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HKT Hong Kong Enterprise Cyber Security Readiness Index
HKT香港企業網絡保安準備指數 2022

Independently Conducted by

Hong Kong Productivity Council

香港生產力促進局 獨立調查

Supported by

Hong Kong Computer Emergency Response Team Coordination Centre

香港電腦保安事故協調中心 支持

Sponsored by

HKT

香港電訊 贊助

Research Objectives 研究目的

- Understand the cyber security status and changes of local enterprises
  了解本地企業的網絡保安現狀及變化

- Raise public awareness and facilitate policy formulation
  提高公眾意識並促進政策制定

- Advise preventive measures to tackle cyber threat
  建議預防措施以應對網絡威脅

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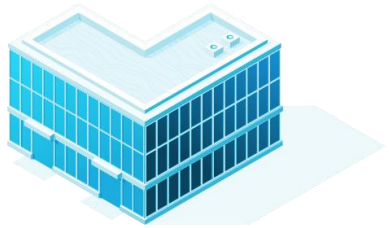
Methodology 研究方法

Interviewed 367 Enterprises in September 2022 by Telephone

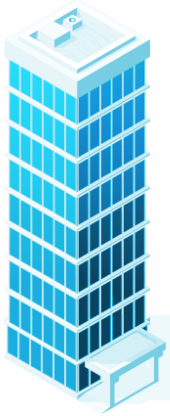
九月期間透過電話訪問了 367間企業



308

SMEs

中小型企業



59

Large Enterprises

大型企業

Respondents by Industries 受訪者行業分佈

103 *(28%)*	**Retail and Tourism Related** 零售和旅遊相關
95 *(26%)*	**Manufacturing, Trading and Logistics** 製造、貿易和物流
45 *(12%)*	**Professional Services** 專業服務
42 *(11%)*	**Financial Services** 金融服務
42 *(11%)*	**NGOs, Schools and Others** 非牟利機構、學校和其他
40 *(11%)*	**Information and Communication Technology** 資訊和通訊技術

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2022 HKT Hong Kong Enterprise Cyber Security Readiness Index

HKT 香港企業網絡保安準備指數 2022

Components of Index 指數成份

- **Policy & Risk Assessment**
  保安政策風險評估
- **Technology Control**
  技術控制
- **Process Control**
  流程控制
- **Human Awareness Building**
  人員意識

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The Rankings of Index 指數級別

Acceptable Levels 可接受級別

Ideal Levels 理想級別

Level 級別	Index Score 指數得分 (0-100)	Description 解釋
Anticipated 具前瞻能力	80 – 100 ★★	Proactive and aware of emerging threats 主動查找並意識到新出現的威脅
Managed 具管理能力	60 – 79 ★	Centrally managed security with fine-grained control 有中央管理和精細控制
Basic 具基本措施	40 – 59	Consistent security measures but no central management & fine-grained control 有一致的保安措施，但沒有中央管理和精細控制
Ad-hoc 措施不一致	20 – 39	Some ad-hoc security measures applied but not consistent 有採取一些保安措施，但沒有一致性
Unaware 缺乏意識	0 – 19	Management not aware of necessity of cyber security investment 管理層不了解投資網絡保安的必要

Higher Readiness Index = Better Resistance and Survivability
準備能力指數較高 = 具備更好的抵抗和生存能力

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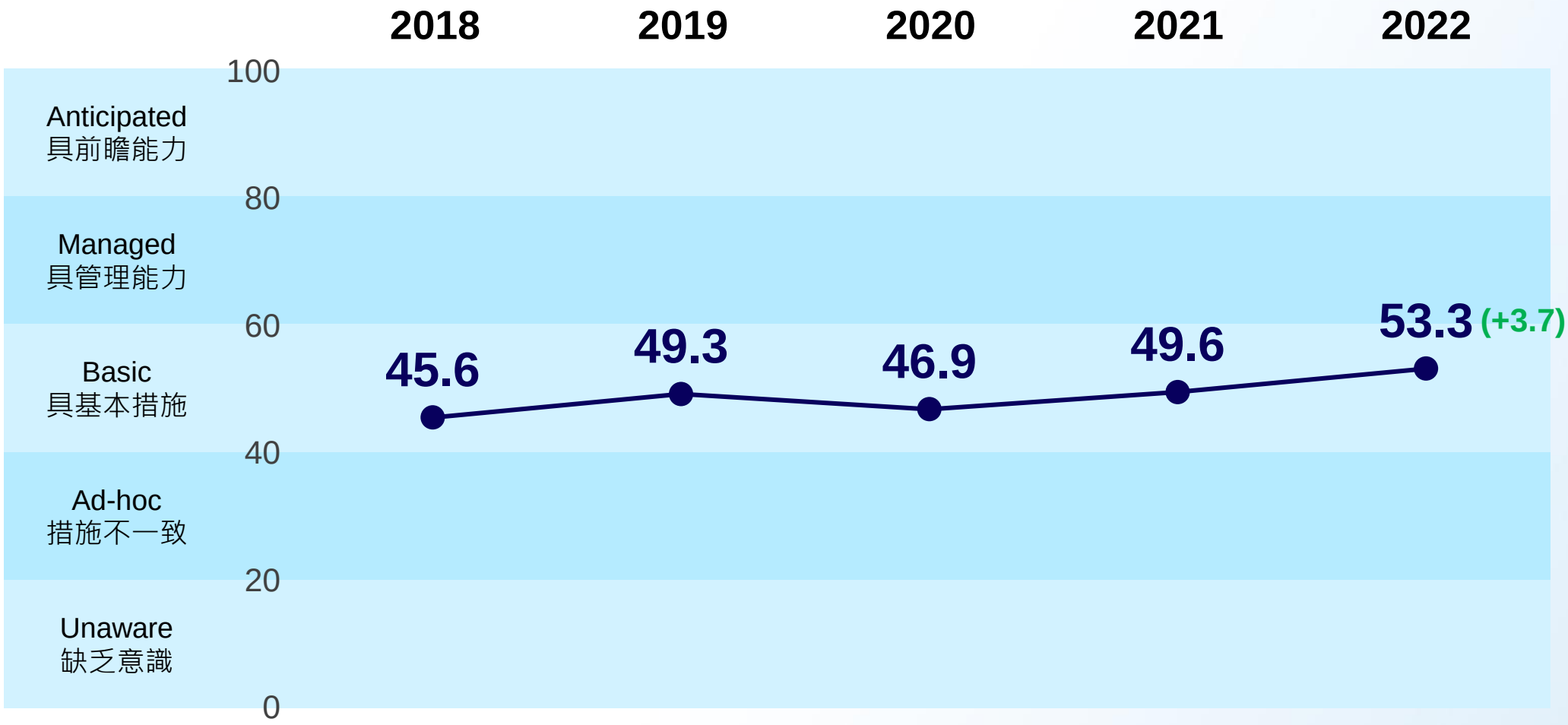
Key Findings
主要調查結果

