McKinsey & Company

IACPM

Emerging Generative AI Use Cases in Credit

Research results

March 2025

Context and overview of the research

IACPM and McKinsey jointly conducted a research in 2024 to understand key emerging GenAI use cases in Credit and its challenges, risks, investments and returns.

This research was conducted using a combination of interviews carried out in Q3 2024 and a flash survey conducted in Dec 2024. 33 institutions participated in the interviews and 33 institutions participated in the online survey, representing a total of 44 unique institutions.

These financial institutions encompassed Mega Banks, Super Regionals, Core Regionals, and others across North America, Europe, Asia, and Africa

In this webinar, we will discuss the findings from our jointly conducted research, including both interview and flash survey results

We will also compare the findings with an article McKinsey published in July 2024 based on insights from roundtable conducted in Oct 2023[1] with CROs of 24 North American financial institutions to understand the state of adoption for GenAI use cases within a year of the launch of ChatGPT. CROs were enthusiastic about GenAI use cases: We heard from 80% of the CROs in North America that they were expecting to implement the first GenAI application by Q4 2024

Since then, LLM models have evolved rapidly and so have the use cases and factors defining success

Expectation of CROs from NA in Oct 2023

We will be sharing the results with participating members as well as conduct webinars in March 2025 which are open to all IACPM members

1. Link to the roundtable publication: https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/embracing-generative-ai-in-credit-risk

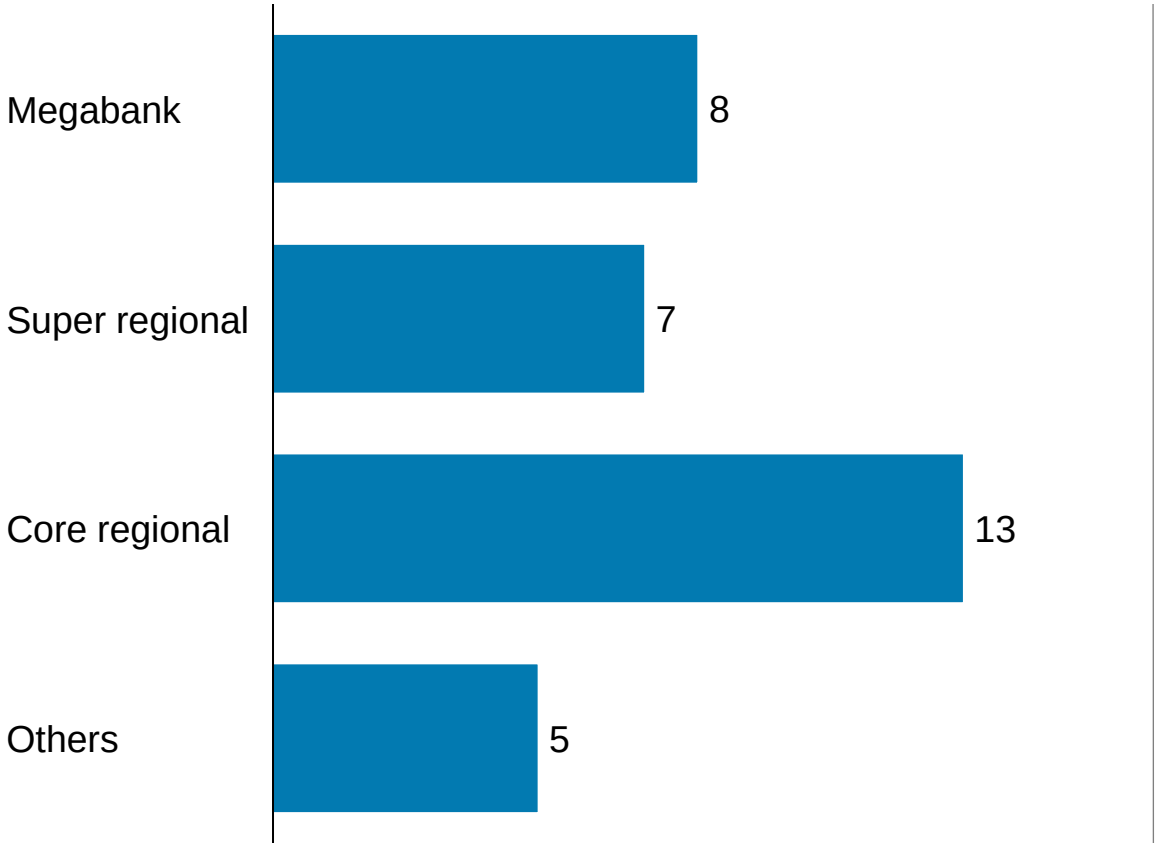
Executive summary

- **All participating institutions are testing one or more GenAI use cases in Credit**, with super regionals leading the deployment. While institutions are experimenting with a wide range of use cases, **most prevalent uses cases are synthesizing for credit decisioning, drafting memos, data assessment and early warning**. The progress, however, is slower than what executives expected in Q4 2023 – where 80% of NA FIs expected to implement GenAI use case within a year, while only ~30% of survey respondents from NA have reached the deployment stage
- **80% institutions have access to external GenAI tools**, though some institutions take caution in making it available to all employees. To ensure safe use, **more than 50% of the institutions require understanding of internal guidelines** as a prerequisite to access them
- Institutions **are taking fast actions to address the challenges they anticipated in Q4 2023:** “Sixty-seven percent of the participants highlighted potential shortages of gen AI capabilities inside the organization. Further challenges, cited by around 50 percent of participants, include difficulties defining uses cases and value at stake.”
- To address this, **institutions have prioritized investment in building talent (87%), Center of Excellence (CoE) (82%), secure environment (94%) and processes (79%)**. Focus on building CoE is consistent with the research McKinsey conducted earlier in 2024 where participants preferred a centralized GenAI operating model
- With large number of use cases emerging**, institutions are considering several factors to determine prioritization with productivity improvement (47% ranked as top factor) and business need (44% ranked as 2nd top factor)** being the top drivers while return on investment being the least important metric
- Other important factors that are **playing a role in an institution’s adoption of GenAI are leadership commitment to prioritize GenAI (52%) and risk tolerance where 36% institutions are being conservative and considering incremental adoption**
- Institutions are continuing to see challenges they observed **in Q4 2023** related to defining uses cases and value at stake. In this survey, we heard institutions that **top reasons for abandoning use cases are insufficient performance (41%) and articulation of benefit (41%)**

