

# Cloud Expo Asia, Hong Kong 2018

Hong Kong Convention and Exhibition Centre

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## Cybersecurity Law, GDPR and Data Ethics

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# Cloud Computing



## Characteristics:

**Rapid cross-border data flow**

**Unknown/little control over data storage locations**

**Rapidly changing/loose outsourcing arrangements**

**Standardised contracts adopted by the cloud service providers**

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# Cloud Computing and Personal Data Privacy

## Bottom Line

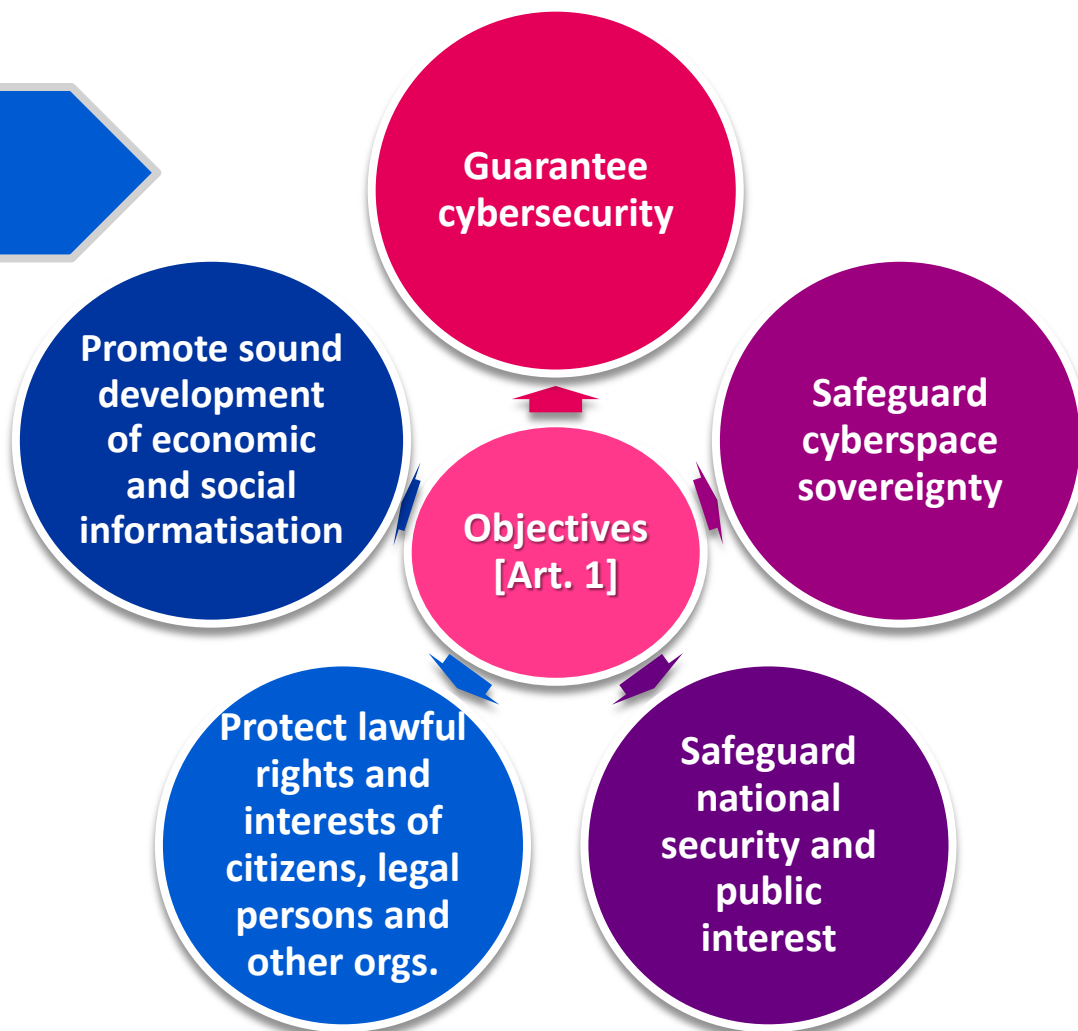


A stylized, cartoonish illustration of a man's face and upper torso. The man has a large, round, light-skinned face with a thick, dark grey mustache. He is wearing a red and white checkered shirt. He is holding a yellow telephone receiver in his right hand, which is visible at the bottom left. The background is a solid light blue. In the top right corner, there are some orange circles and a white arrow pointing downwards. The text "Cybersecurity Law" is written in a bold, blue, sans-serif font across the center of the man's face.

