CYBER SECURITY TODAY: What it means for you



ANDY PRAKASH

Co-Founder | AntiHACK.me CEO | Privacy Ninja Co-hosted By:





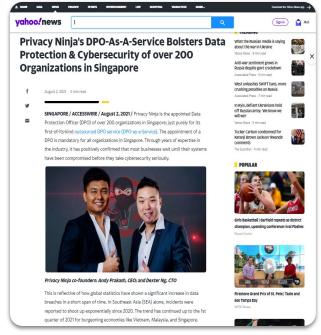
TRUSTED BY OVER 300 ORGANISATIONS IN SINGAPORE





STRENGTHENING THOUGHT LEADERSHIP | MEDIA FEATURES







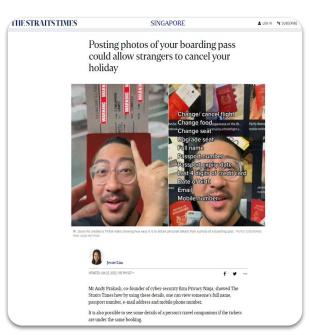
Affordable Cybersecurity
Channel NewsAsia - Sep 2018

Outsourced DPO Service Yahoo! News - Aug 2021

OCBC Bank Scam **Zaobao - Feb 2022**

STRENGTHENING THOUGHT LEADERSHIP | MEDIA FEATURES







Game Scams
Straits Times - Mar 2022

Data Privacy
Straits Times - Jun 2022

Business Email Compromise Straits Times - July 2022

STRENGTHENING THOUGHT LEADERSHIP | MEDIA FEATURES



Channel NewsAsia - Bug Bounty



Channel 8 - GovWare



Interpol World - Cybersecurity



Channel 8 - Dark Web



Echelon Asia Summit - Live Hacking



Channel 8 - IoT Security



Live Hacking Demo at Echelon



Presentation at Interpol



Presentation at Chambers



Training Startups/Co-Working Spaces



Masterclass



Channel 8 - IoT Security

The Past Landscape

- Email threats were not yet as sophisticated as they are now
- Smart everything wasn't as prevalent (e.g. smartphones, smart appliances, etc.)
- The lines between personal and professional were not as blurred
- An emerging trend in cyber crime as a profitable business





The Present Landscape

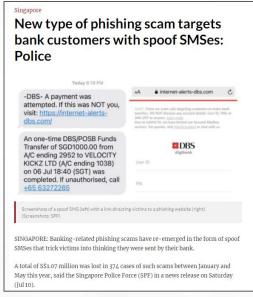
- Unprecedented expansion of personal digital territory
- The lure of convenience, at the price of protection taking a back seat
- Blurred lines between personal and professional
- The rise of Ransomware-as-a-service







Types of Hacking & Their Impact on Individuals or Organisations



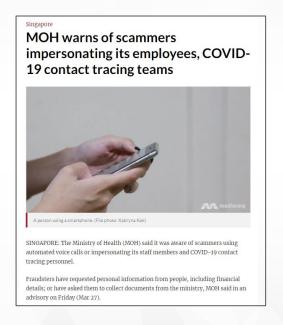






Types of Hacking & Their Impact on Individuals or Organisations









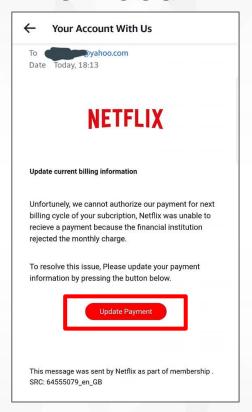
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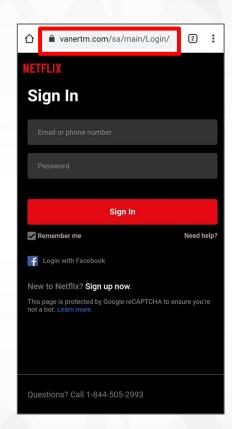


