

**Hong Kong Association of Banks
Hong Kong Monetary Authority
1 April 2019**

Use of Personal Data in the Digital Era

Stephen Kai-yi Wong, Barrister

Privacy Commissioner for Personal Data, Hong Kong, China

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PCPD

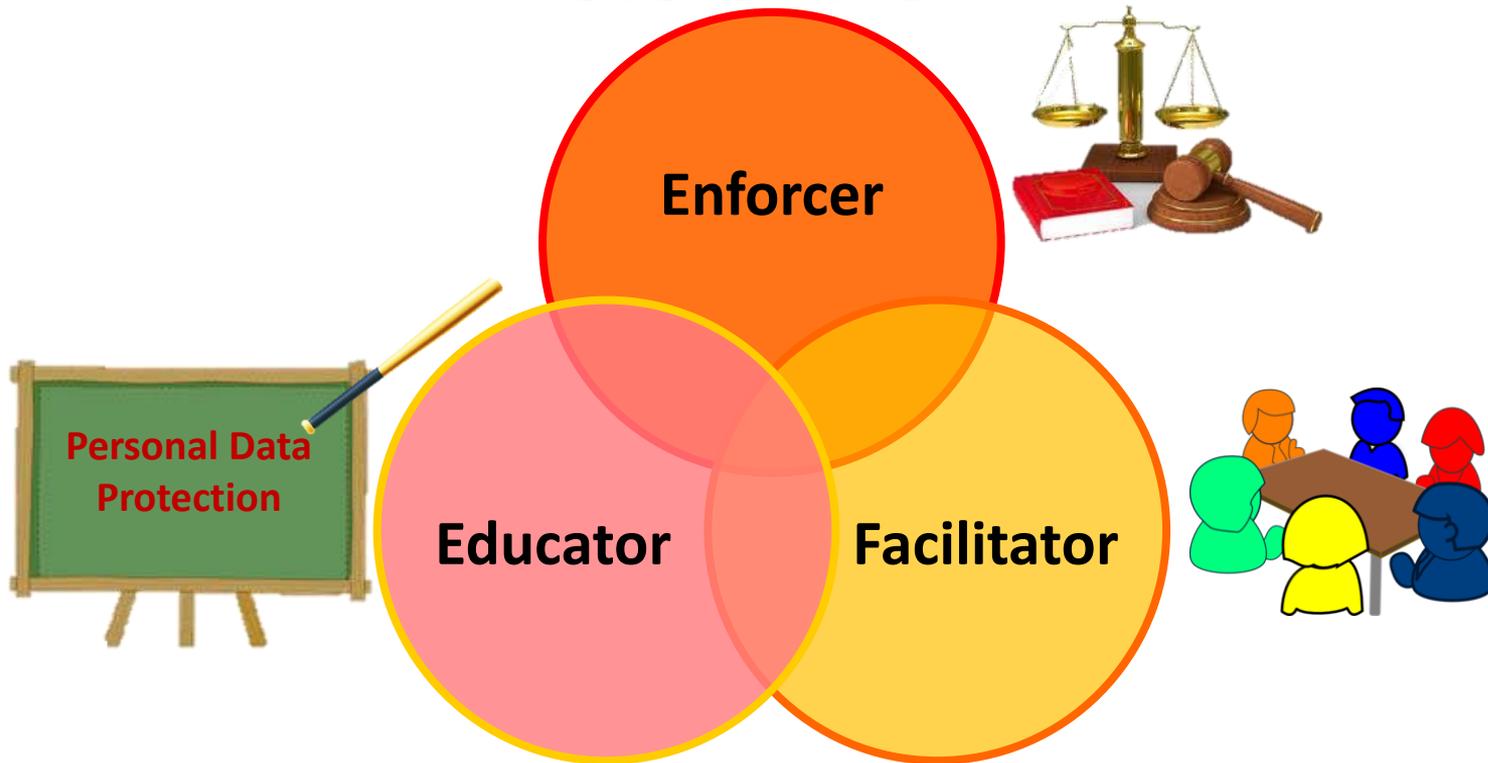


HK



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

Role of PCPD



Proliferation of Fintech



Crowdfunding



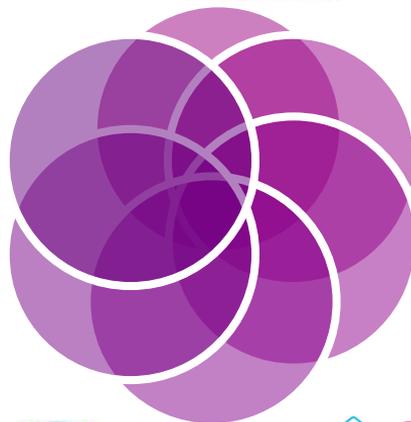
E-wallet



P2P Lending

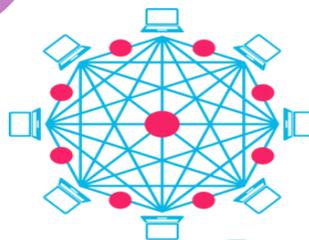


Robo-Adviser

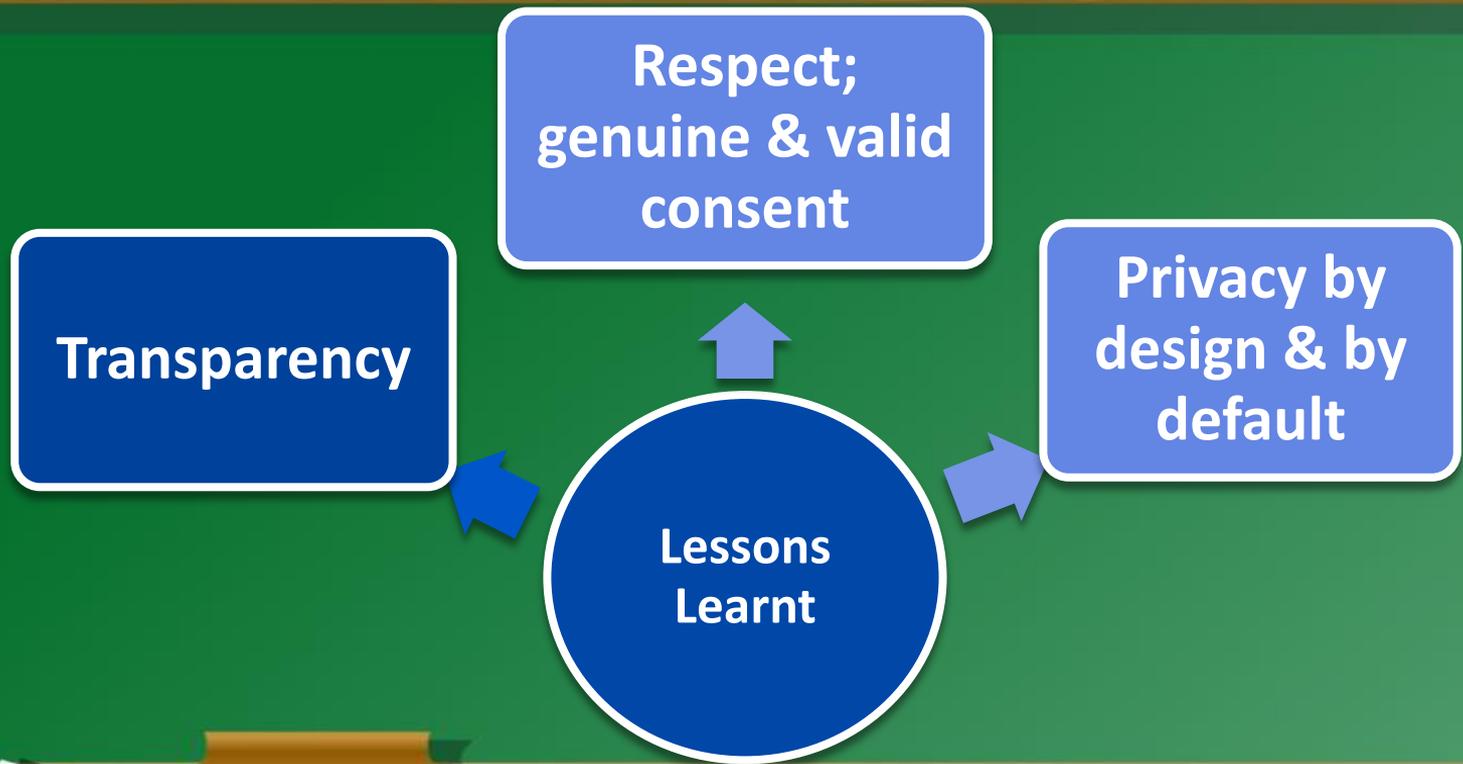


Credit Scoring

Open API



Blockchain



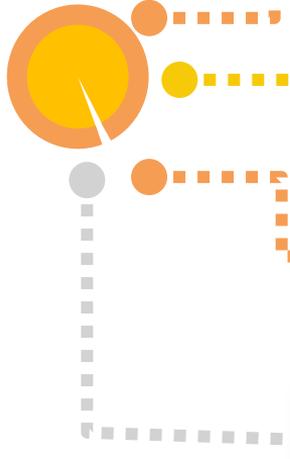
Loophole of SMS-based 2-factor authentication



Sources: Apple Daily; Feb 2019



**Privacy
Risks of
Fintech**



Collection and use of personal data without notice or meaningful consent of the users

Use of personal data in unfair or discriminatory ways

Lack of effective means to erase or rectify obsolete or inaccurate personal data

Data security

Obscurity of the identities of data users and data processors

Vigilance for Users of Fintech

1

Carefully read the privacy policies

3

Critically assess requests for personal data and review privacy settings

2

Operate the application softwares of Fintech under a safe environment

4

Monitor account activities regularly

Recommended Good Practices for Providers/Operators of Fintech

Privacy Impact Assessment and adopt Privacy by Design and by Default

Transparency

Clear and genuine options to users

Minimum personal data collection and retention

Accuracy of data and reliability of algorithms

Monitor data processors

Security of data

Virtual Banking

Advantages

Convenience : 7X24 cross-region and cross-border transactions

Low Cost:

