



# AI in Banking Sector

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AI in Banking sector

# Trends, opportunities and challenges

## BANKING SECTOR – TRENDS, OPPORTUNITIES AND CHALLENGES

# Banks are rapidly scaling trusted GenAI into autonomous, personalised and tokenised workflows – delivering measurable business value

Key Trends Reshaping Banking	Prevalent Opportunities	Related Challenges
<p><b>AI drives measured business value</b> Singapore banks have scaled GenAI and agentic AI across core functions, with leaders like DBS and OCBC quantifying material productivity and revenue impact</p>	<p><b>From copilots to autonomous workflows</b> Banks can move beyond copilots toward supervised agentic AI that executes multi-step credit, compliance, and operations workflows while boosting revenue personalisation</p>	<p><b>Explaining and governing at scale</b> As AI use cases multiply, banks face rising complexity in explainability, validation, lifecycle control, and enterprise-wide AI governance</p>
<p><b>Experience becomes primary differentiator</b> With near-universal banking penetration, differentiation has shifted to UX quality, real-time personalisation, and digital-first engagement</p>	<p><b>Hyper-personalised relationship banking</b> AI enables conversational servicing, dynamic personalisation, and life-event-based journeys across retail, SME, and wealth segments</p>	<p><b>Trust and privacy limit adoption</b> Customer concerns around AI accuracy, tone, bias, and data privacy constrain how far banks can automate front-line experiences</p>
<p><b>Tokenisation in action</b> MAS-led Project Guardian has pushed tokenised assets from proofs-of-concept to early commercial wholesale banking and capital-markets networks</p>	<p><b>AI-driven tokenised market operations</b> AI can power compliance-by-design, real-time surveillance, liquidity management, and post-trade automation in tokenised financial markets</p>	<p><b>Fragmented regulation and architecture</b> Cross-jurisdiction regulatory uncertainty and parallel legacy-plus-DLT stacks increase operational and financial risk</p>
<p><b>Open finance and embedded banking</b> SGFinDex and API-led open finance are enabling ecosystem-based banking and rapid growth in embedded finance across platforms</p>	<p><b>AI-orchestrated financial ecosystems</b> AI enables personalised planning, embedded credit and dynamic pricing using consented data</p>	<p><b>Consent, control and third-party risk</b> Open ecosystems heighten risks around purpose limitation, consent tracking, API reliability, and vendor dependency</p>
<p><b>Enforcement of AI governance</b> MAS has elevated AI governance from voluntary principles to enforceable supervisory expectations with board-level accountability</p>	<p><b>Governance as a strategic advantage</b> Reusable AI governance platforms can accelerate safe deployment and position Singapore banks as trusted AI leaders globally</p>	<p><b>Compliance costs and talent gaps</b> Stricter AI regulation raises compliance burdens and exposes shortages in AI risk, and governance expertise – especially for smaller banks</p>

## PREVALENT AI THEMES IN BANKING SECTOR

# Singapore banks are scaling AI to personalise customer experiences, enhance compliance, and transform credit and lending

## Key themes in market

## Future imperatives for players



### Hyper-personalisation and AI-driven customer insights

- DBS has developed AI-powered hyper-personalised insights and advisory tools that empower customers to make more informed financial decisions
- In Singapore, over 3.5 million retail and wealth customers engage with 30 million of these insights each month through the DBS digibank platform
- DBS's new AI-powered corporate banking virtual assistant, DBS Joy, launched in Nov 2025, is driving over a 23%(1) improvement in customer satisfaction since February 2025

- Shift from post-claim fraud checks to continuous, real-time risk scoring using AI models trained on evolving fraud patterns
- Enable instant approvals and payouts for simple claims to improve satisfaction and reduce operational cost



### AI-enhanced fraud detection and regulatory compliance

- In 2026, MAS launched AI Risk Management Toolkit to strengthen governance across financial institutions. The toolkit was developed with a consortium of 24 banks and other financial institutions
- Singapore leads globally in AI adoption for compliance, with 92%(2) of its financial institutions using AI-driven tools for KYC and AML processes
- UOB is using AI for anti-money-laundering, cutting the time needed to detect suspicious transactions by 60%

- Deploy AI-driven compliance engines to enable continuous, real-time monitoring of financial transactions and proactively detect fraud and money laundering



### AI-driven credit scoring and lending

- Singapore financial institutions piloting AI-driven credit monitoring have achieved over a 10% reduction in delinquency rates by identifying early warning signs and dynamically adjusting their loan management strategies.
- With AI-powered underwriting, mortgage process has significantly accelerated by cutting loan processing times by nearly 30%
- GXS Bank has leveraged AI to automate credit decisioning and fraud detection processes. This has enabled the bank to double its operational productivity

- Industrialise AI-driven credit lifecycle management to enable predictive risk assessment, accelerate lending decisions, and unlock scalable, adaptive credit models for the future of inclusive finance

Note: (1) Based on a survey of 600 senior decision-makers across banks, Fenergo's 2025 Financial Crime Industry Trends Report; (2) DBS rolls out GenAI-powered chatbot to all corporate clients

Sources: "Fenergo Report Says 70% of Banks Lost Clients to Onboarding Delays in 2025", [Link](#); "MYbank Showcases AI-Driven Solutions for SME Banking at SFF 2025", [Link](#); "Singapore's MAS Rolls Out AI Risk Toolkit for Banks, Insurers, and Capital Markets Firms", [Link](#); "Unlocking the vision for AI in banking", [Link](#); "Tapping into AI-powered nudges", [Link](#)

CHALLENGES AND OPPORTUNITIES – BANKING

# Agentic AI and real-time orchestration offer step-change value; onus on banks to embed trust and control at scale

## Tailwinds in AI adoption



### GenAI pilots to agentic operating model

Agentic AI is transforming from experimental pilot projects to a core operational capability in banking sector, moving beyond chatbots to autonomous 'digital teammates' that plan, act, and make decisions

**52%**

Agentic AI is already in active adoption among global banks

**14%**

Industry operators signal AI is currently transformational to strategy/advantage – signaling a pilot-to-platform gap



### Trust stack as a growth engine

There is growing focus among banks to build an AI-native trust stack (behavioral, network, GenAI nudges) that reduces scam losses without hampering the digital banking experience for customers

**\$\$\$913.1m**

Losses from scams in 2025, with 81.8% self-effected transfers



### Real-time cross-border orchestration

As ASEAN moves from bilateral links to multilateral instant payments, winners will be banks that can orchestrate risk, FX, liquidity and compliance in seconds – with AI

## Headwinds in AI adoption

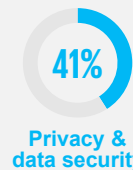


### Customer trust and human touch

Even as banks deploy AI in customer-facing services, maintaining customer trust and confidence in these AI-driven offerings remains a significant challenge.

