

Unleashing the power of Generative AI (GenAI) to reshape Hong Kong's banking sector

The importance of GenAI to the Hong Kong banking sector

Banks in Hong Kong continue to deal with unprecedented levels of market volatility, increased regulatory pressures, geopolitical sensitivities and evolving customer expectations. Against this backdrop, the integration of innovative and game-changing technologies has emerged as fundamental to maintaining and increasing market competitiveness.

Among these innovative technologies, GenAI stands out as a key enabler of transformation, allowing banks to better meet the needs and expectations of their customers, shareholders and regulators. GenAI is changing the very fabric of the banking and capital markets sector and redefining operating models across the front-to-back office.

In doing so, GenAI is helping to: improve customer engagement, enhance operational efficiency, reduce costs in a sustainable manner and increase the robustness of risk management and compliance frameworks. In addition, GenAI is helping to facilitate data-driven decision making with greater confidence and accuracy, leading to improved outcomes for both customers and stakeholders.

That said, the increased use of GenAI does present inherent risks which can be heightened in a banking environment. These include misinformation and inaccuracy, ethical bias, data privacy and security, and a lack of governance. In addition, as GenAI becomes more embedded into our daily lives, questions surrounding accountability, transparency, and regulatory compliance become even more pronounced.

In this paper, we will outline how the integration of GenAI into existing operating models is leading to tangible and quantifiable benefits for banks in Hong Kong - unlocking new opportunities for customer engagement, operational efficiency and regulatory compliance. We will also delve into how realising the full potential of GenAI requires a concerted effort to identify, monitor and mitigate the inherent risks and challenges.

35%

CEO's are increasing budget allocation to AI-driven initiatives and solutions by 35%.

55%

Labour productivity is expected to increase by 55% due to AI by 2030

US\$15.7tr

Potential contribution to the global economy from AI by 2030

+26%

Up to 26% boost in GDP for local economies from AI by 2030

Source: PwC's 27th Annual Global CEO Survey

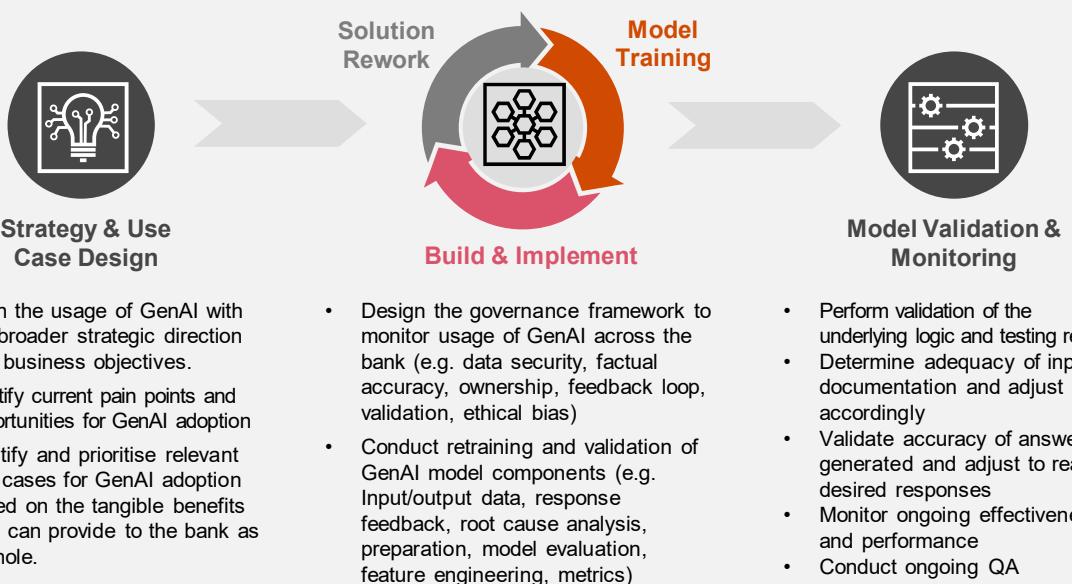
Apply lessons learnt when starting your GenAI journey

Given the wide scale adoption of GenAI in a relatively short period of time, there were always going to be a number of lessons that were learnt the hard way. Therefore, as banks in Hong Kong embark on or continue their GenAI journey, appropriate mechanisms should be established to ensure that such mistakes are not repeated. Banks should pay particular attention to their strategic business objectives, technology stack, resource capabilities and compliance obligations to ensure tangible benefits are being realised from GenAI in a responsible manner.