- rent, renovation, wage → Higher deposit interest and Lower loan interest

Service Diversification:

- innovative financial products and financial services
- big data analysis and provide targeted services to customers

Source: <http://hd.stheadline.com/news/columns/792/20190308/746645/>

Challenges

Risk supervision

Customer protection

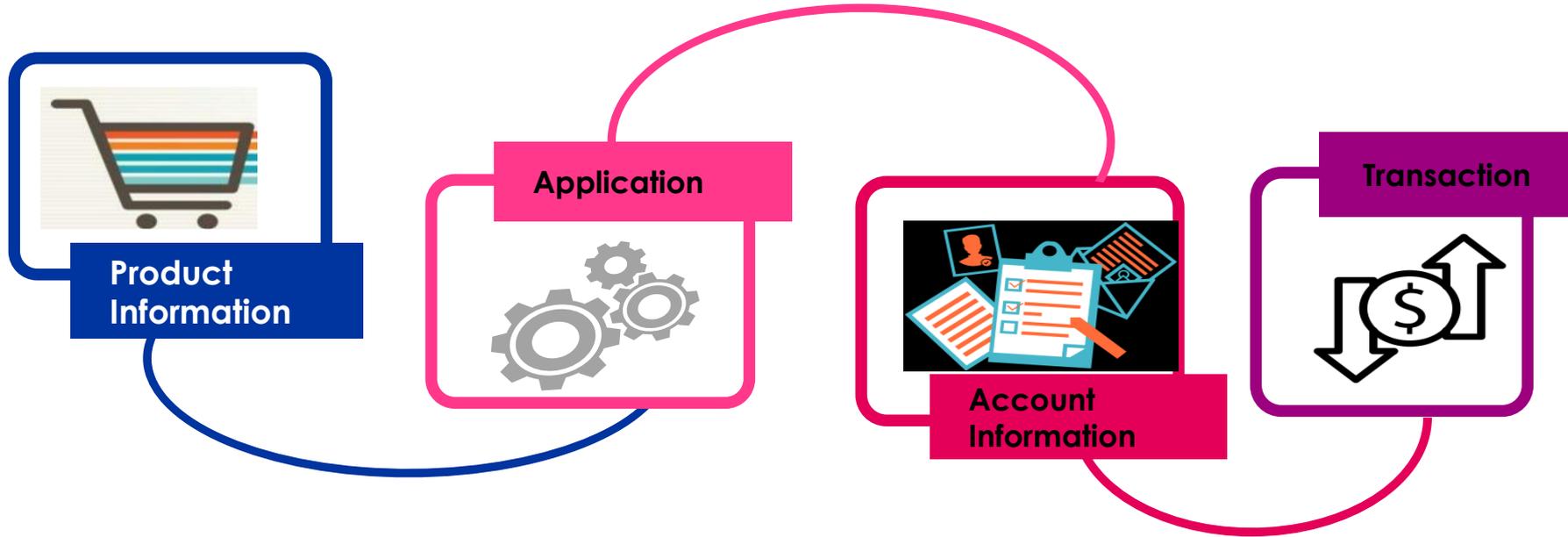
Privacy Risks of Virtual Banking

impersonation, identity theft, etc.

information security e.g. security breaches, hacking

collection of customers' information for profiling and analysis

Open API



Privacy Risks of Open API

individuals may not have full understanding on the kinds of personal data that is shared with third-party developers and how the PD may be used and further disclosed

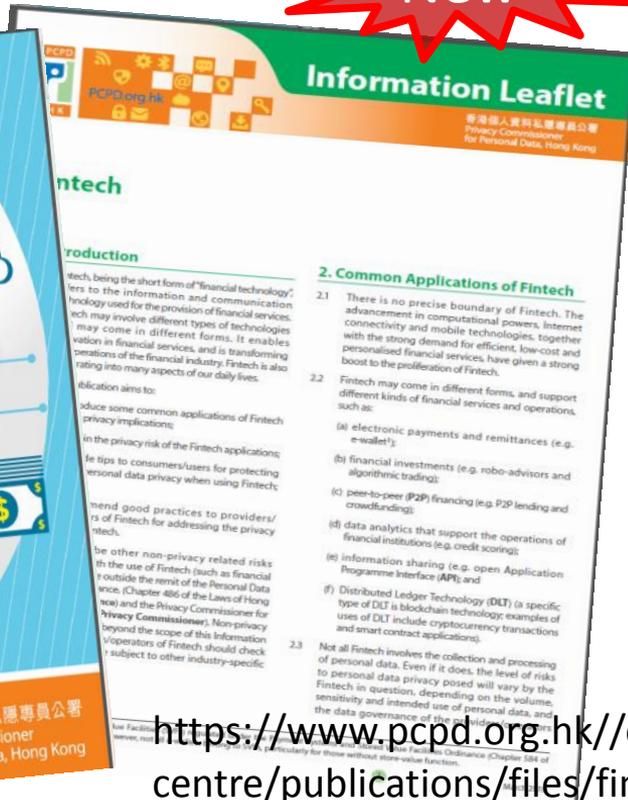
service providers/operators may be inclined to collect and retain as much personal data as possible, even if the data may be inaccurate, irrelevant or obsolete

transmitting personal data electronically among different organisations and end-users, which increases the risk of data leakage or interception during transmission

individuals may not be able to ascertain who is liable for the leakage or mishandling of their personal data

