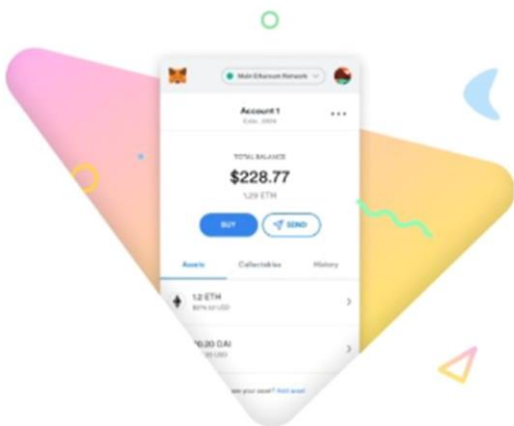
## Unlock your wallet

Enter your recovery phrase to unlock your wallet. A recovery phrase is usually a 12-word phrase but can also be a 24-word phrase. [Click here if you have 24 words.](#)

### Recovery Phrase

1. <input type="text"/>	2. <input type="text"/>
3. <input type="text"/>	4. <input type="text"/>
5. <input type="text"/>	6. <input type="text"/>
7. <input type="text"/>	8. <input type="text"/>
9. <input type="text"/>	10. <input type="text"/>
11. <input type="text"/>	12. <input type="text"/>

Recover wallet now



**Green Radar**  
744 人關注  
6 個月前 • 已編輯 •

【GRETI】Green Radar 公佈2021年第四季電郵威脅指數  
黑客輕取12助記詞以控制帳戶 虛擬錢包現安全隱憂

第四季指數顯示為 65.9分（第二及第三季分別為63分及64.6分），反映企業面臨的電郵威脅風險維持於高水平並持續上升。根據分析，網絡釣魚和商業電郵詐騙攻擊仍是最常見的電郵威脅，風險級別水平為「高」。今季報告亦發現，近期受到社會熱議的非同質化代幣（NFT）成為黑客的釣魚目標，主要由於其高回報的投資特性，令不少人為賺錢而容易墮進黑客陷阱。

NFT熱潮有增無減，當中加密貨幣錢包的安全風險引起憂慮。加密貨幣錢包的用戶經常收到釣魚鏈接，甚至有用戶遭到黑客入侵，短短4分鐘損失錢包內所有資產共90萬。


如欲了解更多電郵威脅最新趨勢，歡迎點擊以下網站下載：

GRETI Q4 update : <https://bit.ly/3tEUPuJ>

#GreenRadar #GRETI #NFT #BEC  
#Cryptowallet #釣魚電郵 #全方位防護  
#EmailSecurity #qrMail #qrAssessment

Scan here for  
Green Radar 



Scan here for  
Green Radar 





# Total Solution: grMail + grAssessment



Technology available in the Market  
to protect your organization from phishing attack

# Continuous email security improvement with **two key solutions**

## grMail™

Green Radar offers comprehensive email protection via our proprietary aidar™ technology that is delivered and managed by a team of security experts in our dedicated Security Operations Center in Hong Kong and Singapore. We are working around the clock to dynamically scan and remove threats on every email before it reaches your inbox.

**aidar™**  
AI | Detection | Analytics | Response

THREATS DETECTION



## grAssessment

grAssessment is a program to support our customers to improve cybersecurity awareness and practices by conducting customized phishing assessment campaigns. It reassures customers with a peace of mind that their workforce has a heightened sense of awareness to help protect their organizations from phishing attacks.

USER COLLABORATION





Block malicious emails before they reach your staff's inbox

Phishing is a **major Cyberattack incident** in HK according to HKCERT  
**Green Radar grMail** is one of the **popular solution** to protect staff from **Phishing Attacks**.

