**IFC-Bank of Italy Workshop on "Data science in central banking"**

**18-20 February 2025**

# IFC survey on central banks' use of AI and ML[1]

Alberto Naudon,
IFC Chair and Central Bank of Chile

[1] This contribution was prepared for the workshop. The views expressed in this publication are those of the authors and do not necessarily represent the official views of the Committee, its members, or the BIS.

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# IFC survey on central banks' use of AI and ML

**Alberto Naudon**, *IFC Chair and Central Bank of Chile*

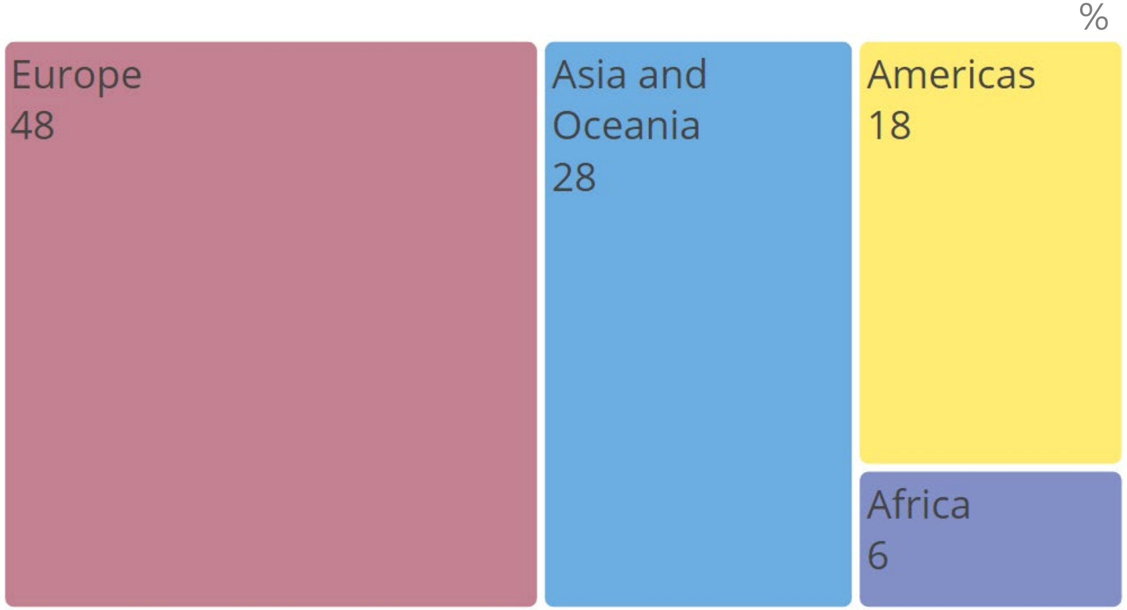
4th IFC and Bank of Italy workshop on "Data Science in Central Banking"

18 February 2025, Rome (Italy)

# IFC survey on central banks' use of AI and ML

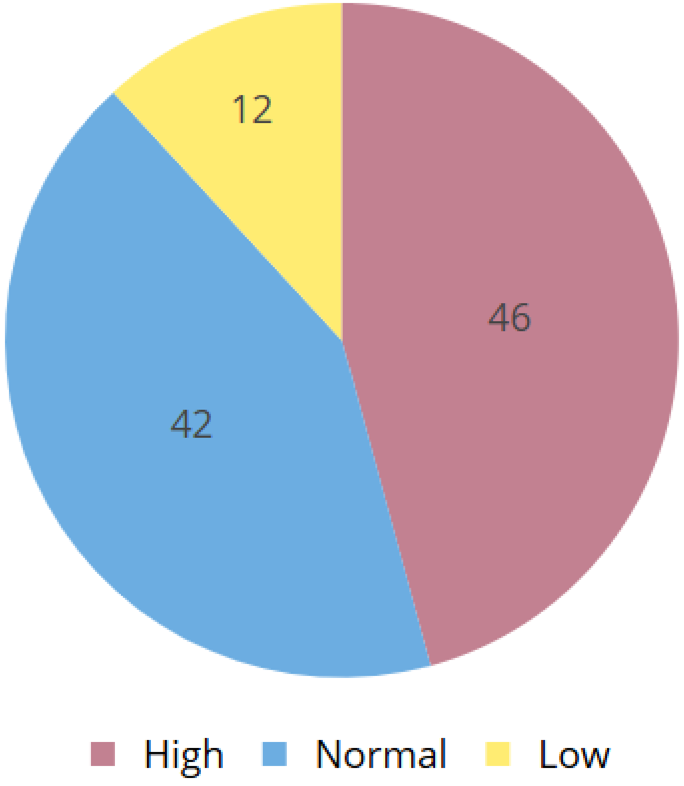
- **Period**: September – October 2024
- **Coverage**: 60 jurisdictions
- **Six chapters**:
  - Scope and interest
  - Expectations
  - Applications
  - Organisational policies, governance and risks
  - IT stack
  - Collaborative strategies