# Cybersecurity Law

# Mainland's Cybersecurity Law

- Effective on 1 June 2017
- Does not apply in HK

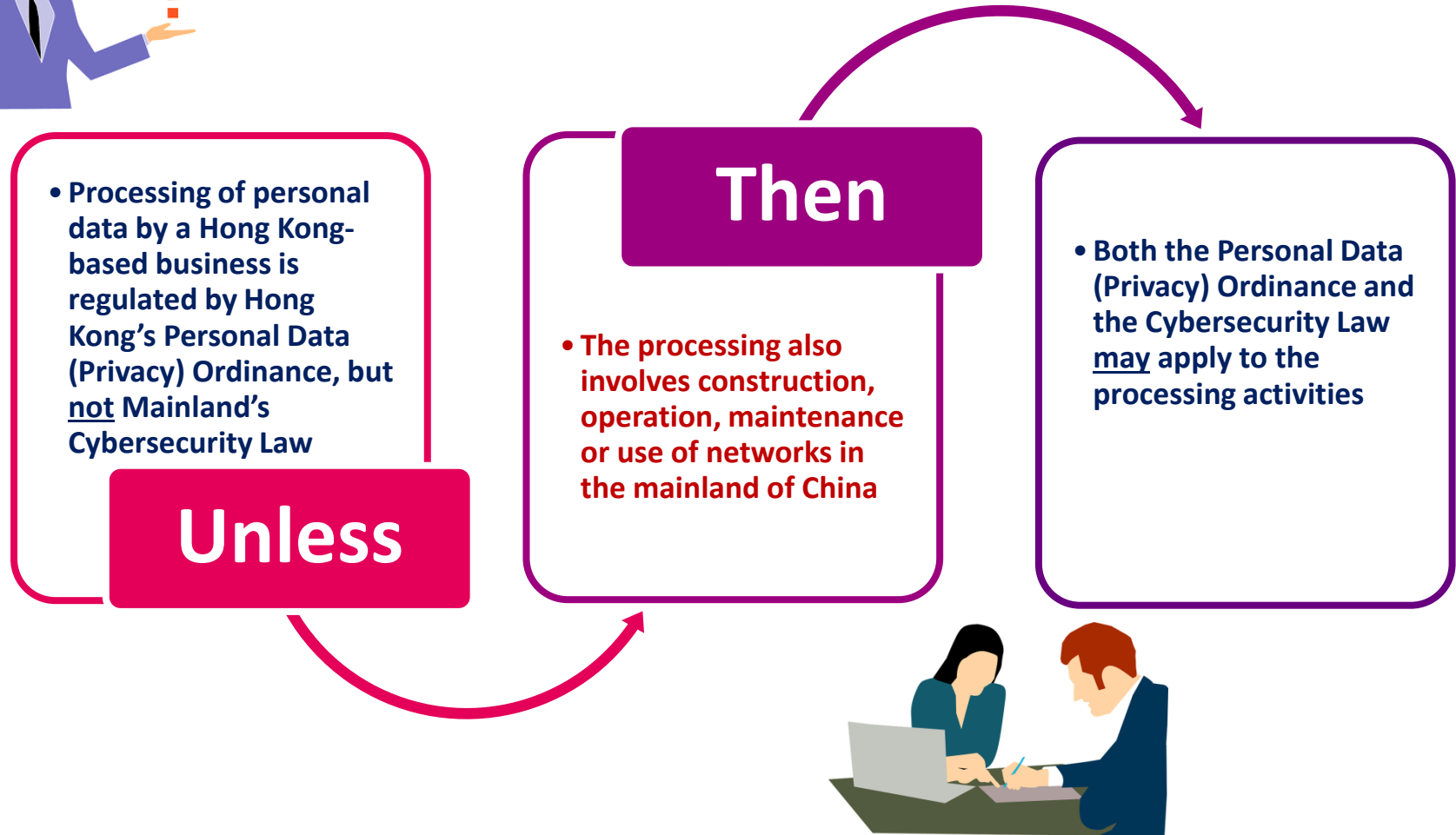


# Mainland's Cybersecurity Law

## Scope of Application:

- Apply to the construction, operation, maintenance and use of **networks**, and the supervision and administration of **cybersecurity** within China [Art. 2]
- Regulate **network operators**, i.e. owners and administrators of networks, and network service providers [Art. 76(3)]
- Protect **personal information**