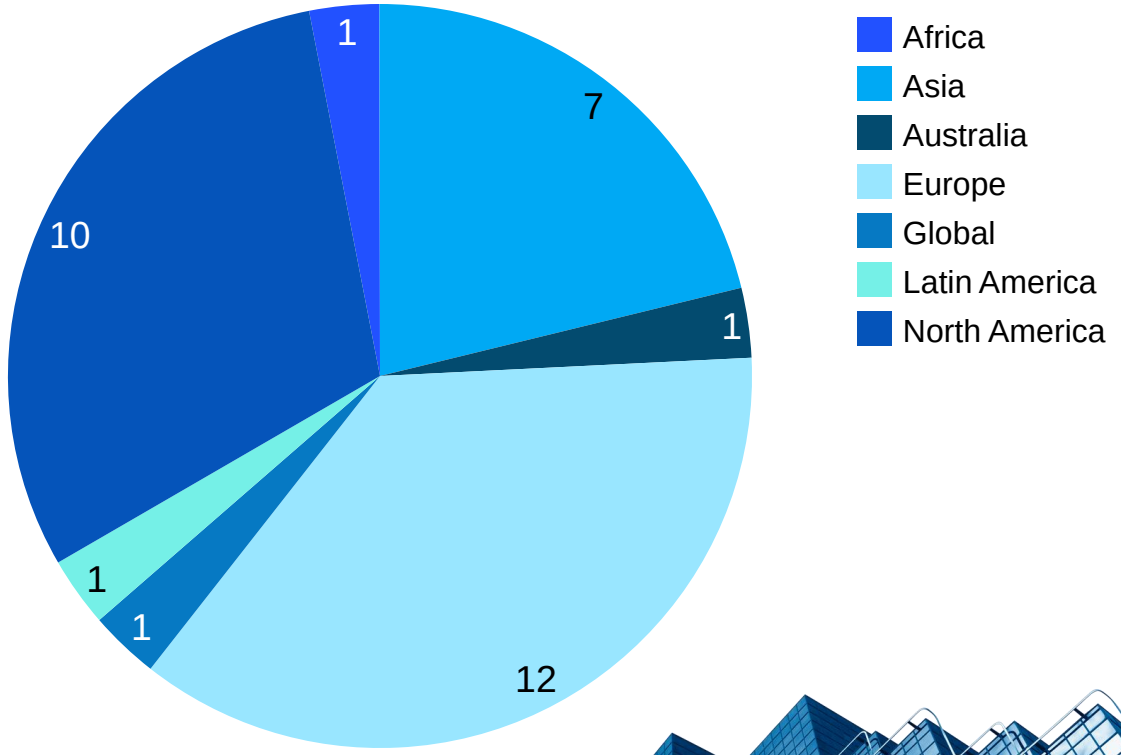
33 institutions participated in the survey with global representation

Number of institutions who responded to the online survey

Size of institution[1]