Share of respondents by geographical region



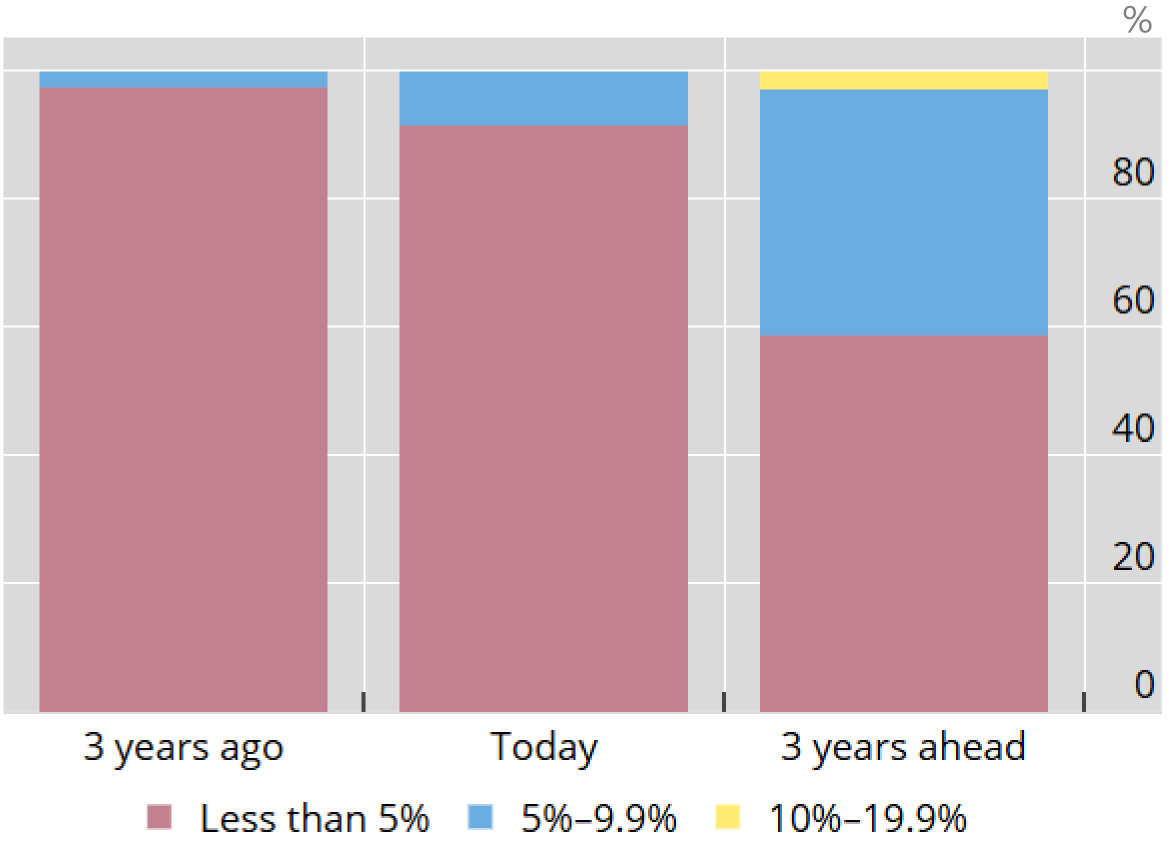
# 1 Artificial intelligence is a **priority** for central banks

AI/ML importance in strategic planning




Question: On a scale from 1 (low priority) to 3 (high priority), how important is AI/ML to your institution's strategic goals over the next two years?

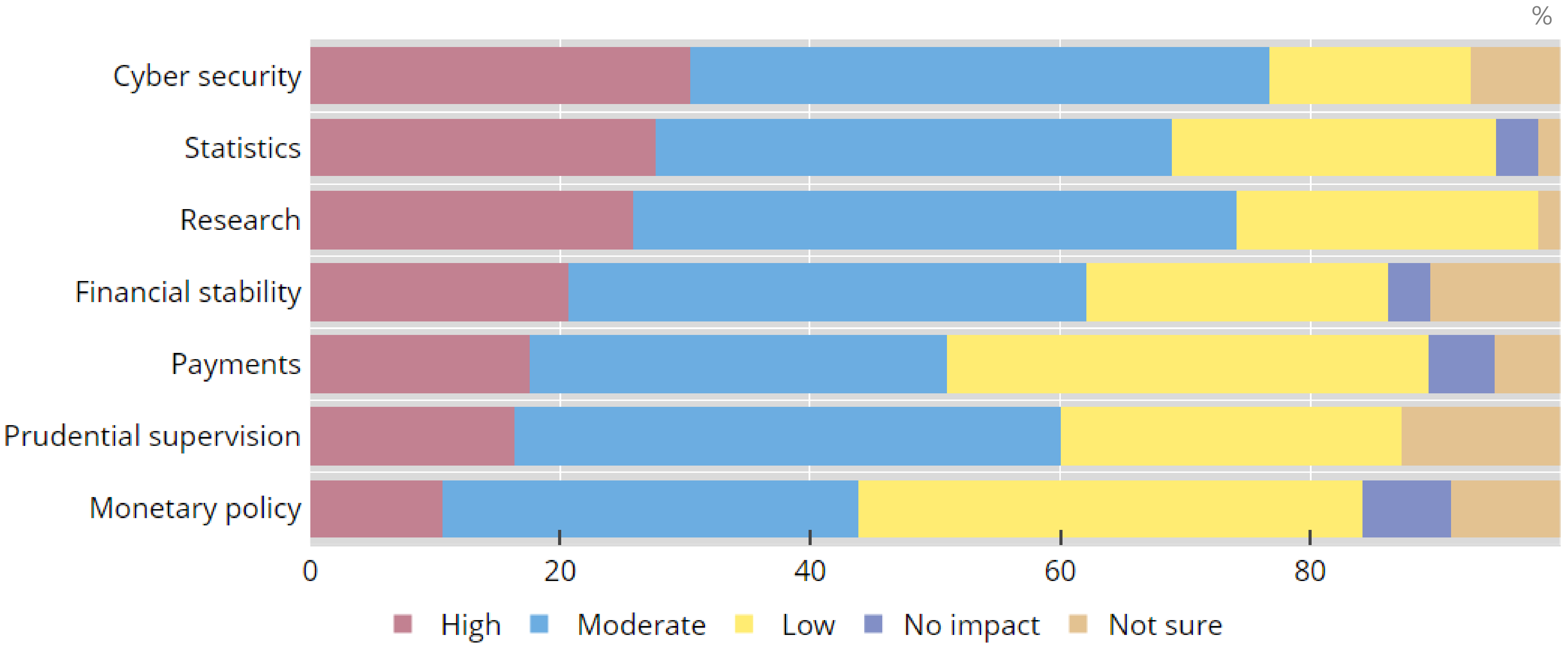
Budget allocated to AI/ML projects




Question: What percentage of the total budget of your institution is intended to finance AI/ML projects?