The first step in the journey, which is typically overlooked, is ensuring GenAI adoption is aligned with the strategic direction and objectives of the bank as a whole. This requires an analysis of existing staff (capabilities, structure, culture), technology stack (infrastructure, data, system integration) and processes (front-to-back operational workflows). This analysis will also allow banks to design a GenAI strategy that is

specifically tailored to their business operations, geographical footprint and customer base. It will also facilitate the systematic identification of GenAI use cases that can deliver the most value to the bank as a whole, while still ensuring robust governance mechanisms and compliance with regulatory obligations.

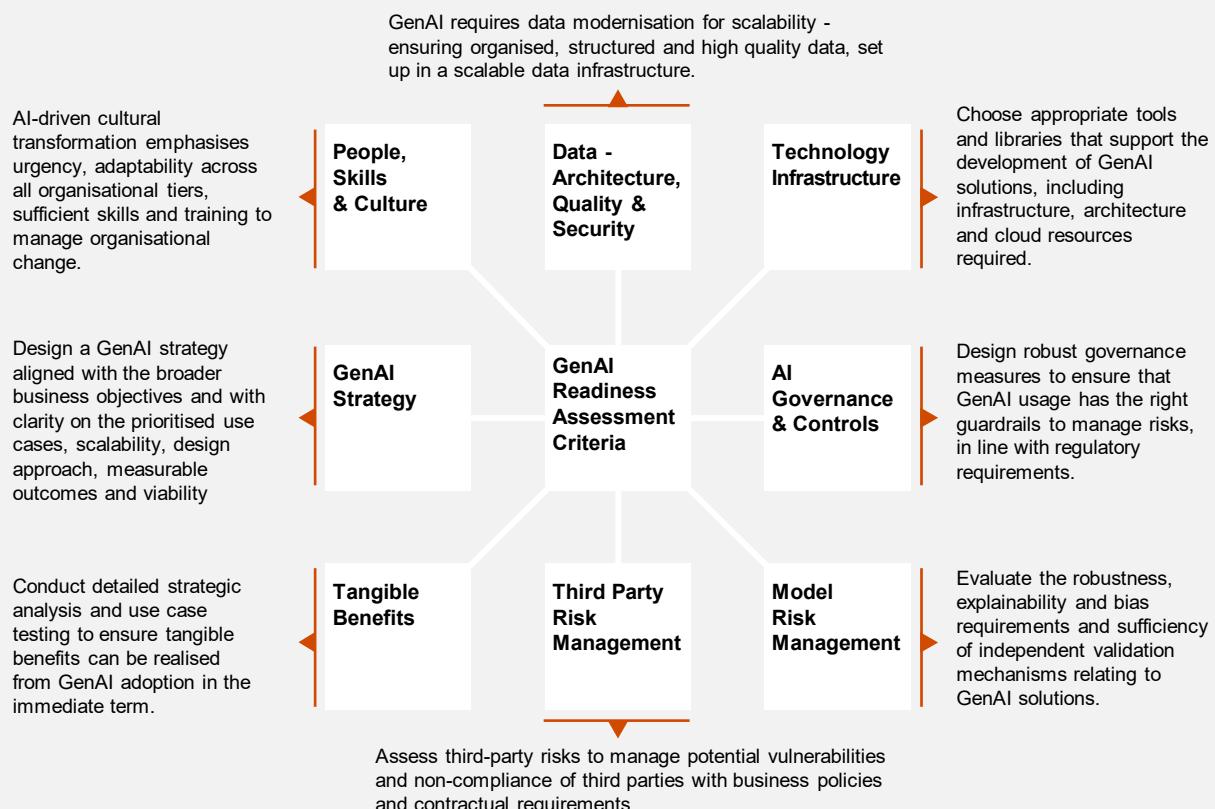
Throughout the journey, it is also important that banks ensure that GenAI is used in an appropriate and responsible manner to mitigate any regulatory or reputational risks that may arise. This involves implementing a sound governance framework to detect factual inaccuracies, prevent algorithmic biases and ensure transparency and accountability in the decision-making processes. A systematic approach is required - from strategy through to implementation and monitoring - to ensure that GenAI solutions are operating as intended and provide tangible benefits.