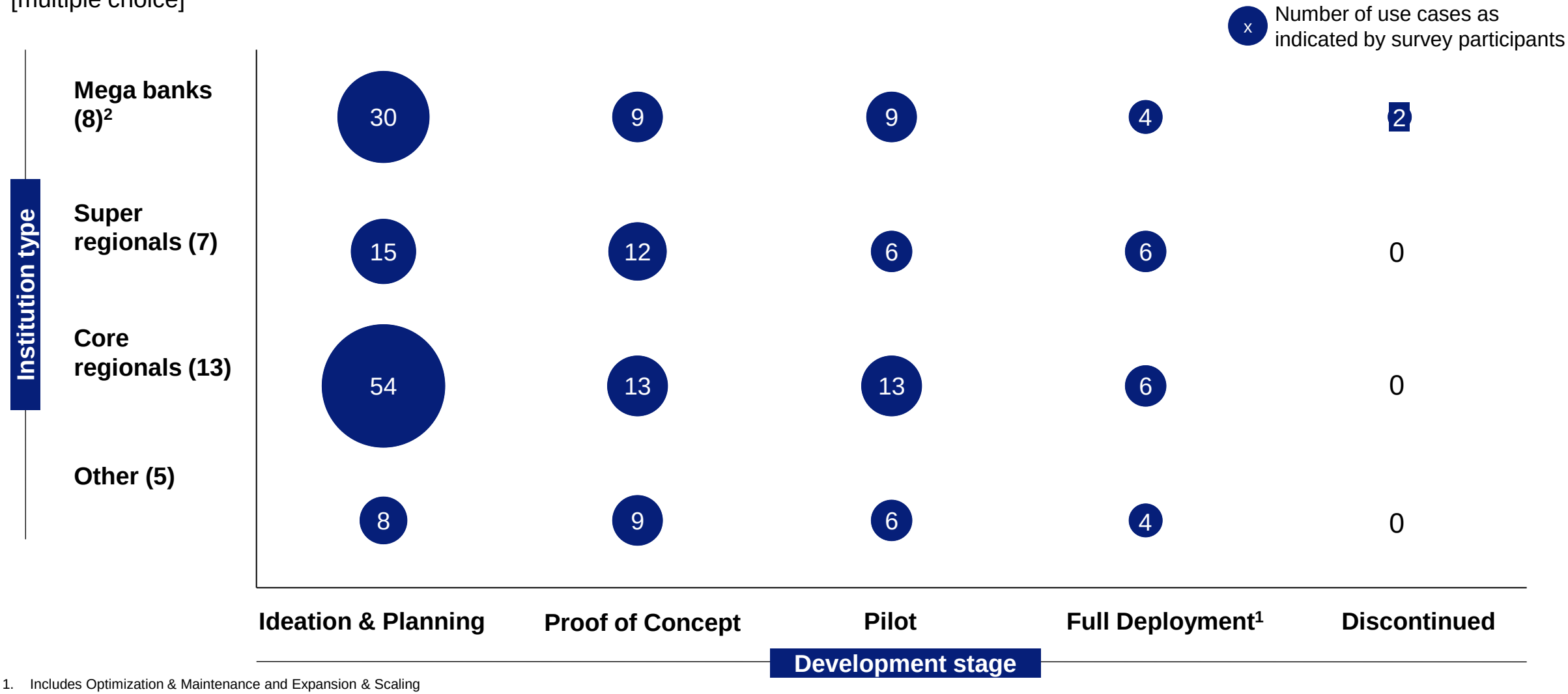
Geography of institution



1. Mega Banks include institutions with >$1,000Bn in assets; Super Regionals include institutions with $500-$1,000Bn in assets; Core Regionals include institutions with $100-500Bn in assets; Others include insurance companies/brokers and development banks

Most institutions are testing GenAI use cases, with super regionals leading the deployment

Question: Which GenAI use cases is your institution currently implementing in commercial credit and what are their development stage? [multiple choice]

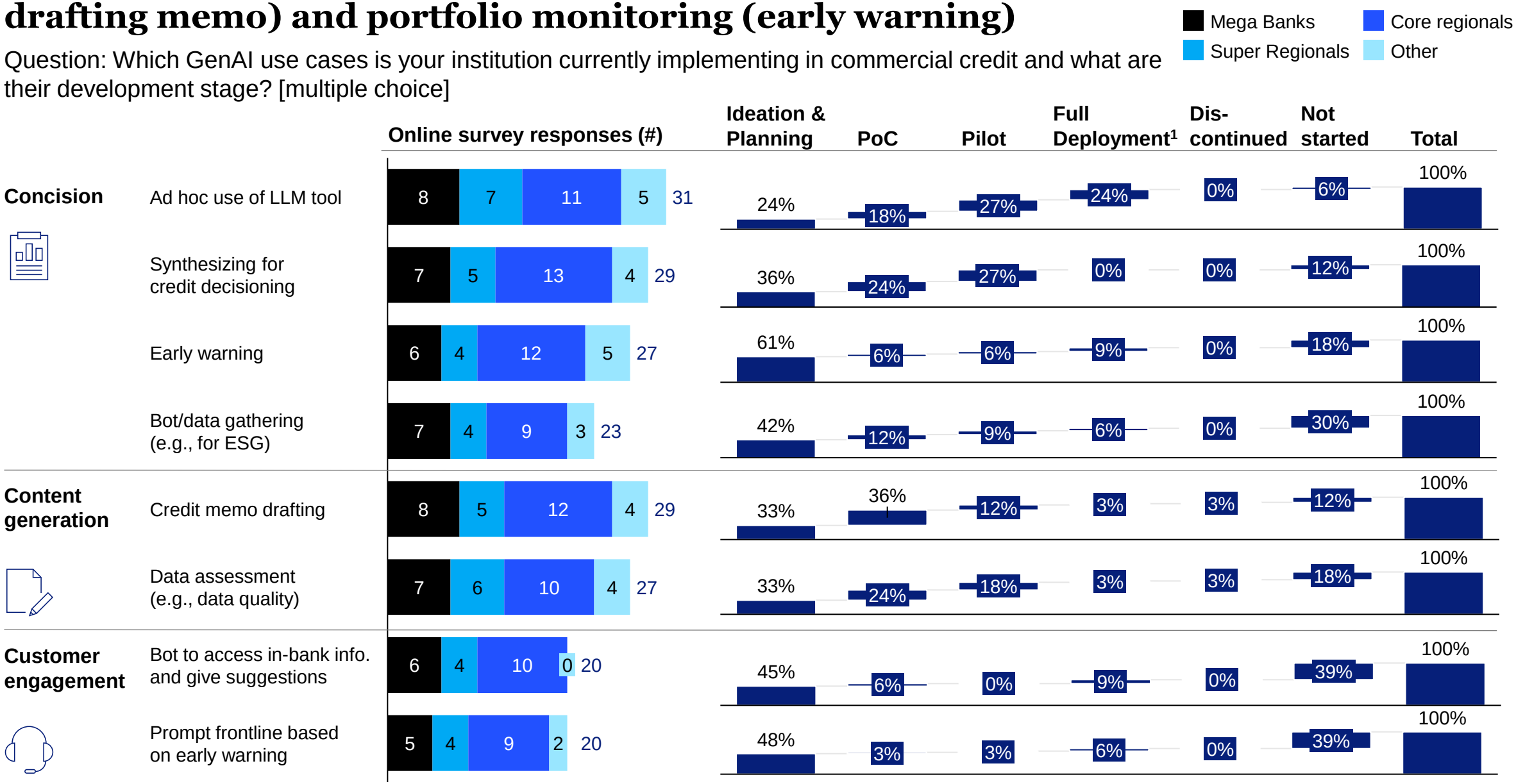


1. Includes Optimization & Maintenance and Expansion & Scaling
2. Mega Banks include institutions with >$1,000Bn in assets; Super Regionals include institutions with $500-$1,000Bn in assets; Core Regionals include institutions with $100-500Bn in assets; Others include insurance companies/brokers and development banks

Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Survey)

Institutions are prioritizing use cases like supporting underwriting (synthesizing, drafting memo) and portfolio monitoring (early warning)

Question: Which GenAI use cases is your institution currently implementing in commercial credit and what are their development stage? [multiple choice]