**95%**

Consumers from Singapore has reported concerns about AI in financial services. Driven by three factors:



### Safety vs. friction

Banks are facing the challenge to balance stronger anti-scam controls with customer experience amid rising expectations to prevent losses while keeping high-value journeys smooth



### Multi-cloud complexity increases security challenges

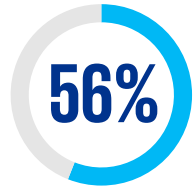
Singapore faces rising complexity from multi-cloud architectures. Overlapping cloud environments produces fragmented and inconsistent signals creating system failures. AI-assisted observability is essential, but must comply with MAS's strict auditability and governance standards

Note: 1) Survey results including 628 global financial institutions; 2) As per RFI Global Survey 2025

Sources: 'Fenergo Report Says 70% of Banks Lost Clients to Onboarding Delays in 2025', Fintechnews SG [Link](#); 'March 2026 RFI Global data', RFI Global [Link](#); '9 in 10 Singapore banks turn to AI for customer checks, fraud prevention', SBR, [Link](#); Annual Scam and Cybercrime Brief, 2025, Singapore Police Force, [Link](#); 'The 2026 Global AI in Financial Services Report', University of Cambridge, [Link](#); 'Gartner Says Worldwide AI Spending Will Total \$2.5 Trillion in 2026', Gartner, [Link](#)

## KPMG BANKING SECTOR PUBLICATIONS – KEY FINDINGS

# AI is driving clear cost and CX gains in banking, but scaled, end-to-end transformation remains a key challenge



Say AI is fundamentally reshaping their business

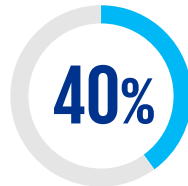
Source: Intelligent Banking<sup>(1)</sup>



## AI GOALS ARE CLEAR



Plan to reduce business/operational costs

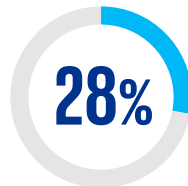


Plan to enhance customer experience

## INITIAL BENEFITS SEEM PROMISING



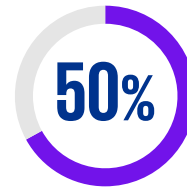
Have achieved cost savings



Have experienced revenue growth



Expect to cut costs by 10% by 2030

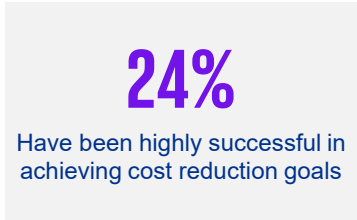


Applied AI to fraud detection, document processing and CX automation

Source: Banking Transformation: The new agenda<sup>(2)</sup>



## Yet successful transformation has been a challenge



Have been highly successful in achieving cost reduction goals



Have been highly successful in achieving transformation goals



*We have seen a lot of transformation programs focused on end-to-end process optimisation over the past twelve months. Tellingly, the focus has been not only on digitalising the process, incorporating greater automation and removing manual tasks, but also on cost. The link between operational transformation and cost is clearly top of mind for banks. – Jörg Fehrenbacher, Partner – Financial Services, KPMG Germany*

Note(s): 1) Key findings based on quantitative survey of 1,390 decision-makers across key global markets, including 183 respondents from the banking sector; 2) Key findings based on a survey of 228 banking leaders globally conducted between February-April 2025  
Sources: 'Intelligence banking', KPMG, [Link](#); 'Banking transformation: The new agenda', KPMG, [Link](#); all accessed in Apr 2026





AI CREDENTIALS BY SECTOR – AI IN BANKING (1/5)

# Semantic AI solution from KPMG boosted AML accuracy by reducing false positives and accelerating due-diligence workflows

## AI use case for AML Screening Accuracy

In the context of increasing regulatory expectations and operational complexity in AML compliance, KPMG supported the client in implementing a semantic automation solution to improve the quality and efficiency of customer screening and adverse media analysis.

### Client challenge

In the context of Anti-Money Laundering (AML) compliance, and specifically within Know Your Customer (KYC) and Customer Due Diligence (CDD) processes, the client faced several operational challenges. The first was the high volume of cases to be processed, requiring the identification and verification of a large number of individuals and legal entities. A second critical challenge was the diversity and fragmentation of data sources to be examined. These included online open sources, licensed information providers, and offline content such as local print media. Analysts were required to consult and cross-check information from all these channels to form a comprehensive view. Lastly, there was a high risk of false positives and a frequent need to assess whether mentions in news articles were materially significant in an AML context.



### Our approach

KPMG implemented a solution based on Natural Language Understanding (NLU) and Natural Language Processing (NLP) technologies, leveraging the Cogito platform by Expert.ai. The solution automated the retrieval of information from multiple data sources, including open and closed online repositories and third-party information providers.

A semantic analysis engine was used to screen and interpret news content, applying a domain-specific "CRIME" taxonomy to filter and prioritize only the information relevant for AML purposes.

To improve accuracy, the system applied scoring algorithms that evaluated both the severity of the content and the degree of match between the subject of the screening and the entities mentioned in the retrieved information.

To ensure usability and integration with existing workflows, we developed a custom front-end interface embedded in Appian.

### Value delivered

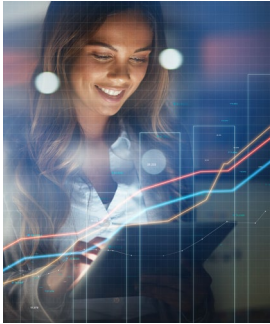
- The solution led to a more accurate and consistent screening process, with a significant reduction in false positives and non-material news items.
- The application of semantic filtering and relevance scoring allowed analysts to focus on content that was meaningful from an AML perspective.
- By automating the connection to multiple sources, including structured providers and unstructured content, the solution also expanded the range of information consulted without increasing operational complexity. Overall, the approach streamlined the verification workflow, resulting in faster processing times and more efficient case handling.

### Why KPMG?

- Our team combined a solid understanding of AML operational requirements with specific experience in applying semantic technologies to compliance workflows. This allowed us to deliver a solution that was technically robust and aligned with the practical needs of screening teams.

### What we have learned

- This project contributed to the development of a KPMG proprietary "CRIME" taxonomy tailored to AML use cases. The experience reinforced the importance of domain-specific language models and classification frameworks when applying semantic technologies to compliance processes.



## AI CREDENTIALS BY SECTOR – AI IN BANKING (2/5)

# AI use case – Banking

### AI use case for dynamic KYC solution

KPMG supported a large bank in implementing the Dynamic KYC solution, which enables greater efficiency and effectiveness in the customer KYC update process.

#### Client challenge

The bank had a backlog of customers with expired KYC that needed to be updated. This KYC-update process requires substantial manual effort from the distribution network and harms the customer experience as customers' ability to transact is blocked until their KYC is refreshed



#### Our approach

KPMG has developed a new approach that automates due diligence activities by replicating, through AI solutions, the checks on customer files that would normally be performed by a human. In particular, KPMG has implemented:

- 1 the AML Predict Index (a supervised machine learning model that estimates the probability of customers being reported to the Financial Intelligence Unit)
- 2 a NLU engine that detects negative press about the bank's customers while minimizing false positives
- 3 an indicator that calculates the probability that companies are infiltrated by criminal organizations
- 4 a set of deterministic indicators that monitor the validity of customer information

#### Value delivered

Thanks to the implemented components, KPMG supported the client in reengineering the customer due diligence process. Under the new process, manual KYC review is required only for customers for whom any Dynamic KYC component flags an increased risk or invalid information..

#### Why KPMG?

KPMG combines regulatory expertise on AML regulation with advanced AI capabilities to deliver tailored, compliant solutions. In this project, we invented a new approach for updating KYC based on the interpretation of the relevant Italian laws which is also compliant with the new European AML package.

#### What we have learned

Combine various machine learning technologies to replicate and enhance human controls. Design a change management process for adopting ML solutions within processes characterized by a high volume of manual activities and staff with low IT literacy.