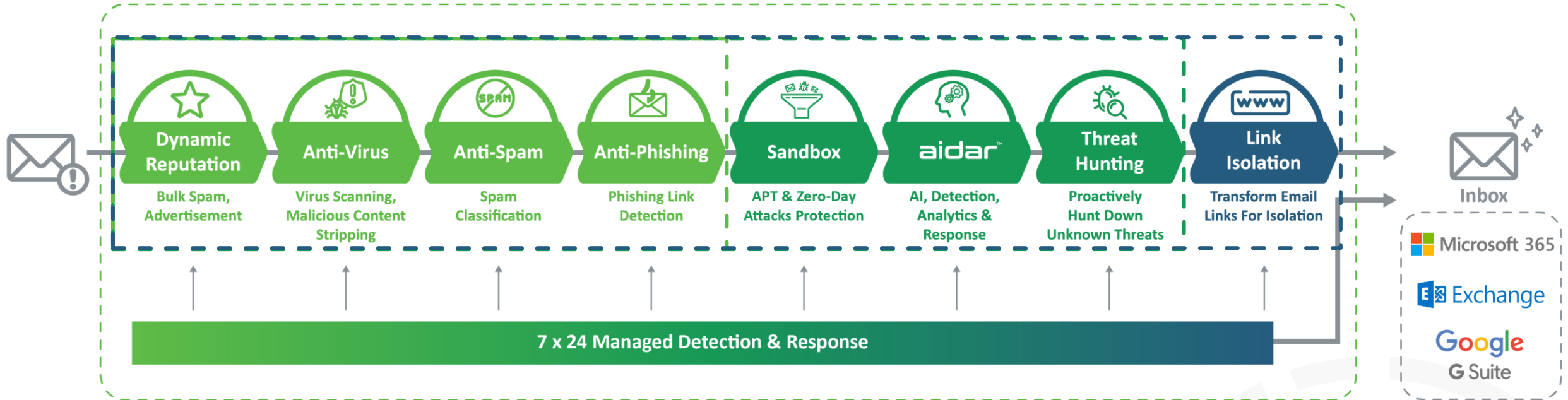
Protect you from

- ✓ **Hyperlink attack** (direct employee to phishing website)
- ✓ **Attachment attack** (virus/zero-day ransomware)
- ✓ **Advanced phishing** (e.g., Attack pretending to be sent from [someone@abcNGO.org.hk](mailto:someone@abcNGO.org.hk) / NGO partners which contains no phishing link/malware and hard to be detected through traditional signature-based technology, e.g., AV/AS)

Operation-wise

- User friendly: SOC Managed service reduces NGO IT admin workload
- Support Service : 7x24 Local Response (available in Cantonese/ English)

# grMail



## grMail Professional

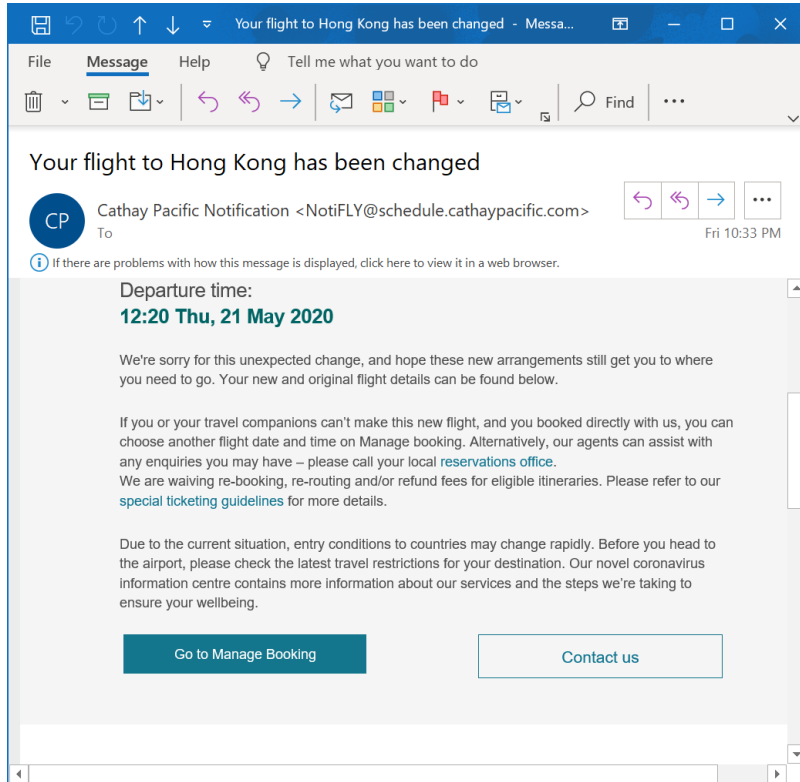
All except "Link Isolation"