Customers may not be provided with clear and genuine options for the sharing of personal data

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- issued in March 2019
- privacy risks
- tips for users
- recommended good practices for providers/operators

https://www.pcpd.org.hk//english/resources_centre/publications/files/fintech.pdf





Data is the lifeblood of Fintech

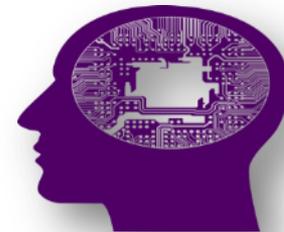


1 ● **Collection of big data** (e.g., transaction records, behavioural data)

2 ● **Data analytics** (e.g., profiling, credit scoring)



3 ● **Automated decision making** (e.g., granting of loans, investment recommendations)



Privacy Challenges in Digital Economy

- Abuse of dominant position by “**data monopolists**”
- Lack of **control** and genuine **choices** by consumers

Competition

Privacy

- **Excessive** and **covert** data collection
- Exposure of **sensitive** information
- **Unexpected, unfair** and/or **discriminatory** use of data
- **No meaningful consent**

- **Hacking**
- **Data leakage**

Data Security

Cross-discipline and cross-border issues

- **Consumer protection**
- **Cross-border data flow**

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The Digital Revolution

**Ubiquitous collection
of data**

**Unpredictability in
use and transfer**

**Personal data belongs
to the individuals**

**Challenges global
data privacy
frameworks based on
'notice' and 'consent'**

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The Digital Revolution

Challenges for regulator:

- To help facilitate the innovative use of data within the legal and ethical frameworks
- To help maximise the benefits of data in a sustainable way
- To minimise the risks of harm, creating healthy synergy with economic growth

Reality (and danger) of the digital economy**:

- Enterprises collect *enormous amount of data* from individuals
- Majority of the data is *controlled by a small group* of enterprises
- *Ownership* of data is not clear in laws

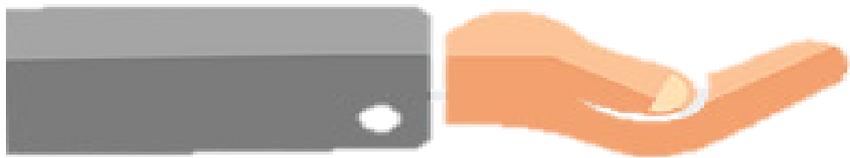


**Chen Zhimin, former Vice-Minister, Ministry of Public Security

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No matter...

Who should own your personal data?



... trust is indispensable.

**Our customers' trust
means everything to us.
We spent decades
working to earn that
TRUST.**

Tim Cook, 2015



***Our data is being
weaponised against us.***

Tim Cook, 2018

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Trust is the new gold.

Andrea Jelinek
Chair of European Data Protection Board



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

Least Common Multiple (LCM) approach: Accountability & Ethics



*“Arguably the biggest change [brought by the GDPR] is around **accountability**.”*

Elizabeth Denham, Information Commissioner of the UK

*“[The GDPR] aims to **restore a sense of trust and control** over what happens to our online lives.”*

Giovanni Buttarelli, European Data Protection Supervisor

Accountability and Governance

EU GDPR

Risk-based approach to accountability. Data controllers are required to:

- implement **technical and organisational measures** to ensure compliance [Art 24];
- adopt **data protection by design and by default** [Art 25];
- conduct **data protection impact assessment** for high-risk processing [Art 35]; and
- (for certain types of organisations) **designate Data Protection Officers** [Art 37].

HK PDPO

The accountability principle and the related privacy management tools are not explicitly stated.

The Privacy Commissioner advocates the **Privacy Management Programme** which manifests the accountability principle. The appointment of data protection officers and the conduct of privacy impact assessment are recommended good practices for achieving accountability.

Data Ethics & Trust



Ethics as a Bridge between Law and Expectation

- Business model and technological development vis-a-vis legislation and regulatory reform
- Public expectation forever increasing
- How to bridge the gap?
- Data Ethics

