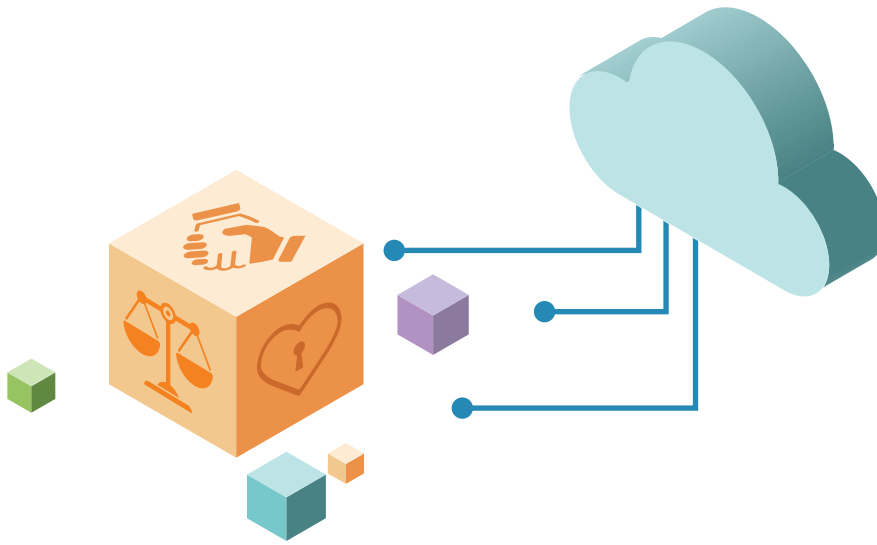


數據管治 DATA STEWARDSHIP



數據道德

擁抱「尊重」、「互惠」及「公平」 的道德價值 實施數據管治，以建立信任

隨著社交媒體、大數據分析及人工智能等的數碼服務及數據科技的興起，資料保障工作的挑戰愈趨嚴峻。傳統的資料保障原則（例如透明度、資料使用限制、資料最少化）的成效開始受到質疑。在資料保障方面，消費者不再滿足於機構只遵循法律規定的做法，而是要求數據道德。

公署於2018年2月委託顧問進行了一個名為「處理數據的正當性」的研究，目的是找出數據道德的核心價值，並制定方法協助機構將數據道德應用於實際操作。超過20間來自銀行、保險、電訊、醫療服務和交通運輸等行業的香港機構應邀參與該研究及提供意見。顧問研究於2018年10月完成，並發布了名為「中國香港可採用的道德問責框架」的報告。顧問報告的全文可於公署網頁下載：

https://www.pcpd.org.hk/tc_chi/resources_centre/publications/surveys/surveys.html

DATA ETHICS

CULTIVATE TRUST BY EMBRACING THE ETHICAL VALUES OF RESPECTFUL, BENEFICIAL AND FAIR, AND IMPLEMENTING DATA STEWARDSHIP

Challenges to data protection are increasingly acute with the rise of digital services and data technologies such as social media, big data analytics and artificial intelligence. Effectiveness of the conventional data protection principles (e.g. transparency, use limitation of data, data minimisation) is beginning to be called into question. Consumers are no longer content with mere legal compliance by organisations in data protection, but are calling for data ethics.

Against the background, the PCPD commissioned a consultancy study known as the “Legitimacy of Data Processing Project” in February 2018 with a view to identifying the core values of data ethics and developing tools to assist organisations to put data ethics into practice. More than 20 Hong Kong organisations from banking, insurance, telecommunications, healthcare services, transportation and other sectors participated in the study by invitation to provide advice. The study was completed with the consultancy report published in October 2018, titled “Ethical Accountability Framework for Hong Kong, China”. The full report can be downloaded from the PCPD’s website:

https://www.pcpd.org.hk/english/resources_centre/publications/surveys/surveys.html