AI CREDENTIALS BY SECTOR – AI IN BANKING (3/5)

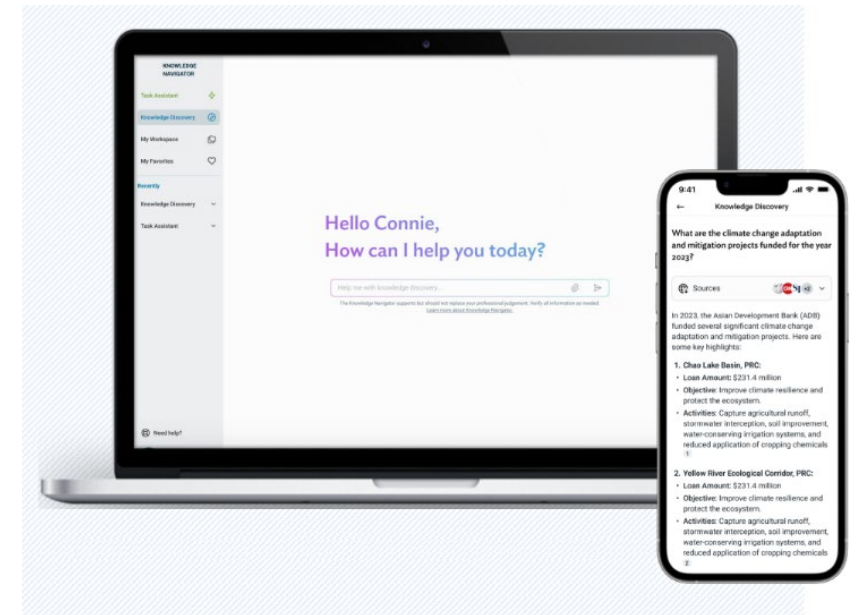
# Developing AI-led Knowledge Management Platform for a leading development bank

## Client challenge

The client's current Knowledge Management (KM) tools are fragmented, lacking standardized taxonomy, protocols, and governance, which hampers effective knowledge management. Staff face challenges in accessing relevant information due to weak information architecture, absence of standardized taxonomy, and insufficient role-based access controls. Additionally, data silos across departments and the absence of clear quality assurance measures limit collaboration, decision-making, and organizational efficiency.

## What we did

- Conducted an AI visioning workshop with cross-functional teams to explore ways to enhance knowledge accessibility through GenAI and streamline labour-intensive tasks. By identifying key pain points, we examined GenAI solutions aimed at boosting productivity and reducing manual workloads
- Led 14 in-depth immersion sessions with stakeholders across multiple business units to validate AI-led design concepts, ensuring alignment with user needs
- Compiled a comprehensive product backlog with prioritized GenAI features such as Knowledge Discovery, Task Assistant, Workspace, and Collections, developed in sprints within 3 months, following an Agile framework to ensure timely delivery and iteration.
- Organized and executed a thorough User Acceptance Testing (UAT) phase, including exercises such as red teaming and responsible AI testing. We engaged end users to test all key functionalities to ensure that the system met business requirements and AI accuracy KPIs, ensuring readiness for technical go-live





## AI CREDENTIALS BY SECTOR – AI IN BANKING (4/5)

# Financial Crime Machine Learning Credential

## Client Background and Context

The three local banks in Singapore have incorporated machine learning and advanced analytics into their transaction monitoring process to complement the rules-based TM systems as they generate considerable volume of false positive alerts with false positive rates ranging from 90% to 99%.

While calibration of the thresholds and parameters to the rule-based scenarios can reduce the false positive rates, the effects of the reduction diminishes over repeated calibration and typically do not drastically reduce false positive rates. In some instances, it may also result in an increase in the volume of alerts.

Since 2018, KPMG has been working with a number of financial institutions in Singapore including two full banks, a qualifying full bank, a tier-one Japanese bank, a private bank and a tier-one insurer on the use of machine learning models to detect anomalous activities by customers.

The current ambition of the more advanced banks in Singapore is to displace the existing rules-based systems with machine learning models that can more effectively identify anomalous customer activities.



## Our approach

- Use of both supervised and unsupervised ML models to detect unusual transactions in customer activities.
- A supervised model will be trained on the transactional characteristics and patterns of customers who had STRs filed in the past to identify any other customers with similar transactional behaviour.
- An unsupervised clustering model will group customers into clusters based on the customer's KYC profile information and transactional activity.
- Another unsupervised model will identify customers whose transactional activities deviate significantly from the other customers within their respective clusters a

## Outcomes

- Familiarity with MAS - We presented POC approach and outcome for the qualifying full bank to the AML Department of MAS and the informal feedback was very positive. We are now assisting the qualifying full bank with the implementation of machine learning in parallel to existing rule-based TM system with the intention to replace incumbent system
- 85% to 98% overall reduction of false positive alerts
- Flagged out additional suspicious customers resulting in the filing of STRs
- Flagged out manual STRs not identified by TM systems



We have run Proof of Concepts in Singapore, developing Machine Learning models to help reduce false positive alerts and identify suspicious transactions.

## POCs Outcomes

### Qualifying Full Bank in Singapore

**98.6%**

Reduction in false positive alerts (100k to 1.4k alerts)

**100%**

Recall of past STRs from TM via supervised Machine Learning (ML) model (180 STRs)

**21**

Additional suspicious customers flagged by the supervised ML models (Precision improved to 50% from 0.18%)

### Private Bank in Singapore

**86.5%**

Reduction in false positive alerts (average 697 alerts/month to 146 alerts/month)

**100%**

Recall of past STRs from TM via supervised ML model

**100%**

STR from KYC Review were flagged by the supervised ML model

### Full Licensed Bank in Singapore

**95%**

Reduction in false positive alerts (112k to 5k alerts)

**93%**

Recall of past STRs from TM via supervised ML model (141 of 152 STRs)

**140**

Additional suspicious customers flagged by the ML models (1.8x more than current TMS)

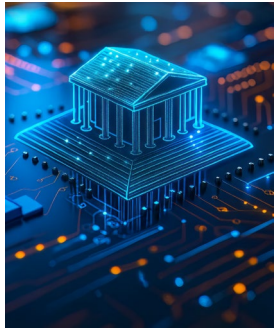
### Insurance Co. in Singapore

**85.96%**

Reduction in false positive alerts

**100%**

Recall of past STRs from TM via supervised ML model (185 of 185 STRs)



## AI CREDENTIALS BY SECTOR – AI IN BANKING (5/5)

# Empowering the use of AI responsibly through a framework and evaluation tool to assess risks of AI use cases across the bank

### Client challenge

With the rise of AI in the recent years, the client recognises the boundless opportunities of AI to support economic and social development. The client has concerns regarding trust in AI which prompts for a Responsible AI framework, to mitigate against the risks of harm that AI can cause, especially on the impact to the people and the planet. KPMG has developed the RAI framework with 2 objectives in mind

- To use AI responsibly as a regional multilateral development bank
- To empower the client's employees on the responsible use of AI

### What we did

- Conducted 19 interview sessions with senior leaders in the bank to validate Responsible AI Principles which will be integrated within the Responsible AI Framework, iteratively develop the Framework with feedback obtained
- Developed a self-assessment Acceptable Use Risk Scoring Matrix to evaluate 5 identified AI Use Cases across the client's operations: Publish Using AI, Advise Using AI, Consumption of AI, Build, and Procure
- Developed an operationalisation plan to uplift the accessibility of both RAI framework and the Acceptable Use Risk Scoring Matrix for accelerated adoption across the AI Use Cases

### Responsible AI Framework



### RESPONSIBLE AI FRAMEWORK

MAY 2024

Assessment Summary		
AI Use Case	User Case Name	Testing 1
Address	Assessment Date	DD/MM/YYYY
Date	Assessment Performed By	Test Name
Conceptual	Category	Build
Process	Recommended Action	Proceed with Accountable User Approval
		1.811
Residual Risk by Category		
Risk is within tolerance as long as the mitigant is effectively established	Risk conditions to be higher than acceptable tolerance, even after mitigant is effectively established	Risk is outside tolerance, even after mitigant is effectively established. Escalation required.
29	0	1

### Acceptable Use Risk Scoring Matrix



## AI CREDENTIALS BY SECTOR – AI IN BANKING (1/5) – SINGAPORE-SPECIFIC

# Source of Wealth (SoW Use Case)

### Client challenge

Faced with regulatory updates, revisions to the due diligence policy and a hefty caseload, the client (global investment bank and financial services firm) sought assistance in the following areas to support Client Advisors (CAs) and the front office in its periodic KYC (PKR) Review process:

- **Lack of clarity in tracking and reporting Periodic KYC Review (PKR) caseload**, involving manual tracking across multiple spreadsheet and inefficient workflow.
- **Low PKR remediation rates caused by time required to adjudicate policy compliance**, with parallel 'uplift' programs running to aid front office due to complexity of existing processes.
- **Required remediation steps not clear and actionable**, i.e. CAs unable to take suitable action (e.g. update client profile writeup, collect lacking information etc.) due to policy complexity, difficulty interpreting substantive client profile data, etc.