## grMail Advanced

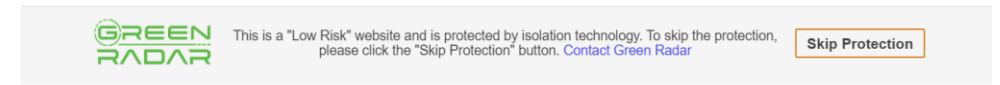
"grMail Professional" plus:

- **Link isolation**  
(protect staff from attack via online document, e.g., SharePoint / OneDrive)

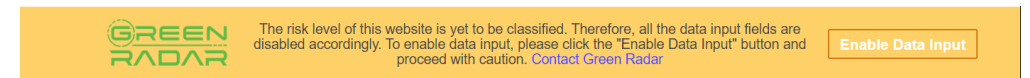
# Link Isolation — Classify website and protect staff from clicking through phishing website



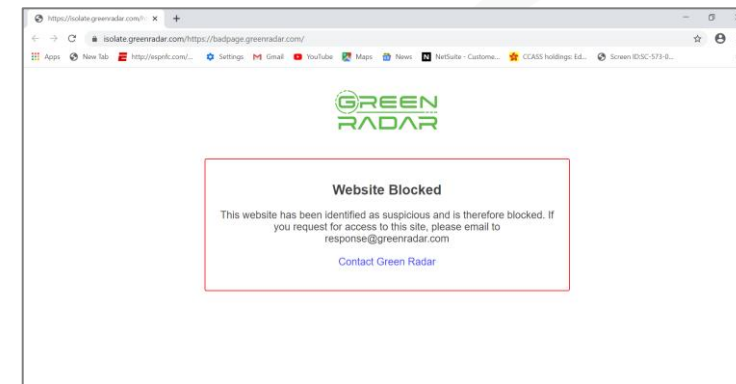
## Low Risk Website



## Cautious Website

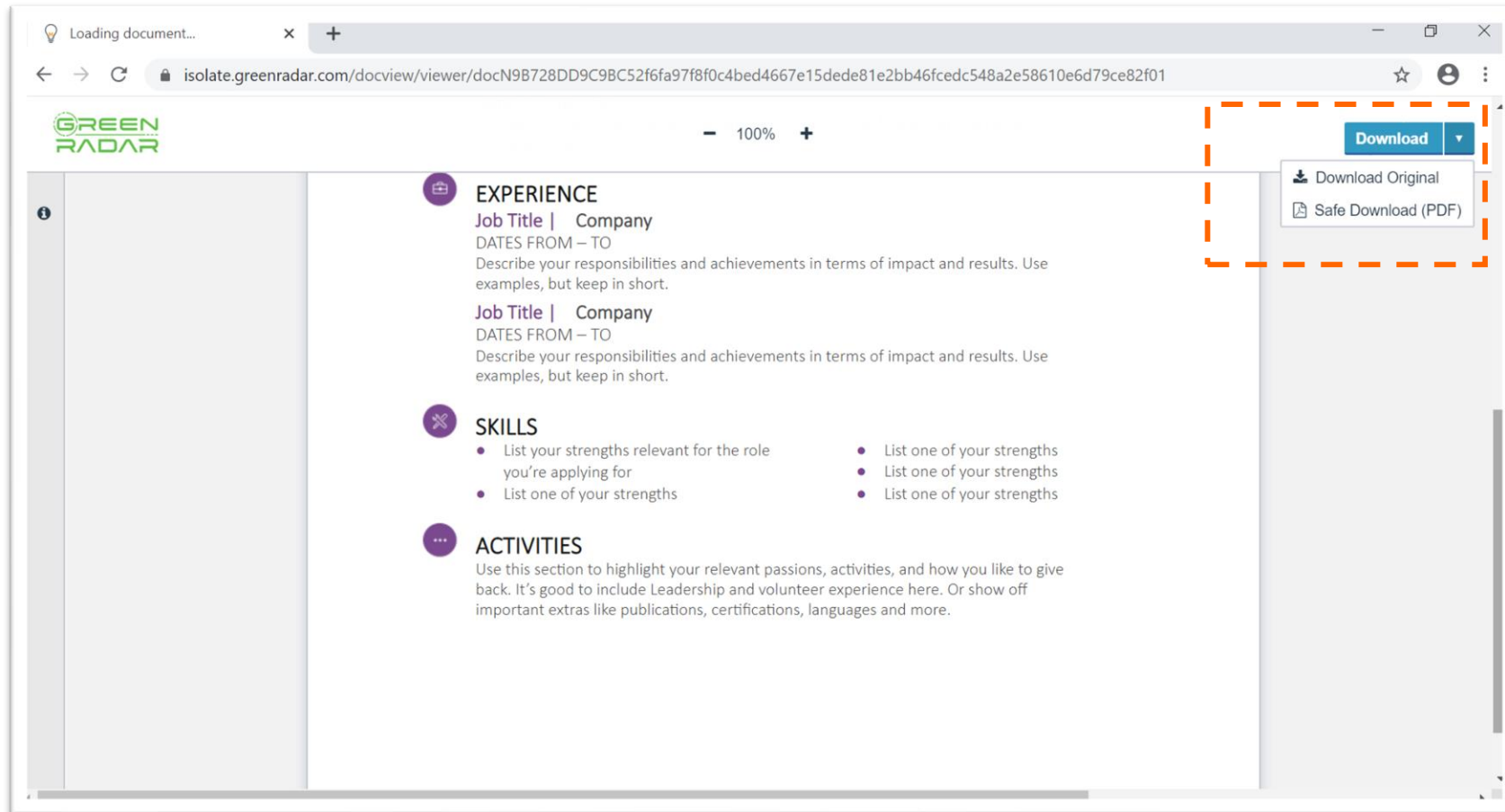


## Phishing Website



# Link Isolation – Malware-free Document Viewing e.g., SharePoint, One Drive, Google Drive, etc.

Many cyberattacks are disguised as ordinary online documents e.g., CV / quotation / invoice to trap staff



**Support PDF conversion  
(100% malware-free  
Safe Download) &  
Original Download**

Example: Potentially harmful online CV targeting HR department. Isolation technology removes malicious elements in the document and ensure safe browsing



# Green Radar & Microsoft 365 / Google

What protection we can add on top of your existing Microsoft / Google mailbox







brings additional protection on top of your Microsoft /Google inbox












Functions	Microsoft Mailbox EOP (Free and Common)	Microsoft Defender Plan 1 OR 2 (additional \$\$)	Google Mailbox Default Setting	Green Radar grMail Professional (Popular solution among NGOs in HK)
1. Identify Known Phishing URL	No	Yes, Safe Link feature (Static URL checking).	Move to Junk Box. No quarantine.	Yes. Uses <b>Sandboxing Approach</b> to analyze <b>Dynamic</b> behavior of the URL (URL Sandboxing)
2. Identify Zero Day Phishing URL	No	No. Static URL checking cannot detect Zero Day Phishing URL	No quarantine.	Yes. Uses Sandboxing Approach to analyze <b>Dynamic</b> behavior of the URL (URL Sandboxing)
