

Cyber Security for Healthcare in Singapore

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Speaker

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Mr John Yong is a former Group Director, Infocomm Security Group, formerly known as Infocomm Development Authority of Singapore (IDA) currently known as GovTech. John holds a Masters in Computer Science from the University of Salford, United Kingdom.

He is a seasoned infocomm security professional who has dedicated > 40 year of his career to this field, both in the public and private sectors. He started his career with the Ministry of Defence before joining the then National Computer Board (NCB) in 1991 to head its IT Security Department. Thereafter, he moved to the private sector and worked for a number of Multi-National Corporations in various management and consulting roles. Prior to joining IDA, he served as Chief Security Advisor to a major Southeast Asian telecommunications group.

In recognition of his achievements and contributions, John received the International Data Group (IDG) ASEAN Chief Security Officer (CSO) Awards and honoured as one of the most outstanding Chief Security Officers in 2013.



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Agenda

NOUN

***health care** (noun) · **healthcare** (noun)*

the organized provision of medical care to individuals or a community.

e.g., "healthcare professionals"

- ▶ Cyber security threat landscape
- ▶ Common constraints faced by organisations and how to overcome it
- ▶ How to ensure a safe cyber environment for your organisation



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Cyber security threats in healthcare

- ▶ Cloud security
- ▶ Unsecure mobile devices
- ▶ Ransomware
- ▶ IoT exploits
- ▶ People

Reference: HealthcareITNews dated 8 Feb 2019



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Cyber security threats in healthcare

- ▶ Healthcare companies being targeted, 300% jump, YoY
- ▶ Senior management being the biggest target
- ▶ 50% of email being spoofed
- ▶ 95% of targeted healthcare companies saw email spoofing from their own trusted domains

Reference: Proofpoint report 2019 Healthcare Threat report, protecting patients, providers and payers



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Cyber security threat in Singapore

- ▶ Cyber attacks using COVID-19 as a lure have surged across all industries from March to April this year
- ▶ The healthcare sector is the worst hit, with a surge of phishing attacks by almost 200 times in the first four months
- ▶ Smart technology helps professionals to do a better job, it also introduces more room for attacks
- ▶ Weak IT hygiene
- ▶ Lack of business continuity plan, backup and recovery
- ▶ Social media fatigue: fake, fraudulent, friction, truth

Reference: ChannelNewsAsia

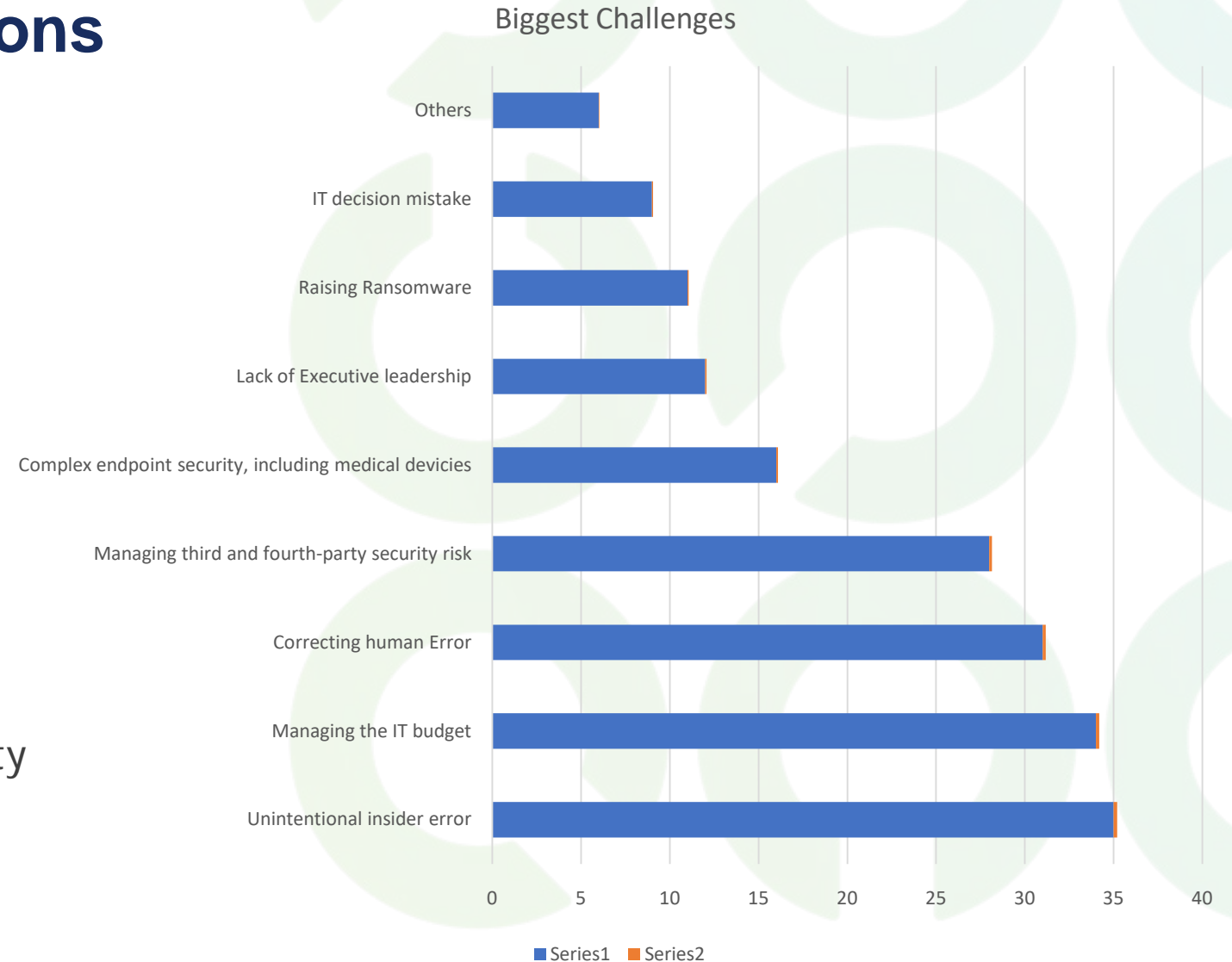


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Constraints and observations

- ▶ Managing the IT budget
- ▶ Correcting human error
- ▶ Unintentional insider error
- ▶ IT decision mistake
- ▶ Raising Ransomware
- ▶ Lack of Executive leadership
- ▶ Complex endpoint security, including medical devices
- ▶ Managing third- and fourth-party security risk



Reference:

1. resources.infosecinstitute.com

2. IHIS COI report



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What can you do

- ▶ People - be aware of the risk and danger
- ▶ Training, briefing, etc
- ▶ Process - design and institute a simple and workable SOP
- ▶ Back-up, IT recovery etc
- ▶ Product - use cost effective and trusted solutions (services and products)
- ▶ Use a safer and more secure product/services, etc
- ▶ *Call for a shared cybersecurity services within VVO community*



Summary

- ▶ Post covid-19 as an opportunity to raise cyber security awareness (Reference: www.hinss.org/cyberreport , Vol 33 - April 2020)
 - e.g., Phishing campaigns, remote access trojans, etc
- ▶ Learn, re-learn, and embrace safe digital
- ▶ Re-org IT security budget and support, such as self help and share services
 - e.g., Work with shared services community, gov't agencies, such as SingCert/CSA



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Questions?



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