### Our approach

KPMG leveraged AI expertise and proven experience in Source of Wealth (SoW) corroboration to support the client in enhancing and automating SoW corroboration during the PKR.

Key limitations faced during the initial design of the solution and execution were as below:

- **Expedited delivery timeline**, with a turnaround period of 4 weeks to produce a usable result.
- **Lack of specifications and limited support** from the business due to multiple concurrent priorities, requiring multiple iterations to the design within the tight window.
- **Design constrained by need for differentiation** from competitor products simultaneously being developed within the program on different timelines.

### Value delivered

The solution, **KPMG Source of Wealth AI agents** help with:

- **Periodic KYC Review:** Assist front office with PKR caseload by analysing the Client Profile (CPAC) against the consumer due diligence policy and providing action items.
- **Onboarding:** Facilitate KYC procedures during the onboarding process allowing the front office to affirm completeness of documentation before passing onto the compliance functions.
- **Meeting preparation:** Streamline meeting preparation by surfacing relevant context and next steps for KYC updates enabling quicker more efficient client engagement.

### Why KPMG?

- Our team

### What we have learned

- This project



## AI CREDENTIALS BY SECTOR – AI IN BANKING (1/5) – SINGAPORE-SPECIFIC

# AI Factory for a global bank

### Client challenge

A leading **Global Bank** sought to move beyond fragmented AI experiments and establish AI as a core enterprise capability. The organisation faced challenges in:

- Embedding a consistent, AI-led culture across geographies and divisions
- Scaling AI use-case delivery while avoiding duplication and fragmentation
- Maintaining strong Trusted AI governance, risk, and ethics at scale
- Prioritising AI investments transparently and demonstrating measurable ROI
- Coordinating internal stakeholders and external ecosystem partners under a unified model

Essentially, the client needed a central, durable transformation vehicle to industrialise AI adoption globally – without compromising trust, accountability, or regulatory confidence



### Our approach

Over a 12-month partnership, we worked with the client to design, establish, and operationalise a **Global AI Factory** – both as a physical presence and a strong internal brand. Key elements of the approach included:

- Defined a clear mission, operating principles, and enterprise scope to anchor prioritisation, funding, and decision-making from day one.
- Established a centralised use-case intake and prioritisation model to drive consistency, reduce duplication, and scale transversal AI use cases.
- Implemented robust governance and Trusted AI controls, embedding ethics, risk management, and human-in-the-loop oversight into delivery.
- Aligned funding, delivery, and accountability models to enable enterprise scale while maintaining business ownership and buy-in.
- Enabled AI readiness at scale, covering data foundations, tooling choices, stakeholder alignment, and enterprise MI to track value and ROI.

### Value delivered

- Enterprise-wide AI operating model with a single, consistent mechanism for AI delivery
- Improved speed-to-value through prioritised, reusable, and scalable use-case development
- Reduced duplication and cost leakage across regions and business units
- Stronger regulatory and risk posture, with Trusted AI principles embedded by design
- Durable AI governance and decision structures that continue to guide investment and deployment
- Clear linkage between AI strategy, funding, and measurable business outcomes

### Why KPMG?

- Proven expertise in enterprise-scale AI Factories for regulated global banks, spanning strategy, governance, risk, and execution.
- Trusted AI leadership, enabling innovation at scale while meeting regulatory, ethical, and risk expectations.
- End-to-end transformation capability, bridging business value, technology delivery, and organisational change.

### What we have learned

- Mission, principles, and risk appetite must be defined upfront
- Funding and delivery models are inseparable
- AI readiness is largely invisible but critical – governance, data foundations, MI, and change effort determine success more than the models themselves.



AI CREDENTIALS BY SECTOR – AI IN BANKING (1/5) – SINGAPORE-SPECIFIC

# AI-enabled Knowledge Management – Large Development Bank

KPMG has developed multiple AI-enabled solutions for a regional multilateral bank

## Client challenge

### Knowledge Management

- The client sought to build an AI-driven, seamless digital knowledge discovery experience, but faced fragmented search capabilities with employees relying on external tools like Google for critical information.
- Weak knowledge governance, limited information accessibility, and siloed, low-quality data significantly hindered productivity, collaboration, and evidence-based decision-making.

### Contract Generation

- The client faced delays and inconsistencies in ToR creation due to manual, time-intensive processes (4–6 hours per ToR), leading to productivity gaps and compliance risks
- The need was to accelerate the creation of compliant, context-aware ToRs to improve efficiency, reduce risk, and enhance output quality

### Credit Risk Review

- Credit officers faced fragmented workflows for initial credit assessments, spending excessive time gathering scattered data and preparing notes, with frequent back-and-forth clarifications
- The client aimed to leverage AI to streamline collaboration, enhance decision-making, and ensure compliance in credit risk management.



## Our approach

### Knowledge Management

- KPMG developed a trusted multi-agent AI solution that acts as an intelligent layer over legacy systems, enabling secure access to enterprise knowledge and insights, task execution and workflow orchestration
- Currently in production and accessible to 5,000 employees, the solution is geared to replace the bank’s intranet and reimagine the ways its employees work and collaborate

### Contract Generation

- KPMG built an AI-enabled contract management solution to streamline ToR creation through automated tagging, standardized templates, and integrated workflows
- This eliminated manual drafting while improving compliance, accuracy, and output quality.

### Credit Risk Review

- KPMG designed an AI roadmap with modular advancements and a multi-agent system to streamline collaboration across banking functions
- The solution enables AI-driven credit note generation and proactive risk review through automated due diligence, early warnings, and portfolio risk flagging.

## Value delivered

### Knowledge Management

- Unified, AI-driven platform that breaks down data silos, enhances employee productivity, and supports informed decision-making through improved access to knowledge
- Employees have reported 5x productivity gains

### Contract Generation

- Time Reduction: From 4-6 hours to less than 5 minutes per ToR.
- Scale: Over 400 ToRs generated annually.
- Efficiency Gains: More than 2,000 hours saved yearly, freeing teams to focus on strategic tasks.

### Credit Risk Review

- Transformed the credit risk process by leveraging AI to improve collaboration, enable smarter decisions, and ensure compliance.
- Deal analysis reduced from 1-2 months to 10-15 mins



## AI CREDENTIALS BY SECTOR – AI IN BANKING (1/5) – SINGAPORE-SPECIFIC

# AI-enabled Credit Risk Review – Large Development Bank

### Client challenge

Credit banking officers faced a disjointed workflow for initial credit assessments, they struggle to gather scattered information and spend excessive time preparing credit notes and there were many back-and-forth clarifications with credit risk officers.

Amid the rapid advancement of AI, our client sought to unlock its potential to transform credit risk management. Key stakeholders rallied around a shared challenge: “How might we use AI to enhance collaboration, drive informed decision-making, and ensure compliance in the credit risk process?”



### Our approach

KPMG designed a strategic roadmap featuring modular advancements and cutting-edge AI capabilities to guide future development.