# How May Cybersecurity Law Affect Hong Kong Businesses?



# Comparison between Cybersecurity Law and PDPO



## Collection & Use

### Cybersecurity Law

#### Art. 41 (collection & use)

- Follow the principles of **lawfulness, propriety** and **necessity**
- Obtain **consent** from data subjects
- **Do not collect** personal information **irrelevant** to services provided
- Disclose related policy and practice
- Clearly indicate the **purposes, means** and **scope** of collection and use
- **Do not collect or use** personal information **in violation** of agreements with the data subjects

#### Art. 42 (disclosure)

- Personal information shall not be disclosed to third parties without the data subject's consent

### HK PDPO

#### DPP1 (collection)

- No consent requirement
- Collect data in a lawful and fair way, for a purpose directly related to a function or activity of the data user
- Data collected shall be necessary but not excessive
- Notify data subjects about the purpose of collection, the classes of persons to whom the data may be transferred, and the contact person

#### DPP3 (use, including disclosure)

- Shall not use personal data for new purposes, unless with prescribed consent of data subjects

# Comparison between Cybersecurity Law and PDPO



## Security & Data Breach Notification

### Cybersecurity Law

#### Art. 42 (security & notification)

- Adopt **technical measures** and other measures to **ensure security** of personal information, and prevent information leakage, damage and loss
- In case of information leakage, damage or loss, take remedial actions immediately, and **notify data subjects and the supervisory authority**

### HK PDPO

#### DPP4 (security)

- Take all practicable steps to protect personal data against unauthorised or accidental access, processing, erasure, loss or use
- No requirement for data breach notification

# Comparison between Cybersecurity Law and PDPO



## Cross-border Data Transfer

### Cybersecurity Law

#### Art. 37 (data localisation)

- **Personal information** and **important data** collected and produced by operators of **critical information infrastructure** during their operations in China shall be stored locally
- If cross-border transfer is needed for business reasons, **security assessment** should be conducted pursuant to the measures stipulated by the Cyberspace Administration of China (CAC) and the relevant department of the State Council

### HK PDPO

#### S. 33 (prohibition against transfer)

- Personal data shall not be transferred to places outside Hong Kong, unless under specified circumstances, e.g.:
  - transfer to White List regions
  - consent by data subjects in writing
  - reasonable precautions taken and due diligence exercised by the data user
- S.33 is not yet in force

# What is Critical Information Infrastructure under Cybersecurity Law?

Examples of **Critical Information Infrastructure (CII)** under Cybersecurity Law:

- Public communications and information services
  - Energy
  - Transportation
  - Water conservancy
  - Finance
  - Public services
  - E-government affairs
  - Other infrastructure which will cause serious damage to state security and public interests, in case of destruction, dysfunction or data leakage
- [Art. 31]



# Comparison between Cybersecurity Law and PDPO



## Sanctions

### Cybersecurity Law

#### Arts. 64 & 66

- Possible **administrative sanctions** for a breach:
  - Corrective action
  - Warning
  - Confiscation of illegal income
  - Fine between 1 and 10 times of illegal income (if no illegal income, fine < RMB 1 million)
  - Fine between RMB 10,000 and 100,000 on directly responsible person
  - Suspension or cease of business operation for rectification, or closedown of website, or revoking of business permit or license

### HK PDPO

- PCPD has no power to impose administrative sanction

#### Ss. 50 & 50A

- The Privacy Commissioner may issue an enforcement notice, ordering remedial actions by a data user
- Non-compliance with an enforcement notice may (upon conviction by a court) subject to a fine of HK\$50,000 and imprisonment for 2 years

# Information security technology — Personal information security specification

## 《信息安全技术 个人信息安全规范》

- Implemented on 1 May 2018
- Comprehensive personal data protection standard in mainland China
- Developed with reference to personal data protection guidelines/regulations of OECD, EU and USA
- Recommended good practice – organisations that follow the Specification will be taken to have observed the data protection requirements under the Cybersecurity Law
- Provide guidance for compliance with the data protection principles in the Cybersecurity Law

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A stylized, textured illustration of a man's face and upper torso. The man has a large, round, light-skinned face with two small, dark eyes and a thick, dark grey mustache. He is wearing a red and white checkered shirt. In his right hand, he holds a yellow telephone receiver. The background is a solid light blue. In the top right corner, there are several orange circles of varying sizes, with a white arrow pointing downwards from the largest one.

