

## **Arrangement for the Second Cohort of Generative A.I. Sandbox (“Sandbox”)**

### **Objectives**

- The Sandbox is intended to:
  - support the development, testing, and pilot of innovative Artificial Intelligence (A.I.) and Generative A.I. (GenA.I.)-based solutions in the banking sector; and
  - provide early targeted supervisory feedback to participants in the Sandbox and draw insights from sandbox trials. Where appropriate, the Hong Kong Monetary Authority (HKMA) will further provide guidance and share good practices on the adoption of A.I. and GenA.I..
- The Sandbox use cases are expected to focus on enhancing risk management, anti-fraud measures and customer experience. Some non-exhaustive example use cases are shared below for inspiring innovative ideas:
  - **Risk management** – Optimise risk management processes for the full range of risk disciplines relevant to AIs, such as to evaluate creditworthiness and on-going performance of borrowers by analysing financial statements and other unstructured data to enhance the efficiency of credit lifecycle; review business processes to improve operational resilience; and generate risk assessment reports and timely risk warning;
  - **Anti-fraud measures** – Detect and prevent “Deepfake” scams, fraudulent document; review website, emails and message contents to automatically identify fraudulent messages; devise timely responses; and formulate preliminary investigation reports based on identified fraud patterns; and
  - **Customer experience** – Elevate customer engagement through the use of more advanced customer service chatbots capable of generating personalised responses based on individual customer background, transaction records and past interactions; interact with customers through mediums other than text by leveraging multimodal capabilities of GenA.I.; and generate more timely and customised communications based on customer context and relevant external news.
- All Sandbox use cases should incorporate a component of A.I. risk management and safety. Examples may include bias detection and mitigation, explainable A.I., as well as frameworks for A.I. output monitoring and evaluation.

## **General Principles**

- The focus of the Sandbox is on solutions that demonstrate a significant level of innovation and potential for substantial impact. Priority will be given to solutions that align with these criteria.
- Adhering to the general principle of data minimisation, AIs are strongly encouraged to adopt data sensitisation techniques such as data masking or tokenisation on their training data, where applicable, to minimise the risk of data leakage, while still ensuring the models are trained and tested under realistic conditions.
- A secure data transfer and access mechanism will be made available to ensure the confidentiality and integrity of the data used within the Sandbox. AIs are expected to review and implement adequate data security controls, including encryption and access controls where necessary.
- The level of A.I. or GenA.I.-specific risk mitigations associated with the proposed solutions will be a key factor in the project selection. Projects that focus on exploring and testing a wide range of GenA.I.-driven risk mitigation strategies will be prioritised over simpler or commonly adopted cases, the latter of which may offer less learning or impact.
- All use cases are recommended to incorporate a robust A.I. safety validation component into their technical trials and evaluations.

## **Key Factors for Consideration in Evaluating Applications**

- **Level of innovation** – The extent to which the proposed solution introduces novel or alternative ideas, methodologies or models that have the potential to create new digitalisation opportunities;
- **Complexity of the solutions** – The technical sophistication and intricacy of the proposed solutions to promote advancement and added value;
- **Expected contribution to the industry** – The potential for the proposed solution to make a meaningful impact on the financial services sector, such as by addressing industry-wide challenges or by formulating new solutions replicable and scalable by different institutions; and
- **Adherence to the principle of fair use** – The degree to which the proposed solution is designed to be used in a fair, responsible, and ethical manner, avoiding harm to others or misuse of computing power.

## **Application Procedure**

- Interested parties can submit their applications through the HKMA's Survey Tool platform. Applicants are required to provide details including high-level design, applicable models, preliminary risk assessments, approach and timeline of proposals and information about their technology partners.
- The HKMA may contact the applicant to gather additional information during the evaluation process. Processing time will depend on the complexity of the proposal, quality of the information provided, and responsiveness to follow-up questions.

## **Sandbox Collaboratory Arrangement**

- The HKMA will issue separate invitations to AIs. Interested AIs may submit their areas of interest and potential use cases.
- AIs and technology vendors will be grouped into sessions based on their interests, areas of expertise and availability.
- AIs may identify their technology partners during these sessions to participate in the GenA.I. Sandbox for further exploration and more comprehensive testing following initial ideations.

## **Others**

- Admission to the sandbox does not indicate HKMA's endorsement of the solution.
- Sandbox participants intending to implement the solution after the Sandbox should adhere to established procedures when adopting new technologies.
- The HKMA may publicly announce information regarding sandbox participation, including the disclosure of approved participants.
- The HKMA may adjust sandbox requirements based on participants' proposals and testing progress.

For interested AIs, please contact Mr. John Chiu or Ms. Joyce Ip of Banking Supervision Department at [GenAI\\_sandbox@hkma.gov.hk](mailto:GenAI_sandbox@hkma.gov.hk).