From then, we developed a multi-agent AI system as an intermediary between critical banking functions, transforming team collaboration. The solution enables:

- **AI-assisted Credit Note Filling:** Comprehensive information retrieval for due diligence and deal screening
- **AI-assisted Risk Review:** Early warning for deal review and flagging of portfolio risks

### Value delivered

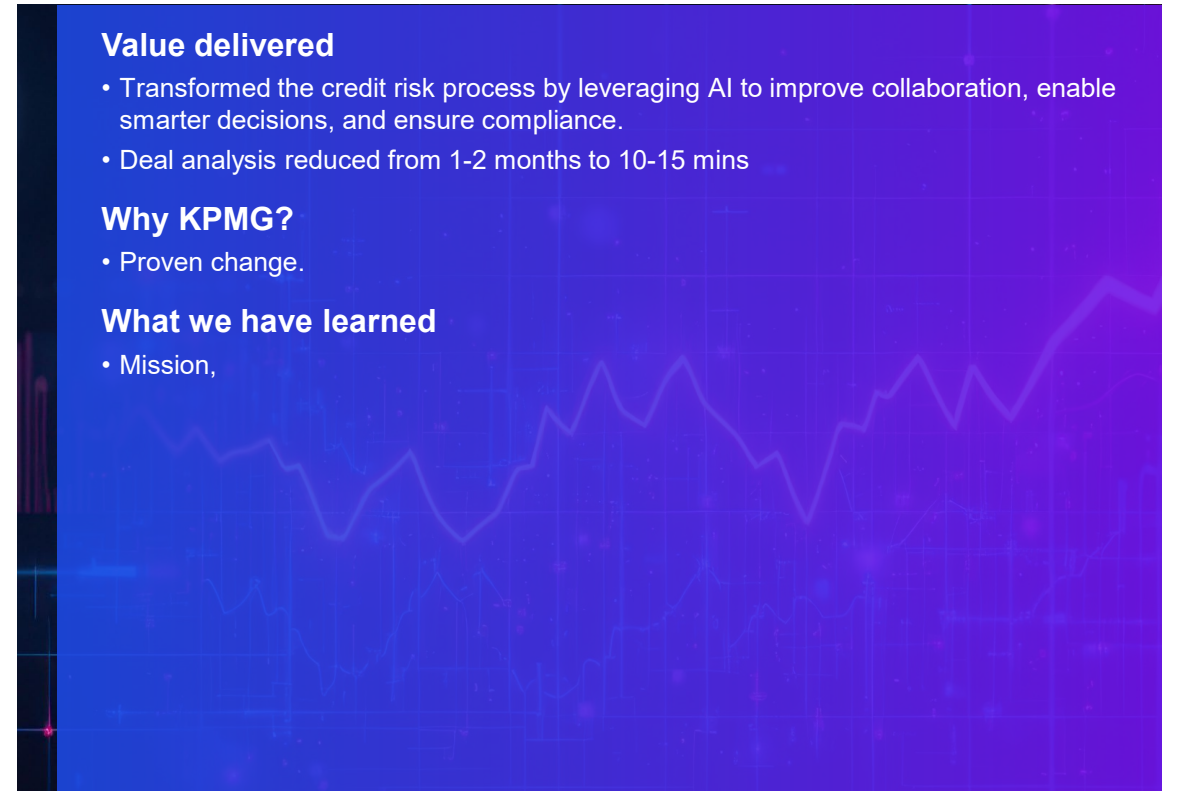
- Transformed the credit risk process by leveraging AI to improve collaboration, enable smarter decisions, and ensure compliance.
- Deal analysis reduced from 1-2 months to 10-15 mins

### Why KPMG?

- Proven change.

### What we have learned

- Mission,





AI CREDENTIALS BY SECTOR – AI IN BANKING (1/5) – SINGAPORE-SPECIFIC

# AI-enabled Contract Generation – Large Development Bank

## Client challenge

A regional large development bank faced persistent delays and inconsistencies in creating Terms of Reference (ToR) contracts. Manual preparation of briefing notes, ToRs, and policy or risk assessments was time-consuming and error-prone, requiring 4-6 hours per ToR on average. This inefficiency led to reduced productivity, compliance risks, and slower project initiation.

The question was clear: How might we accelerate the creation of compliant, context-aware ToR contracts to enhance efficiency, reduce risk, and improve overall output quality?



## Our approach

KPMG developed an AI-enabled contract management solution that transforms the ToR creation process. Key features include:

- Automated tagging and categorization for briefing notes and ToRs.
- Pre-built templates to ensure compliance and consistency.
- Seamless workflow integration for faster approvals and collaboration.
- This approach eliminates manual drafting, ensures accuracy, and maximizes output quality.

## Value delivered

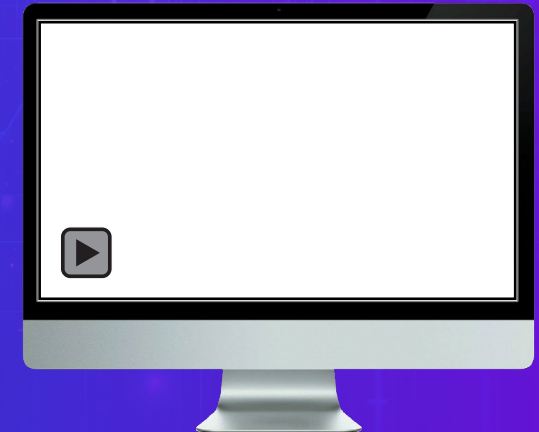
- Time Reduction: From 4-6 hours to less than 5 minutes per ToR.
- Scale: Over 400 ToRs generated annually.
- Efficiency Gains: More than 2,000 hours saved yearly, freeing teams to focus on strategic tasks.

## Why KPMG?

- Proven change.

## What we have learned

- Mission,





## AI CREDENTIALS BY SECTOR – AI IN BANKING (1/5) – SINGAPORE-SPECIFIC

# KymCompliance

### Client challenge

The client's compliance capability was heavily reliant on manual controls and siloed processes. Consequently, the client continued to experience avoidable compliance breaches. With the emergence of Applied AI technologies, KPMG saw an opportunity to uplift the client's compliance maturity at a speed and scale not previously possible by:

- Giving Board and Executive leadership confidence in their coverage of obligations and quality of their controls through an AI driven health check.
- Significantly improving quality and efficiency across the compliance lifecycle.
- Predicting downstream impacts to compliance performance from implementation of changes (e.g. regulatory, process, technological, organisational) that are currently not being clearly understood or addressed.



### Our approach

KPMG's Compliance AI Solution, powered by Kym, addresses recurring regulatory themes and compliance challenges, offering a unique and effective response to improving compliance maturity and sustainment. KPMG's Compliance AI solution incorporates KPMG's regulatory risk and compliance better practices and has been trained on regulations and client-specific nuances. KPMG deployed the KPMG Compliance AI solution across all the client's obligation areas, used by teams across all parts of the business to improve uplift operations.

AI enhanced processes include obligation statement capture and maintenance, comparing authoritative sources, documenting obligation statements, assessing current controls and identifying gaps, planning testing of control design effectiveness, recommending uplift, and determining reliability.

### Value delivered

- KPMG's AI Compliance solution educates teams about good-practice controls, fostering continuous learning and improvement
- Enhanced responsiveness to regulatory changes ensures coverage remains up-to-date, while prioritisation of strategic tasks over routine work boosts efficiency in risk management
- Clear and actionable steps and improved compliance tracking enhance accountability and trust within the organisation's control environment.

### Why KPMG?

- Proven change.

### What we have learned

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AI in Banking sector

# KPMG AI proposition and key differentiators



# The KPMG Trusted AI Centre of Excellence

## AI that deliver results, not just pilots.

Most organisations can launch AI pilots.  
Very few manage to scale them.  
The KPMG Trusted AI CoE exists to fix that.

### What we do

We help organisations design, build, and scale AI that:

- Solves real business problems
- Is trusted by leaders, employees, and regulators
- Can be adopted and scaled across the organisation
- Enables intelligent governance, decision-making and operations

### The result

AI that people trust, use, and rely on,  
that leaders can see, measure, and defend.

## Contact us



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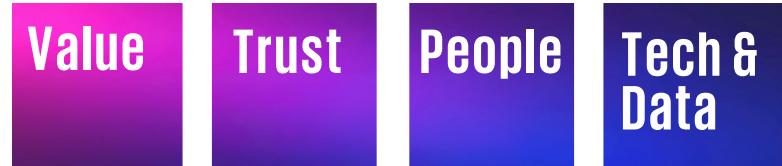


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# What makes our AI CoE different

## KPMG Four-Door Framework

*A structured way to scale AI across the enterprise*



### VALUE

Turn AI activity into real business impact and ROI.