1

# AI is expected to have a **significant impact** on **cyber security**, **statistics** and **research**

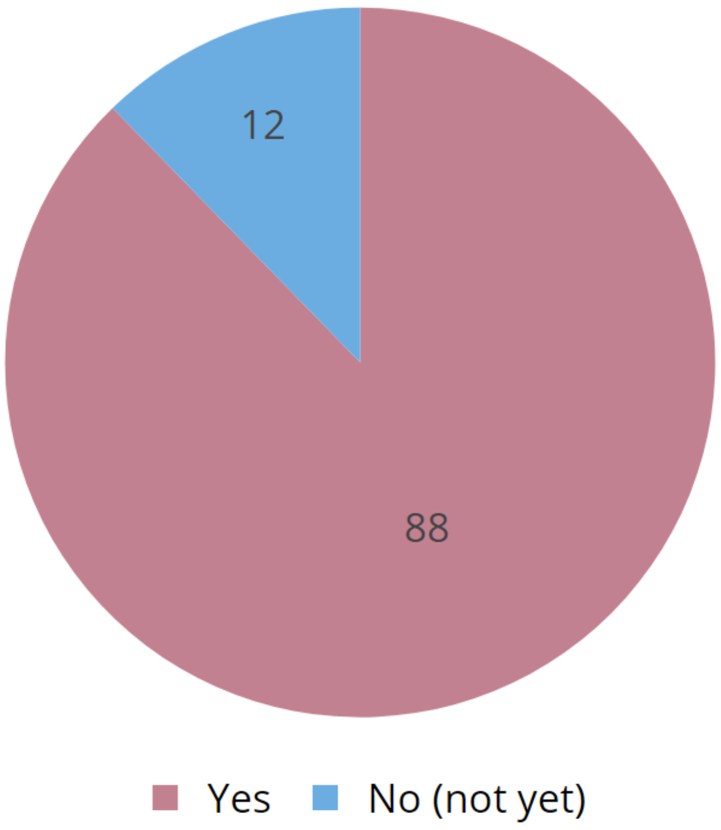



Question: Please rate the impact you expect from AI/ML in the following functional domains in the next two years.

1

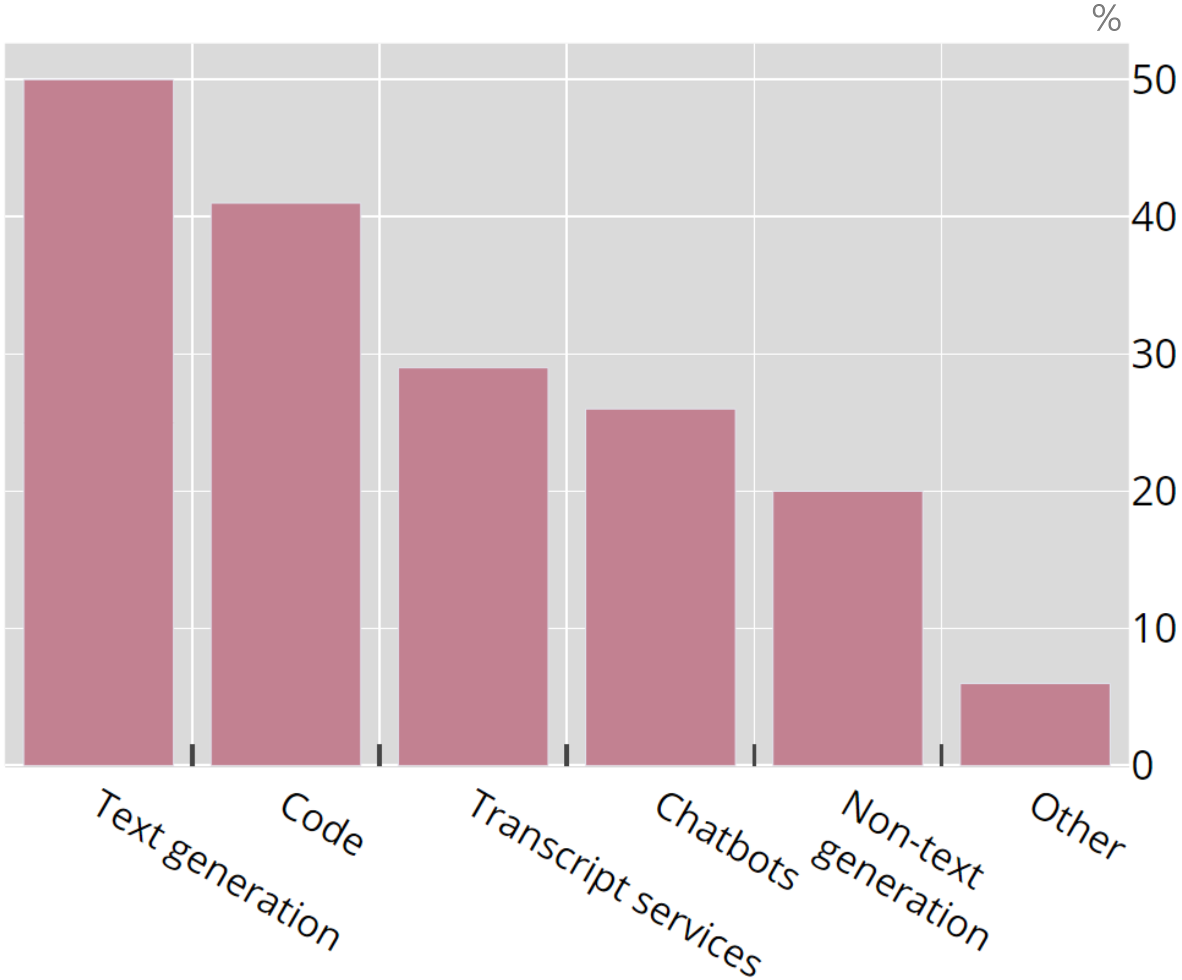
# Central banks widely use **generative AI**

Share of central banks using generative AI




Question: Are you currently using generative AI in your institution?