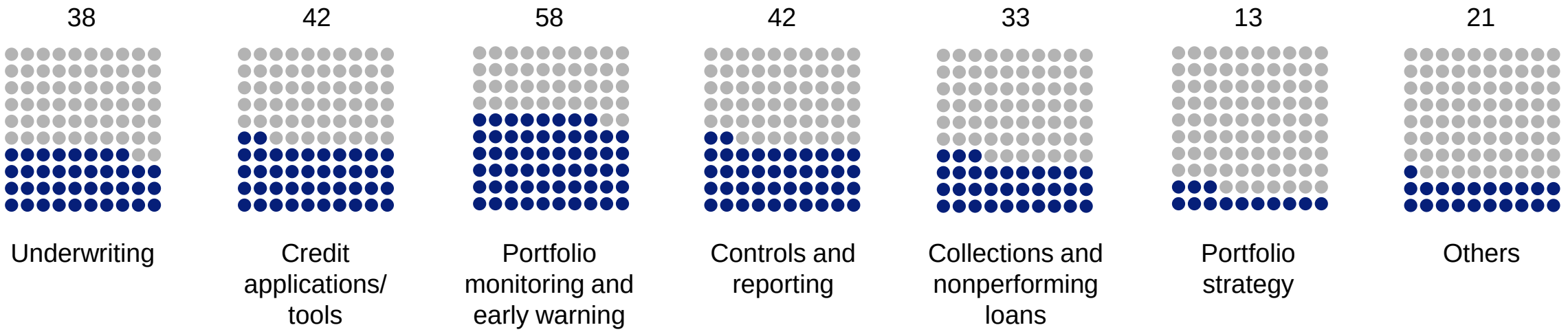
1. Includes Optimization & Maintenance and Expansion & Scaling

Source: Survey

Survey results on use case prioritization aligns with CRO expectation in October 2023

Question (October 2023 CRO roundtable): Which areas are you applying (or planning to apply) GenAI? [multiple choice]

Areas of GenAI application in the credit risk life cycle, % of respondents



Source: Roundtable of CROs from NA (https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/embracing-generative-ai-in-credit-risk)

A: Case example of how a bank automated credit memo drafting using GenAI

A video will play during the Webinar

Impact

20-60%

CA productivity gain

~30%

Faster decisioning speed

The use cases vary based on institutional priorities

Examples sourced from the 2024 interviews

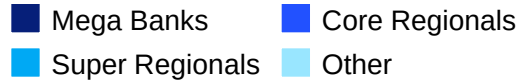
Ideation & Planning | PoC | Pilot | Deployment

	Use case		Example
Concision	Ad hoc use of LLM tools		▪ Several banks have deployed **virtual LLM assistants** for employee's ad hoc use, with a focus on document processing (PDF conversion, digitizing) and quick Q&A
	Synthesizing for credit decisions		▪ A Multilateral Development Bank is exploring a GenAI tool to **find the right documents, read, synthesize, and draw conclusions** for credit related research questions
	Early warning		▪ A Multilateral Development Bank is exploring the use of GenAI for **credit watchlist augmentation**, by combining scoring data with unstructured data like sentiment analysis to highlight non-compliance issues
	Bot / Data gathering		▪ A Mega Bank is deploying a bot for better **internal knowledge management** that can call customers and try to find internal information
Content generation	Credit memo drafting		▪ Several Mega Banks and Super Regionals are conducting pilots on GenAI agents that can extract information from unstructured and structured documents to **automate the creation of initial credit memos**
	Data assessment (e.g., data quality)		▪ A Mega Bank is conducting a PoC on using GenAI to **check data sources and flag likely wrong inputs**, which has many potential applications
Customer engagement	Bot to access in-bank info and give suggestions		▪ A Super Regional has conducted a pilot for a chat bot that **aids the relationship managers during client conversations**: The bot can perform real time Q&A based on their economic research
	Prompt frontline based on early warning		▪ A Mega Bank is conducting a PoC on **risk surveillance** using quarterly financials and industry outlooks to send early warnings to analysts, triggering rating review

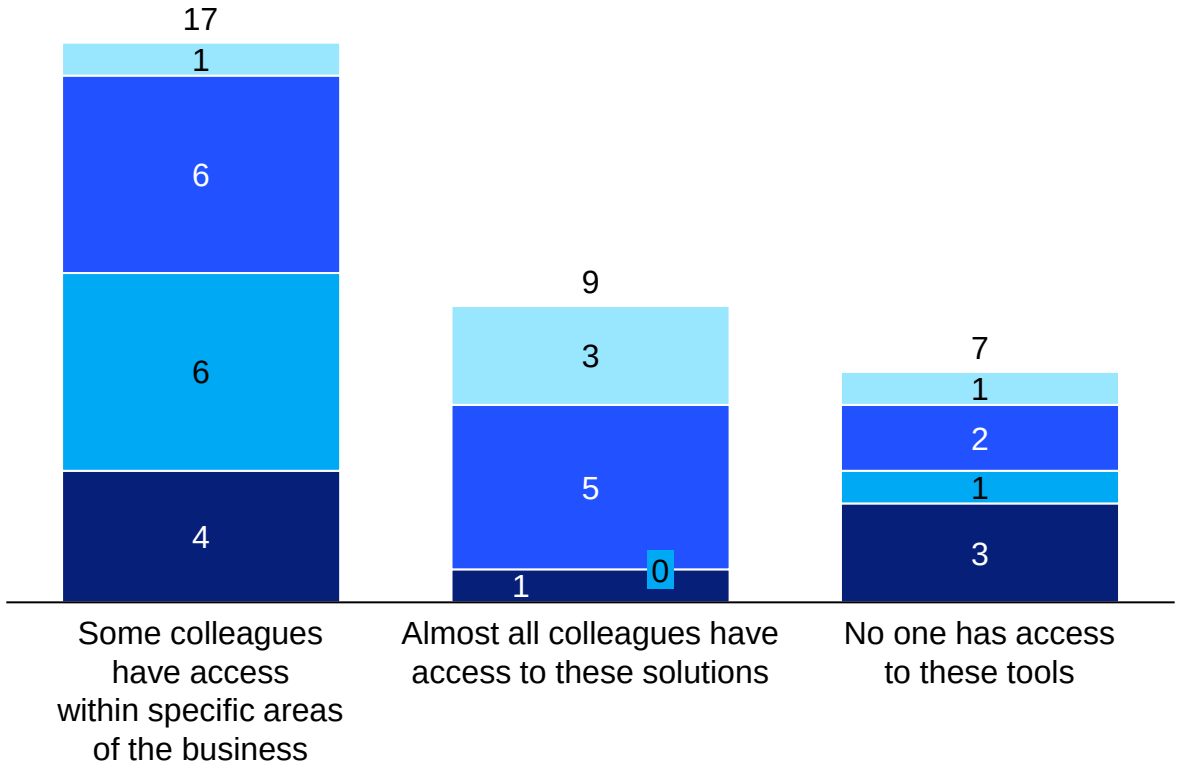
Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Interviews)

