



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

Artificial Intelligence: Model
Personal Data Protection Framework

Hong Kong General Chamber of Commerce

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1 Impact and risks of Al

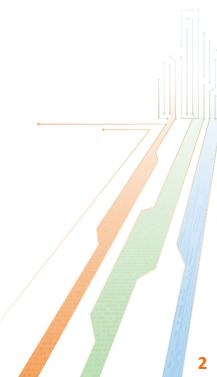
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- Overview of "Artificial Intelligence: Model Personal Data Protection Framework" (2024)
- 3 Implementation

# 1 Impact and risks of Al



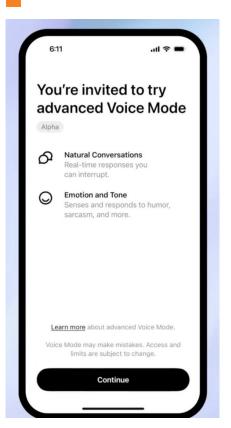




### **Potential**

#### Al characters could be very powerful





Why AI characters can be more promising – and concerning



Sophisticated understanding



24/7 availability

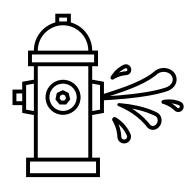


Personalised experience

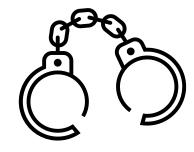
# Why care Al impacts business very much



#### How use of AI could impact businesses



**Data Breach** 



Regulatory requirements

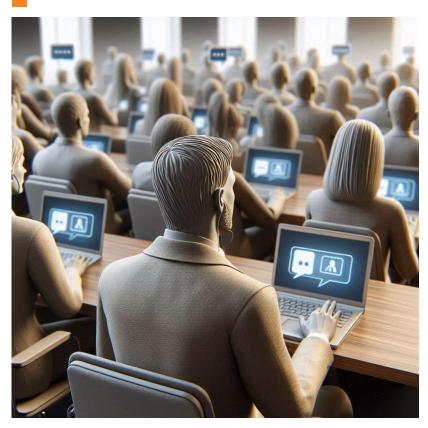


Reputation

### Security

#### Many employees insecurely use AI chatbots for work





#### Prevalent insecure use of AI chatbots



~75% of employees using ChatGPT use a private account



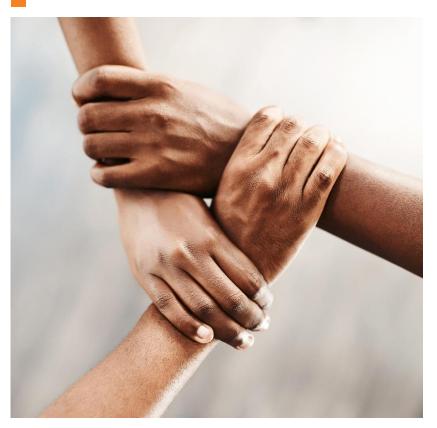
~28% data input into AI chatbots are sensitive

Source: Cyberhaven

### **Public's reaction**

The public is concerned about organisation's use of data in AI





## Consumer's views towards business use of AI

Global consumers, 2023



Concerned about business use of Al



Use of AI by organisations has already eroded trust in them

Source: <u>Cisco</u>

### **Risks**

Different risks have arisen from AI







Excessive data collection



Misuse of data



**Data security** 



Identity reidentification



**Data accuracy** 





Interpretation of decisions



Harmful content



Copyright issues



Bias and inaccuracies



Hallucination

### **Best of both worlds**

Is it possible to enjoy benefits of AI while ensuring privacy protection?



Privacy risks need to be carefully managed



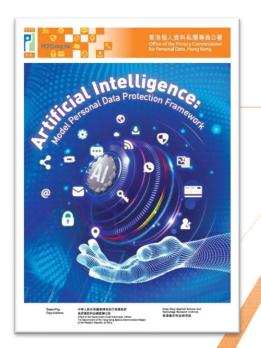
Opportunities from Al need to be grabbed

2 Overview of "Artificial Intelligence: Model Personal Data Protection Framework" (2024)









### **Foundation models**

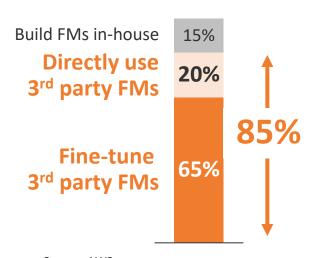
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Enterprises may use third-party FMs more than to develop in-house models