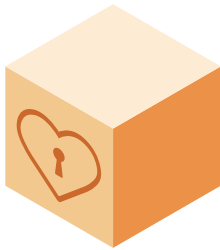


數據道德的三個核心價值

報告建議，當機構進行數據處理活動，尤其是大數據分析、機器學習、人工智能等高階數據處理活動，並因此可能對個人的權利、自由和利益帶來重大影響，便應遵守以下三個數據道德的核心價值。

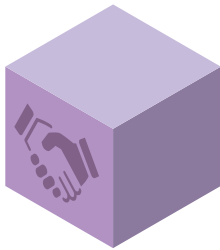
Three core values of data ethics

The study recommended the following three core values of data ethics that organisations should embrace when conducting data processing activities that might have significant impact on the rights, freedoms and interests of individuals, particularly in advanced data processing activities such as big data analytics, machine learning and artificial intelligence.



尊重 Respectful

- 機構須就其開展的高階數據處理活動負責，並要顧及對所有持份者的影響。
- 針對個人所作出的決定及其決策過程應能夠清楚解釋及合理。
- 對受高階數據處理活動影響的個人，應向他們提供適當且具意義的參與和控制權。
- 若高階數據處理活動對個人造成影響，有關個人應可提出查詢、索取解釋，並且在有須要時提出反對。
- Organisations should be accountable for conducting advanced data processing activities with the interest of all stakeholders in mind.
- Decisions made about individuals and the decision-making process should be explainable and reasonable.
- Individuals should be provided with appropriate and meaningful engagement and control over advanced data processing activities that impact them.
- Individuals should always be able to make inquiries, to obtain explanations and, if necessary, to appeal against decisions made by advanced data processing activities that impact them.



互惠 Beneficial

- 若高階數據處理活動可能會對個人造成影響，應確定和衡量當中的好處和風險。
- 確定所有風險後，應採取適當的措施以減低風險，及平衡各方利益。
- Where advanced data processing activities may have impact on individuals, all the benefits and risks of the activities should be identified and assessed.
- Once all risks are identified, appropriate ways to mitigate those risks and to balance the interests of different parties should be implemented.



公平 Fair

- 高階數據處理活動必須避免引起不恰當或具侵犯性的行動。
- 不公平的歧視行為應被禁止。
- 應定期檢視用於決策的數據運算法和模型的準確度和關聯性，消除錯誤、偏見和歧視。
- 高階數據處理活動應與機構的道德價值一致。
- Advanced data processing activities must avoid actions that seem inappropriate or offensive.
- Unfair discrimination should be prohibited.
- The accuracy and relevancy of algorithms and models used in decision-making should be regularly reviewed to remove errors, bias and discrimination.
- Advanced data processing activities should be consistent with the ethical values of the organisation.

數據管治問責要素

研究定出道德數據管治問責要素，要求機構：

1. 界定數據管治價值，再發展成各項指導原則，繼而轉化成機構的道德數據處理政策和實務措施；
2. 採用「貫切道德的設計」流程，確保所有持份者（例如個人、群體及社會）可從高階數據處理活動中獲益；
3. 當高階數據處理活動可能對人造成顯著的影響，或涉及純機器的自動決策，便應進行「數據道德影響評估」（見下文）；
4. 進行內部審核以確保數據管治問責要素和數據道德影響評估有恰當地執行；
5. 對數據處理活動保持透明度；及
6. 若數據處理可能對人造成顯著影響，應隨時準備好向監管機構解釋其內部流程的健全度。

評估模式

為協助機構實施道德數據管治和落實數據道德價值，研究報告建議使用以下兩個評估模式：

- 數據道德影響評估-用於評估數據處理活動對所有持份者的影響；及
- 流程監督-用於監督機構如何將道德價值轉化為各項原則、政策和實務措施。

公署希望是次顧問研究的建議能協助香港以至其他地區的機構在日常營運中實施數據道德，並在保障和尊重個人基本權利（包括私隱權）、自由和利益的同時，亦能充分享受數據經濟帶來的好處。