2022 HKT Hong Kong Enterprise Cyber Security Readiness Overall Index
HKT 香港企業網絡保安準備整體指數 2022



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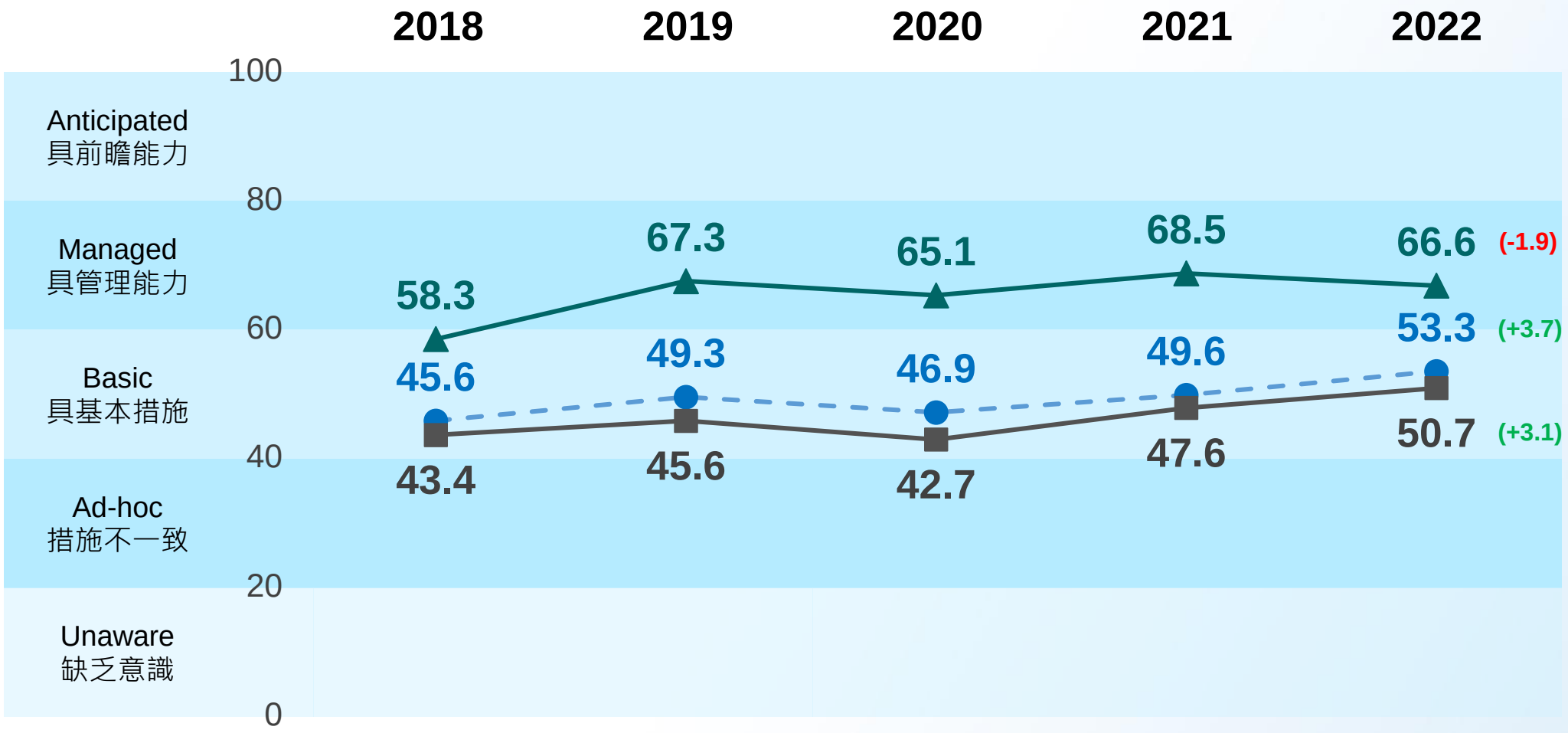
2022 HKT Hong Kong Enterprise Cyber Security Readiness Overall Index
HKT 香港企業網絡保安準備整體指數 2022



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Index by Industries 行業分類指數

By Business Category 以行業分類	2022 Index 指數	2022 Level 級別	YoY Change 按年變化
Financial Services 金融服務	65.7	Managed 具管理能力	+2.8
Information and Communication Technology 資訊和通訊技術	61.1	Managed 具管理能力	+8.9
Manufacturing, Trading and Logistics 製造、貿易和物流	57.5	Basic 具基本措施	+8.5
Professional Services 專業服務	48.4	Basic 具基本措施	-0.7
NGOs, Schools and Others 非牟利機構、學校和其他	47.1	Basic 具基本措施	-5.2
Retail and Tourism Related 零售和旅遊相關	45.8	Basic 具基本措施	+3.8
HKT-HKECSRI (All Business Categories) 所有行業	**53.3**	**Basic 具基本措施**	+3.7

Highest increase 升幅最大

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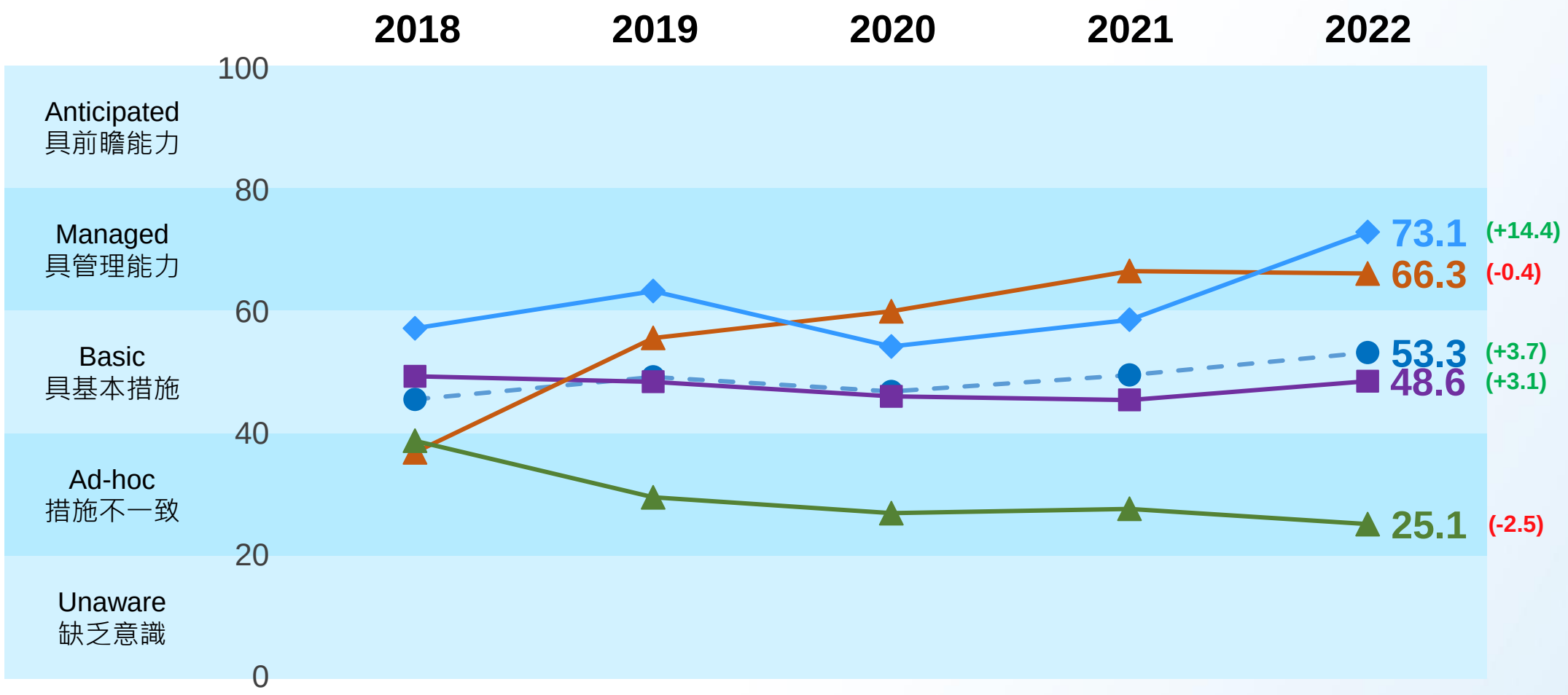
Sub-Indices 分項指數