Use cases mostly involve text and code generation

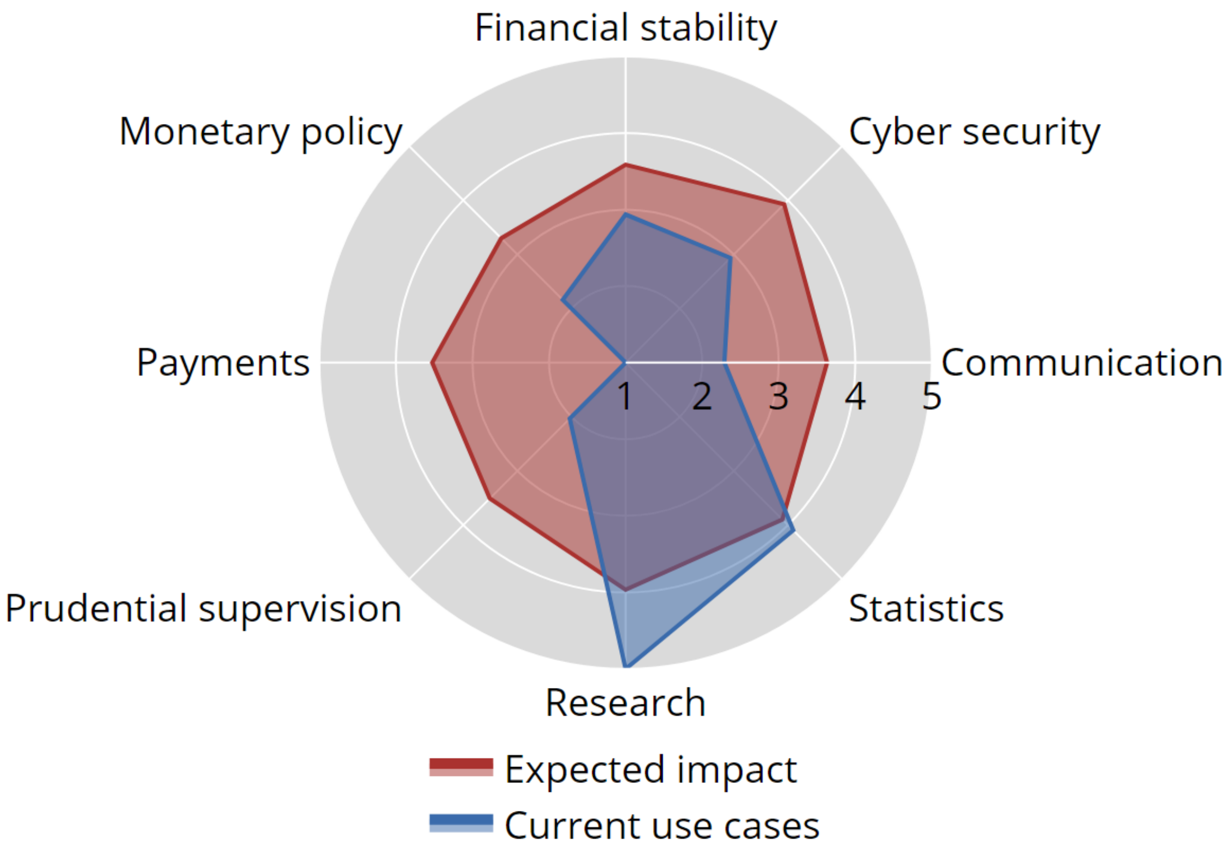



Question: If yes, please select the applicable use cases.

1

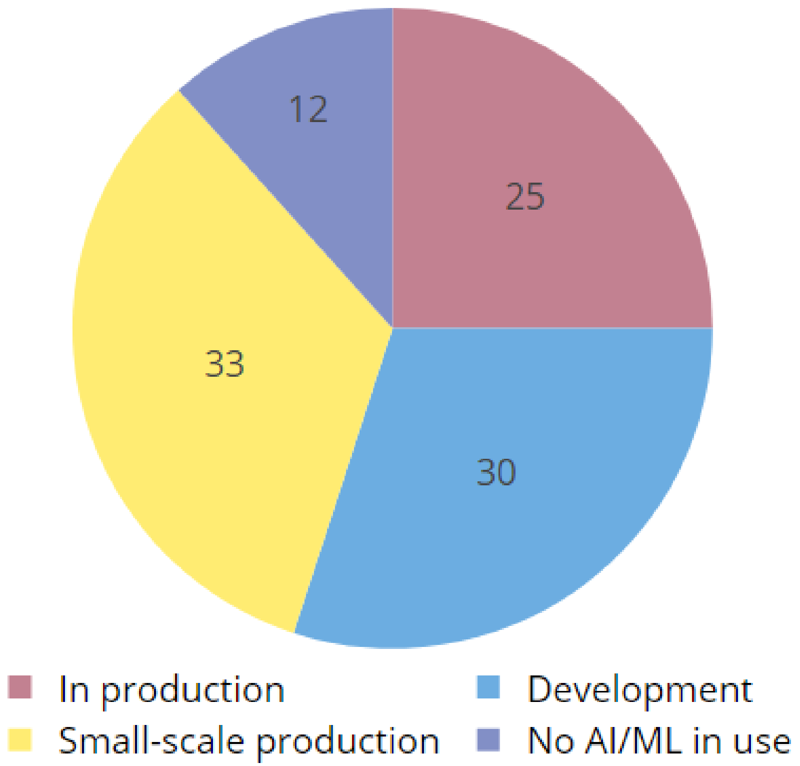
# Yet **expectations** do not necessarily match **applications** which remain limited

## Expected impact and current applications of AI/ML[1]




[1] The expected impact is calculated as the average of the response rates on a scale from 1 to 5 (1: not sure; 2: not impactful at all; 3: slightly impactful; 4: moderately impactful; 5: highly impactful). Current use cases are derived as the total count normalised on a scale from 1 (minimum) to 5 (maximum).