3. Identify Zero Day Malware in attachments	No	Yes, Safe Attachment feature	No quarantine.	Yes. <b>Local Sandboxing</b> ensures speed, performance and accessibility from China / Hong Kong users.
4. Prevent <b>Domain Spoofing</b> Fake email sent from "someone@abcNGO.org.hk"	No	No	No quarantine.	Yes. Provides SPF* checking at header level. With <b>look alike domain AI analysis</b> .
5. Prevent <b>VIP Spoofing</b> Fake email sent from the name of management	No	No	No quarantine.	Yes. Provides <b>VIP watchlist and SOC service</b> for proactive VIP anomaly investigation.
6. Prevent <b>BEC* attack</b> Pure-text scam email that contains no URL / attachments	No	No	No quarantine.	Yes. Provides <b>AI Detection and Investigation</b> for indicator of compromises, e.g., "reply-to inconsistency", in addition to email content / URL / attachment detection.



# grAssessment

- phishing assessment campaign to enhance user awareness

# Data statistic to be collected

	Initialize	1 <sup>st</sup> Click	2 <sup>nd</sup> Click	3 <sup>rd</sup> Click	Result
Phishing Link				Submit Credential	Credential Leaked
Malware Download Link				Download Attachment	Malware Downloaded
Malware Attachment				Open Attachment	Malware Installed
BEC				Respond to Email	

 Delivered to inbox

 Open Email

 Open Link / Attachment

 Compromised

# Sample Management Report



## Sample of Phishing Assessment Report for <Customer>

<Date>  
Version V0.1

**CONFIDENTIAL AND PROPRIETARY**  
The information contained in this document is confidential and proprietary to <Customer>. This document may be distributed or disclosed in any form to any third party without written permission of <Customer>. The use of this document is subject to <Customer> prevailing corporate policies.