Process Control
流程控制

Technology Control
技術控制

Overall 整體

Policy & Risk Assessment
保安政策風險評估

Human Awareness Building
人員意識

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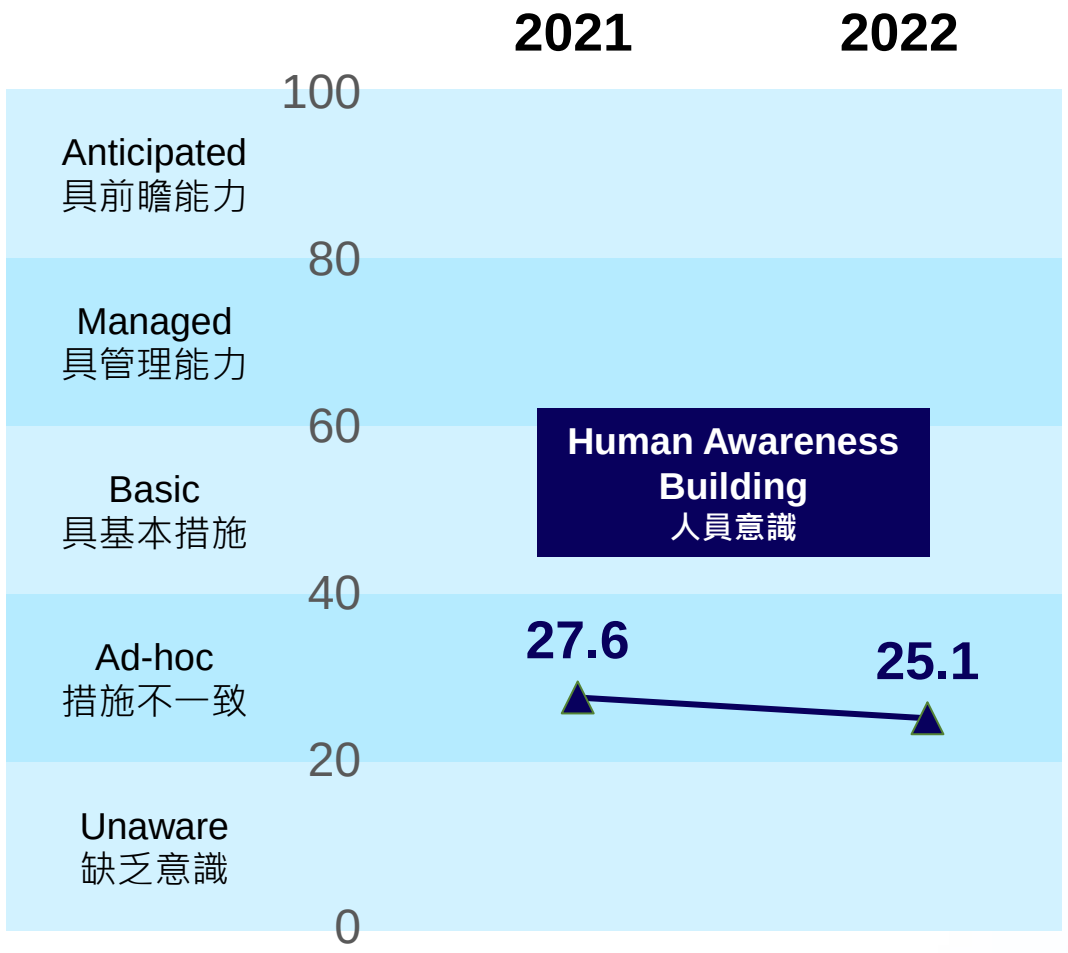
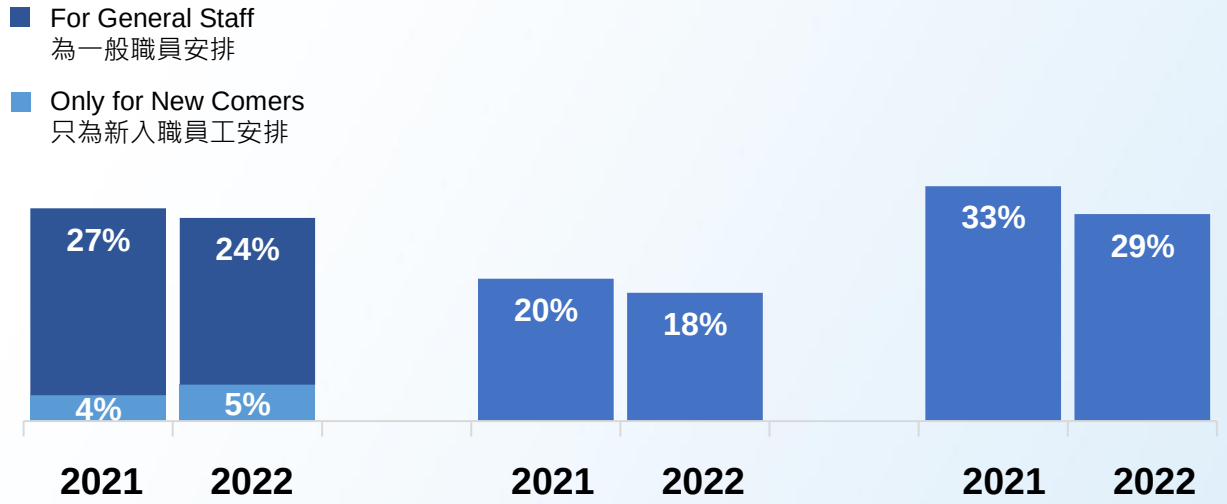
Human Awareness Building Sub-index
人員意識分項指數