Data Stewardship Accountability Elements

The study outlined the Ethical Data Stewardship Accountability Elements that call for organisations to:

1. define data stewardship values, develop them into guiding principles and then translate them into organisational policies and practices for ethical data processing;
2. adopt “ethics by design” to ensure that all stakeholders (e.g. individuals, groups of individuals and society as a whole) will gain from the data processing activities;
3. conduct Ethical Data Impact Assessments (see below) when advanced data processing activities may be impactful on people in a significant manner and/or when data-enabled decisions are being made solely by machines automatically;
4. conduct internal review to ensure that Data Stewardship Accountability Elements and Ethical Data Impact Assessments have been properly implemented;
5. be transparent about the data processing activities; and
6. stand ready to demonstrate the soundness of internal processes to the regulators when data processing activities may be impactful on people in a significant manner.

Assessment models

In order to assist organisations in implementing the Data Stewardship Accountability Elements and the core values of data ethics, two assessment models are recommended by the consultancy report:

- Ethical Data Impact Assessment – for assessing the impact of an advanced data processing activity on all stakeholders; and
- Process Oversight – for evaluating how an organisation translates the ethical values into principles, policies and practices.

The PCPD hopes that the recommendations of the consultancy study will assist organisations in Hong Kong and beyond to implement data ethics in their daily operations, and to fully reap the benefits of the data-driven economy while protecting and respecting the fundamental rights (including the right to privacy), freedoms and interests of individuals.

私隱管理系統

私隱管理系統與數據道德

公署自2014年起提倡各機構建立自己的私隱管理系統，由最高管理層（例如董事會）做起，將個人資料保障視為其企業管治責任，並將之納入處理業務中不可或缺的一環，由上而下貫徹地在機構中執行有關保障個人資料的政策。從個人資料獲取利益的機構企業應摒棄在營運時只達致最低監管要求的想法。相反，它們應恪守更高的道德標準，在符合相關法例和監管要求的同時，亦符合持份者的期望。因此，數據道德可填補法例要求和持份者期望兩者之間的落差。在數據推動的經濟下，掌握及實踐數據道德，會令機構企業更有優勢。

因此，機構企業最佳的行事方式是建立及全面執行私隱管理系統，數據管治應涵蓋整體業務常規、操作程序、產品和服務設計、實體建築，以至網絡基礎設施。在策略層面，機構可採用私隱管理系統作為框架，輔以行之有效的檢討及監察程序，建立健全的私隱保障基建，藉以配合機構遵從《私隱條例》的規定，與顧客共享公平、尊重和互惠。

在報告年度，公署曾

- 舉辦私隱管理系統專業研習班；
- 協助三個選定的政府部門/決策局建立及完成其私隱管理系統操作手冊；
- 為政府不同政策局及部門舉辦兩場私隱管理系統工作坊，講解建立私隱管理系統的重點及實用建議；
- 協助擬備私隱管理系統操作手冊的一般性參考指引，供其他政府部門/決策局發展、推行及改進其私隱管理系統；
- 修訂《私隱管理系統 – 最佳行事方式指引》，向機構提供實務建議，並輔以具體例子、簡潔圖表及相關問卷及清單範本等供參考；及
- 參照私隱管理系統框架，視察及評估機構處理個人資料的程序。

PRIVACY MANAGEMENT PROGRAMME

PRIVACY MANAGEMENT PROGRAMME (PMP) AND DATA ETHICS

The PCPD has advocated since 2014 that organisations should develop their own PMP. Organisations should embrace personal data protection as part of their corporate governance responsibilities and apply them as a business imperative throughout the organisation, starting from the boardroom. Organisations/Enterprises that derive benefits from personal data should ditch the mindset of conducting their operations to meet the minimum regulatory requirements only. They should instead be held to a higher ethical standard that meets the stakeholders' expectations alongside the requirements of laws and regulations. Data ethics can therefore bridge the gap between legal requirements and the stakeholders' expectations. In a data-driven economy, organisations/enterprises will benefit by grasping and implementing data ethics.