Most institutions have access to external GenAI tools and require understanding of internal guidelines as a prerequisite to access them

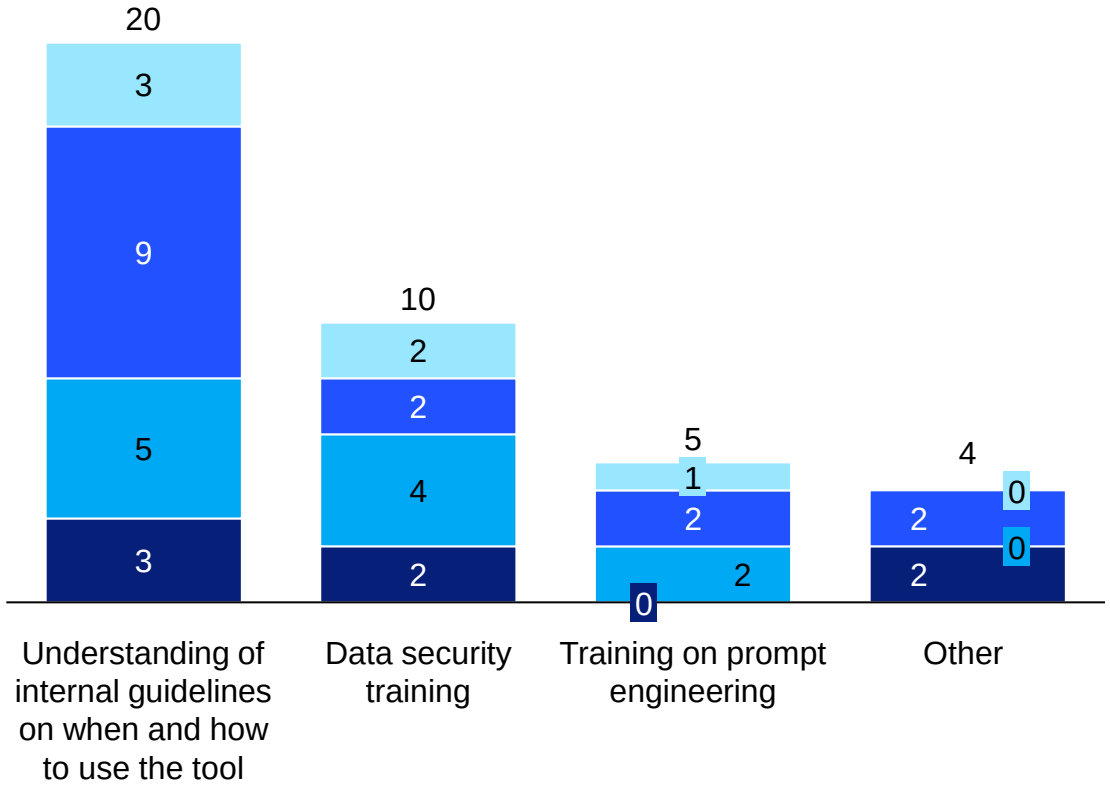
Question: How open is the access to external GenAI solutions [single choice] and what pre-requisites are required? [multiple choice]



~80% of the institutions have access to external GenAI solutions *(number of institutions)*