Items on Human Awareness Building
人員意識相關項目



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Cyber Security Environment
網絡保安環境

Overall Incidence of Cyber Security Attacks
網絡安全攻擊的發生率

2022

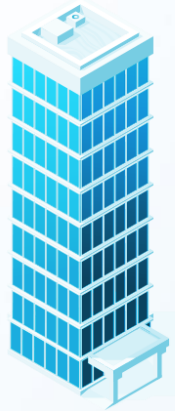
65%

of companies encountered Cyber Security Attacks in past 12 months
公司在過去12個月內有遇到網絡安全攻擊

24%-pt
YoY Increase
按年增加

63%
SMEs
中小型企業

23%-pt
YoY Increase
按年增加



78%
Large Enterprises
大型企業

32%-pt
YoY Increase
按年增加

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Top 5 Cyber Security Attacks Encountered in the Past 12 Months
過去12個月面對的五大網絡安全攻擊

94% ▲ 12%-pt
Phishing Attacks
釣魚攻擊

- **Email phishing** 網絡釣魚電子郵件 — 83%
- Vishing (“voice phishing”) 網絡釣魚電話 — 32%
- Spear phishing 魚叉式網絡釣魚 — 28%
- Smishing (“SMS phishing”) 網絡釣魚簡訊 — 20%
- Angler phishing (“social media phishing”) 社交媒體釣魚 — 10%

16% ▼ 5%-pt
Other Malware including Botnet
其他惡意軟件 包括殭屍網絡

15% ▼ 27%-pt
Ransomware
勒索軟件

12% ▼ 16%-pt
DDoS
阻斷服務攻擊

11% ▼ 8%-pt
Web Server & App Attacks
針對網絡服務器/ 應用程式的攻擊

Base基數： Those who encountered Cyber Security Attacks in P12M 在過去12個月內有遇到網絡安全攻擊的公司

▲▼ Changes compared with 2021
比較2021年的轉變

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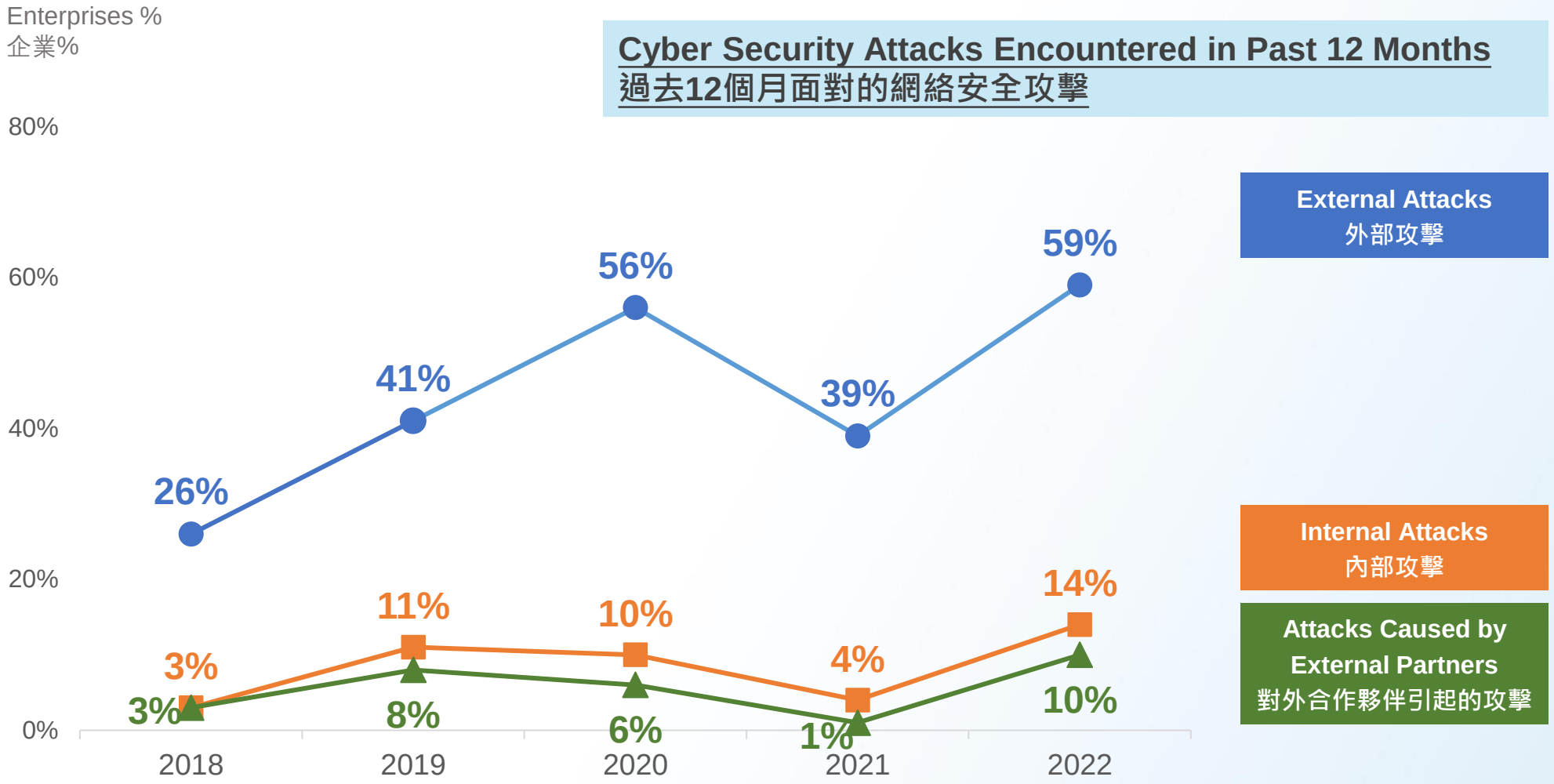
Cyber Security Attacks Encountered by Enterprises in Past 12 Months
企業過去12個月面對的網絡安全攻擊



