



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

Evolving Hong Kong Personal
Data Privacy and
Cybersecurity Risks and the
Implications on Cyber
Insurance

23 April 2025

Meet Your Presenter



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- Office of the Privacy Commissioner for Personal Data, Hong Kong, China (PCPD)



Agenda



1. Overview of the Personal Data (Privacy) Ordinance (PDPO)

2. Cyberattacks and Data Breaches

3. Artificial Intelligence (AI) and Personal Data Privacy Risks

Definition



Personal data means any data: (Section 2(1) of the PDPO)



Relating directly or indirectly to a living individual



From which it is practicable for the identity of the individual to be directly or indirectly ascertained



In a form in which access to or processing of the data is practicable

Who?



Three groups are involved:

Data Subject



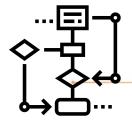
The individual who is the **subject** of the personal data

Data User



A person who, either alone or jointly or in common with other persons, controls the collection, holding, processing or use of the personal data

Data Processor



A person who –

- a) processes personal data
 on behalf of another person; and
- b) does **not** process the data for any of the person's **own purposes**

6 Data Protection Principles (DPPs)



(Schedule 1 to the PDPO)



- Represent the core requirements of the PDPO
- Cover the entire lifecycle of the handling of personal data, from collection, holding, processing, use to deletion
- Data users must comply with the DPPs

DPP 1 – Purpose and Manner of Collection





Personal data must be collected for a lawful purpose directly related to a function or activity of the data user



The data is **necessary, adequate but not excessive** in relation to the purpose of collection



The **means of collection** must be **lawful** and **fair**



All practicable steps shall be taken to inform the data subject whether it is obligatory to supply the personal data, the purpose of data collection, and the classes of persons to whom the data may be transferred, etc.

DPP 2 – Accuracy and Duration of Retention



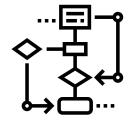
Data User



Should take **all practicable steps** to ensure:

- the accuracy of the personal data
- the personal data is not kept longer than is necessary for the fulfilment of the purpose for which the data is used

Data Processor



If a data processor is engaged to process personal data, the data user must adopt contractual or other means to prevent the personal data from being kept longer than is necessary

DPP 3 - Use of Personal Data



 Personal data shall not, without the prescribed consent of the data subject, be used for a new purpose



"New purpose" means any purpose which is unrelated to the original purpose or its directly related purpose when the data is collected

"Prescribed consent" means express consent given voluntarily which has not been withdrawn in writing

DPP 4 – Security





Data users should take all practicable steps to ensure the personal data that they hold is protected against unauthorised or accidental access, processing, erasure, loss or use



If a data processor is engaged, the data user must adopt contractual or other means to prevent unauthorised or accidental access, processing, erasure, loss or use of the data transferred to the data processor for processing

DPP 5 – Openness



All Practicable Steps Should be Taken to Ensure that a Person Can:



Ascertain a data user's policies and practices in relation to personal data



Be informed of the **kind of personal data** held by a data user



Be informed of the main purposes for which personal data held by a data user is or is to be used

DPP 6 – Data Access and Correction





A data subject must be given access to his personal data



A data subject must be entitled to request corrections where the data is inaccurate



A data user must comply with a data access or correction request within 40 days after receipt