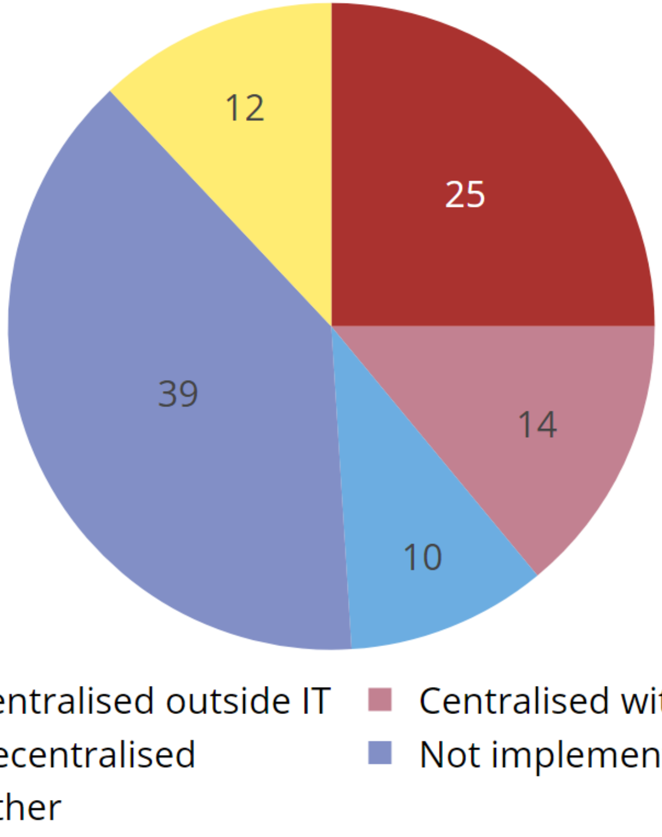
## AI/ML use cases




Question: What is the state of AI/ML adoption in your institution?

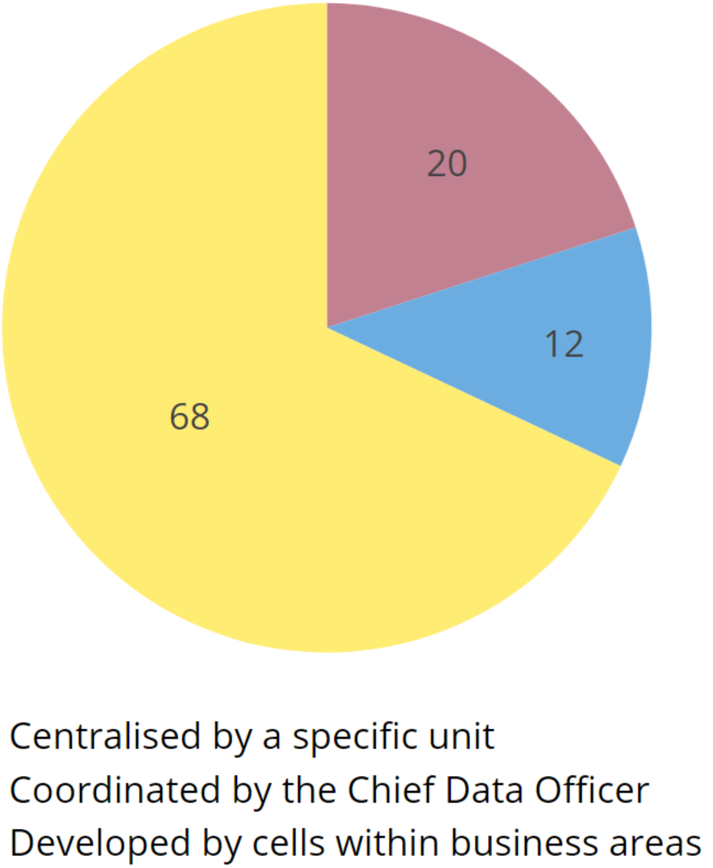
# 2 **Governance is still in its infancy** and involves multiple stakeholders …

## While AI governance is mostly not implemented or centralised…




Question: How is the AI governance role implemented in your institution?