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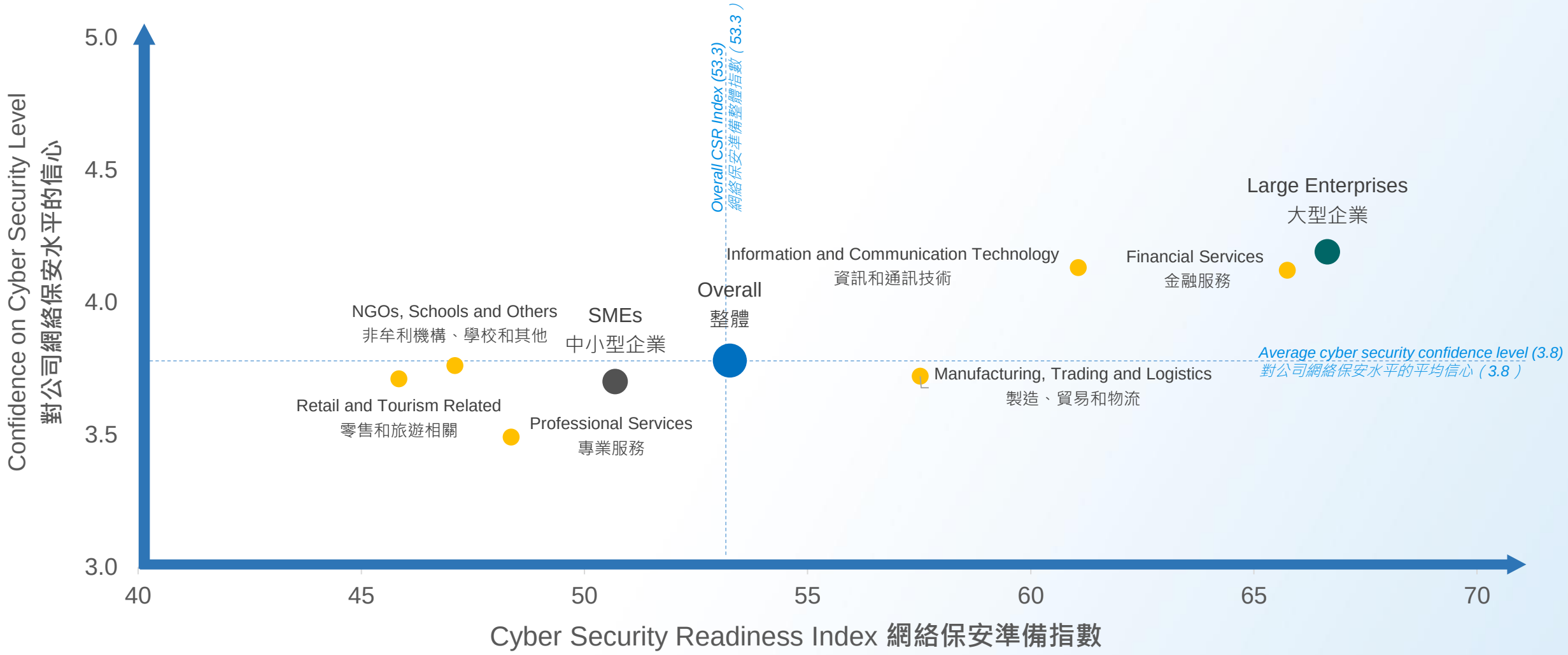
Confidence Level on Cyber Security and Cyber Security Readiness Index
對公司網絡保安水平的信心及網絡保安準備指數



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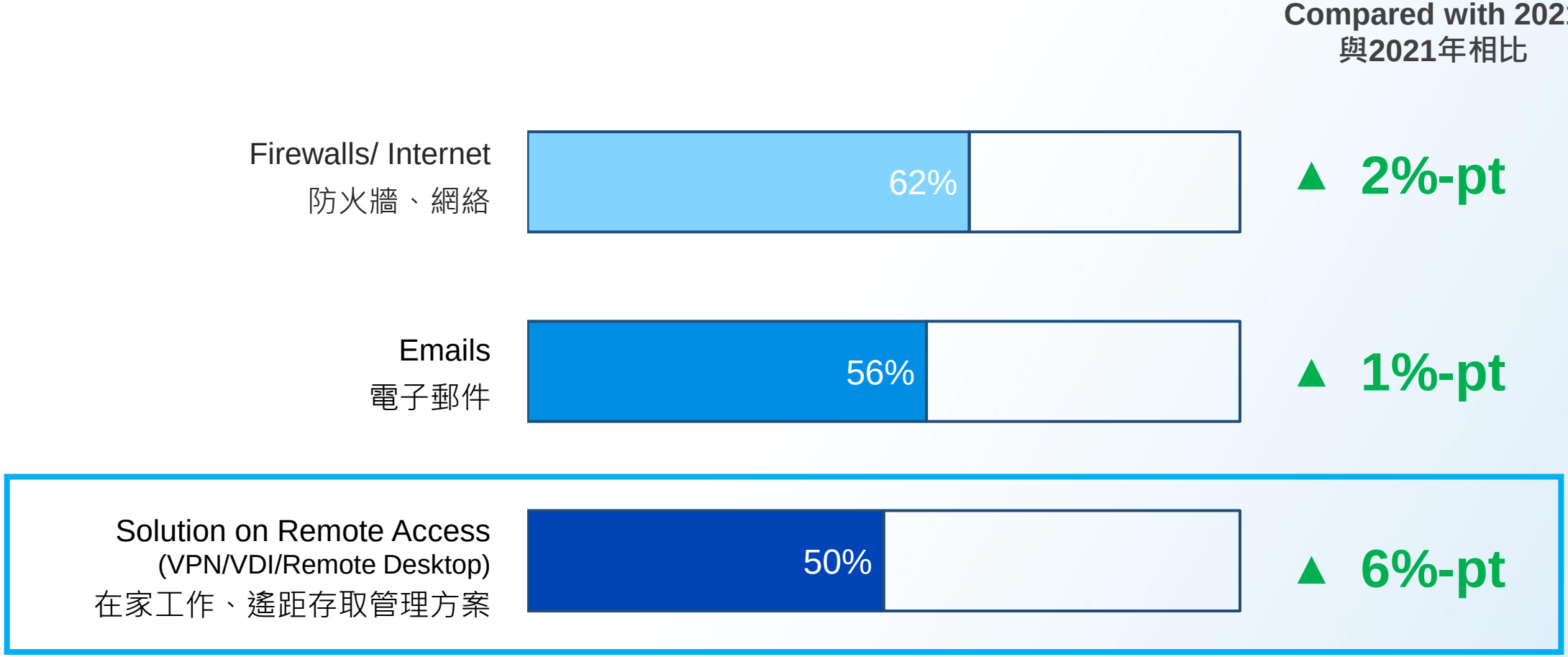
Thematic Survey of the Year
年度專題

Managed Security Services (MSS)
網絡保安託管 (MSS) 服務

Top 3 Important Cyber Security Services
三大重要網絡保安服務



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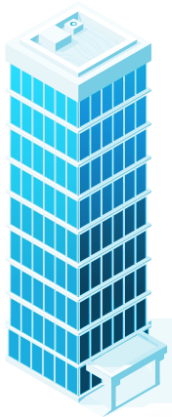
MSS Adoption Rate
網絡保安託管服務採用率

Overall
整體

By Company Size
各企業類型

47%
SMEs
中小型企業



56%
Large Enterprises
大型企業

By Industries
各行業類型

76%	Professional Services 專業服務
55%	Financial Services 金融服務
49%	Manufacturing, Trading and Logistics 製造、貿易和物流
48%	NGOs, Schools and Others 非牟利機構、學校和其他
47%	Retail and Tourism Related 零售和旅遊相關
18%	Information and Communication Technology 資訊和通訊技術