Phishing Assessment Report for <Customer>

### 1 Executive Summary

Green Radar is engaged for an annual Phishing Assessment ("CUSTOMER"). The purpose of this service is to assist <CUSTOMER> in improving cybersecurity awareness through phishing.

This report summarizes the Round 1 ("R1") testing result. In total, a total of **xxxx mails** were sent out. Importantly, **xx** users have clicked the phishing links. Below is the summary table.

#	Email Subject	Launch Date
1	Your package has been shipped!	<date>
2	Enjoy Your Gift Voucher!	<date>
3	You have a meeting request!	<date>
4	Spam Alert	<date>
Overall		

The R1 mock phishing exercise was launched amid the current stressful atmosphere. Green Radar conducted the test with some general remote work phishing to reinvigorate remote workers' security awareness.

Overall, the click rate was **yy.yy%** in R1. Of all the phishing templates, the #1 phishing template ("Your package has been shipped!") with **yy.yy%**, followed with the #3 ("You have a meeting request!") with **yy.yy%**. Staffs are still easily manipulated by phishing emails.

Customer confidential

All Rights Reserved by Green Radar

Phishing Assessment Report for <Customer>

### 4.1.1 Summary – Click Rate

Due to the large number of users, the details on all the findings are separated into multiple pages. The summary table is only highlighting the major statistics. In this section, we will use some charts to depict the situation of <CUSTOMER>.

#### 4.1.1.1 Overall Summary

Total number of phishing mails sent: **xxxx**  
Overall click rate: **yy.yy%**

#	Template	# of Test Mail	Round
1	Your package has been shipped!	xxxx	X
2	Enjoy Your Gift Voucher!	xxxx	X
3	You have a meeting request!	xxxx	X
4	Spam Alert	xxxx	X
Total		xxxx	X

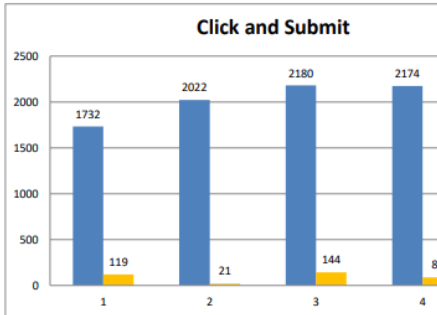


Figure 3 – Number of click (Corporate)

#### 4.1.1.2 Summary – Faculty Level

This section illustrates the overall response on faculty level as well as the response on different email templates for <CUSTOMER> reference.

Customer confidential

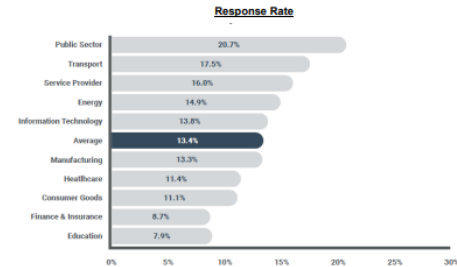
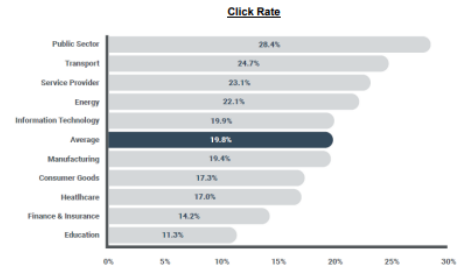
All Rights Reserved by Green Radar

grAssessment Report



### 1.4 Industry Benchmarking

Based on the "Gone Phishing Tournament Global Benchmarking Report 2020", the "Click Rate" and "Response Rate" are industry dependent.



Source: "Gone Phishing Tournament Global Benchmarking Report 2020"

On average, the "Click Rate" and "Response Rate" should be "19.8%" and "13.4%" respectively.