# **General Data Protection Regulation (GDPR)**



# PDPO – GDPR Comparative Study

## Background


- **Keep abreast of overseas** privacy law developments
- Assess GDPR's **impact on businesses** (in particular multi-national organisations)
- Comparable legal framework facilitates **free flow of information** and commercial activities

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# PDPO – GDPR Comparative Study

## Major differences between PDPO and GDPR:

	EU	HK
<b>Application</b>  	<b>Data processors or controllers:</b> <ul style="list-style-type: none"> <li>• processing personal data in the context of activities of EU establishments, or</li> <li>• with an establishment in the EU, or</li> <li>• established outside the EU, that offer goods or services to, or monitor the behaviour of individuals in the EU. [Art 3]</li> </ul>	<b>Data users (controllers /processors) who, either alone or jointly or in common with other persons, control the collection, holding, processing or use of the personal data in or from Hong Kong. [s.2(1)]</b>


**Cloud service providers with customers/clients in the EU should be mindful of the extra-territorial application of GDPR**

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# PDPO – GDPR Comparative Study

## Major differences between PDPO and GDPR:

	EU	HK
<b>Personal Data</b> 	<p>"Personal data" means</p> <ul style="list-style-type: none"> <li>• any information relating to an identified or identifiable natural person; an identifiable natural person is one who can be identified, directly or indirectly.</li> <li>• examples of personal data explicitly identified being extended to include location data and online identifier.</li> </ul> <p>[Art 4(1)]</p>	<p>"Personal data" means any data –</p> <ul style="list-style-type: none"> <li>• relating directly or indirectly to a living individual;</li> <li>• from which it is practicable for the identity of the individual to be directly or indirectly ascertained; and</li> <li>• in a form in which access to or processing of the data is practicable.</li> </ul> <p>[s.2(1)]</p>


**Broader definition of personal data under GDPR**

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# PDPO – GDPR Comparative Study


## Major differences between PDPO and GDPR:

	EU	HK
<b>Accountability and Governance</b>  	<p>Risk-based approach; data controllers are required to:</p> <ul style="list-style-type: none"> <li>• implement technical and organisational measures to ensure compliance [Art 24];</li> <li>• adopt data protection by design and by default [Art 25];</li> <li>• conduct data protection impact assessment for high-risk processing [Art 35]; and</li> <li>• (for certain types of organisations) designate Data Protection Officers. [Art 37]</li> </ul>	<p>The accountability principle and the related privacy management measures are not explicitly stated. The Privacy Commissioner advocates the adoption of a 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.</p>



# PDPO – GDPR Comparative Study

## Major differences between PDPO and GDPR:

	EU	HK
<b>Sensitive Personal Data</b> 	Category of sensitive personal data expanded. Processing of sensitive personal data is allowed only under specific circumstances. [Art 9]	No distinction between sensitive and non-sensitive personal data for all purposes.



# PDPO – GDPR Comparative Study

## Major differences between PDPO and GDPR:


	EU	HK
<b>Consent</b> 	<p>Consent must be</p> <ul style="list-style-type: none"> <li>• freely given, specific and informed;</li> <li>• an unambiguous indication of a data subject's wishes, by statement or by clear affirmative action, which signifies agreement [Art 4(1)]; and</li> <li>• given by a child below 16 (or 13) with parental authorisation.</li> </ul>	<p>Consent is not a pre-requisite for the collection of personal data, unless the personal data is used for a new purpose.[DPP1&amp;3] For other purposes, where consent is also required, consent means express and voluntary consent.</p> <p>No requirement for parental consent.</p>

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# PDPO – GDPR Comparative Study


## Major differences between PDPO and GDPR:

	EU	HK
<b>Breach Notification</b> 	<p>Data controllers are required to notify the authority of a data breach without undue delay (exceptions apply).</p> <p>Data controllers are required to notify affected data subjects if it is likely to result in high risk to the rights and interests of the data subjects, unless exempted. [Arts 33-34]</p>	<p>No mandatory requirement, but notification to the Privacy Commissioner (and data subjects, where appropriate) is recommended in the interest of all stakeholders including data users/controllers and subjects.</p>



# PDPO – GDPR Comparative Study

## Major differences between PDPO and GDPR:

	EU	HK
<b>Data Processors</b> 	Data processors are additionally obliged to maintain records of processing, ensure security of processing, report data breaches, designate Data Protection Officers, etc. [Arts 30, 32-33, 37]	Data processors are not directly regulated. [s.2(12)] Data users are required to adopt contractual or other means to ensure data processors' compliance. [DPP2(3) & DPP4(2)]


**Cloud service providers are likely to be regarded as data processors to their customers under GDPR**

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# PDPO – GDPR Comparative Study