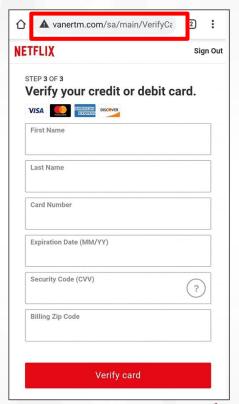




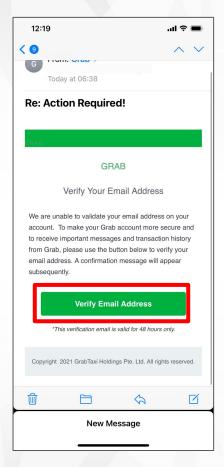


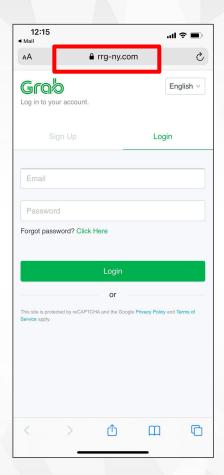




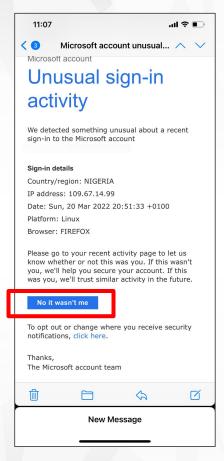


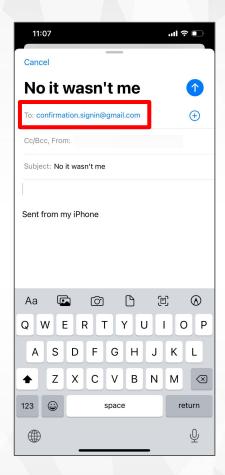




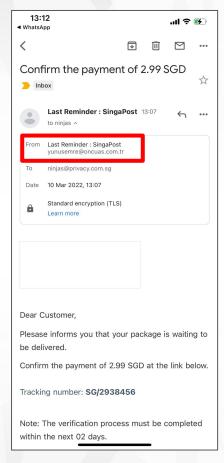


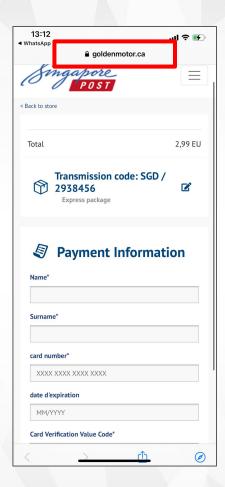




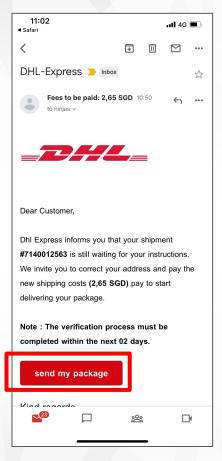


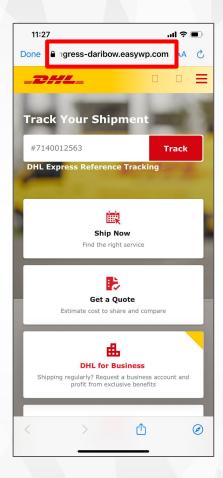














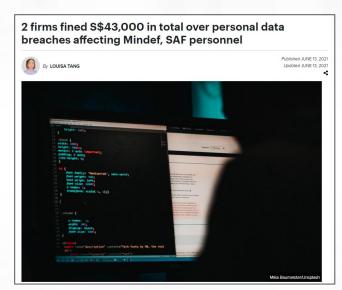
Recent Hacking Incidents



Singapore Home Cams Hacked And Stolen Footage Sold On Pornographic Sites

SINGAPORE (THE NEW PAPER) – Security cameras in Singapore homes have been hacked, and the footage shared online. Clips from the hacked footage were uploaded Data of some 129,000 Singtel customers, including NRIC details, stolen in hack of third-party system







Recent Hacking Incidents

Breach of the Protection Obligation by Audio Breach of the Protection Obligation by Vhive Breach of the Protection Obligation by Lov Breach of the Protection Obligation by Trinity

Breach of the Protection Obligation by Tanah Merah Country Club to pro and ex 18 Feb 2022 A financial penalty of \$4,000 was imposed on Tanah Merah Country Club for failing to put in place reasonable security to protect personal data in its possession. The incident resulted in personal data being accessed.

May we have two volunteers Please share your business email with us.



Demonstration Exercise

Email spoofing from Person A to Person B.



Malicious downloads can be masked as an innocent looking attachment until they are opened. To ensure that you will never fall victim to these attachment shams, always practice these 3 rules:



Link (Any Website Link)

Always make it a habit to inspect a link / copy and paste in a new tab



Document (Excel, MS Word File or PDF)

• Double check the document if you're not expecting to receive the file



Image (.exe file masked as a file – E.g Virus, Trojan, Keylogger, Ransomware)

• Double check the document if you're not expecting to receive the file



1

Verify the authenticity of requests from companies or individuals by contacting them directly

Paying of invoices to suppliers, claims or urgent payment

2

Be suspicious of unknown links or requests sent through email or text message

- Avoid opening Software or Files if you're not expecting it
- Turn off the option to automatically download attachments



3

Do not give out personal information

- Do not reveal personal or client's particulars over electronic means
- Avoid sending any form of logins online

4

Set secure passwords and don't share them with anyone

- Avoid using common words, phrases, or personal information and update regularly
- Use minimum 8 to 12 characters with complexity (Xyyyyyy123!)