GenAI Usage is prevalent, but the benefits being realised by banks are inconsistent

The accessibility of GenAI has led to widespread adoption across the Hong Kong banking sector. However, the tangible and quantifiable benefits being realised are still largely inconsistent. This is primarily attributable to the fact that banks, in their eagerness to adopt GenAI, have at times overlooked the requirement to conduct a detailed readiness assessment of their existing operating model prior to implementation. As a result, a number of issues have arisen which have ultimately limited the impact and scalability of GenAI. These include: misalignment with strategic objectives, technical hurdles around infrastructure and compatibility, integrity and quality of data, insufficient model training, lack of skilled resources and non-compliance with regulations.

To proactively avoid these pitfalls and realise the true benefits of GenAI, it is crucial that banks conduct a detailed GenAI readiness assessment. This will help banks identify potential challenges, gaps in skills, infrastructure requirements, and ethical considerations. In addition, by assessing their readiness, banks can optimise resource allocation, mitigate risks, and maximise the benefits of GenAI adoption in alignment with their strategic goals and objectives. It will also help facilitate the transition from experimental proof-of-concept use cases to a resilient and scalable GenAI implementation.





Where do you start? Business model reinvention

It is important to start any GenAI initiative by reinventing the existing business model in a manner that allows the full potential of GenAI to be realised, while ensuring the inherent risks are appropriately mitigated. This will help banks navigate the complexities of integrating this innovative technology and driving sustainable and scalable value across the front-to-back office.

As the adoption of GenAI involves cross collaboration between the business, operations,

technology and compliance, a well-defined business model will ensure all stakeholders are engaged and accountable throughout the adoption process.

Where do you start when designing and reinventing a GenAI specific business model? A number of key questions need to be asked and systematically answered to ensure key success criteria are met.

Strategic Alignment

- How can you ensure that your GenAI strategy aligns with your overall business objectives?
- What are the costs and benefits of GenAI going to be for the business across the front-to-back office?

Success Criteria

- What are the quantitative and qualitative criteria required to measure the success of a GenAI solution?
- How can you define the key performance indicators to facilitate this?

Governance Framework

- What are the inherent risks associated with the use of GenAI across a bank?
- How can you mitigate these risks and ensure compliance against regulatory requirements?

Technology & Data

- What are the infrastructure and integration requirements needed to implement GenAI solutions?
- How can you ensure the quality of data is sufficient to train GenAI solutions?

People & Organisation

- What skills and capabilities are required by your teams to design, train and implement GenAI solutions?
- Which functional teams will be impacted and benefit most from the use of GenAI?

Process Workflows

- How will GenAI impact existing processes and workflows to alleviate bottlenecks, inefficiencies and duplications?
- What are the specific process optimisation requirements to ensure that GenAI provides the most benefit?

Recent use cases where PwC has driven GenAI adoption for banks in Hong Kong:

Given the wide scale adoption of GenAI across society, it is unsurprising that we are seeing use cases in the banking sector in Hong Kong that are leading to tangible and quantifiable benefits. Some of our most recent GenAI project credentials for

banks operating in Hong Kong have resulted in enhanced risk detection mechanisms, improved customer experience, operational enhancements and cost optimisation.

PwC Credential 1: Chinese Bank

We designed and implemented a machine learning model that risk prioritised transaction screening alerts, reduced false positive alerts generated from the screening system by 35-40% and increased true hits detection by 5-11%. GenAI capability was built on the back to generate reports on alert performance, high risk events and investigation reports.