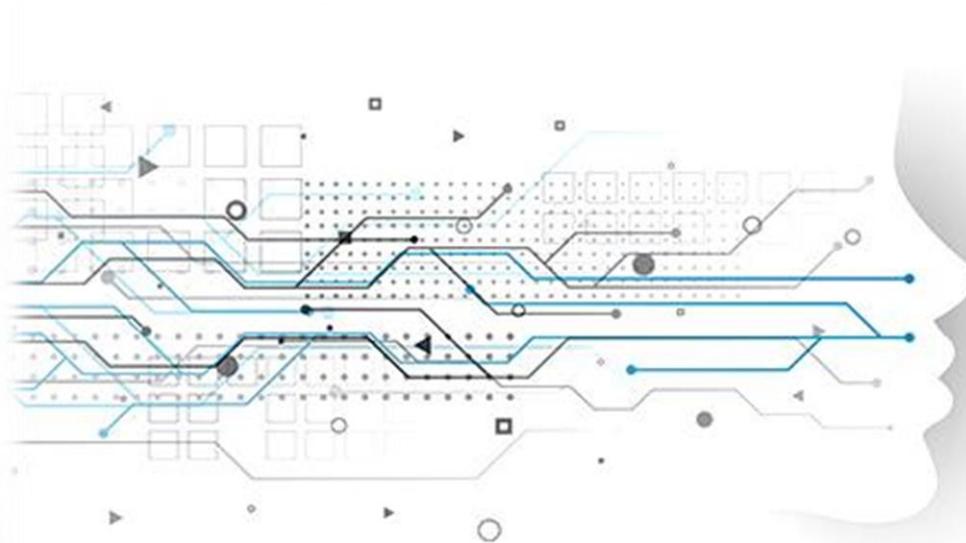
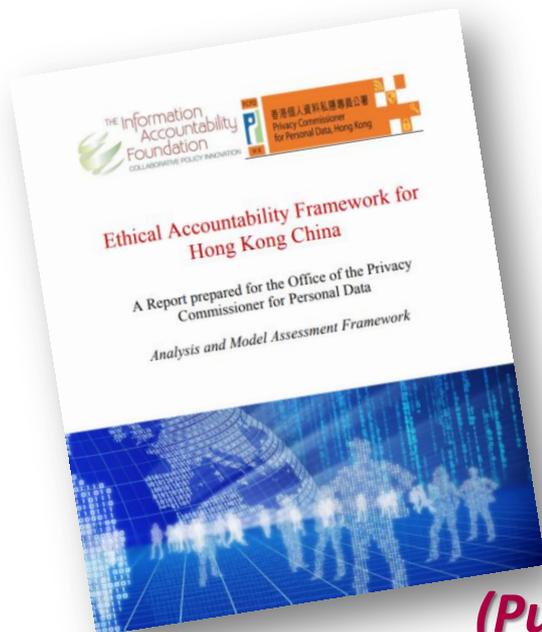


Fair Enforcement

Ethics

“Ethical Accountability Framework for Hong Kong China”

REPORT OF LEGITIMACY OF DATA PROCESSING PROJECT



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(Published on 24 October 2018)

