

LCQ3: Application of robots and artificial intelligence technologies

Following is a question by the Hon Dominic Lee and a reply by the Secretary for Innovation, Technology and Industry, Professor Sun Dong, in the Legislative Council today (January 22):

Question:

It has been reported that the application of robots and artificial intelligence (AI) technologies has become increasingly popular in recent years, particularly in service industry settings such as hotels and restaurants. There are views that Hong Kong should make forward planning and formulate related policies. In this connection, will the Government inform this Council:

(1) whether it has reviewed if there are issues pertaining to the restrictions on the application of robots and AI technologies under the existing laws and regulations, including the restrictions on the operation of robots in public facilities (such as access to lifts); if there are, whether the Government has plans to amend the legislation to address the related issues;

(2) whether it has reviewed the actual effectiveness of the existing Innovation and Technology Venture Fund and other funding schemes in promoting the introduction of robots and AI technologies by small and medium enterprises and start-ups; whether it has assessed if the Government needs to optimise or increase dedicated funding to support the application of the related technologies in the service industry; if it has, of the details; if not, the reasons for that; and

(3) as there are views that the application of robots and AI technologies may involve issues such as privacy, ethics and labour rights, whether the Government will draw on the experience of the Mainland, Europe and the United States and formulate concrete specifications and guidelines, so as to strike a balance between technological development and the needs of the community; if so, of the details and timetable; if not, the reasons for that?

Reply:

President,

In respect of the question raised by the Hon Dominic Lee, having consolidated the information provided by the Development Bureau and the Constitutional and Mainland Affairs Bureau, my reply is as follows:

(1) The development of robotics and artificial intelligence (AI) is originally intended to facilitate societal progress, serve and benefit mankind. At present, there is no specific legislation in Hong Kong to

regulate the application of robotics; however, projects must comply with the applicable legislation involving the relevant sectors or scenarios. We encourage developers and the market to be flexible and innovative, and to provide technological solutions that meet the needs of different users, such as a wide range of smart solutions.

Regarding the application of robotics that Hon Lee is concerned about, the Lifts and Escalators Ordinance (Cap. 618) itself does not restrict the access of robots to lifts. In line with the above-mentioned general principles of innovative research and serving the people, if the application of individual technologies is restricted by existing legislations, the relevant bureaux/ departments will actively explore the necessary adjustments based on a people-oriented approach.

(2) The Government has all along attached great importance to the development of robotics and AI technologies. We have established 16 research centres under the AIR@InnoHK Research Cluster, which focuses on the development of AI and robotics technologies. AIR@InnoHK brings together top talents from around the world to promote innovative research, technology transfer and the application of AI and robotics technologies.

In addition, the Government has proposed to set up a \$10 billion Innovation and Technology (I&T) Industry-Oriented Fund, which will include AI and robotics as one of the thematic areas of emerging and future industries of strategic importance, to channel more market capital to promote the development of AI and robotics industries.

To further accelerate the development of new industrialisation, the New Industrialisation Acceleration Scheme launched last year also provides funding support on a matching basis to enterprises of industries of strategic importance such as advanced manufacturing and AI, to set up new smart production facilities in Hong Kong. The Government also enhanced the New Industrialisation Funding Scheme to strengthen support for local manufacturers shifting to advanced manufacturing, so as to promote the development of the I&T industry.

(3) AI is the "brain" of robots, giving them cognitive, learning and decision-making abilities; while robots are the manifestation of AI. Most of the moral and ethical regulations relating to AI are applicable to robotics technology projects. For example, the Government's Ethical AI Framework and its revised version in response to the development of generative AI technology have covered the ethical principles, governance framework and risk assessment of AI, providing guidance on the application of relevant technologies.

As for the Personal Data (Privacy) Ordinance (PDPO), it provides for the collection, holding, processing and use of personal data. The Office of the Privacy Commissioner for Personal Data (PCPD) has also published the "Guidance on Ethical Development and Use of AI" and the "Artificial Intelligence: Model Personal Data Protection Framework" to provide recommendations regarding the governance of AI and the protection of personal

data privacy, with a view to assisting public and private organisations in complying with the relevant requirements under the PDPO when they develop, procure, implement and use AI systems.

On the other hand, the Government has commissioned the Hong Kong Generative AI Research and Development Center (HKGAI) under the InnoHK Research Clusters to study and suggest appropriate rules and guidelines on generative AI technologies through practical applications.

We will continue to improve the relevant policies, with a view to balancing the development and regulation of robotics and AI, and embracing the opportunities and challenges brought about by "human-machine collaboration".