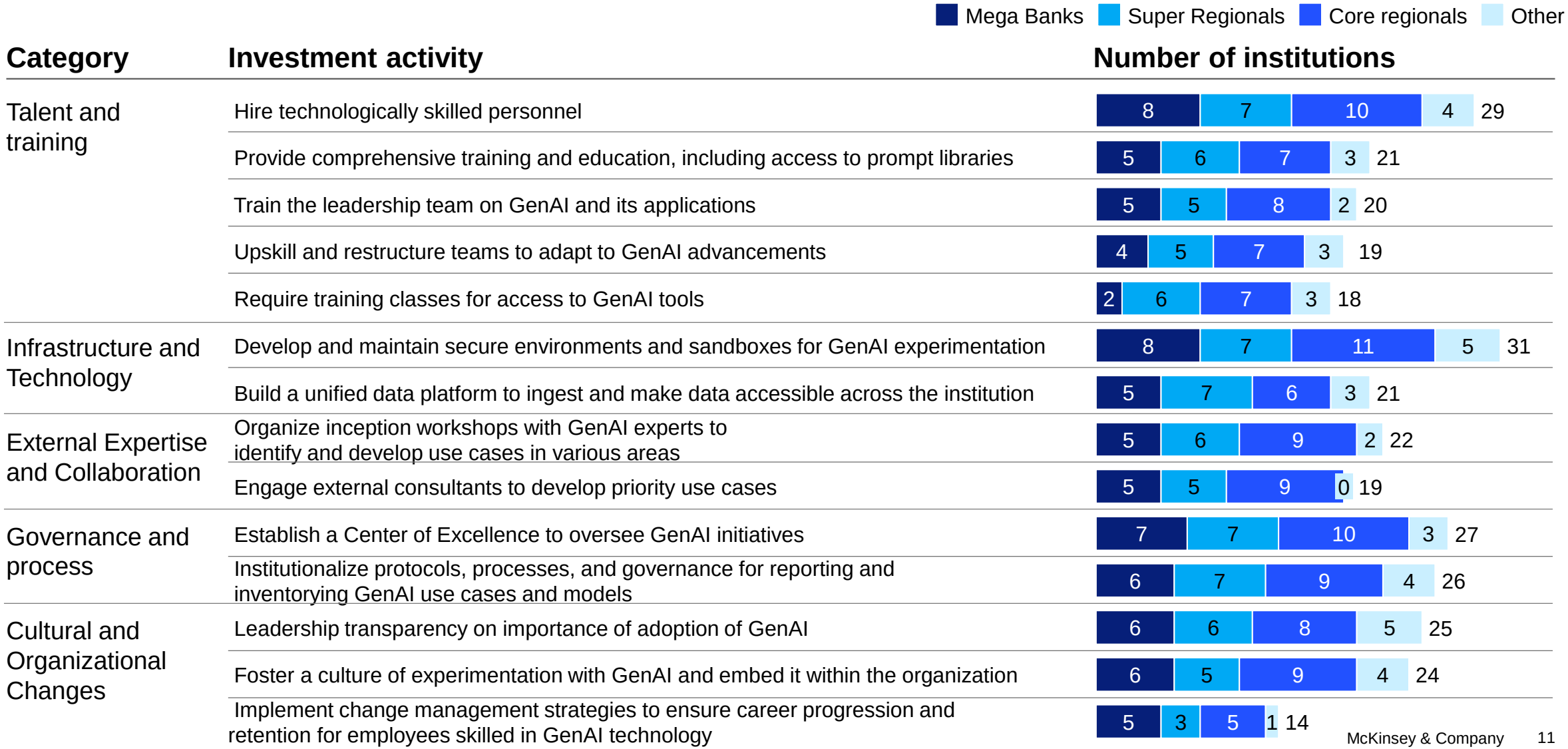
More than 50% of institutions require understanding of internal guidelines on when and how to use the tool as a prerequisite to gain access to the tool *(number of institutions)*



Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Survey)

Institutions have prioritized investment in building talent, CoE, secure environment and processes

Question: Has your institution invested in the following categories to drive adoption of GenAI? [multiple choice]



Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Survey)

Institutions prioritize productivity improvement as the most important factor when initiating or developing GenAI use cases

Question: How would you rank the following factors in terms of their prioritization / importance in the initiation/development of GenAI use cases in your institution? [rank order]

(number of institutions)

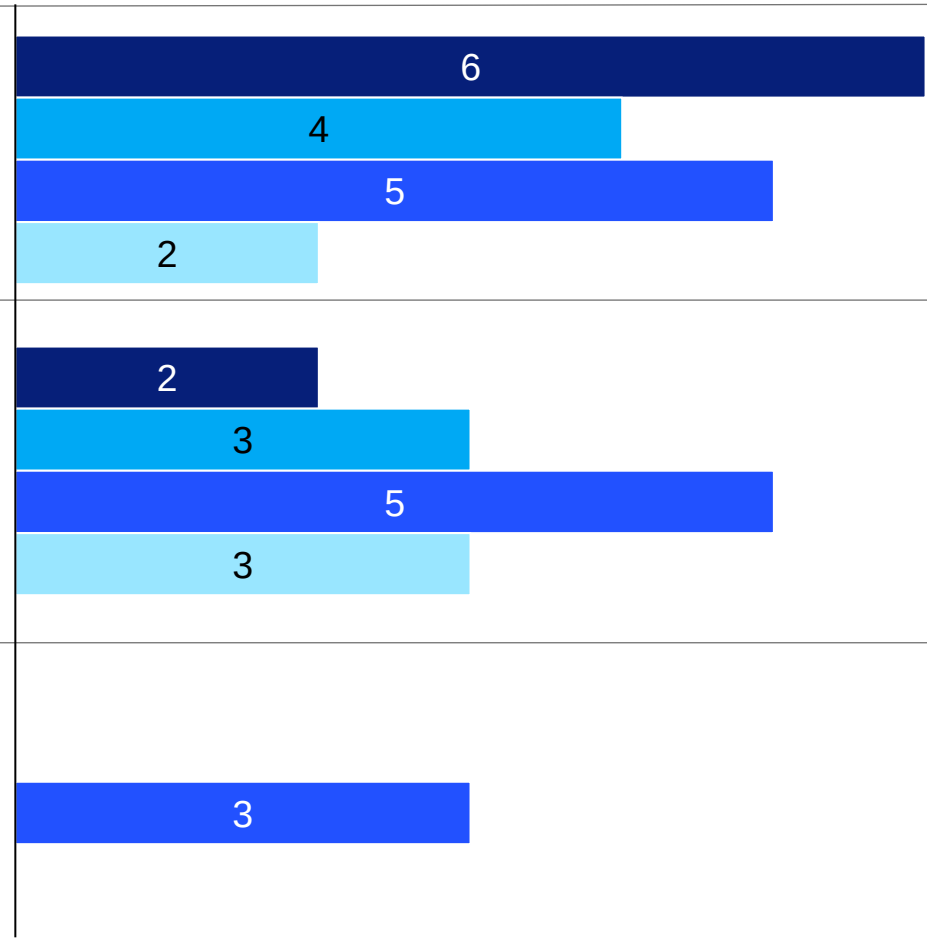
Factor	Ranking in survey	Mega Banks	Super Regional	Core Regional	Other
Productivity Improvement	47% of the institutions have ranked productivity improvement as their top factor for prioritization	3 2 2	1 3 3	8 1 3 1	3 1 1
Business Needs	44% of the institutions have ranked business needs as the second factor of importance in prioritization	1 3 3	1 2 1 3	1 5 6 1	4 1
Regulatory Compliance	25% of the institutions have ranked regulatory compliance as the third factor of importance for prioritization	2 1 4	4 1 1 1	2 4 3 4	1 3 1
Return on Investment	50% of the institutions have ranked return of investment as the least important factor for prioritization	1 2 1 3	1 1 2 3	2 3 1 7	1 1 3

Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Survey)

Leadership at majority of the institutions are positioning GenAI as a priority

Question: How would you describe your institution's leadership commitment to the adoption of GenAI? [single choice]

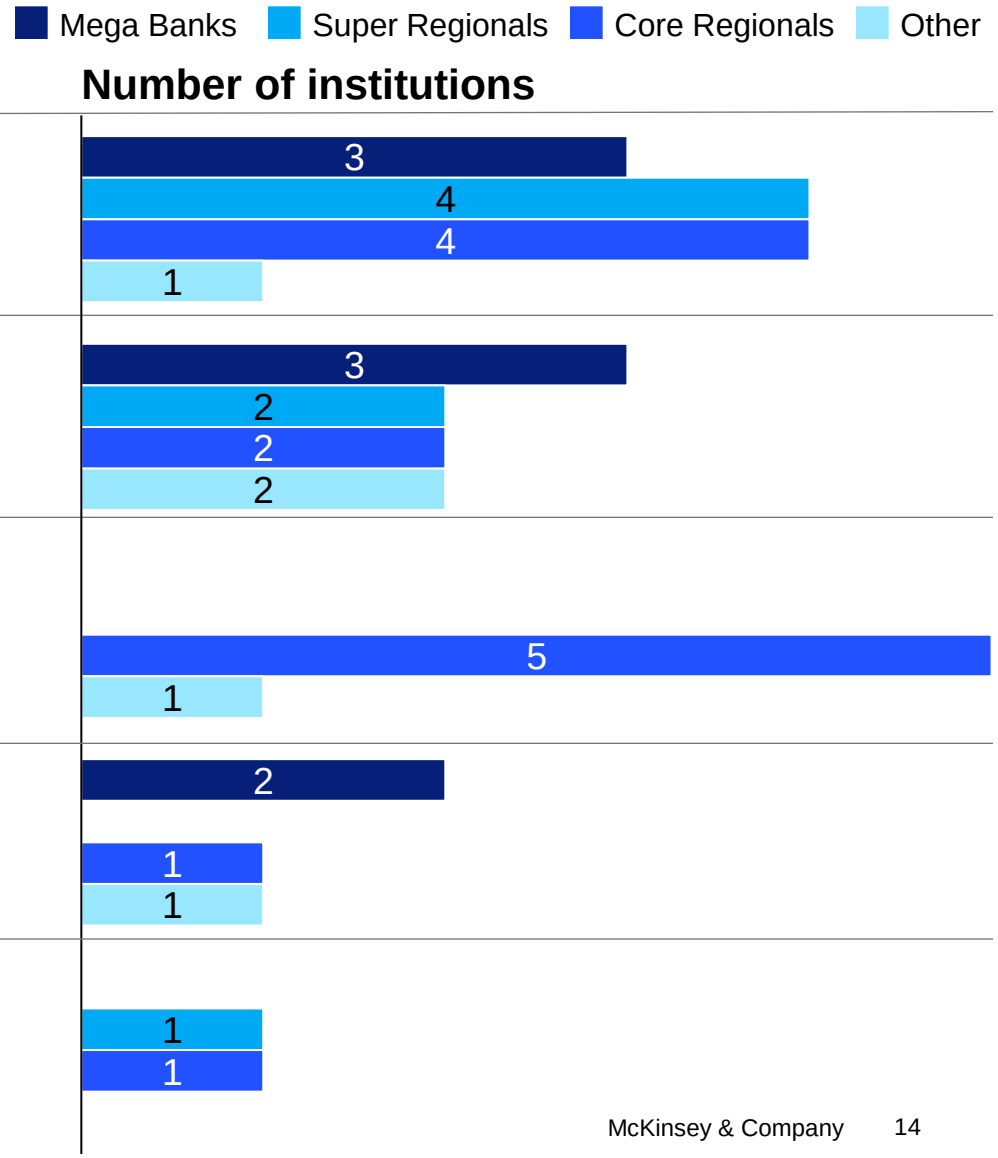
Level	Description	Number of institutions
Priority	**52% of institutions position Gen AI adoption as a priority** *Senior leadership promotes developing GenAI use cases as a priority and supports through investments and hiring; and demonstrates through tone and actions that there will be setbacks given that the technology is nascent*	
Interested but not a clear priority	**39% of Institutions are interested but Gen AI adoption is not a clear priority** *The organization is encouraged to learn about GenAI, and is supportive of use cases proofs of concept; however, there is less commitment to investments/hiring without a "proven" ROI and setbacks*	
Not positioned as a priority	**9% of Institutions (all Core Regional banks) don't position the adoption of Gen AI as a priority** *Senior leadership does not seem to proactively engage with the topic, and the message is rather to approach with caution based on the associated risks*	



Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Survey)

Majority of the institutions are moving ahead cautiously with GenAI applications, with Super Regionals and Core Regionals showing slightly higher appetite for risk

Question: How would you describe your institution's risk profile when it comes to the adoption of GenAI? [single choice]



Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Survey)

Institutions leading GenAI development are typically taking the following actions

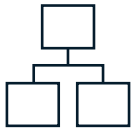
Highlights from the interviews

Engaging with regulators proactively to understand regulatory expectations and ensure compliance

Establishing an institution-wide CoE driven by technologically able experts while maintaining close collaboration with IT

Aligning processes with the institution stakeholders for building GenAI tools to support End-to-End experimentation and deployment

Investing in infrastructure, such as machine learning operations (MLOps) and data processing pipelines, to ensure sufficient preparation for a new GenAI use case