Most firms won't develop FMs in-house

#### Intended FM model use

US, Telecommunications sector, %



Source: AWS

# Enterprises will tilt towards customising 3<sup>rd</sup> party FMs for cost and speed reasons

#### **In-house development**



 Building one model can cost US\$50-90 million

#### Cost



- **3 – 6 months** for developing one model

#### **Third-party FMs**

- Fine-tuned FMs
- Off-the-shelf FMs

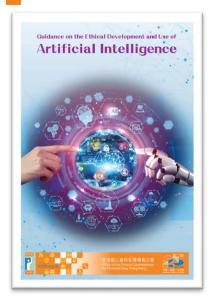
- **Fast** even with data training
- Up to 70%
   reduction in time
   to value

Source: BCG; IBM

### International standards







## 3 Data Stewardship Values



1. Being respectful



2. Being beneficial



3. Being fair

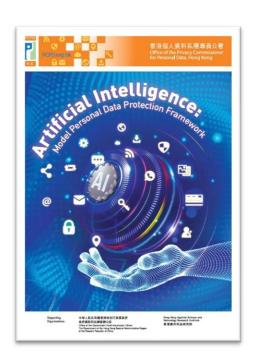
#### 7 Ethical Principles for Al

- 1. Accountability
- 4. Data Privacy
- 2. Human oversight
- 5. Fairness
- 3. Transparency & interpretability
- 6. Beneficial Al
- 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, that involve the use of personal data

#### **Benefits**



Assist organisations in complying with the requirements of the Personal Data (Privacy) Ordinance



Nurture the healthy development of Al in Hong Kong



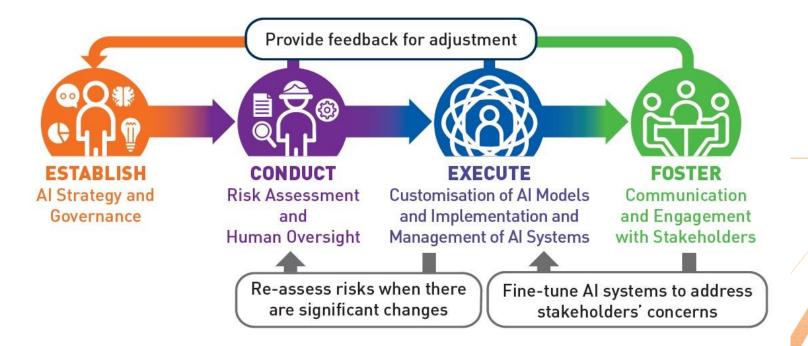
Facilitate Hong Kong's development into an innovation & technology hub



Propel the expansion of the digital economy not only in HK but also GBA

### Artificial Intelligence: Model Personal Data Protection Framework





### **Establish**

Al Strategy and Governance







**Al Strategy** 

3



**Governance Considerations for Procuring AI Solutions** 

2



**Governance Structure** 

4



Training and Awareness Raising

### **Al Strategy**

#### An AI strategy shows management's commitment





#### **Al 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 Al systems



Regularly communicating the AI strategy, policies and procedures



Establishing an inventory



Considering emerging laws and regulations that may be applicable

# Al procurement steps Al solution procurement involves 7 steps





1.	Sourcing Al Solutions	
2.	Picking the Appropriate Al Solution	
3.	Collecting and Preparing Data	
<b>(4.</b>	Customising AI Model for Particular Purpose	
5.	Testing, Evaluating and Validating Al Model	
( ,	Testing and Auditing System and Components for	
6.	Security and Privacy Risks	
7.	Integrating AI Solution into Organisation's System	

