

**AmCham HK Roundtable Breakfast on  
Artificial Intelligence in Finance:  
Data Ethics and Beyond**

Tuesday 2 November 2021

**Opening Keynote Speech by Ada CHUNG Lai-ling,  
Privacy Commissioner for Personal Data**

1. Remi (Jean-Remi Lopez, Vice-chair of Financial Services Committee, AmCham Hong Kong), Michael (Michael Tae, Corporate Vice President of Broadridge), distinguished guests, ladies and gentlemen, good morning. I am very honoured to be invited to give the keynote speech at this roundtable.
2. As illustrated by Michael's study, organisations increasingly adopt artificial intelligence (AI) in their operations. I agree with Michael that the use of AI has been accelerated as a result of the pandemic. This is especially true for the financial services sector. According to a global survey by McKinsey<sup>1</sup> in 2019, more than 60% of the respondents in the financial services sector reported that their companies have applied at least one AI capability. According to another study report published by the Hong Kong Monetary

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<sup>1</sup> McKinsey & Company (2019), *Global AI Survey: AI proves its worth, but few scale impact*: <https://www.mckinsey.com/featured-insights/artificial-intelligence/global-ai-survey-ai-proves-its-worth-but-few-scale-impact>

Authority<sup>2</sup> in the same year, almost 90% of the surveyed retail banks in Hong Kong adopted or planned to adopt AI applications. More recently, the Hong Kong Academy of Finance (AoF) released a research report<sup>3</sup> last week (28 October), suggesting that more than 70% of financial services companies in the Asia-Pacific region adopted or planned to adopt AI and Big Data technologies in the next 12 months.

3. Indeed, in the financial services sector, Hong Kong now has more than 600 fintech companies which provide diverse services<sup>4</sup>. Meanwhile, the Mainland's 14<sup>th</sup> Five-Year Plan supports Hong Kong to enhance its status as an international financial centre and develop into a global innovation and technology hub. The development of fintech and AI in Hong Kong will surely be prosperous in the years to come.
4. Nowadays, TaoBao, Amazon or even Facebook tell us what to buy. In less than 5 years' time, I envisage that similar algorithms would tell us where to borrow, how to invest and they may even replace the traditional roles of financial advisors or planners.

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<sup>2</sup> Hong Kong Monetary Authority (2019), *Reshaping Banking with Artificial Intelligence*: [https://www.hkma.gov.hk/media/chi/doc/key-functions/financial-infrastructure/Whitepaper\\_on\\_AI.pdf](https://www.hkma.gov.hk/media/chi/doc/key-functions/financial-infrastructure/Whitepaper_on_AI.pdf)

<sup>3</sup> AoF (2021), *Artificial Intelligence and Big Data in the Financial Services Industry - A Regional Perspective and Strategies for Talent Development*: <https://www.aof.org.hk/docs/default-source/hkimr/applied-research-report/aibdrep.pdf>

<sup>4</sup> HKSAR (2021), *Speech by FS at Global Fintech Market Updates: Hong Kong-Korea Ecosystem webinar*: <https://www.info.gov.hk/gia/general/202109/08/P2021090800603.htm>

## **Risks of AI**

5. While the use of AI presents huge opportunities and benefits, it also carries inherent risks to the protection of personal data and privacy owing to its data-intensive nature. As machine learning algorithms often rely on a vast amount of training data to generate “intelligence”, organisations may be inclined to collect and retain excessive data for the sake of AI training.
  
6. In short, AI developed by machine learning may be so “intelligent” that sometimes the AI models may evolve beyond human comprehension. This may well undermine the transparency and interpretability of AI systems. In case inaccurate or biased training data is used, the automated decisions made by AI may even lead to or reinforce bias and discrimination.
  
7. For instance, using algorithms to make credit decisions is one of the most popular AI applications in the banking sector. In 2019, the credit card, the Apple Card, jointly issued by Apple and Goldman Sachs in the US was accused of being discriminatory by giving significantly lower credit limits to women than their male partners<sup>5</sup>. Although New York’s Department of Financial Services found no evidence of intentional bias after investigation, the regulator

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<sup>5</sup> BBC News (2019), *Apple's 'sexist' credit card investigated by US regulator*: <https://www.bbc.com/news/business-50365609>

acknowledged that the company, Goldman Sachs, could have done better in dealing with customer confusion and making it easier for customers to appeal against credit limits<sup>6</sup>. This example well illustrates that human intervention and transparency are still essential when AI applications are taking over more and more tasks.

8. In the light of these risks, more should be done to ensure that the development and use of AI are on the right track. While the next decade will be the era of AI, and AI is going to transform the way we live and contribute substantially to the global economy, I would appeal all stakeholders to collaborate to mitigate the privacy and ethical risks arising from the use of AI.

### **Work of the PCPD on Data Ethics**

9. My office, the PCPD, has been advocating data ethics since 2018 by introducing the Ethical Accountability Framework for advanced data processing activities, including AI and machine learning. Among other things, the Framework proposes three Data Stewardship Values, namely, being respectful, beneficial, and fair to stakeholders. Organisations are also advised to conduct Ethical Data Impact Assessments when data processing activities may affect people.