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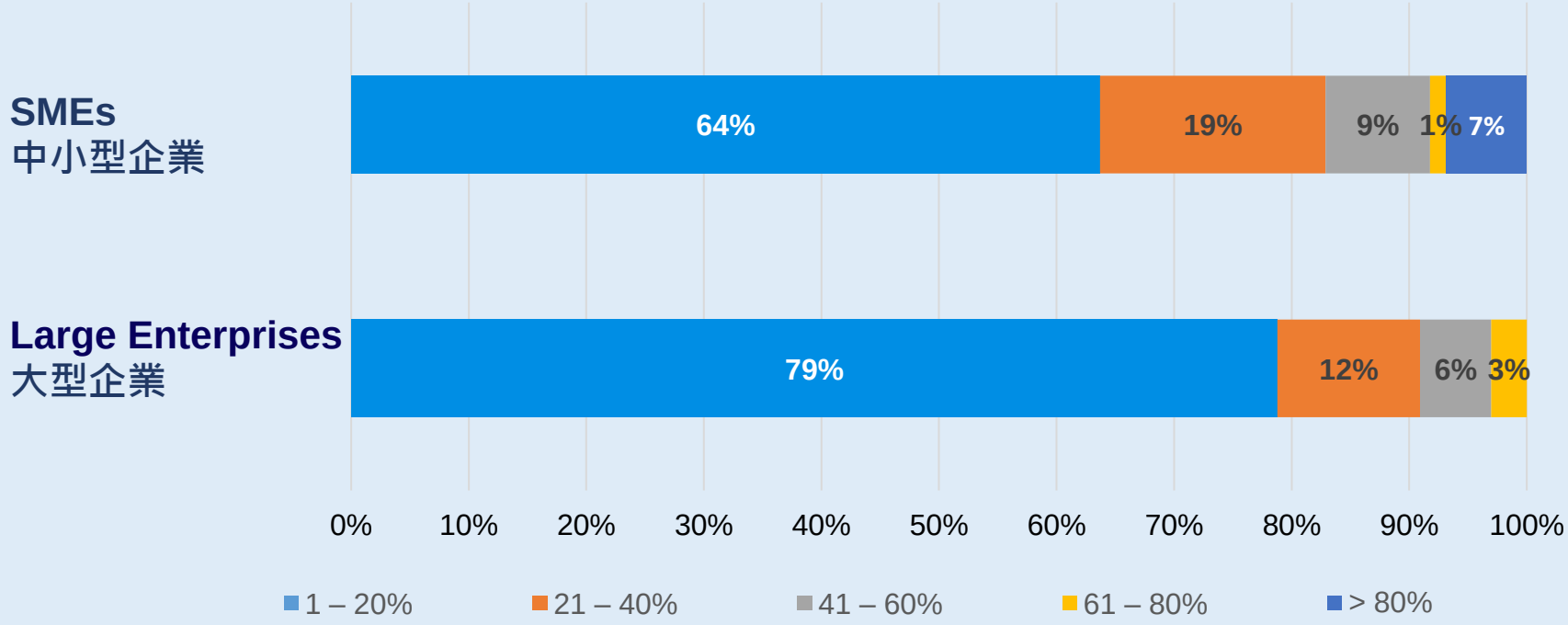
MSS Spending
網絡保安託管服務費用

Overall
整體

Percentage of MSS Cost to Overall Cyber Security Cost (Large Enterprise vs SME)
網絡保安託管服務費用佔整體網絡保安費用的比例（大型企業 vs 中小企）



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Top 3 Reasons to Increase MSS Budget
三大增加保安託管服務經費的原因

Change on MSS Budget in the Next 12 Months
未來12個月的保安託管服務費用轉變

99%
受訪者
Respondents

Expect to Maintain / Increase
預估保持不變(90%) / 上升 (9%)
(+3%-pt) (-4%-pt)

1%
受訪者
Respondents

Expect to Decrease
預估下跌
(+1%-pt)

Top 3 Reasons to Increase MSS Budget 三大增加保安託管服務經費的原因	Compared with 2021 與2021年相比
Meet with Digital Transformation / Remote and Hybrid Workplace 應對數碼轉型/遙距工作及混合工作模式	▲ 9%-pt
Meet with Organisation Development 切合機構業務發展	▲ 3%-pt
Respond to the Increasing Security Threats 應對保安威脅的增加	+/-0%-pt

(+/-) Changes compared with 2021
比較2021年的轉變

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Key Challenges of Cyber Security Management & Benefits of MSS
網絡保安管理的挑戰及網絡保安託管服務的優點

Top 4 Challenges of Cyber Security Management 網絡保安管理的四大挑戰

48% Lack of IT support and management staff
欠缺IT支援及管理人手

3%-pt YoY Increase 按年增加

44% With its ever-changing nature, investments on projects related require a high level of flexibility
需求隨時間變化，投資項目要求極具彈性

40% Require a large one-off investment on infrastructure
需要龐大的基建投資

35% Lack of the expertise (IT personnel or knowledge) to deploy
欠缺相關專才或技術

Top 5 Corresponding Benefits of MSS 網絡保安託管服務相對應的五大優點

31% Mitigate internal IT personnel demand
減輕內部IT人才要求

49% Higher flexibility, which allows the users to adjust the service level to business needs
較有彈性，能根據實際業務需要，提升或減少所需服務

35% Low one-off investment as Capital Expense is substituted by Operation Expense
較投資整套IT基建相宜

30% Service providers continuously enhance technology and service standard to increase competitiveness
服務商為增加競爭力持續更新技術和提升服務水平

35% Support from cyber security experts
能提供網絡保安專家的支援

Base 基數： Those who are subscribing MSS 有使用網絡保安託管服務的公司

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Cyber Security Enhancement Plan of Enterprises in the Coming 12 Months