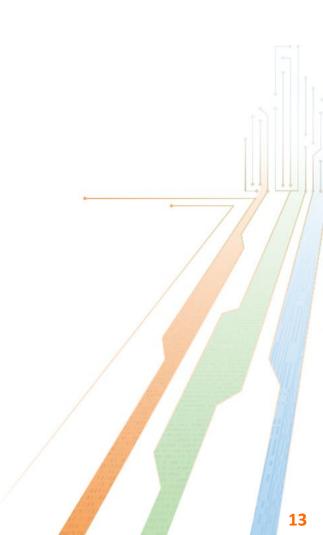
Agenda



Overview of the PDPO

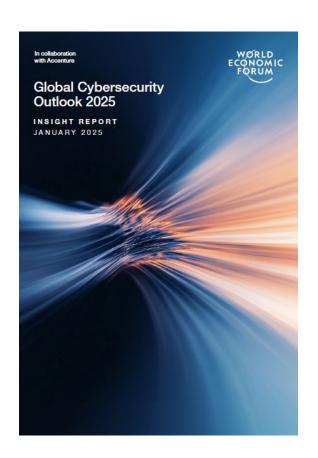
2. Cyberattacks and Data Breaches

3. Al and Personal Data Privacy Risks



Global Situation





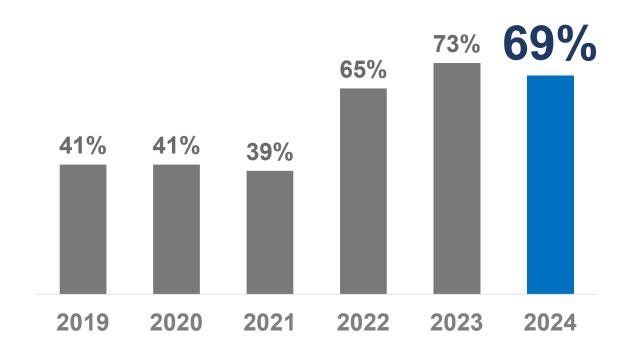
- 72% of respondents reported an increase in organisational cyber risks, with ransomware remaining a top concern
- 42% of respondents experienced <u>phishing</u> and <u>social engineering attacks</u>

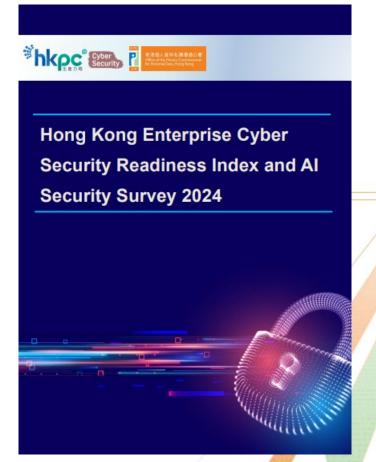
Source: WEF Global Cybersecurity Outlook 2025.pdf

Local Situation – Cybersecurity Attacks



% of companies encountered cybersecurity attacks in the past 12 months





Source: AlSecuritySurvey2024.pdf

Local Situation – Cybersecurity Attacks



Top 5 cybersecurity attacks encountered in the past 12 months











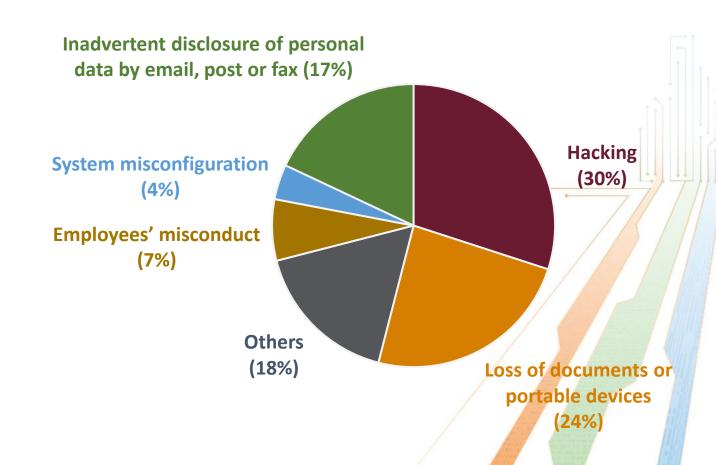


Source: AlSecuritySurvey2024.pdf

Local Situation – Data Breaches



- In 2024, the PCPD received
 203 data breach notifications
 (DBNs), which represented an increase of nearly 30% as compared to 157 DBNs in 2023
- Among those DBNs received by the PCPD in 2024, <u>61</u> cases involved <u>hacking</u>, which constituted <u>30</u>% of all data breach incidents



Investigation



- A DBN was submitted by a non-governmental organisation to the PCPD, reporting that they had suffered from a ransomware attack which affected their information systems (Incident)
- A total of 37 servers and 24 workstations or notebook computers were compromised
- Over 330 GB of data was exfiltrated from the information systems, which
 potentially affected around 550,000 data subjects

Investigation Findings



Having considered the circumstances of the Incident and the information obtained during the investigation, the Privacy Commissioner found that the following **deficiencies** contributed to the occurrence of the Incident:

- 1. Outdated firewalls which contained critical vulnerabilities
- 2. Failure to enable multi-factor authentication
- 3. Lack of critical security patches of servers
- 4. Ineffective detection measures in the information systems
- 5. Inadequacies of the security assessments of information systems
- 6. Lack of specificity of its information security policy
- 7. Prolonged retention of personal data

Contravention of DPPs



DPP 4(1)

It had not taken all practicable steps to ensure that the personal data involved was protected against unauthorised or accidental access, processing, erasure, loss or use

DPP 2(2)

It had not taken all practicable steps to ensure that personal data was not kept longer than was necessary for the fulfilment of the purpose for which the data was used

"Guidance on Data Breach Handling and Data Breach Notifications"



Data Breach Response Plan



from which it is practicable for the identity of the individual to be directly or indirectly

(c) in a form in which access to or processing of the

or actual breach of the security of personal data held by a data user2, which exposes the persona

What is a data breach?

Good data breach handling makes good business

not only useful for containing the damage caused by a breach, but also demonstrate the data user's problem, by formulating a clear action plan that can be followed in the event of a data breach. In data breach notifications can help reduce the risk of litigation and maintain the data user's goodwill and usiness relationships, and in some cases the public

This guidance is aimed at assisting data users to prepare for and handle data breaches, to prevent recurrence and to mitigate the loss and damage caused to the data subjects involved, particularly when sensitive personal data is involved.

Data breach incidents often involve the pers data of individuals, such as customers, service users employees and job applicants of organisations Under the Personal Data (Privacy) Ordinance (Chapter 486 of the Laws of Hong Kong) (PDPO), personal data means any data¹



A document setting out **how** an organisation should respond in a data breach

The plan should outline:

- a **set of procedures** to be followed in a data breach
- strategy for identifying, containing, assessing managing the impact brought about the incident from start to finish

Elements

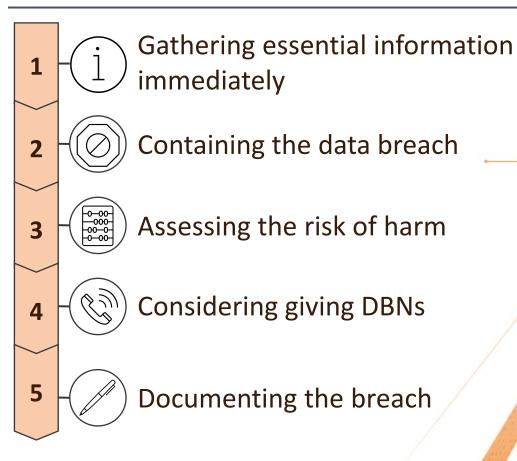
- Description of what makes a data breach
- Internal incident notification procedure
- Contact details of response team members
- Risk assessment workflow
- (\) Containment strategy
- Communication plan
- Investigation procedure
- Record keeping policy
- ்டீ Post-incident review mechanism
- Training or drill plan

"Guidance on Data Breach Handling and Data Breach Notifications"





Handling Data Breaches



PCPD's Support



"Data Security" Package



Data Security Scanner



Data Security Webpage



Free Quotas to Join Professional Workshops and Seminars



Data Security Hotline

Data Security Training Series for SMEs

Training Jointly Rolled out by the PCPD and the HKPC. Topics include:

- Strategies to prevent cyberattacks for SMEs
- Ways and means to handle a data breach incident
- How to address the data security and privacy risks associated with Al