5

Multi-Factor Authentication

• Enable Two-Factor Authentication (2FA) when available

6

Keep your operating system, browser, anti-virus and other critical software up to date

- Security updates and patches are available for free from major companies
- Schedule Full Scans as often as possible, have the "Kiasu" mentality



7

Pay close attention to website URLs & File Extensions

- Malicious websites use a variation in common spelling or a different domain (.com instead of .net)
- Enable viewing of full file extensions for windows machines

8

"Sound Off", not Brush Off

- Report any improper cyber hygiene being practiced at the workplace
- Alert the IT administrator/CISO of any suspicious email, better safe than sorry



9

Social Media Presence

- Keep your personal information off the internet
- Change your account settings from public to private, and change privacy and security settings to prevent search engines from indexing your profile page.

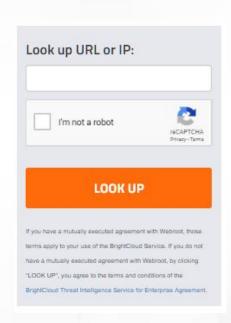
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Connecting to Unknown Networks

- Ensure the integrity of any access point you connect to
- If you have to access the internet thru public wifi, connect using a VPN



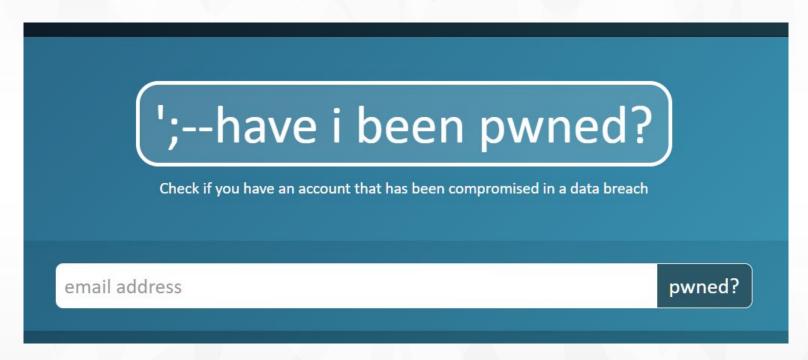
https://www.brightcloud.com/tools/url-ip-lookup.php







https://haveibeenpwned.com/





Password Managers









Privacy Guidelines

- As long as personal data / sensitive information is to be collected, perform a Data Protection Impact Assessment (DPIA) before commencement.
- Always leverage on latest security standards and best practices to access/secure data (in-transit or storage), example encryption and authentication.
- Adhere to the retention policy and dispose personal data / sensitive information properly.
- Perform due diligence (PDPA Compliance & Cyber Security) on third parties whom you may be disclosing personal data / sensitive information to.





PDPA & Data Protection Officers (Requirements & Penalties)



- Appointing a DPO is mandatory for all organisations in Singapore
- Failure to do so risks a fine of up to 10% of annual gross turnover / \$1 Million
- Develop internal capabilities
- PDPA Fundamentals
- DPO Practitioner Certification
- Certified Information Privacy Manager (CIPM)
- Outsourced DPO Service



PDPA & Data Protection Officers (Requirements & Penalties)



- Implement email authentication protocols to prevent Business Email Compromise ("Email Spoofing") on your domain
- Don't underestimate what an anti-virus software installation can detect & prevent
- Conduct periodic/annual Vulnerability
 Assessment & Penetration Tests (VAPT) on systems and network
- Conduct regular PDPA / Cyber Hygiene trainings for employees



CASE STUDIES | EDUCATION INSTITUTIONS

Breach of the Protection Obligation by North London Collegiate School (Singapore)

18 Feb 2022

A financial penalty of \$10,000 was imposed on North London Collegiate School (Singapore) for failing to put in place reasonable security arrangements to prevent the unauthorised access of its student applicants' personal data residing in a website directory folder.

CASE STUDIES | EDUCATION INSTITUTIONS

From December 2019 to July 2021, parents of prospective students could submit documents for admission applications via the Organisation's website (https://nlcssingapore.sg/).

However, the website directory/folder was not adequately secured from automatic indexing by web crawlers. As a result, the submitted documents were indexed by search engines and could show up in online search results.

of Individuals	
1,742	
1,714	
720	
709	
676	
670	

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THANK YOU FOR HAVING US!



ANDY PRAKASH

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Q&A



Cyber Security Today: What it Means For You