### **Governance considerations**

An organisation intending to invest in AI solutions may consider







Purpose(s) of using AI



Privacy and security obligations and ethical requirements



International technical and governance standards



Criteria and procedures for reviewing Al solutions



Plan for continuously scrutinising changing landscape



Data processor agreements



Policy on handling output generated by the AI system



Plan for monitoring, managing and maintaining AI solution



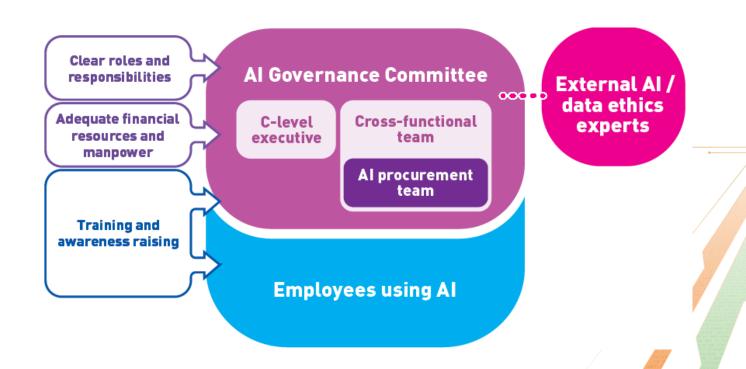
**Evaluation of AI supplier** 

### **Governance Structure**

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







### Conduct







#### **Process of Risk Assessment**

Conduct risk assessment by a cross-functional team

Identify and evaluate the risks of the AI system

Adopt risk management measures

### Risk-based approach

The level of human oversight should correspond with the risks identified





An AI system likely to produce an output that may have such significant impacts on individuals would generally be considered high risk.

Risk level of Al system

Higher



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

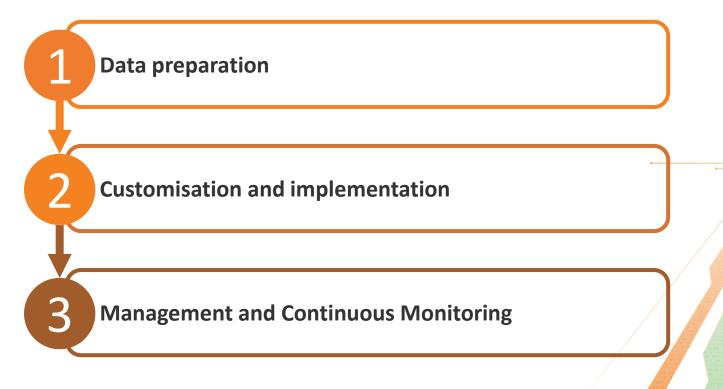
Human actors retain control in the decision-making process

### **Execute**

Customisation of AI Models and implementation and management of AI systems







### **Data Preparation**

Compliance, data minimization, quality management, data handling

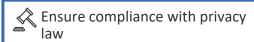






#### **Selected Recommendations**







Manage data quality



Minimise the amount of personal data involved



Document data handling



**Customisation and Implementation of AI** 



Conduct rigorous testing and validation of reliability, robustness and fairness



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







Conduct periodic audits



Establish an Al Incident Response Plan



Consider incorporating review mechanisms as risk factors evolve

### Al Incident Response Plan

All six steps in a glance



The case of self-driving cars



Image source: Wikimedia Commons (no changes made)

### **Foster**

#### Communication and Engagement with Stakeholders





**Information Provision** 

3 Explainable Al

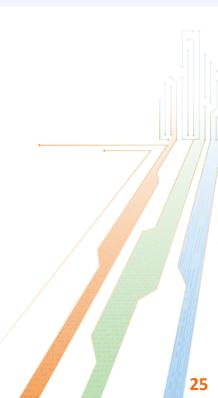
2 Data Subject Rights and Feedback

4 Language and Manner

# Implementation



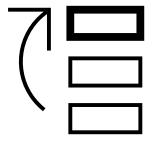




### **Business-friendly**

We've designed the Model Framework to be business-friendly





**Best practices** 



Risk-based Approach



Alignment with international standards

### Questions

Businesses may ask why they should adopt the Framework



How will this framework help my business build trust with customers?

2

Can this framework help my business avoid regulatory pitfalls?

My organisation is quite established, and we already have had our AI frameworks. Why should we still care about this Model Framework?

### PCPD's support

We're here to help



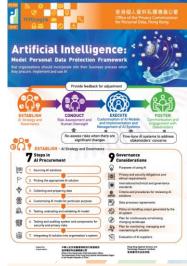


Supporting Organisation: ASTRI



SME Hotline





2-page leaflet



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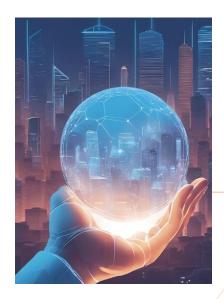
### **Future**







Where our next generations benefit from Al's enormous powers



Because we act now to ensure the safety of AI by proactively managing its risks

### **Contact Us**







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#### 保障、尊重個人資料私隱

#### Protect, Respect Personal Data Privacy