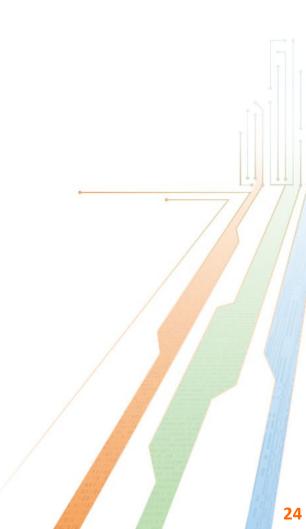
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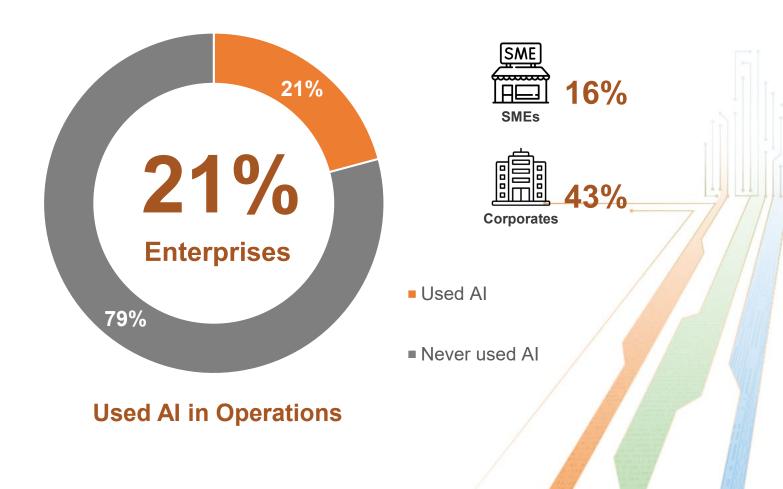


Local Situation – Enterprises' Use of Al



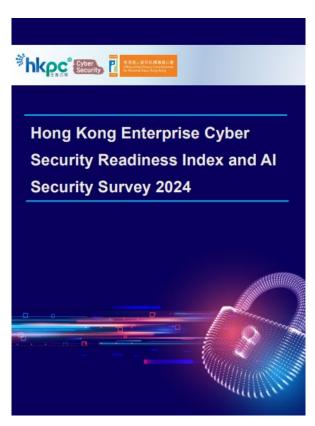


Source: AlSecuritySurvey2024.pdf

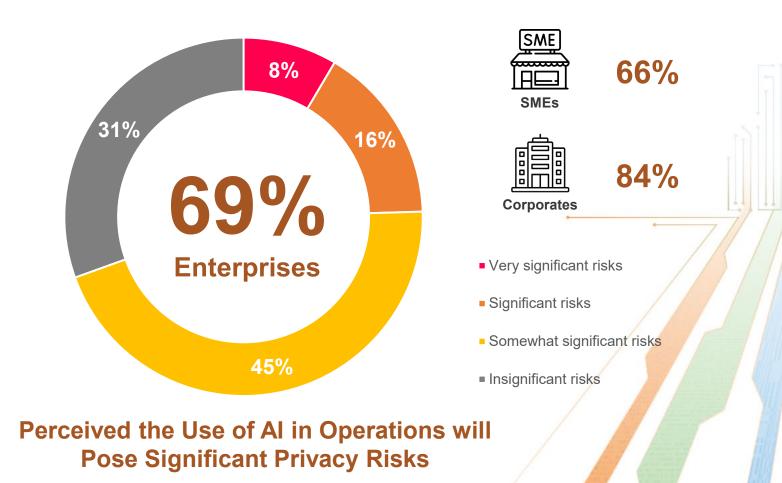


Local Situation – Enterprises' Perception on AI Risks





Source: AlSecuritySurvey2024.pdf



Risks arising from the Use of Al



1 Privacy Risks



Excessive data collection



Misuse of data



Data security



Identity reidentification



Data accuracy





Interpretation of decisions



Harmful content



Copyright



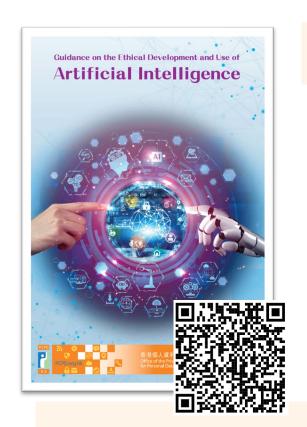
Bias and inaccuracies



Hallucination

"Ethical Development and Use of Artificial Intelligence"