Customer Confidential

# Real time educational video to refresh awareness



- Video is also available in English language
- Traditional / Simplified Chinese Subtitle available



# Green Radar's approach to **Phishing Assessment Program**




**PROFESSIONAL**  
Managed by Certified  
Cybersecurity  
professionals

**SIMULATIONS**  
Emulate real world  
phishing simulations  
like a hacker



**TRAINING**  
Real-time bite-sized  
training when  
problem arises

**MONITORING**  
Regular and  
disciplined pulse  
checks



# No longer challenges with grMail and grAssessment



**24 x 7  
Expertise  
Support**



**Fully  
affordable**



**Expertise  
Consultancy**



**Proactive  
Response**



# Green Radar Company Background

– wholly owned subsidiary of

**edvance** Edvance International Holdings Limited (HKEx: 1410)



# Green Radar – Hong Kong-based Email Security Service Provider

**20+**

years  
CyberSecurity  
experience

**No. 1**

HK  
Cybersecurity  
Distributor

- ✓ 6,000 ft<sup>2</sup> office in HK for Security Operations Center (SOC)
- ✓ 2 x data centers in HK (Local sandboxing✓)
- ✓ 2 x SOC's in HK & SG
- ✓ Provides local threat hunting & support services
- ✓ Equip with R&D team for technology control & development



# Green Radar – Unique Security-as-a-Service Vendor

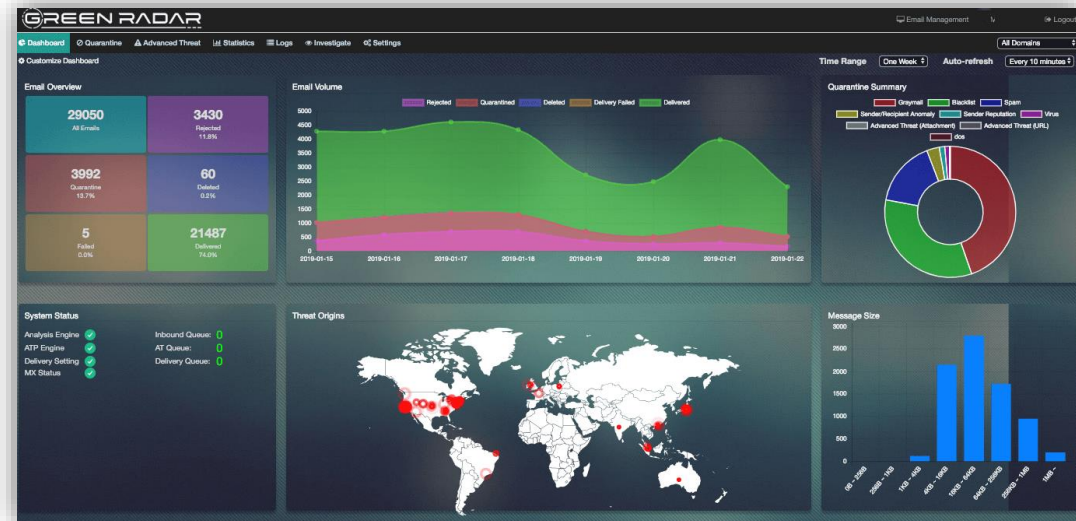
Local  
Technology

R&D  
experts

Local  
SOC

Local  
support  
expertise

Self  
developed  
AI engine



Hong Kong | Singapore



# Green Radar SOC Team continuously providing Email Support Service to Top HK Enterprise and Government Departments



HONG KONG MONETARY AUTHORITY  
香港金融管理局



SECURITIES AND  
FUTURES COMMISSION  
證券及期貨事務監察委員會

香港特別行政區政府  
房屋署



香港按揭證券有限公司  
The Hong Kong Mortgage Corporation Limited



香港特別行政區政府  
香港警務處

忠誠勇毅 心繫社會



A.S. Watson Group  
A member of CK Hutchison Holdings



# Green Radar Customers (Commercial)

**MUJI**  
無印良品



# Assurance to our customers



Guarantee **99.9999%**  
availability (we achieved  
100% uptime in the past 3  
years)



Email processing time less  
than **10s** without  
attachment



SPAM capture rate  
> **99%**



## Awards & Recognition

- eZone eBrand Award 2020 – The Best Email Security Solution
- PCM Biz.IT Excellence 2021 – IT Solution Excellence
- APAC CIO Outlook Top 10 Cyber Security Companies 2021
- 2021 CybersecAsia Readers Choice Awards – Rising Star

# THANK YOU!

**Green Radar (Hong Kong) Limited**

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a member of Edvance International (1410.HK)

**Green Radar (Singapore) Pte. Ltd.**

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