## Major differences between PDPO and GDPR:

	EU	HK
<b>New and Enhanced Rights for Data Subjects</b> 	<ul style="list-style-type: none"><li>• Right to notice on data processing. [Art 13-14]</li><li>• Right to erasure of personal data ("right to be forgotten"). [Art 17]</li></ul>	<ul style="list-style-type: none"><li>• Less extensive notice requirements for data users / controllers (processors).</li><li>• No right to erasure, but data shall not be retained longer than necessary. [s.26 &amp; DPP 2(2)]</li></ul>



# PDPO – GDPR Comparative Study


## Major differences between PDPO and GDPR:

	EU	HK
<p><b>New and Enhanced Rights for Data Subjects (con't)</b></p> 	<ul style="list-style-type: none"> <li>• Right to restriction of processing and data portability. [Art 18, 20]</li> <li>• Right to object to processing (including profiling). [Art 21]</li> </ul>	<ul style="list-style-type: none"> <li>• No right to restriction of processing and data portability, but data access and correction requests be complied with. [DPP6, Part 5]</li> <li>• No right to object to processing (including profiling), but may opt out from direct marketing activities [ss.35G &amp; 35L] and PDPO contains provisions regulating data matching procedure. [ss.30-31]</li> </ul>



# PDPO – GDPR Comparative Study

## Major differences between PDPO and GDPR:

	EU	HK
<b>Certification, Seals, and Codes of Conduct</b> 	Mechanisms are explicitly recognised and established for demonstrating compliance by data controllers and processors. [Art 42]	No formal recognition of certification or privacy seals mechanisms for demonstrating compliance. The Privacy Commissioner may approve and issue code of practice after consultation. [s.12]

### Industry resources:


- **Code of Conduct for GDPR Compliance (issued by the Cloud Security Alliance (CSA) in Nov 2017):** <https://gdpr.cloudsecurityalliance.org/>
- **EU Cloud Code of Conduct (May 2017):** <https://eucoc.cloud/en/home.html>

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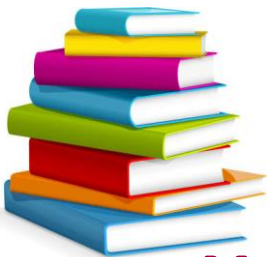


# PDPO – GDPR Comparative Study

Major differences between PDPO and GDPR:


	EU	HK
<b>Cross-jurisdiction Data Transfer</b> 	Certification and adherence to approved codes of conduct are explicitly made one of the legal bases for transfer. [Art 46]	Certification and adherence to an approved code of practice are not explicitly made a legal basis.

**Cloud service providers may make use of certification mechanism and/or approved codes of conduct for the transfer of personal data out of EU**



# PDPO – GDPR Comparative Study

## Major differences between PDPO and GDPR:

	EU	HK
<b>Sanctions</b> 	<p>Data protection authorities are empowered to impose administrative fines on data controllers and processors. [Art 58]</p> <p>Depending on the nature of the breach, the fine could be up to €20 million or 4% of the total worldwide annual turnover. [Art 83]</p>	<p>The Privacy Commissioner is not empowered to impose administrative fines or penalties. The Privacy Commissioner may serve Enforcement Notices on data users, failure to comply with which may attract penalties after judicial process. [s.50]</p>

# “European Union General Data Protection Regulation 2016” Booklet



[www.pcpd.org.hk/tc\\_chi/resources\\_centre/publications/files/eugdpr\\_c.pdf](http://www.pcpd.org.hk/tc_chi/resources_centre/publications/files/eugdpr_c.pdf)



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A stylized, textured illustration of a man's face and upper torso. The man has a large, round, light-skinned face with a prominent grey mustache. He is wearing a red and white checkered shirt. He is holding a yellow telephone receiver to his ear with his right hand. The background is a solid light blue. In the top right corner, there are some orange circular shapes, one of which contains a white downward-pointing arrow.

# **Access by Law Enforcement Agencies**



### Implications:

US authorities may compel US-based service providers to provide data stored on the latter's servers, regardless of whether that data is stored in the US or a foreign jurisdiction.

## *United States v Microsoft*

(US Supreme Court case)

- Must a US provider of email services comply with a US warrant by disclosing electronic communications within its control even if the communications are stored in non-US jurisdictions?
- The case is **moot** due to the passage of the Clarifying Overseas Use of Data Act (**CLOUD Act**) by the US Congress in March 2018.