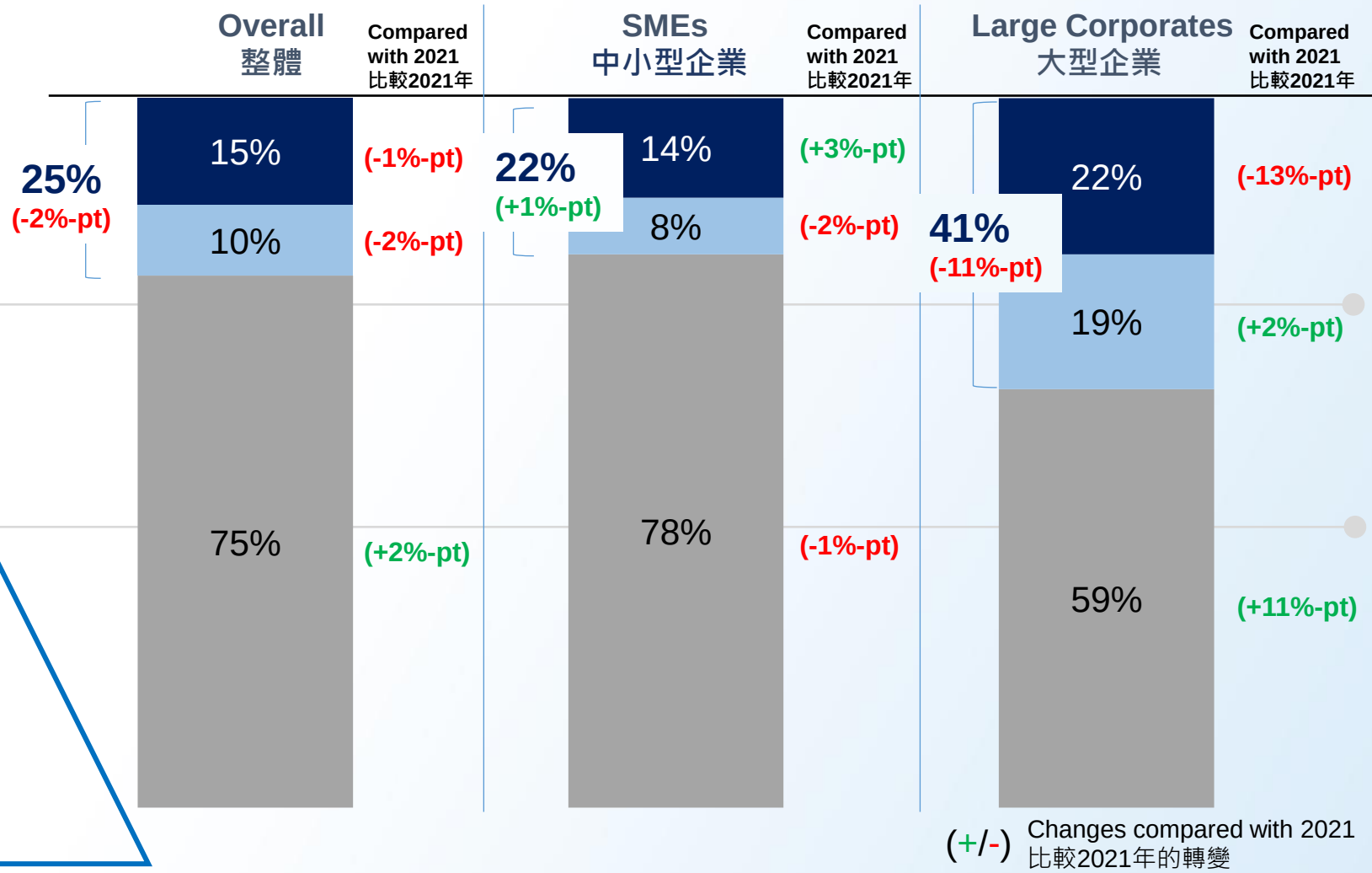
企業未來12個月加強網絡保安的計劃

Plan to Enhance Cyber Security
計劃加強網絡保安

Enhancing Cyber Security in Next 12 Months AND Now Using / Planning to Use Cloud Solutions
計劃在未來12個月內加強網絡保安，並在現在 / 將來使用雲端技術

Enhancing Cyber Security in Next 12 Months but not Planning / Using Cloud Solutions
計劃在未來12個月內加強網絡保安，但現在 / 將來不會使用雲端技術

Not enhancing Cyber Security in Next 12 Months
沒有計劃在未來12個月內加強網絡保安



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Plan to Enhance Cyber Security (cont.)
計劃加強網絡保安（續）

Areas to Enhance Cyber Security 加強網絡保安的領域	Endpoint/Internal Security Solutions 端點/內部部署保安方案		Cloud Security Solutions 雲端保安方案
Base *基數*	*Those who plan to enhance cyber security in N12M* *計劃在未來12個月內加強網絡保安的公司*	Compared with 2021 與2021年相比	*Those who plan to enhance cyber security and deploy cloud technology in N12M* *計劃在未來12個月內加強網絡保安及使用雲端技術的公司*
System and network security solution (e.g. Internet/ application firewall) 系統及網絡保安方案（例如網絡 / 應用防火牆）	77%	(+14%-pt)	75%
Remote access management solutions (e.g.VPN / VDI / Remote Desktop) 遙距存取管理方案（例如VPN / VDI / Remote Desktop）	69%	(+16%-pt)	68%
End point security (e.g. Firewall, updated Operational System 端點威脅防禦（例如個人防火牆 / 保安更新）	68%	(+18%-pt)	73%
Backup and Recovery solution 備份與恢復方案 Backup and recovery solution	65%	(NA)	57%
Access management solution (e.g. Internal/ third party visit and monitoring) 存取及訪問管理方案（包括內部 / 第三方訪問及監控）	60%	(-5%-pt)	64%
Credential management solution 憑證管理方案	56%	(+13%-pt)	48%
Patch Management 修補程式管理（Patch Management）	55%	(+1%-pt)	43%
Cyber threat intelligence 網絡威脅情報	54%	(+1%-pt)	54%
Two-factor and multi-factor authentication technology 雙重 / 多重身份驗證技術	48%	(+6%-pt)	57%
Threat detection technology (e.g. IDS/IPS, SIEM) 威脅檢測技術（例如IDS / IPS / SIEM）	48%	(±0%-pt)	46%
IoT Security Solutions 物聯網（IoT）保安方案	31%	(+8%-pt)	32%

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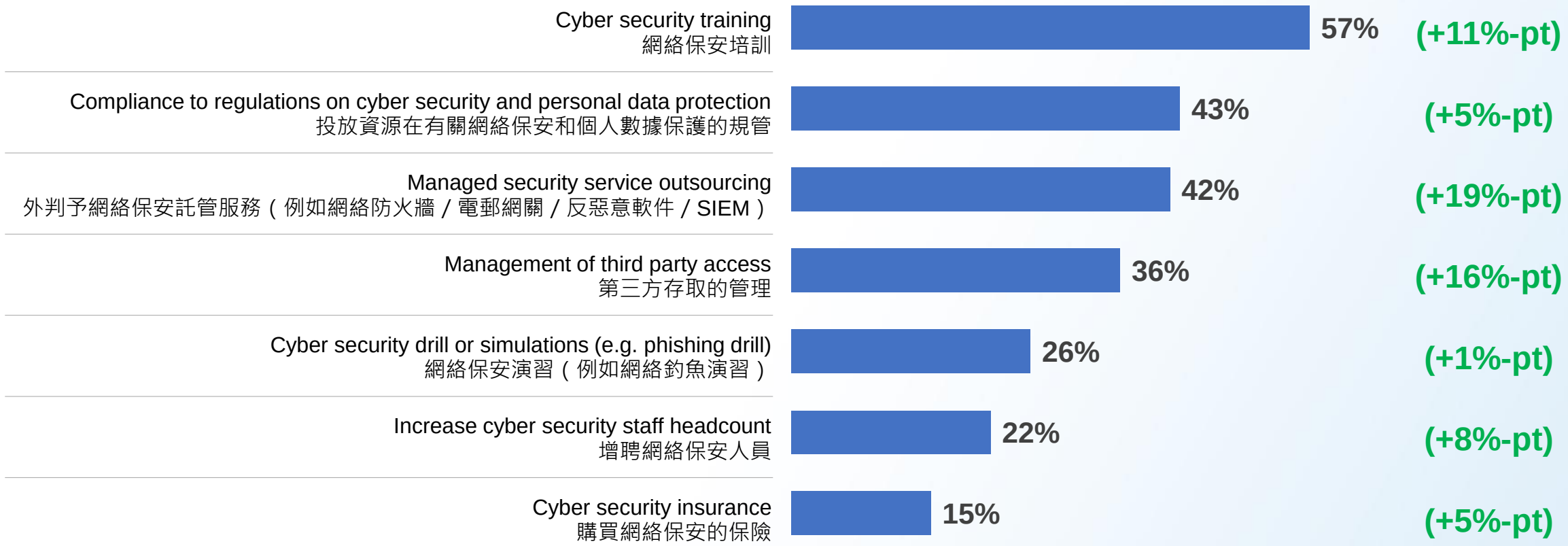
Plan to Enhance Cyber Security (cont.)
計劃加強網絡保安（續）