## … AI/ML projects are mostly developed across business areas

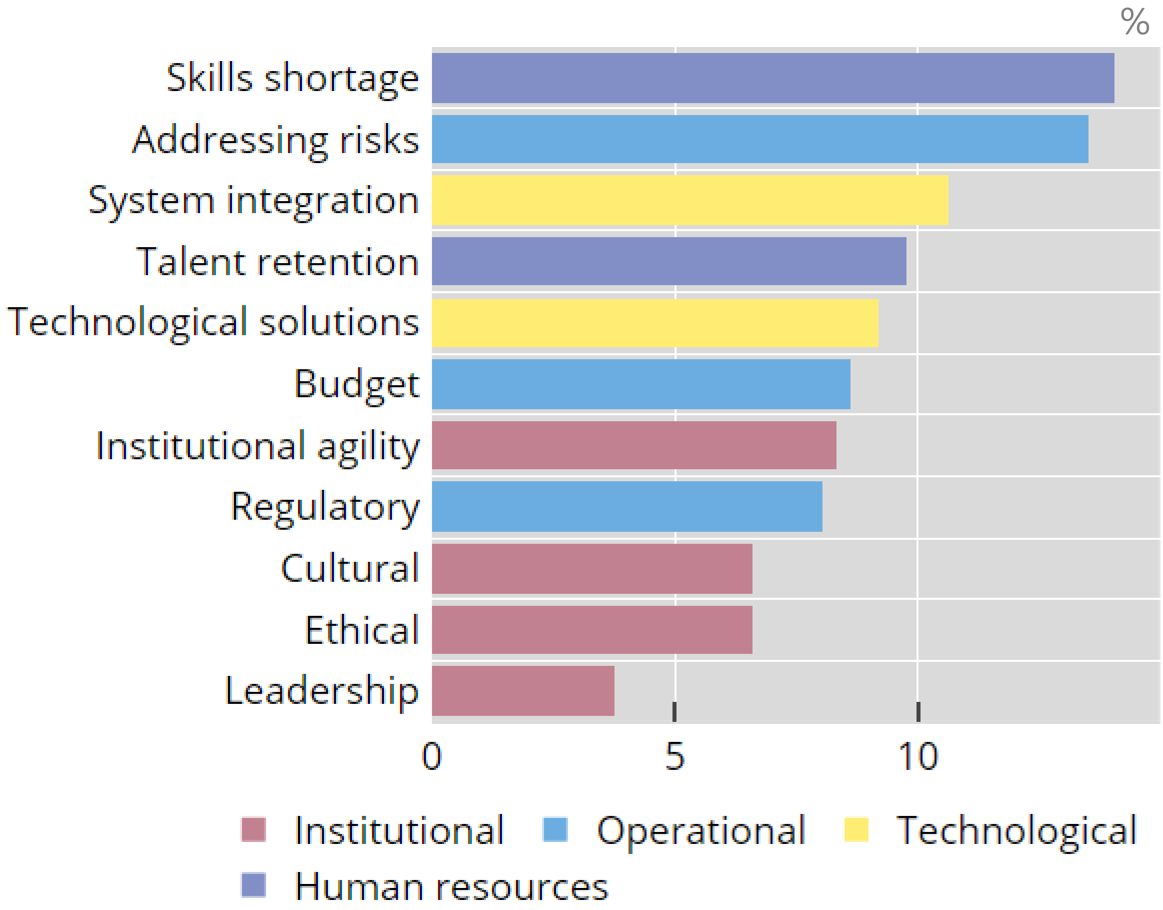



Question: How is the work on AI/ML projects organized in your institution?

2

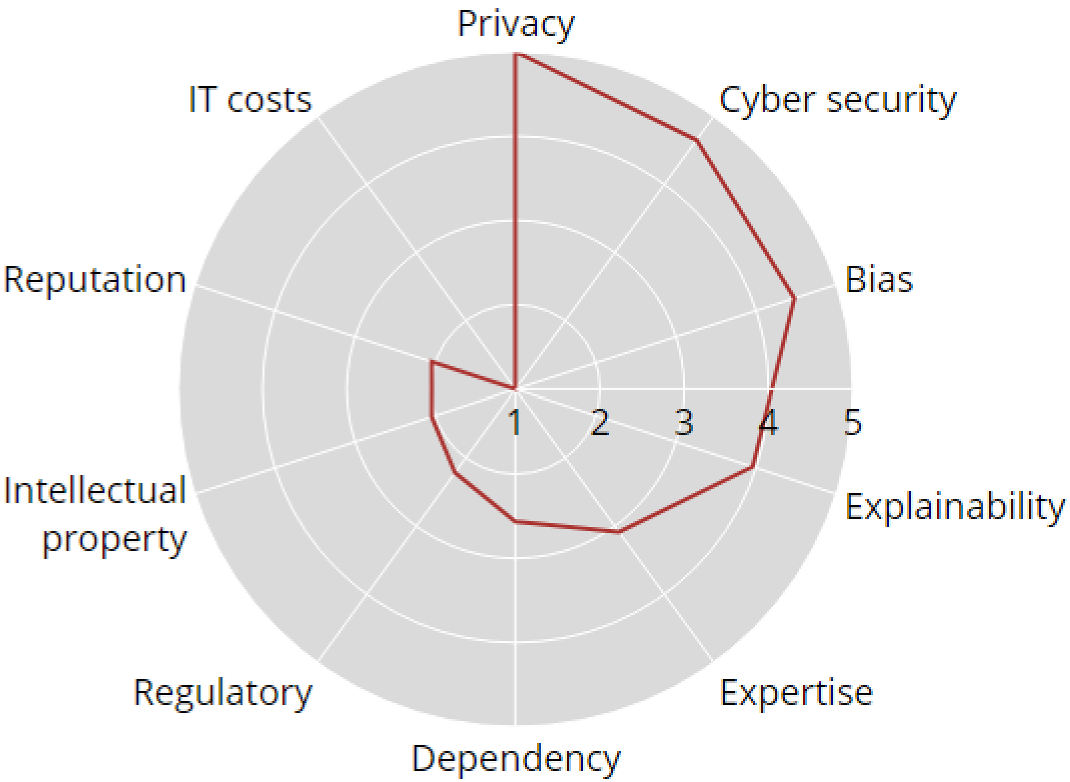
# AI is also posing some key **challenges** and **risks**

## Key barriers to AI/ML adoption




Question: What are the biggest challenges to business adoption of AI/ML?