3 Data Stewardship Values



1. Being respectful



2. Being beneficial



3. Being fair

7 Ethical Principles for AI

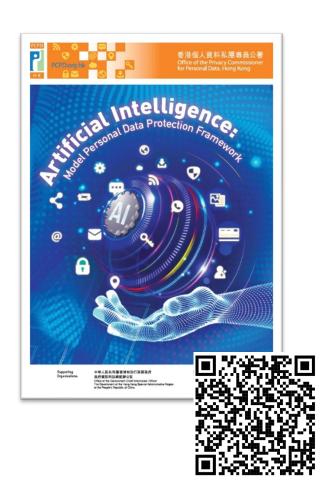
- 1. Accountability
- 4. Data privacy
- 2. Human oversight
- 5. Fairness
- 3. Transparency & interpretability
- 6. Beneficial AI
- 7. Reliability, robustness & security



Model Personal Data Protection Framework

"Artificial Intelligence: Model Personal Data Protection Framework"





Feature

A set of recommendations on the best practices for organisations procuring, implementing and using any type of Al systems, including generative Al (Gen Al), that involve the use of personal data

Benefits



Assist organisations in complying with the requirements of the PDPO



Nurture the healthy development of Al in Hong Kong



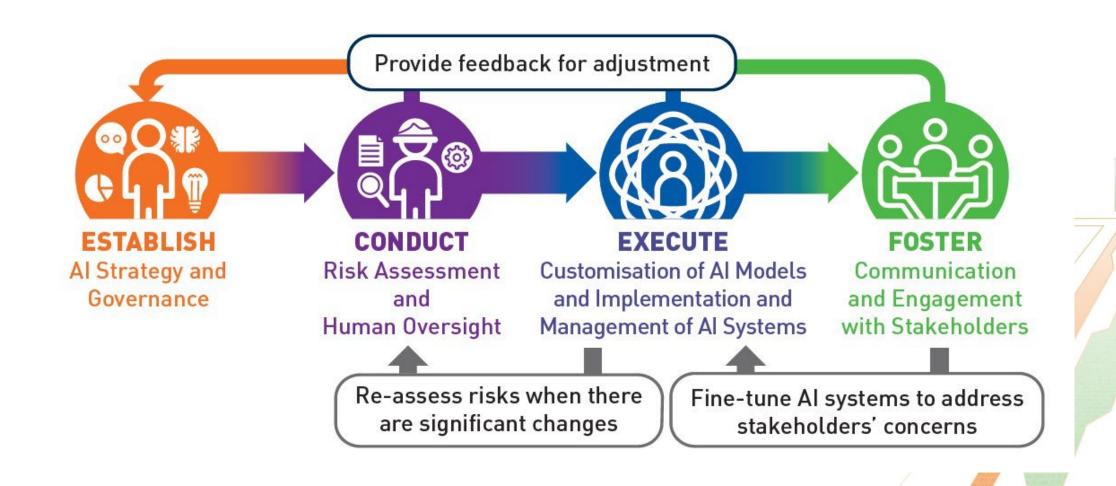
Facilitate Hong Kong's development into an innovation & technology hub



Propel the expansion of the digital economy not only in Hong Kong but also in the Greater Bay Area

"Artificial Intelligence: Model Personal Data Protection Framework"





AI Strategy



Functions

Demonstrate the commitment of top management to the
ethical and responsible
procurement, implementation
and use of AI

Provide directions on the purposes for which AI solutions may be procured, and how AI systems should be implemented and used

Elements that may be Included





Setting out **ethical principles**



Establishing specific internal policies and procedures



Determining the **unacceptable uses** of AI systems



Regularly **communicating the AI strategy**, policies
and procedures



Establishing an AI inventory



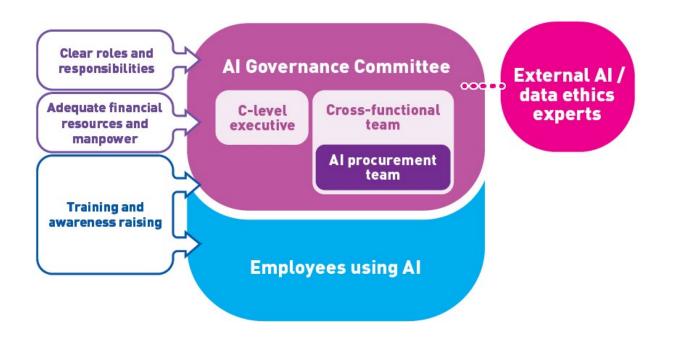
Considering emerging laws and regulations that may be applicable