Areas to Enhance Cyber Security – Non-Technical Measures
加強網絡保安的領域 - 非技術措施



Base 基數： Those who plan to enhance cyber security in the coming 12 months 計劃在未來12個月內加強網絡保安的公司

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Conclusion and Advice
結論和建議

Advice for Enterprises
給企業的建議

Cyber security is indispensable to digital transformation

Building trust and keeping information secure has become a top priority

網絡保安對於數碼轉型是不可或缺的

建立信任和保持資訊安全已成為重中之重

Hong Kong enterprises should devote more resources to reach **"Managed"** level

企業應投入更多資源以達至**「具管理能力」**級別

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Improvement Methods (cont.)
改善方法（續）

Businesses Should … 企業應該	How? 如何做？
Improve Cyber Security Awareness 提高網絡保安意識 Cybersec Infohub Cybersec Training Hub	• **Regularly Train** All General Staff and Newcomers 定期培訓所有員工 • **Run Regular Cyber Drills** and Monitor Progress **定期進行網絡演習**，並監控進度 • Attend **HKCERT Seminars** and Subscribe **Security Advisory** 參加 **HKCERT 研討會**並訂閱**保安警報** • Join Cybersec Infohub to **Exchange Information** with Industry Peers to Build Up **Collaborative Defence** 參加 Cybersec Infohub，與同業**交流資訊**，建立**聯合防禦** • Encourage **employees to undergo training** on Cybersec Training Hub **鼓勵員工**在Cybersec Training Hub **接受培訓**

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(ISC)² Certified In Cyber Security (CC) certification
(ISC)² 網絡安全認證課程及考試

(ISC)² Certified in Cyber Security (CC) certification supports and nurtures new workforce for cyber security professionals
(ISC)² 網絡安全認證(CC)課程支持和培育新一代網絡安全專業人員入行

https://www.hkpcacademy.org/10013480-01-certified-in-cyber-security-cc-official-training/

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Phishing & Incident Response Drills
網絡釣魚及事故管理演習

Phishing Defence Services
網絡釣魚防禦服務

- Phishing Awareness Training Programme
  網絡安全意識培訓計劃
- Phishing Campaign/Scenario Design
  網絡釣魚題材/場景設計
- Localised Phishing Template Library
  本地化網絡釣魚範本庫
- Phishing Drills
  網絡釣魚演習
- Regular workshops
  定期專題工作坊

Incident Response Drills
保安事故應變演習

- Tabletop exercise
  桌上模擬演習
- Cybersecurity in the Boardroom
  高級管理人員網絡保安

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Incident Response Guideline for SMEs
中小企保安事故應變指南

DOWNLOAD

https://www.hkcert.org/tc/security-guideline/incident-response-guideline-for-smes

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“Check Your Cyber Security Readiness” Online Tool
「評估你的網絡保安狀況」 線上工具

https://www.hkcert.org/resources/check-your-cyber-security-readiness

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Cybersecurity and Privacy Maturity Assessment & VAPT
網絡安全及私隱成熟度評估 網絡安全漏洞掃描及滲透檢測

數碼不求人 Digital DIY | hkpc 生產力局 創優增值 55 YEARS DELIVERING VALUES

香港生產力促進局數碼轉型部

中小企網絡安全及私隱成熟度評估

協助中小企了解網絡安全及私隱之行業基準及差距

- 以國際認可標準作全面評估
- 助中小企了解網絡安全及私隱之行業基準及成熟度
- 專家意見諮詢

#網絡安全方案

香港生產力促進局數碼轉型部

中小企網絡安全漏洞掃描及滲透檢測

企業級漏洞掃描服務

- 企業級漏洞掃描工具
- 按次收費
- 減低工具投資及開支

#網絡安全方案 #漏洞掃描/滲透檢測

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Information Security Summit 2023
資訊保安高峰會2023

Coming Soon in 2023 Q3

https://www.issummit.org/

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HKT Hong Kong Enterprise Cyber Security Readiness Index
HKT香港企業網絡保安準備指數 2022

Hybrid Workplace Trend on Cybersecurity
混合辦公趨勢對網絡保安影響

- Cyber attacks become much more evolved and complicated in terms of scope and scale, targeting endpoint device as well as office IT network
  1. Cloud Adoption (Public Cloud, SaaS)
  2. Remote Access
  3. Mobile Device / Laptop
- 網絡攻擊的種類及規模日趨進化及複雜，同時針對端點裝置及辦公室IT網絡
  1. 雲端應用 (公共雲、軟體即服務)
  2. 遙距存取管理
  3. 行動裝置/電腦

- Require comprehensive and flexible cyber security strategy to combat with cyber security threats
- 需要綜合及靈活網絡保安策略應付網絡攻擊威脅

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Managed Security Service (MSS) Adoption
網絡保安託管服務採用

Challenges on Cyber Security Management:	網絡保安管理的挑戰:
Lack of IT support and management staff or expertise	欠缺IT支援及管理人手或專才
Concern on infrastructure investment scale	龐大的基建投資
Requires flexible approach	需要靈活應對

- Recently market reflects stronger demand and adoption of following list of Managed Security Services
  - Managed Email Security
  - Managed Firewall
  - Managed Endpoint Detect & Response
  - Managed VPN
- 市場反映近年對於以下網絡保安託管服務種類的需求及採用有顯著增加
  - 電郵網絡保安託管服務
  - 防火牆託管服務
  - 端點偵測及回應託管服務
  - 虛擬專用網絡託管服務

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Suggestion
建議

How To Select Managed Security Service Provider

怎樣選擇網絡保安託管服務供應商

Extensive Security Solutions

全面網絡保安方案

Proactive Detection & Rapid Response

主動監測及迅速反應

Supported by Local Security Expertise

本地網絡專家支援

Flexible Pricing Options

靈活收費模式

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