### TRUST

Build AI that's trusted by everyone, from the start.

### PEOPLE

Design AI around how people work, so adoption sticks.

### TECH & DATA

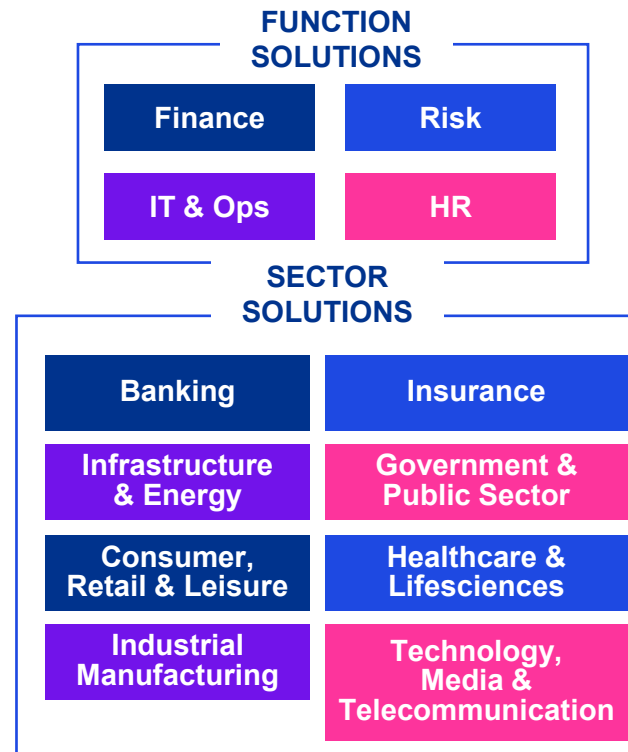
Enable AI to scale with the right technology foundation

## Trusted ecosystem

KPMG brings together a powerful ecosystem of partners (leading technology companies, academia, industry organisations, and government agencies) to help turn AI ideas into tangible innovative solutions.

## Co-creation of solutions

*with you, for you in your function and sector*



## Support from EDB

*With grants for*

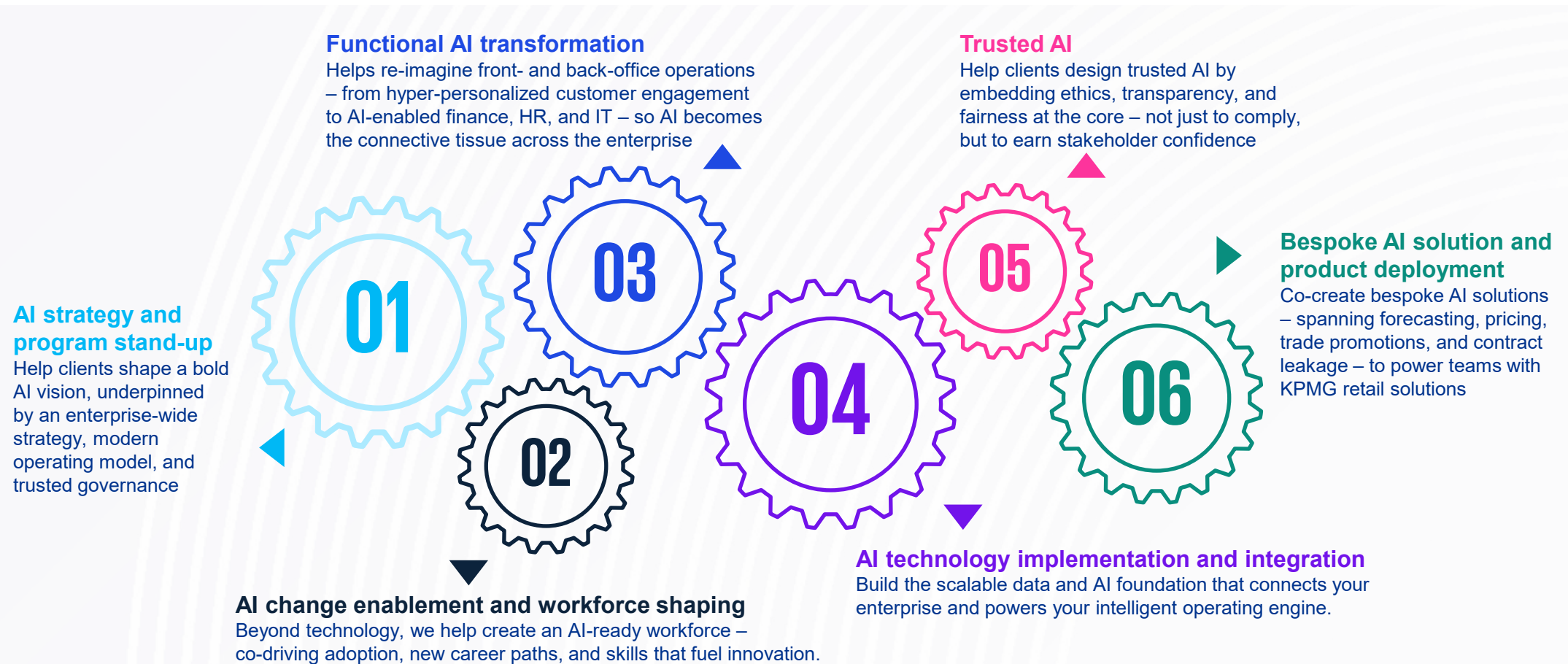
- Solution Design & Rapid Prototyping
- PoC/Pilot Build

## Speed to market

- Faster time to market, going from idea to POC to scaled deployment
- Access to proven, reusable AI solutions and accelerators

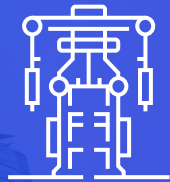
HOW KPMG CAN HELP (1/2)

# Driving enterprise-wide AI impact by combining strategy, technology, workforce, and trust



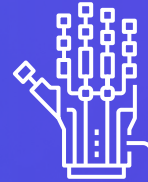
HOW KPMG CAN HELP (2/2)

# KPMG can help clients across their AI journeys



## Develop a transformational AI strategy

Define your AI goals, identify opportunities and risks, and create a tailored strategy and execution plan. Build a business case with clear metrics to secure investments and ensure measurable success by scaling AI for enterprise-wide impact and building lasting capabilities.



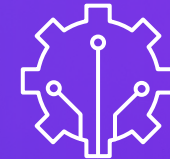
## Ensure AI trust and compliance

Scaling AI introduces complexities and risks. KPMG Trusted AI teams can help ensure your AI solutions are ethical, secure and compliant. Our Trusted AI Framework, built on 10 ethical pillars, empowers organizations to boldly deploy AI responsibly, transparently and with confidence.



## Empower your workforce with AI

KPMG AI-enabled Workforce solutions deliver personalized adoption and upskilling experiences, helping your team embrace generative AI and infuse it into everyday work.



## Build a sustainable AI technology infrastructure

Leverage KPMG professionals' experience to integrate AI frameworks, platforms and accelerators, helping you ensure your technology infrastructure is ready to scale AI initiatives.

## AI IN ACTION: KPMG WORKBENCH

# KPMG Workbench: Scaling AI innovation globally

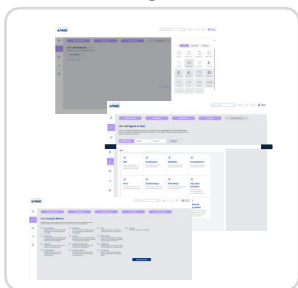
In a rapidly evolving market, innovation at the required speed is increasingly difficult. While AI has held significant promise, efforts are fragmented across regions and business units, often stalling at the proof-of-concept stage and duplicating work across geographies. This led to the creation of **KPMG Workbench** – a single, secure global AI platform that enables teams to build once and scale solutions consistently across member firms and jurisdictions

KPMG Workbench is KPMG's global AI development platform empowering our Member Firms and Global Functions to accelerate AI capability, leverage global expertise and foster local innovation by providing secure, scalable tools and resources for developing and deploying AI solutions that adhere to our Trusted AI principles.