PCPD



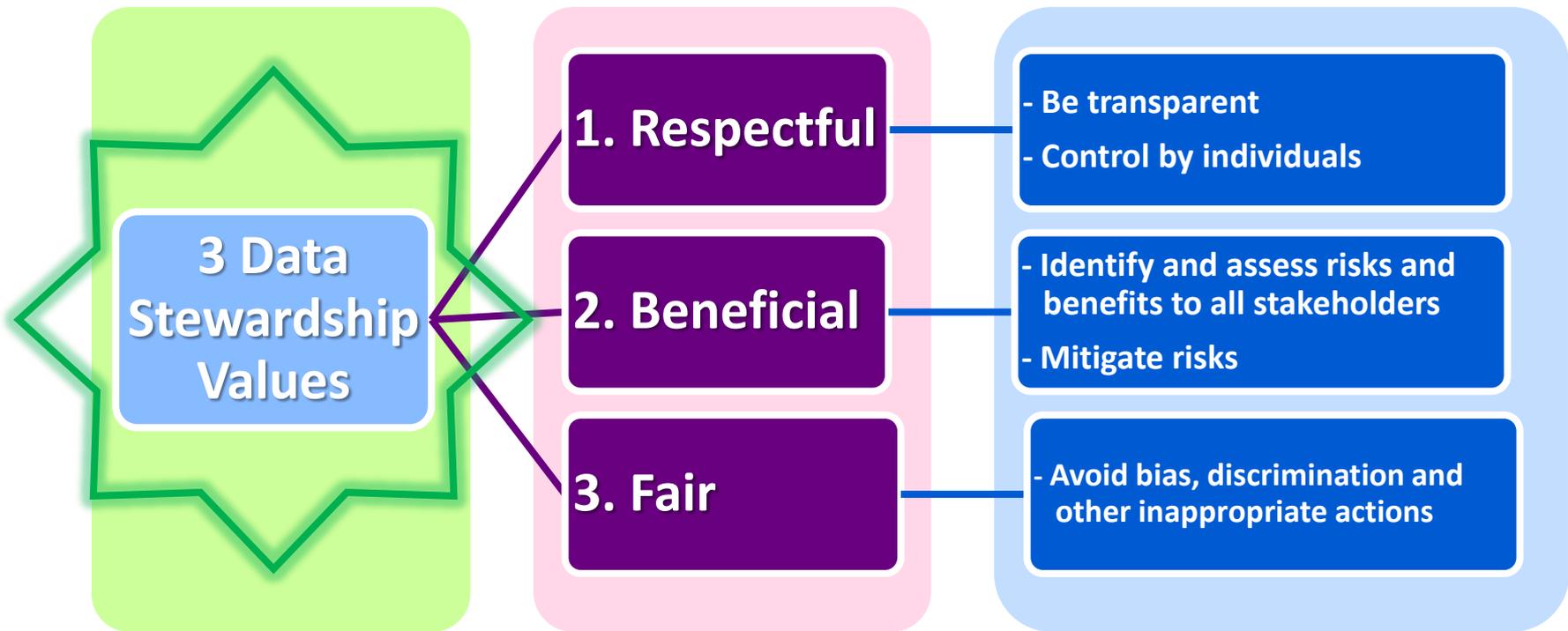
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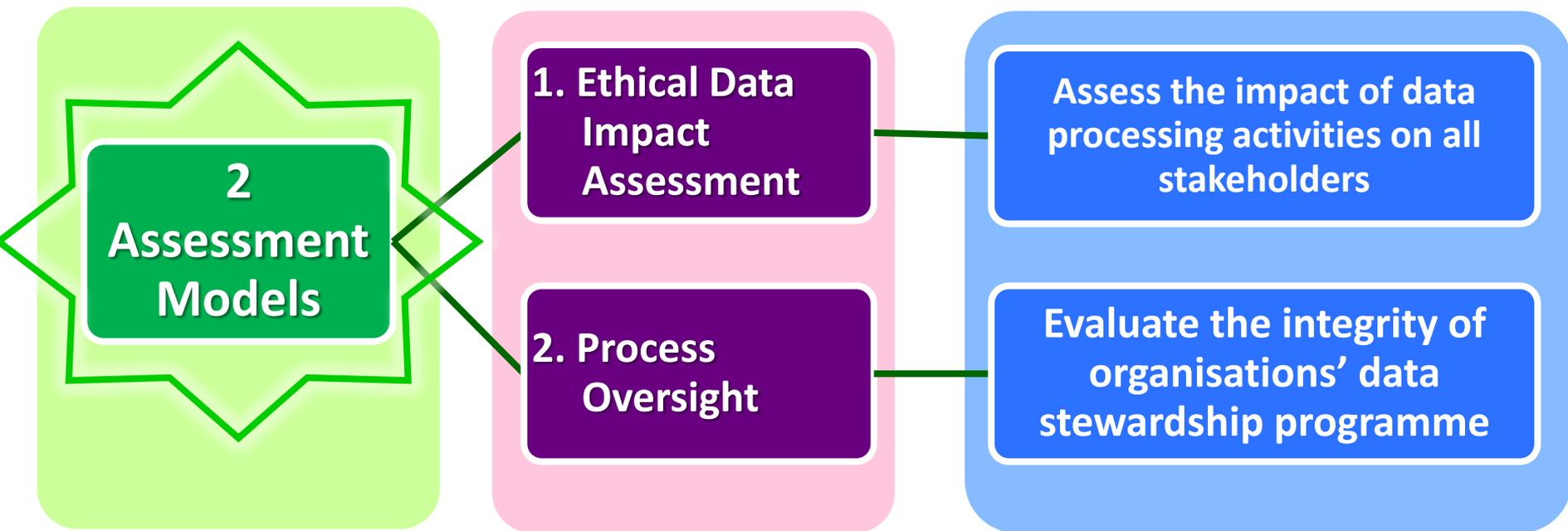
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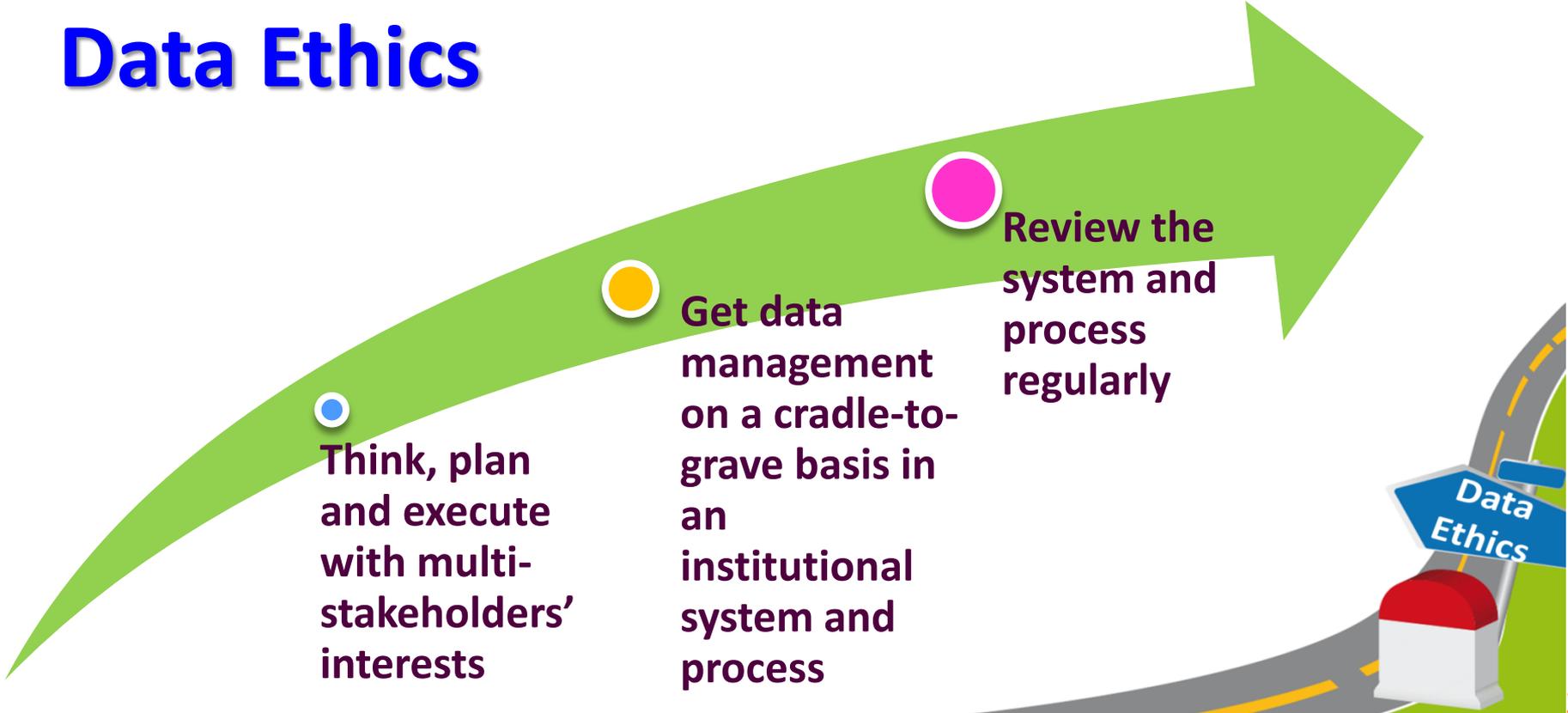
Multi-stakeholders' Approach – Three Core Values