PwC Credential 2: Asian Bank

We designed an AI risk solution that ingested multiple internal and external data sources to facilitate predictive fraud monitoring, straight-through client onboarding and perpetual AML and sanctions risk assessments on customers. GenAI was able to analyse patterns to proactively identify and report suspicious behaviour and activity.

PwC Credential 3: Chinese Bank

We designed and implemented a customer 360 model that leveraged GenAI to provide personalised product and service recommendations to customers. This was used by the front office to enhance customer engagement, optimise marketing channels, improve customer profitability, facilitate cross and up selling and reduce customer churn.

PwC Credential 4: European Bank

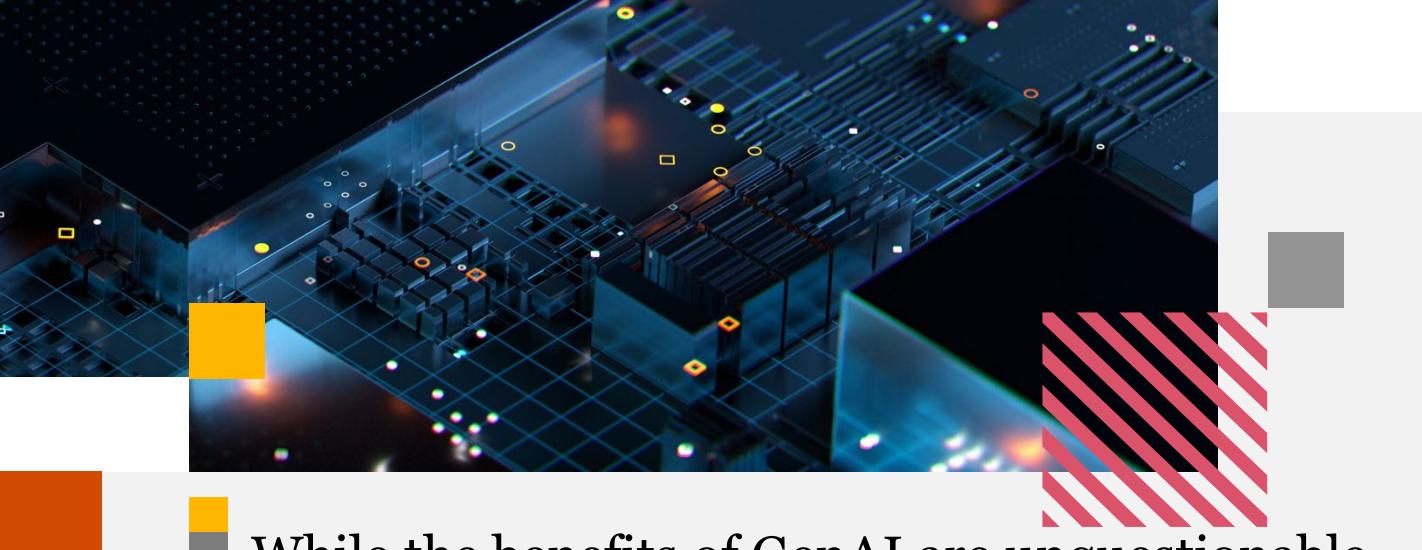
We designed a regulatory horizon scanning AI solution that automatically identified, extracted and monitored regulatory changes from multiple sources across the APAC region. GenAI was used to categorise these changes by taxonomy, risk and content type and also to generate reports and summaries of the regulatory changes.

PwC Credential 5: Asian Bank

We designed and implemented a GenAI model to help generate the content required by relationship managers to prepare credit proposals. The process entailed automatically gathering information, analysing business and financial figures, structuring facilities, and writing content to help enable the credit application process.

PwC Credential 6: Asian Bank

We designed a customer service GenAI powered chatbot to handle customer enquiries, product information, trouble-shooting customer support and scheduling appointments. This significantly improved customer experience and efficiency associated with daily operational tasks and matters.



While the benefits of GenAI are unquestionable...