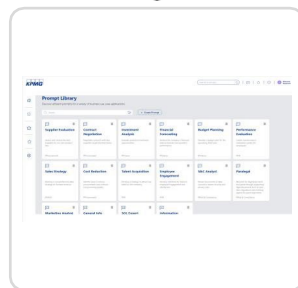
- **Globally Scalable AI Platform:** Develop and deploy AI tools on a unified platform with global consistency and local data sovereignty.
- **Federated Architecture:** Enables member firms to create AI applications and access best practises collaboratively.
- **Integration with Existing Systems:** Seamlessly integrates with existing tools.
- **Access to Headless Agents:** Provides a centralised platform for all headless agents across the KPMG network.
- **Trusted AI Compliance:** Aligned with Trusted AI standards ensuring safety and security.
- **Real-Time Monitoring:** Offers real-time telemetry and reliability tracking for enhanced performance oversight.

## Agent Marketplace: KPMG's no-code accelerator to AI Agent adoption

**Agent Designer** Define Agents, assign tools and Responsible AI metrics using a **No Code Wizard**



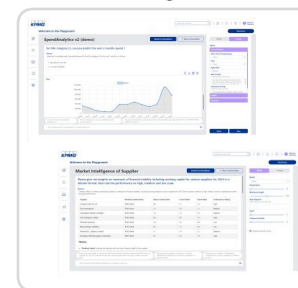
**Manage your Enterprise Knowledge Base** Prompt Store and other knowledge refining & creation utilities



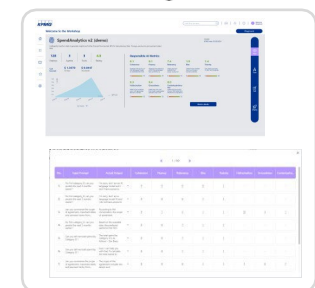
**Agent Marketplace** A library of approved agents for different business divisions and journeys



**Agent Playground** To interact with existing Agents, copy and **change** instructions and LLM parameters at run time



**Agent Operations** Monitor **cost, latency and accuracy** perspective with a detailed log with scores for each interaction within an app



## AI IN ACTION: KPMG AI POD MODEL (1/2)

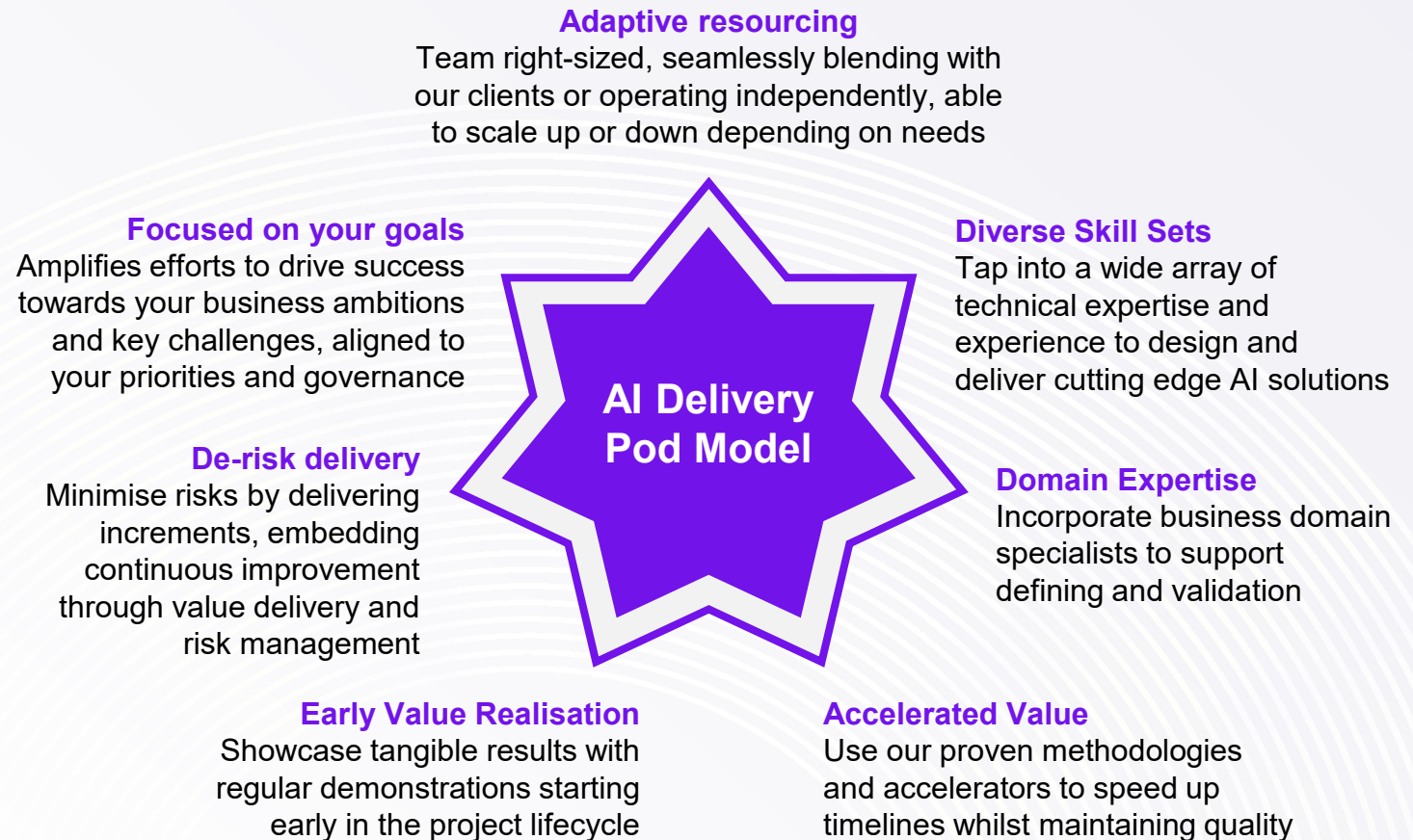
# KPMG Pod Model

## What is an AI Delivery Pod?

Our AI Delivery Pods are cross functional teams that bring together complementary expertise in AI, business and technology.

The Pod is embedded in the business and operates in an Agile fashion, focused on delivering a specific subject area or use case. The collective skills, experience and dedicated focus of the team is harnessed to accelerate delivery of AI solutions.