In this connection, organisations/enterprises should formulate and maintain a comprehensive PMP as a best practice. Data stewardship should cover the overall business practices, operational processes, product and service design, physical architectures and network infrastructure. The PMP, supported by an effective ongoing review and monitoring process to facilitate its compliance with the requirements under the Ordinance, serves as a strategic framework to assist organisations in building a robust privacy infrastructure and to share mutual fairness, respect and benefit with their customers.

During the reporting year, the PCPD

- conducted PMP professional workshops;
- assisted three government bureau/departments selected for developing and completing their PMP manuals;
- organised two training workshops for government bureau and departments to highlight and elaborate the major aspects and practical advice in developing PMP;
- assisted to develop a General Reference Guide for use by other bureaux/departments in developing, implementing and refining their PMPs;
- issued the revised Best Practice Guide on Privacy Management Programme with more concrete examples, charts, templates of questionnaire and checklist for reference; and
- conducted inspection by using PMP framework to assess personal data handling process of organisations.

金融科技

在金融科技的熱潮中保障及尊重個人資料私隱

「金融科技」是指用以提供金融服務的資訊及通訊科技。金融科技在香港以及其他地區的發展勢頭強勁。金融科技帶來創新的金融服務，逐漸改變金融行業的運作。金融發展局認為，為追求創新及確保香港在未來的金融服務業中穩佔一席位，發展金融科技是順理成章的下一步。

2016年3月，香港金融管理局（金管局）成立了金融科技促進辦公室，以促進香港金融科技業的穩健發展，並推動香港成為亞洲的金融科技樞紐。同年，金管局發出了13個儲值支付工具（即電子錢包）牌照。金管局並於2018年7月發布銀行業開放應用程式介面框架，促進銀行和第三方服務提供者之間合作及數據分享，以為客戶帶來創新的金融服務。金管局亦於2019年3月發出了首批虛擬銀行牌照。

除銀行業外，保險業監管局（保監局）於2017年9月推出保險科技沙盒，以便保險公司在商業運作上試行應用創新保險科技。2018年12月，保監局宣布向一間使用全數碼分銷渠道的新保險公司，發出首個快速通道授權，標誌著香港保險科技發展的一個重要里程碑。

金融科技並無明確的界限。電腦運算能力的提升、互聯網無遠弗屆的連接性、流動電話技術的進步，加上人們對便捷、低成本及個人化的金融服務需求強勁，令金融科技蓬勃發展。

金融科技會以不同形式呈現，並支援不同的金融服務和運作，例如：

- 電子支付及匯款（例如：電子錢包）；
- 金融投資（例如：機械人投資顧問及算法交易）；
- 點對點融資（例如：點對點網貸及眾籌）；
- 支援金融機構運作的數據分析（例如：信貸評分）；
- 資訊共享（例如：開放應用程式介面）；及
- 分佈式分類帳技術（區塊鏈技術是分佈式分類帳技術的特定類型；分佈式分類帳技術的應用例子包括加密貨幣的交易及智能合約程式）。

FINTECH

PROTECT AND RESPECT PERSONAL DATA PRIVACY IN FINTECH BOOM

Fintech refers to information and communications technology used for the provision of financial services. Fintech is gaining momentum in Hong Kong and beyond. It enables innovation in financial services, and is transforming the operations of the financial industry. According to the Financial Services Development Council, development of Fintech is a logical next step for Hong Kong in seeking innovation and securing a place in the future of financial services.