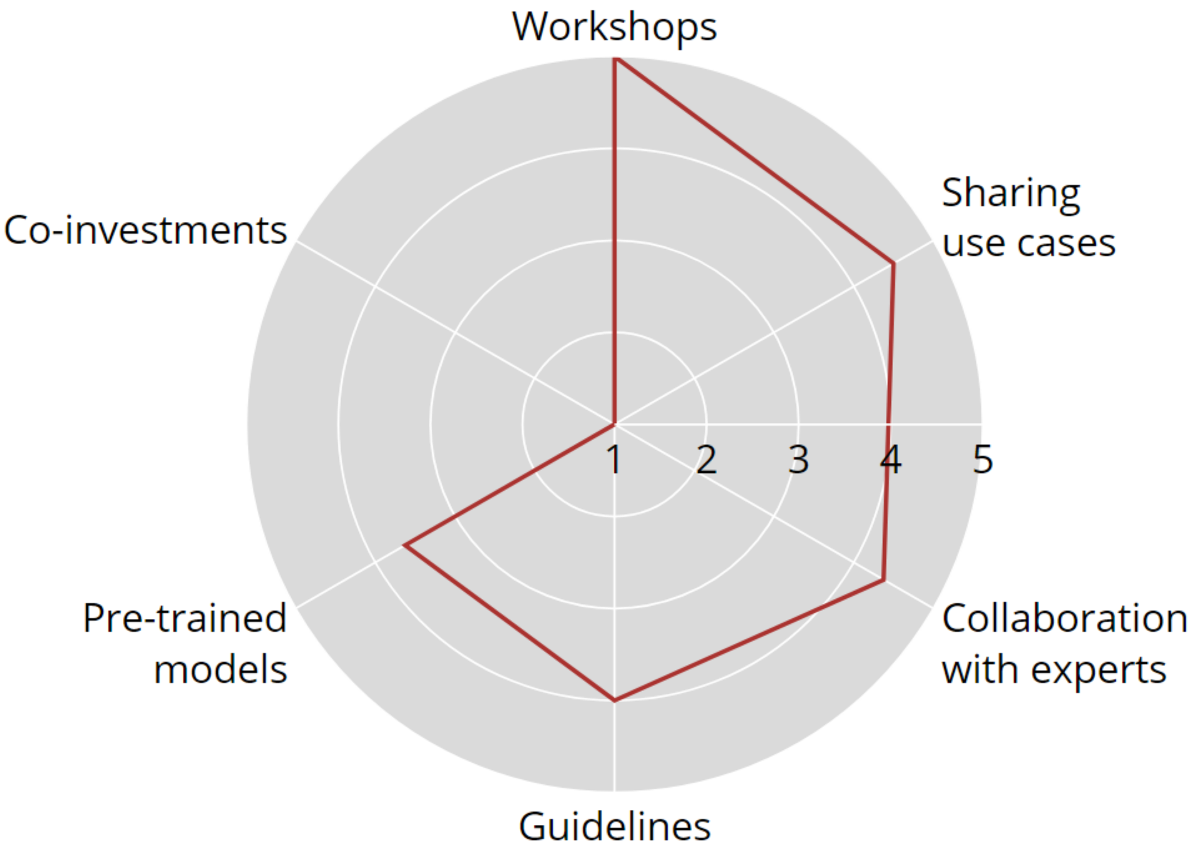
## Main risks




Question: Which AI/ML risk does your institution consider relevant?

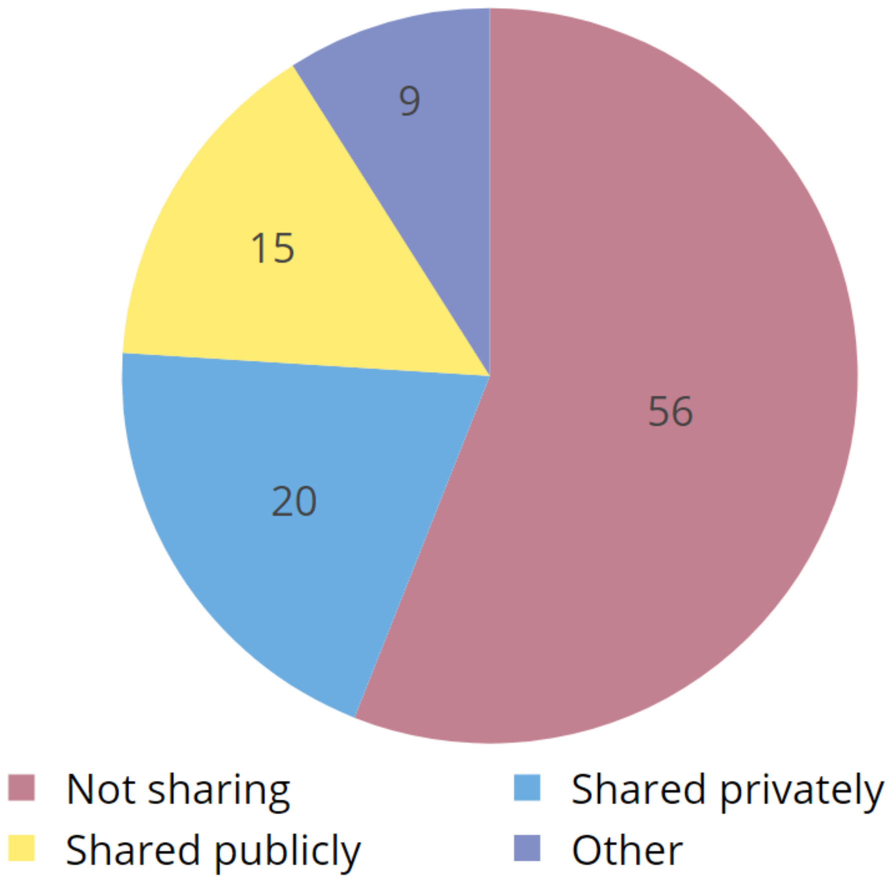
# 3 Looking forward, three priorities: **sharing**

## Sharing knowledge, code and use cases




Question: What are the main avenues for central bank collaboration to address the challenges of AI going forward?