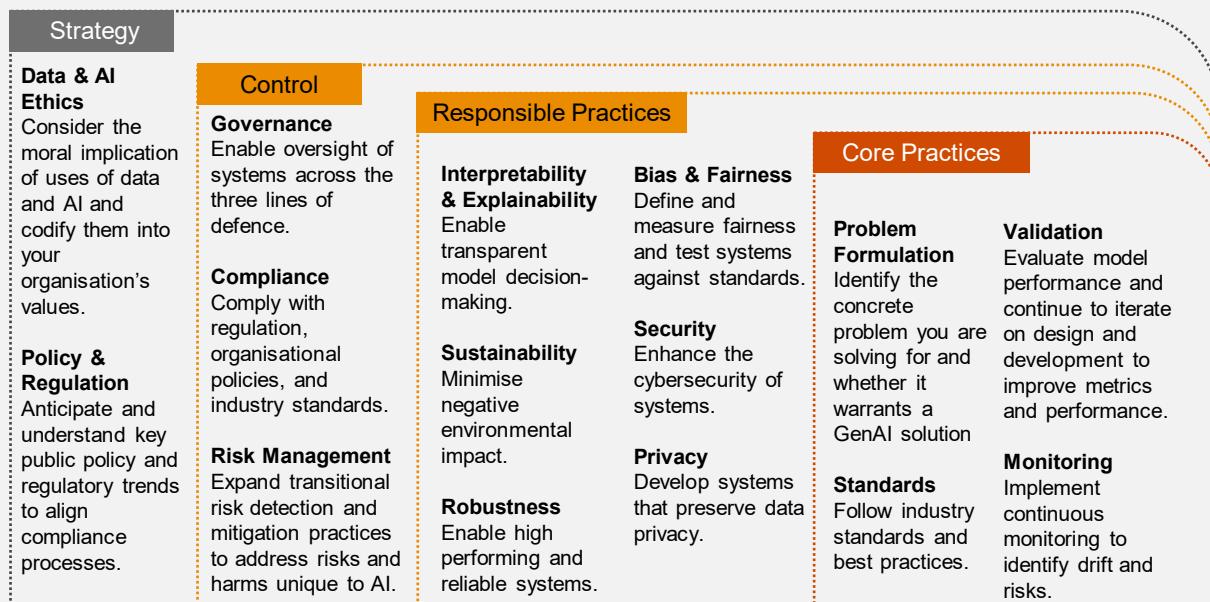


...trust needs to be established to mitigate the risks.



Regulations governing GenAI are evolving, which has prompted regulators in Hong Kong to accelerate efforts to promote safe and trustworthy AI systems. The Hong Kong Monetary Authority issued a circular on "Manpower Management in the Age of AI" on May 23, 2024, which was followed by The Privacy Commissioner for Personal Data releasing the

"AI: Model Personal Data Protection Framework" on June 11, 2024. Establishing a Responsible AI framework is a key prerequisite to establishing trust in GenAI and ensuring compliance with these regulations. This entails designing and implementing robust controls over the GenAI development lifecycle, covering Strategy, Control and Responsible and Core Practices.



How can PwC Hong Kong help?

GenAI strategy

We can help design your GenAI strategy to ensure it is aligned with your broader strategic objectives, customer base and geographic footprint, while still providing tangible benefits across the bank as a whole. This will include identifying and prioritising use cases, analysing the costs and benefits and mitigating the inherent risks.

Target operating model

We can help design your target operating model to appropriately embed GenAI across the front-to-back office functions within the bank and ensure benefits are realised. This will include analysis of the existing people and organisation (governance, capabilities, culture), technology (infrastructure, data, system integration) and processes (workflows, procedures).

GenAI implementation

We can help to build, implement, test and train GenAI solutions from proof of concept through to production and go-live environment. This will include iterative training and rework of enterprise/private GenAI solutions using bank-specific data (policies, procedures, emails, documents) to ensure desired and accurate outcomes are generated in a secure way.

Responsible AI framework

We can design a Responsible AI framework to govern the usage of GenAI solutions across the bank and appropriately identify and mitigate the inherent risks. This will include designing and implementing robust controls over the GenAI development lifecycle, covering Strategy, Control and Responsible and Core Practices.

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