Multi-stakeholders' Approach – Two Assessment Models



Data Ethics



Think, plan and execute with multi-stakeholders' interests

Get data management on a cradle-to-grave basis in an institutional system and process

Review the system and process regularly

Data Ethics - Implementation

Privacy
by
Design



Ethics
by
Design

Step 1: Analyse the business objective and purpose of the data processing activity

Step 2: Assess the nature, source, accuracy and governance of the data

Step 3: Conduct impact assessment, i.e. risks and benefits to the individuals, the society and the organisation itself

Step 4: Balance between expected benefits and the mitigated risks to all stakeholders

Examples of Privacy by Design and by Default



Under iOS 12.2, access to location data of iPhone or iPad by website operators is disabled by default

- To allow websites to their access location data, users have to switch on the function themselves, providing users with stronger control

Source: Ars Technica; Feb 2019

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Examples of Privacy by Design and by Default



About the ICO / News and events / News and blogs /

ICO fines Uber £385,000 over data protection failings

Date 27 November 2018
Type News

The Information Commissioner's Office (ICO) has [fined ride sharing company Uber £385,000](#) for failing to protect customers' personal information during a cyber attack.

A series of avoidable data security flaws allowed the personal details of around 2.7million UK customers to be accessed and downloaded by attackers from a cloud-based storage system operated by Uber's US parent company. This included full names, email addresses and phone numbers.

The records of almost 82,000 drivers based in the UK – which included details of journeys made and how much they were paid – were also taken during the incident in October and November 2016.

The ICO investigation found 'credential stuffing', a process by which compromised username and password pairs are injected into websites until they are matched to an existing account, was used to gain access to Uber's data storage.

Also paid \$148 million
in U.S.

- Uber changes its privacy settings after having been fined
 - ❖ 'hiding precise pickup and dropoff locations' in the driver app after a trip ends to help protect information about rider locations
 - ❖ riders and drivers can call or chat with each other directly in the Uber app, so rider no need to share their phone number

Source: ICO; Nov 2018

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Examples of Ethics by Design

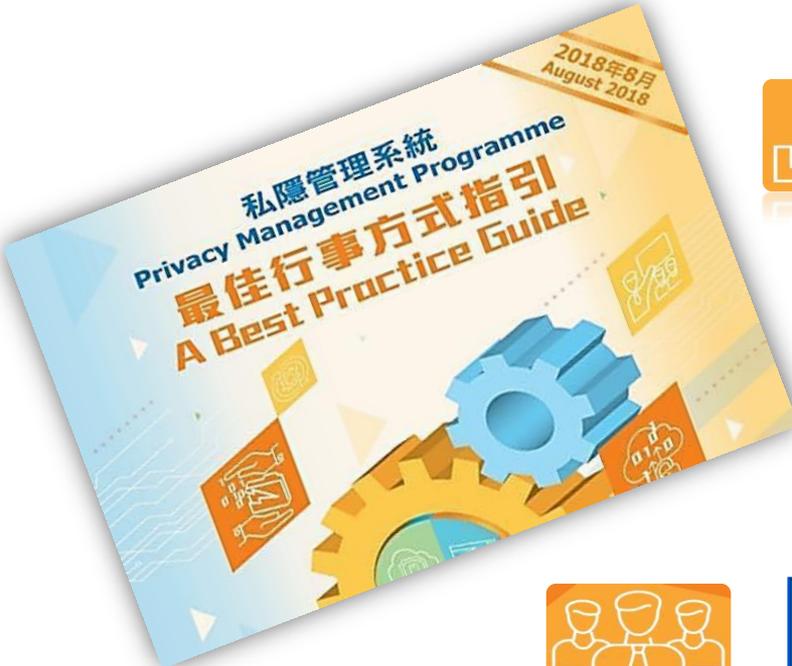
For personalised online advertising and marketing**:

- make it clear to the consumers if a recommendation of goods/services is a personalised advertisement; and
- provide consumers with information about other similar but non-personalised goods/services.

** Reference: draft revision to the Personal Information Security Specification of China (Jan-2019)



Data Governance & Accountability: Privacy Management Programme (PMP)



Effective management of personal data



Minimisation of privacy risks



Effective handling of data breach incidents



Demonstrate compliance and accountability

Treat Data as Money



Money

- (1) Accountant
- (2) Accounting rules
- (3) Inventory on money
- (4) Reporting
- (5) Board meetings

Data

- (1) Data Protection Officer
- (2) Data protection policy and guidelines
- (3) Personal Data Inventory
- (4) Compliance reporting and monitoring
- (5) Board commitment

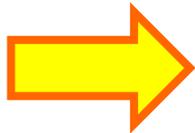
PCPD's Roles – Enforcer + Educator + Facilitator

PCPD's Strategic Focus

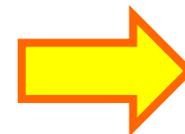
Fair Enforcement



Engaging



Incentivising



Privacy-friendly Culture

A Balancing Exercise

- Individuals' Right
- Country's Interest
- Data Protection

- ICT Development
- Economic & Trade Development
- Free Flow of Information
- Use of Data

Q&A

Thank you

"Ethical Accountability Framework for Hong Kong, China"

REPORT OF LEGITIMACY OF DATA PROCESSING PROJECT



Fintech

1. Introduction

1.1. Fintech, being the short form of "financial technology", refers to the combination and application of various technologies used for the provision of financial services. Fintech may involve different types of technologies and may come in different forms. It enables innovation in financial services, and is transforming the operation of the financial industry. Fintech is also generating increasing operational use data flow.

1.2. This publication aims to:

(a) introduce some common applications of fintech and privacy implications;

(b) explain the privacy risks of the fintech applications;

(c) provide tips to consumers/users for protecting their personal data privacy when using fintech; and

(d) recommend good practices to providers/operators of fintech for addressing the privacy risks of fintech.

2. Common Applications of Fintech

2.1. There is no precise boundary of fintech. The following are some common fintech applications, together with the strong demand for effective data control and personalised financial services, have given a strong boost to the proliferation of fintech.

2.2. Fintech may come in different forms, and support different kinds of financial services and operations, such as:

(a) electronic payments and remittances (e.g. mobile*);

(b) financial investments (e.g. robo-advisors and algorithmic trading);

(c) peer-to-peer (P2P) financing (e.g. P2P lending and crowdfunding);

(d) data analytics that support the operations of financial institutions (e.g. credit scoring);

(e) information sharing (e.g. open Application Programming Interface*);

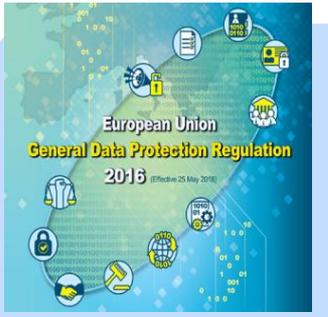
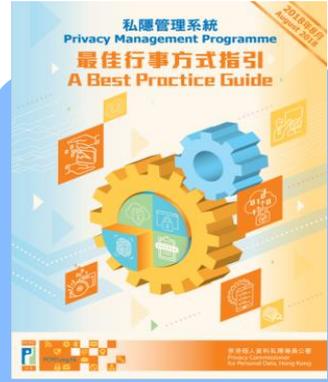
(f) Distributed Ledger Technology (DLT) in specific form (DLT is blockchain technology extension of some of DLT's widely recognised transactions and contract capabilities);

2.3. Not all fintech involve the collection and processing of personal data. Even if it does, the level of risk to personal data privacy is varied, not only for the fintech in question, depending on the volume, sensitivity and intended use of personal data, and the data governance of the providers/operators.

* Examples include: mobile banking, mobile payment and other services provided by financial institutions; mobile payment and other services provided by third parties; and other services provided by third parties.

Privacy

March 2018



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- ☐ Hotline 2827 2827
- ☐ Fax 2877 7026
- ☐ Website www.pcpd.org.hk
- ☐ E-mail enquiry@pcpd.org.hk
- ☐ Address 1303, 13/F, Sunlight Tower, 248 Queen's Road East, Wanchai, HK