Governance Structure



An internal governance structure with sufficient resources, expertise and authority should be established:





Governance Considerations



An organisation intending to invest in AI solutions may consider:



1

Purposes of using Al

Privacy and security obligations and ethical requirements

International technical and governance standards

Criteria and procedures for reviewing AI solutions

Data processor agreements

Policy on handling output generated by the AI systems

Plan for continuously scrutinising changing landscape

Plan for monitoring, managing and maintaining AI solutions

Evaluation of AI suppliers

Risk Assessment and Human Oversight



Process of Risk Assessment



1

Conduct risk assessment by a cross-functional team

2

Identify and *evaluate* the risks of the AI system

3

Adopt risk management measures

Risk-Based Approach

An Al system likely to <u>produce</u>
an output that may have such
significant impacts on
individuals would generally be
considered <u>high risk</u>

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Higher

The level of human oversight should correspond with the risks identified:

Risk level of AI system



Lower



Human-out-of-the-loop

Al makes decisions without human intervention



Human-in-command

Human actors oversee the operation of AI and intervene whenever necessary



Human-in-the-loop

Human actors retain control in the decision-making process

Customisation of AI Models and Implementation and Management of AI Systems



Process

Selected Recommendations



Data Preparation



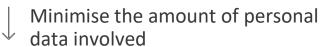
Customisation and Implementation of AI



Management and Continuous Monitoring of Al



Ensure compliance with privacy law





Manage data quality



Document data handling





Consider compliance issues based on the hosting of AI solution ("on-premise" or on a third party cloud) prior to integration



Ensure system security and data security



Maintain proper documentation



Establish an Al Incident Response Plan



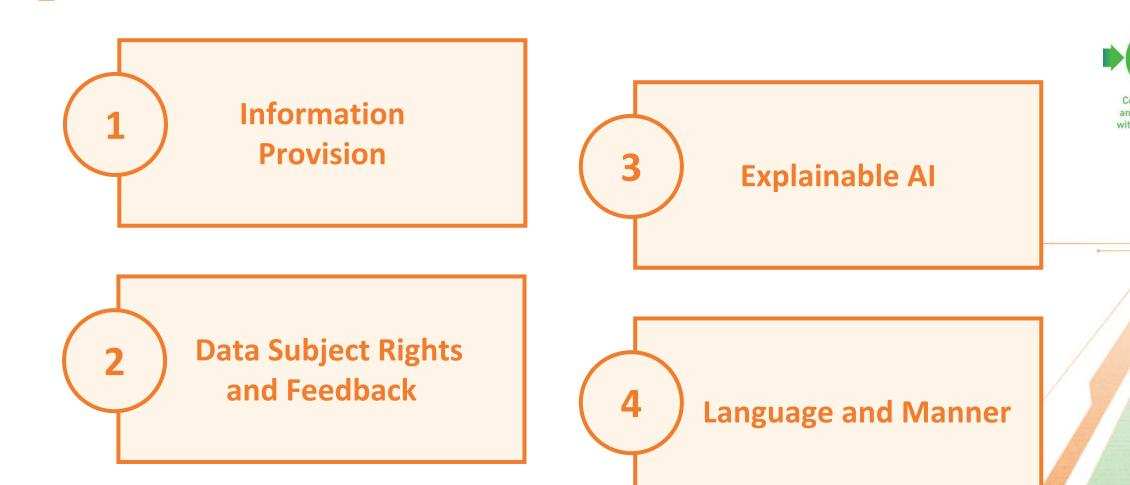
Conduct periodic audits



Consider incorporating review mechanisms as risk factors evolve

Foster Communication and Engagement with Stakeholders





"Checklist on Guidelines for the Use of Generative AI by Employees"





- Presented in a checklist format
- As a matter of good practice, organisations may devise their own policies or guidelines in alignment with their values and mission
- Helps organisations develop internal policies or guidelines for employees' use of Gen Al at work while complying with the requirements of the PDPO in relation to the handling of personal data

Recommended Coverage of the Policies or Guidelines





Protection of personal data privacy

Lawful and ethical use and prevention of bias

Data security

Violations of the policies or guidelines

Contact Us







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保障、尊重個人資料私隱

Protect, Respect Personal Data Privacy