## Sharing AI/ML code and models has yet to mature

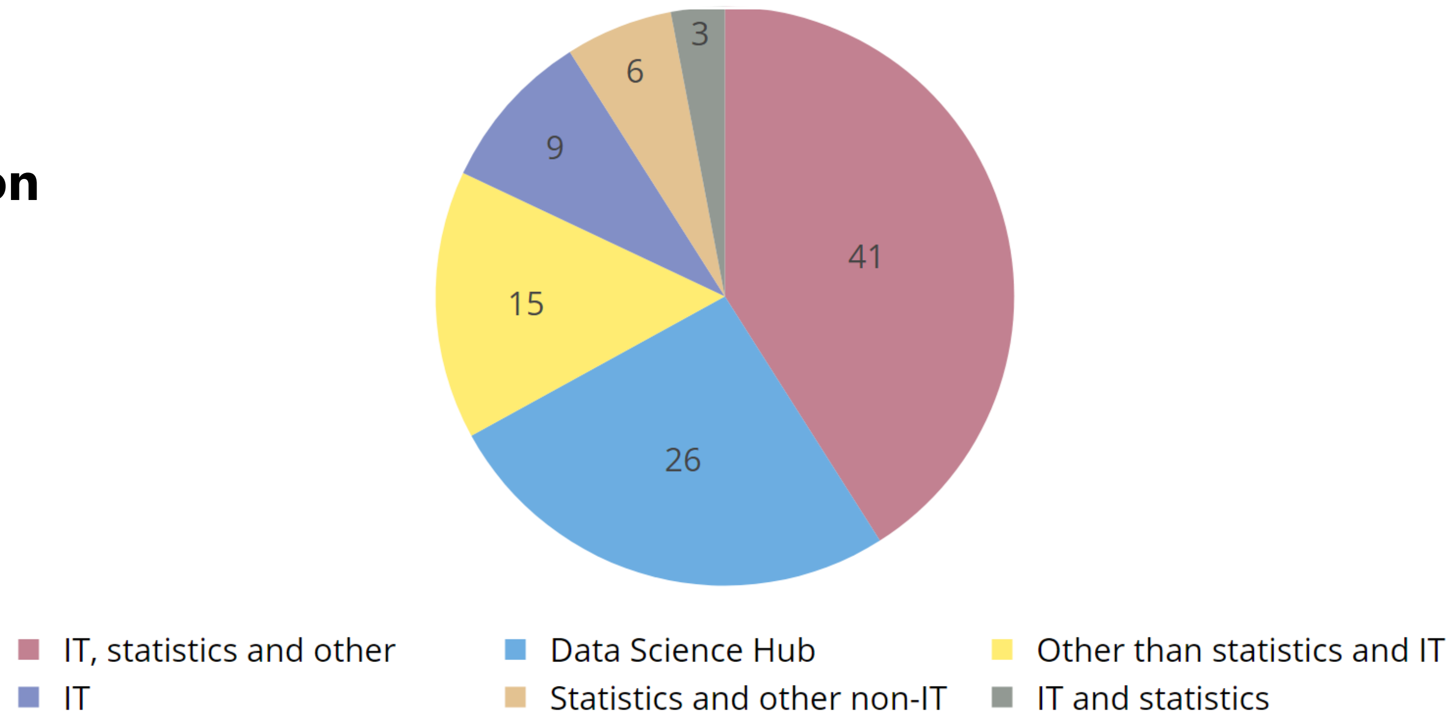



Question: Does your institution share AI/ML code or models, or plans to?

# 3 Looking forward, three priorities: **collaboration**

- **Collaboration** *within*, *across* and *outside* central banks
- Key role of **international cooperation**
- Coordination to **co-invest** but also to **monitor** and **manage risks**

AI/ML involve strong collaboration within the central bank




Question: Departments involved in current AI/ML-related projects by central banks.

# 3 Looking forward, three priorities: genAI, **data quality** and data platforms

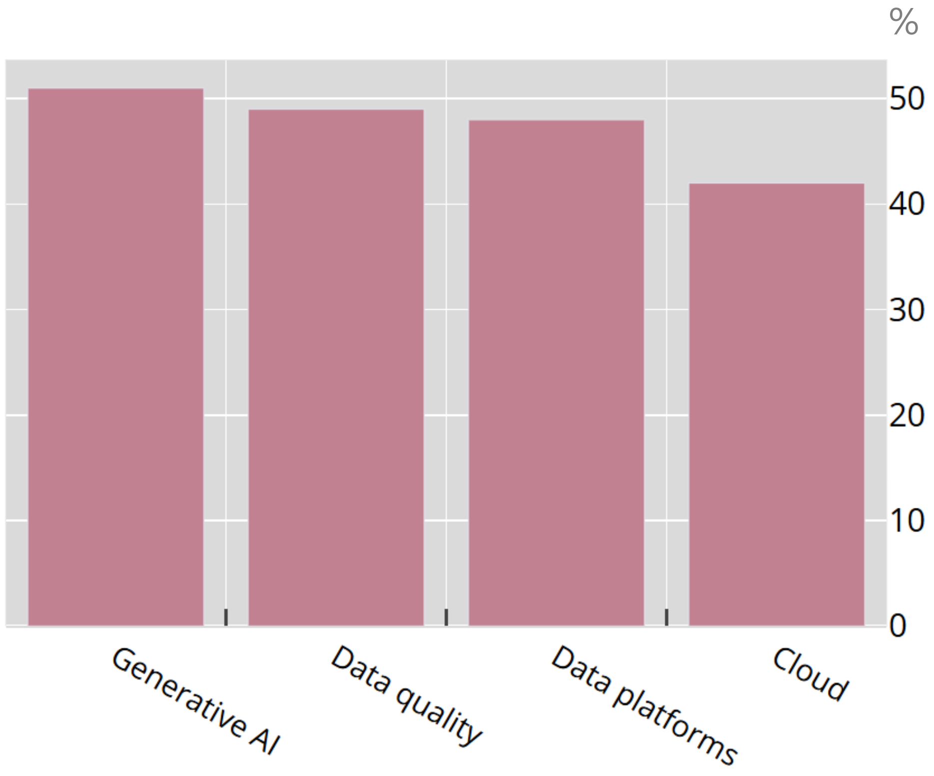
Beyond expanding the use of generative AI, **prioritizing data quality** as a top priority :

- Good **AI** is good **data**
- AI to get the **data right**
- AI to get the **right data**

Central banks as providers of **high-quality data for AI**

Maximize data value through **data platforms**, including **leveraging cloud** services and infrastructures

Priorities in the near future




Question: In your opinion, what will be the emerging technologies topics that will concentrate interest and resources in the upcoming future?

# **Thank you** for your attention !

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