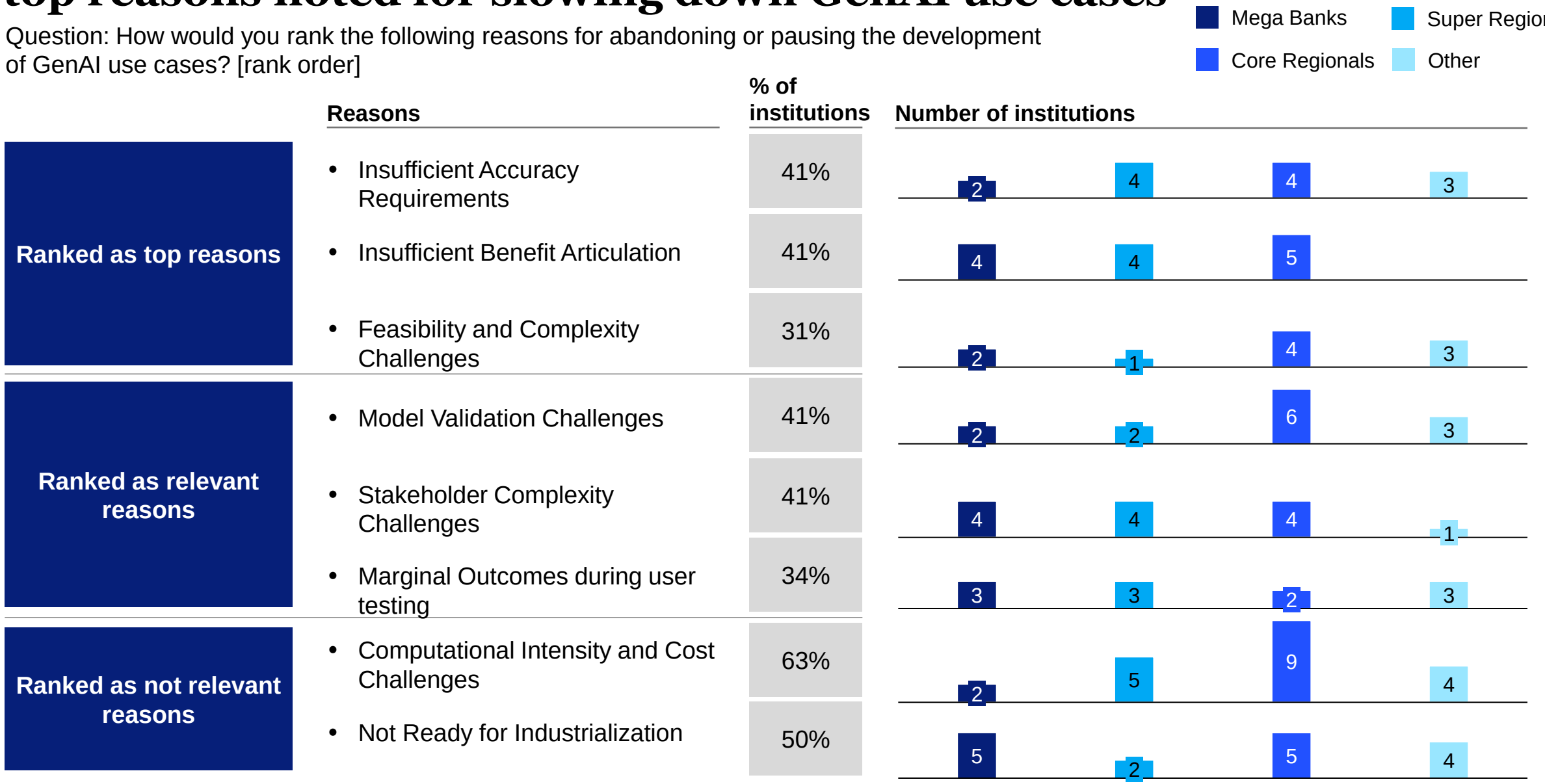
Developing a modular solution architecture that allows parallel development and customizable connections across different layers

Piloting on use cases that involve the least level of risk (e.g., bots for ad hoc internal use) to test the feasibility and effectiveness of GenAI before scaling up

Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Interview) & Roundtable of CROs (https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/embracing-generative-ai-in-credit-risk)

Insufficient performance and complexity challenge are the top reasons noted for slowing down GenAI use cases

Question: How would you rank the following reasons for abandoning or pausing the development of GenAI use cases? [rank order]



Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Survey)

Interview insights have revealed similar themes across institutions on the key challenges for adopting GenAI use cases

Highlights from the 2024 interviews

Reason for abandoning use cases	Highlights from the interviews
Insufficient Accuracy Requirements	▪ **Hallucination issues** with LLMs pose a challenge if a business scenario requires close to 100% accuracy ▪ Stakeholders often **lack sufficient understanding of the model logic**, leading to incorrect selection of parameters for measuring accuracy of outputs
Insufficient Benefit Articulation	▪ Institutions often have **difficulty demonstrating strong ROI or benefits** by adopting GenAI models, leading to **reluctance from business** to commit to full-scale deployment
Feasibility and Complexity Challenges	▪ The nature of **unstructured data** poses a challenge for credit memo related use cases – complications arise to manage and align on expectations for this initiative ▪ **Heavy ground level work** to collect all information in a data base to get ready for GenAI applications provides additional complexity for institutions (e.g., credit memo are not organized in a way that is easy to extract)
Model Validation Challenges	▪ Institutions often **struggle with validating the performance** of the models given no way to back test
Stakeholder Complexity Challenges	▪ The presence of **too many stakeholders** is a common organizational challenge for effective project management. Underlying complexity factors may include: – Time commitment and other priorities – Willingness of the business to utilize offered GenAI solutions – Upstream data risk & compliance requisites for developing GenAI models
Marginal Outcomes during User Testing	▪ Underwhelming PoC results often raise concerns about **opportunity costs**
Computational Intensity and Cost Challenges & Not Ready for Industrialization	▪ **Requirement of high-quality machines and infrastructure** limits the number of users and machine capacity ▪ Institutions also find it **difficult to find cost-effective tools** (even with using vendors) and they must be able to demonstrate value of these tools

Source: IACPM/ McKinsey Study on the Use of Generative AI in Credit Portfolio Management (Interview)