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# e-Evidence Regulation of the EU

- Proposed by the European Commission on 17 April 2018
- **Objective:** makes it easier and faster for police and judicial authorities to access the electronic evidence (e.g., emails, texts or messaging apps) they need in investigations
- A judicial authority in one Member State can obtain electronic evidence directly from a service provider (or its legal representative) in another Member State, **regardless of the location of data**
- Service providers are obliged to respond within 10 days, and within 6 hours in cases of emergency
- Investigators could also require that certain data not be deleted
- A service provider that offers services in the EU **but without a presence in the EU** is still subject to the same obligations



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# **Accountability & Ethics**

# Mishandling of Personal Data

## Facebook says data leak hits 87 million users, widening privacy scandal

David Ingram

4 MIN READ

SAN FRANCISCO (Reuters) - Facebook Inc said on Wednesday the personal information of 87 million users, mostly in the United States, may have been improperly shared with political consultancy Cambridge Analytica, up from a previous news media estimate of more than 50 million.



## Trust in Facebook has dropped by 66 percent since the Cambridge Analytica scandal

Sixty-five percent of survey respondents say they want Facebook to disclose how it uses the personal information it collects.

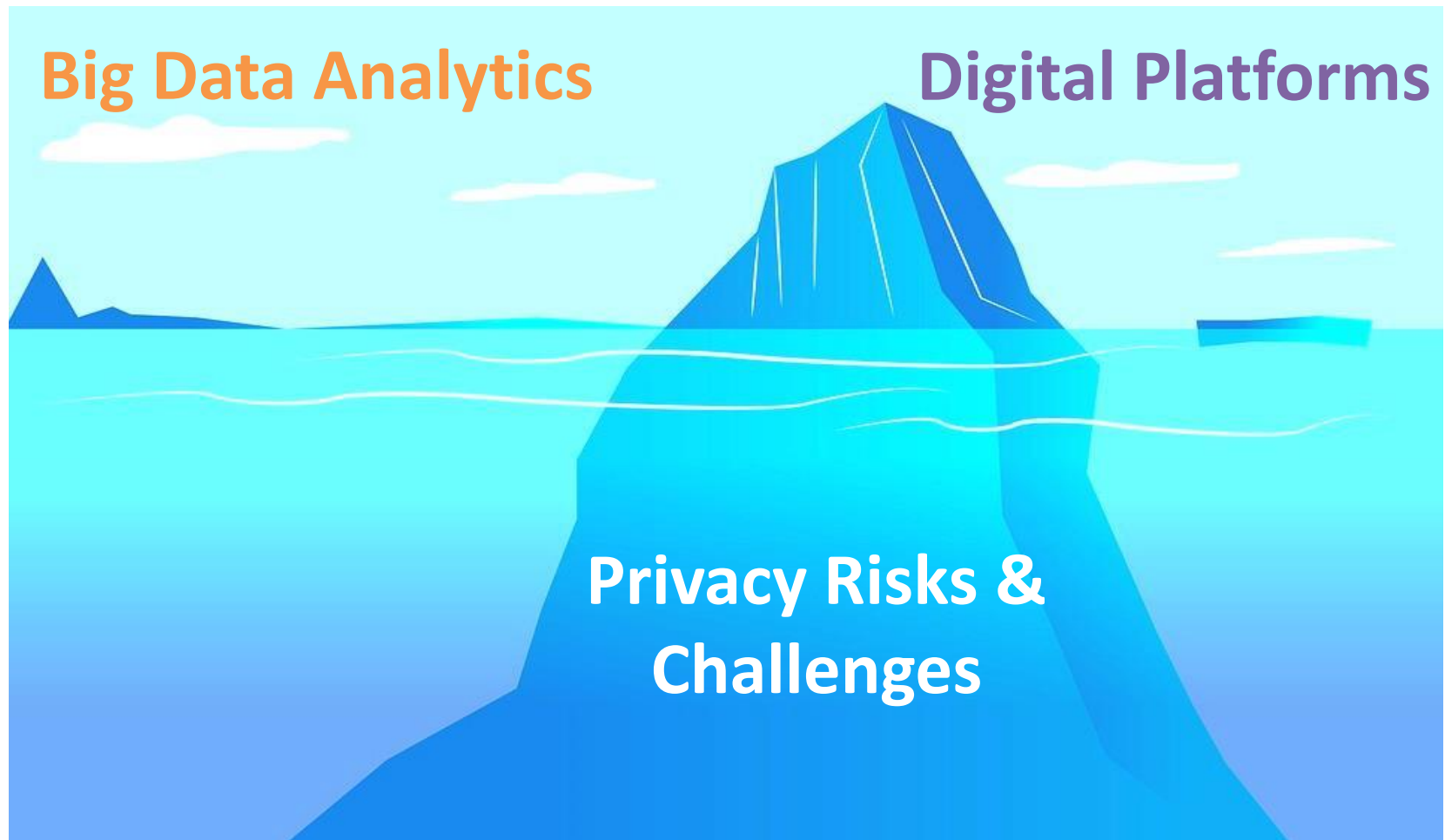
by Herb Weisbaum / Apr. 19, 2018 / 3:08 AM ET