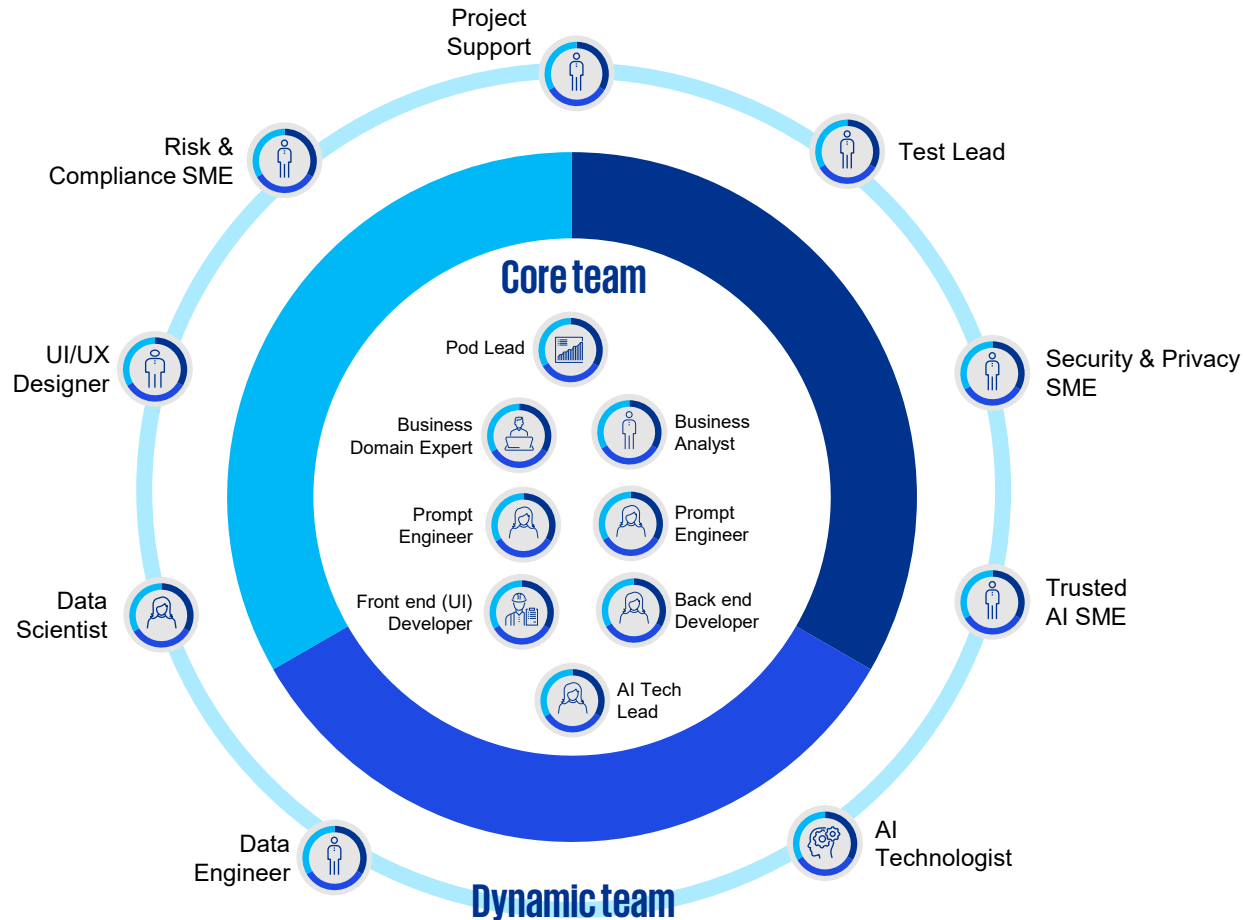
The size and composition of the Pod is tailored to the complexity of the use case and needs of the business. It typically includes a core team, with the ability to scale to address evolving challenges or opportunities.



## AI IN ACTION: KPMG AI POD MODEL (2/2)

# KPMG Pod Composition

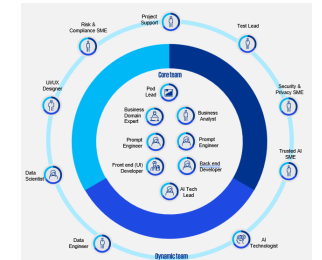
## Example Risk & Compliance AI Delivery Pod



## Scaling Options

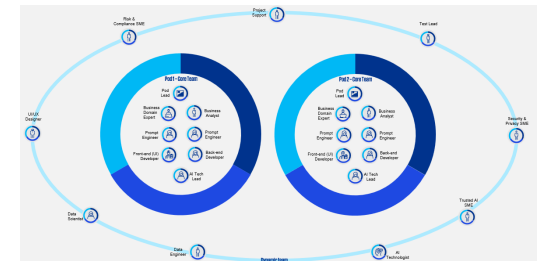
### 1 Pod

Typically used for rapid support / Proof of Concepts



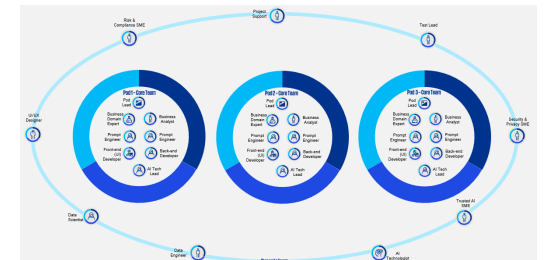
### 2 Pods

Accelerate delivery and focus on AI initiatives



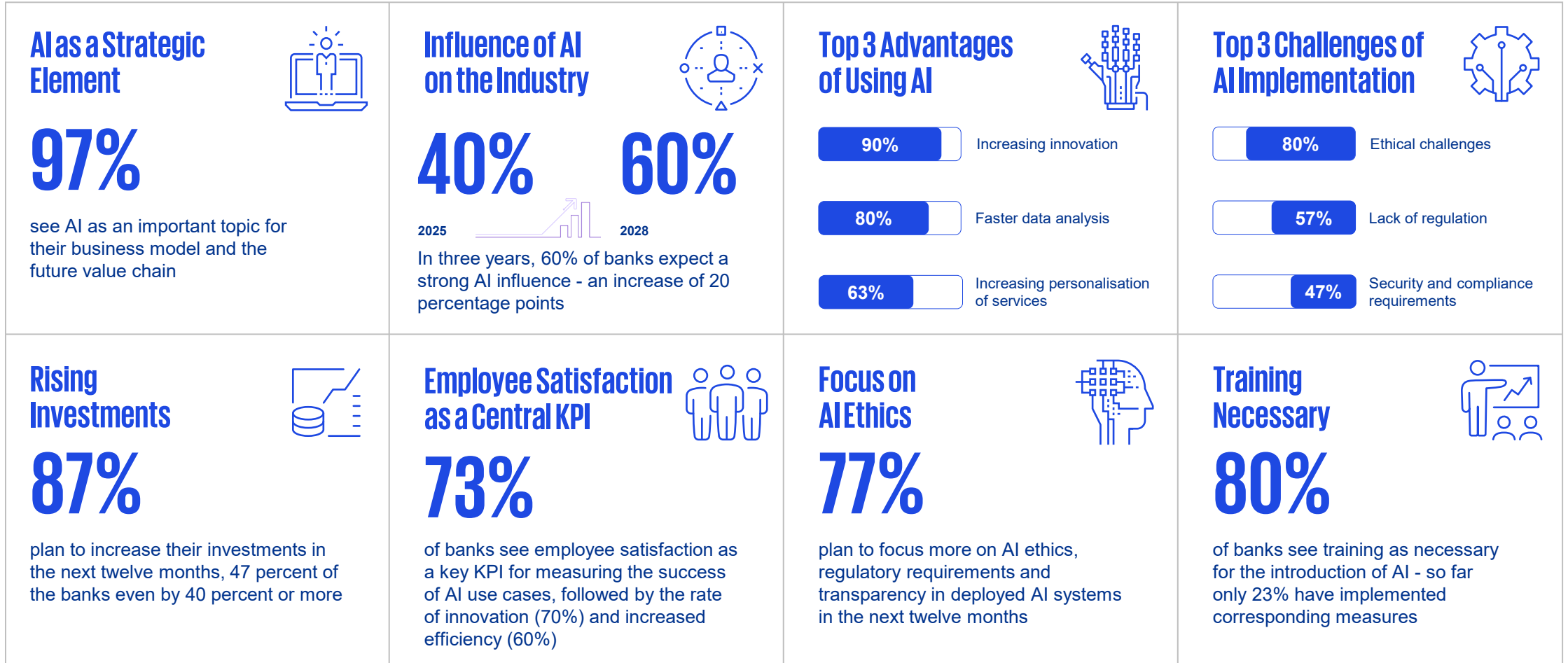
### 3+ Pods

Transforming the enterprise with an AI Factory



## AI CASE STUDIES BY SECTOR – AI IN BANKING

# AI in Banking – Key enablers





[kpmg.ai/Singapore](https://www.kpmg.ai/Singapore)

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