In March 2016, the Hong Kong Monetary Authority (HKMA) established its Fintech Facilitation Office to facilitate the healthy development of the Fintech ecosystem in Hong Kong and to promote Hong Kong as a Fintech hub in Asia. Subsequently, 13 licences for stored value facility (i.e. e-wallet) were issued by the HKMA in 2016. An Open Application Programming Interface Framework for the Hong Kong banking sector was published by the HKMA in July 2018 to allow banks and their partners to work closely and share data in order to develop innovative financial services. The first batch of virtual banking licences was also granted by the HKMA in March 2019.

Apart from the banking sector, the Insurance Authority also launched an InsurTech Sandbox in September 2017 to facilitate a pilot run of innovative technology by insurers in their business operations. In December 2018, the Insurance Authority announced that it had granted the first authorisation under the Fast Track of a new insurer operating solely digital distribution channels, marking a significant milestone of Insurtech development in Hong Kong.

There is no precise boundary of Fintech. The advancement in computational powers, Internet connectivity and mobile technologies, together with the strong demand for efficient, low-cost and personalised financial services, have given a strong boost to the proliferation of Fintech.

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

- electronic payments and remittances (e.g. e-wallet);
- financial investments (e.g. robo-advisors and algorithmic trading);
- peer-to-peer (P2P) financing (e.g. P2P lending and crowdfunding);
- data analytics that support the operations of financial institutions (e.g. credit scoring);
- information sharing (e.g. open Application Programme Interface (API)); and
- Distributed Ledger Technology (DLT) (a specific type of DLT is blockchain technology; examples of uses of DLT include cryptocurrency transactions and smart contract applications).



與此同時，金融科技發展無遠弗屆，並帶來無限商機及便利，但其對私隱的影響亦不容忽視，例如：

- 在使用者不知情或未有具意義的同意下收集及使用個人資料；
- 以不公平或歧視方式使用個人資料；
- 欠缺有效方式刪除或改正過時或不準確的個人資料；
- 資料保安風險；及
- 資料使用者及資料處理者的身份模糊不清。

因應上述私隱風險，公署在2019年3月發布了「金融科技」資料單張，提醒消費者在使用金融科技時保持警惕，例如：

- 細心閱讀私隱政策；
- 審慎評估個人資料要求及檢視私隱設定；
- 在安全環境下操作金融科技應用軟件；及
- 定期監察帳戶活動。

有關資料單張亦建議金融科技供應商/營運者採取的良好行事方式以保障消費者的個人資料，例如：

- 具透明度；
- 減少收集及保留個人資料；
- 向使用者提供清晰及真正的選擇；
- 確保數據準確及算法可靠；
- 確保資料安全；
- 監察資料處理者；及
- 進行私隱影響評估及採用「貫徹私隱的設計」。



公署深信，個人資料保障的法規不應阻礙科技及經濟發展。與此同時，科技應該以人為本。作為服務人們的一種工具，機構在使用金融科技時，應該保障及尊重消費者的個人資料及私隱權以達至雙贏。

Fintech development is ubiquitous and brings about tremendous business opportunities and convenience. Yet the privacy impacts of Fintech have to be addressed, such as:

- 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 risks; and
- obscurity of the identities of data users and data processors.

In light of the above privacy risks, the PCPD published the information leaflet “Fintech” in March 2019 to remind consumers to maintain vigilance when using Fintech, such as:

- carefully read the privacy policies;
- critically assess requests for personal data and review privacy settings;
- operate the application software of Fintech under a safe environment; and
- monitor account activities regularly.

The information leaflet also recommends good practices for providers/operators of Fintech for protecting consumers’ personal data, i.e.:

- be transparent;
- minimise personal data collection and retention;
- provide clear and genuine options to consumers;
- ensure accuracy of data and reliability of algorithms;
- ensure data security;
- monitor data processors; and
- conduct privacy impact assessments and adopt privacy by design.

The PCPD firmly believes that personal data protection regulations should not stand in the way of technological and economic developments. Meanwhile, technology should be human-centric. As a means to serve people, organisations employing Fintech should protect and respect personal data and privacy rights of consumers in order to achieve a win-win situation.