Sources: Reuters; NBC News

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# Privacy Risks and Challenges



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# Ubiquitous and Covert Data Collection



**Data Minimization**

**Data Transparency**



**Adequate Notification**



**Erodes Individuals' Control Over Data**

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# Unpredictable Analytics



**✗ Notice & Consent**



**✗ Purpose & Use Limitations**

# Profiling



## Re-identification



## ✗ Distinction between Personal Data & Non-Personal Data

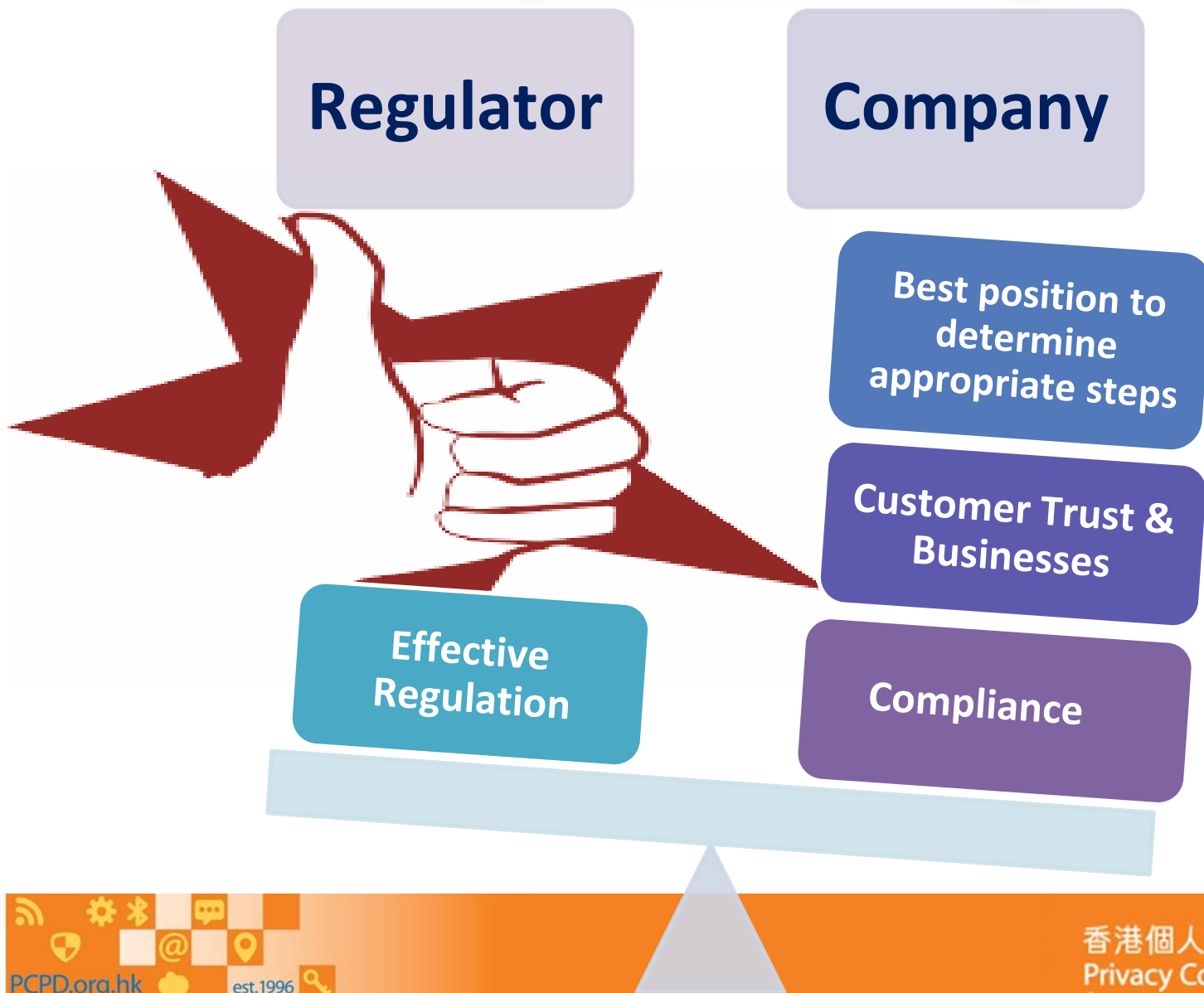
# Inaccurate Inferences and Predictions

**✗ Data Accuracy**

**Filter Bubble**

**Interference in Elections...**

# Why Accountability?



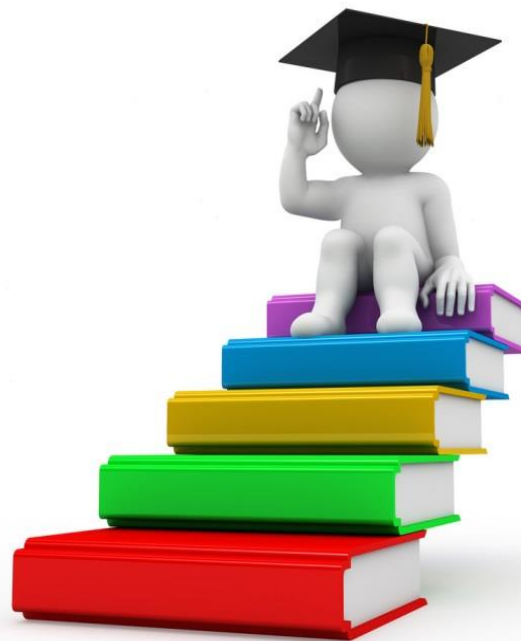
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# Mechanics of Accountability

Voluntary/Self-Regulatory  
or

**Mandatory**  
Accountability?

Education → **Incentivise**



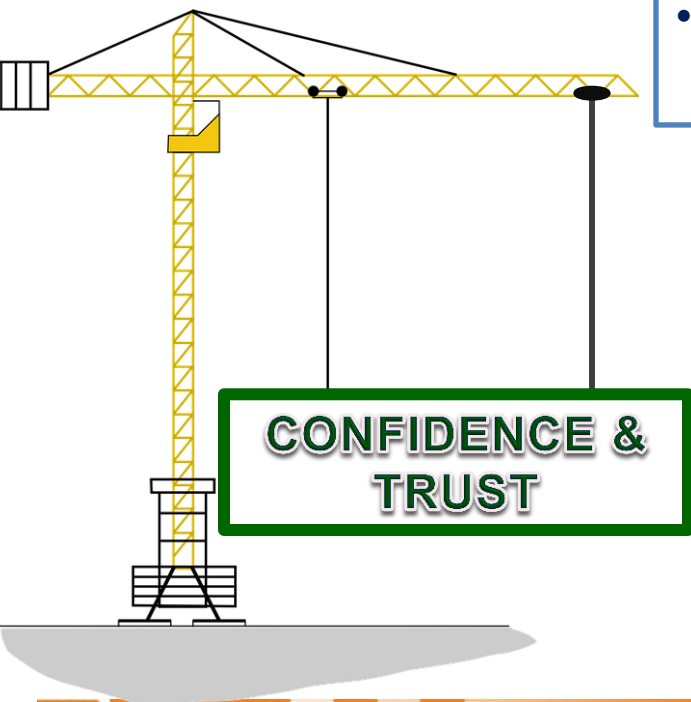
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# Data Ethics and Trust



- No Surprise to Consumers
- No Harm to Consumers

# Building Confidence and Trust



## Short term actions:

### Data users

- Be transparent
- Obtain meaningful consent
- Report data security incidents without delay

## Medium and long term actions:

### Regulators

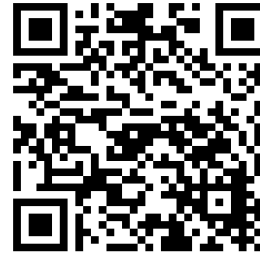
- Education
- Fair and proactive enforcement
- Updating the law
- Use of certification & trust marks

### Data users

- Paradigm shift from compliance to accountability
- Develop privacy-friendly culture
- Ethical processing of personal data

спасибо  
danke 謝謝  
ngiyabonga  
teşekkür ederim  
tapadh leat  
gracias  
dank je  
thank you  
mochchakkeram  
go raibh maith agat  
dziękuję  
hvala  
mauruuru  
sagolun  
sukriya  
kop khun krap  
arigatō  
takk  
dakujem  
merci  
obrigado  
bedankt  
merci  
ευχαριστώ  
감사합니다  
terima kasih  
grazie  
merci

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