TOPICS:

Technology

SOURCE:

European Central Bank

ECB: Technology Is Neutral, Governance Is Not - AI Adoption in the Banking Sector

- In this keynote address, Pedro Machado (ECB Banking Supervision) outlines the supervisory perspective on **artificial intelligence** (AI) adoption within European banks. Technology itself is neutral, **governance frameworks determine its prudential impact**.

- **AI use in banking has moved from experimentation to materiality**. Over 85% of large supervised institutions now deploy AI, with applications expanding beyond traditional areas such as credit risk modelling and fraud detection into IT operations, legal analysis and front-line customer services. This horizontal integration alters the supervisory risk lens: AI is no longer confined to model risk but increasingly affects operational, compliance, conduct and strategic risk profiles.

- Supervisory engagement indicates that banks are leveraging existing model governance experience; however, **AI introduces qualitative challenges** that require adaptation. Governance remains uneven, particularly regarding accountability, senior management oversight and effective independent challenge across the three lines of defence. Supervisors stress that AI must be treated as a core business and risk issue,

embedded in risk appetite frameworks and subject to rigorous pre- and post-implementation controls.

- **Three risk management priorities** are highlighted: **explainability** (ensuring meaningful understanding and challenge of model outputs), **robust lifecycle** and **drift monitoring** for evolving models and **strengthened data governance** to mitigate bias and concentration risks. **Generative AI** presents **additional concerns**, notably concentration risk, vendor lock-in, cloud dependency, operational resilience, and confidentiality - closely linked to DORA obligations and outsourcing risk management.

- Strategically, banks are expected **to integrate AI within coherent digitalisation strategies** aligned with internal capabilities and risk-adjusted return considerations. Fragmented or opportunistic AI deployment may generate hidden prudential vulnerabilities.

- The overarching objective is not to constrain innovation, but to ensure that AI strengthens resilience and financial stability through sound **governance, accountability** and **risk management** discipline.