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<sup>6</sup>The Verge (2021), *The Apple Card doesn't actually discriminate against women, investigators say*: <https://www.theverge.com/2021/3/23/22347127/goldman-sachs-apple-card-no-gender-discrimination>

## **International Development of AI Ethics**

10. As the wave of AI is sweeping across the globe, the international community has established numerous governance principles and guidelines to address the ethical risks of AI. For example, the Global Privacy Assembly, of which my office is a member, the European Commission and the OECD have published their respective guidelines to promote AI governance in recent years. A study shows that there are currently over 160 sets of AI principles published by different organisations worldwide<sup>7</sup>.
  
11. Among the guidelines and principles for AI, we can see some commonalities, such as the principles of accountability, transparency, fairness, data privacy, and human oversight. In April this year, the European Commission made a proposal for regulating AI by legislative means. If passed, this may become the first law in the world specifically enacted for regulating AI.
  
12. In the EU, although the term “AI” is not explicitly written in the General Data Protection Regulation (GDPR), the GDPR does regulate profiling and automated decision-making. A case in point is article 13 of the GDPR. It requires that a data subject must be provided with certain information if the data processing activities involve profiling and automated decision-making, such as

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<sup>7</sup> United Nations (2020), *Report of the Secretary-General – Road map for digital cooperation: implementation of the recommendations of the High-level Panel on Digital Cooperation*: <https://undocs.org/A/74/821>

meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject. Article 22 further provides that a data subject shall have the right not to be subject to a decision based solely on automated processing, if it produces legal effects on him/her or has an important bearing on him/her. These requirements may help to ensure transparency and accountability in the use of AI.

13. In the Mainland of China, the Personal Information Protection Law (PIPL) was passed in August this year and came into effect yesterday (1 November). It is the first piece of legislation in the Mainland dedicated to the protection of personal information. Similar to the GDPR, the PIPL regulates automated decision-making, which refers to the use of computer programmes to automatically analyse, assess and make decisions about the behaviours, habits, interests, hobbies as well as financial, health and credit conditions of individuals. PIPL requires that processors of personal information using personal information in automated decision making shall ensure that the decision-making processes are transparent, and the results are fair and impartial. There shall not be any unreasonable price discrimination against individuals. If the automated decisions cause significant impact on individuals' rights and interests, the individuals shall have the right to request the processors of personal information to provide explanation, and object to the decisions made solely by automated process.

14. Meanwhile, the Cyberspace Administration of China (CAC) also issued draft guidelines to regulate algorithms in August this year<sup>8</sup>. The CAC further announced a joint plan with eight other government agencies over next three years to create a comprehensive regulatory system for algorithms which, I believe, will have massive implications on the provision of personalised services.
15. While some regulators are tightening up their grip on AI technologies, at the other end of the pendulum there are voices in the UK calling for the repeal of the GDPR requirements relating to automated decision-making to make way for innovation and development of AI<sup>9</sup>. These developments remind us of how challenging it is to strike a balance between promoting innovation on the one hand and safeguarding human rights on the other.

### **PCPD's AI Guidance**

16. In Hong Kong, it is time for us to have a wider discussion on whether and how we should regulate AI. In August, my office published the “Guidance on Ethical Development and Use of Artificial Intelligence” (the “Guidance”), with a view to helping

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<sup>8</sup> CAC (2021), *Draft Guidelines for Internet Recommendation Algorithms (Chinese Only)*: [http://www.cac.gov.cn/2021-08/27/c\\_1631652502874117.htm](http://www.cac.gov.cn/2021-08/27/c_1631652502874117.htm)

<sup>9</sup> GOV.UK (2021), *Taskforce on Innovation, Growth and Regulatory Reform independent report*:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/994125/FINAL\\_TIGRR\\_REPORT\\_1\\_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/994125/FINAL_TIGRR_REPORT_1_.pdf)

organisations to develop and use AI in an ethical manner, and to comply with the requirements of the Personal Data (Privacy) Ordinance when they develop or use AI.

17. Expanding from the three Data Stewardship Values of being respectful, beneficial and fair to stakeholders as recommended by my office, the Guidance promulgates seven ethical principles for AI, namely, accountability, human oversight, transparency and interpretability, data privacy, fairness, beneficial AI, and reliability, robustness and security. These seven principles are in line with internationally recognised principles in the field.
18. To facilitate the application of the values and ethical principles by businesses, the Guidance also provides a four-part practice guide, structured in accordance with general business processes. The Guidance provides examples of good practices in four areas, namely, establishing AI strategy and governance; conducting risk assessment and human oversight; development of AI models and management of AI systems, and fostering communication and engagement with stakeholders. The four areas are structured in accordance with business processes to facilitate businesses to apply the Guidance to their operations.
19. In essence, while the Guidance reflects internationally recognised principles, the recommended good practices in the Guidance are



by no means exhaustive. Notwithstanding the ongoing and rapid evolution of AI, we should spare no effort in addressing and minimising the privacy and ethical risks related to the development and use of AI.

### **Conclusion**

20. To conclude, I am sure that if we work together, we can promote the beneficial use of AI while respecting and protecting individuals' privacy and fundamental rights.
  
21. So with this in mind, I wish you all a very fruitful and inspiring discussion this morning. Thank you.