



**EUROPEAN CENTRAL BANK**  
**BANKING SUPERVISION**

## **Take-aways from the horizontal assessment of the survey on digital transformation and the use of fintech**

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**15 February 2023**

**ECB Banking Supervision**

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# 1. Overview – six focus points for digital transformation strategies

ECB Banking Supervision (ECB and NCAs) conducted **the first Single Supervisory Mechanism (SSM)-wide data collection on digital transformation and fintech** based on banks' **self assessments** and combined this **with market intelligence initiatives** to **build knowledge** on this evolving field of expertise.

This led to some preliminary insights:

- **Digital transformation is relevant for all SSM banks**, and most of them have a digital transformation strategy in place.
- **Digital transformation** can be defined as a **bundle of business model, processes and cultural transformation, enabled by technologies**.
- There is a high degree of **heterogeneity** in banks' submissions and further dialogue is needed to validate them.

ECB Banking Supervision identified **six focus points** to shape a framework for supervisors when looking into digital transformation strategies:



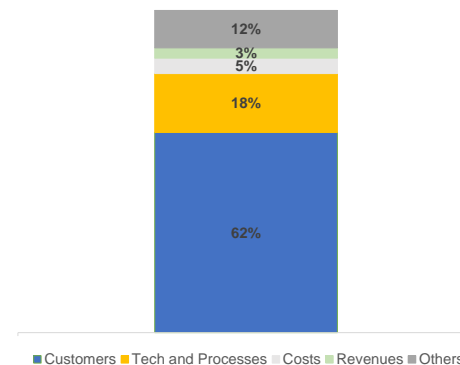
# 1<sup>st</sup> focus point : Digital strategy and KPI steering



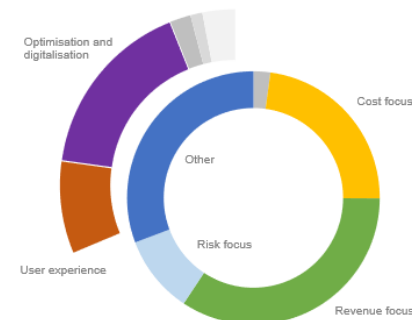
The majority of banks only started to develop their digital transformation strategy in recent years, targeting revenues and cost objectives.

- The most important digital projects carried out by SSM banks are broadly in line with the key objectives of digital strategies: **attract and retain market share and achieve efficiency gains**.
  - 43% of banks' top-5 projects are aimed at **revenue/customer experience enhancement**.
  - 83% of banks see **process automation** as a key lever to **reduce costs** (mainly through IT legacy transformation).
- **Banks develop KPIs to monitor customers' preferences.**
- However, even given the multi-faceted nature of digital transformation, banks still find it **difficult to isolate and quantify the cost and revenue impacts of their digital transformation strategies and processes.**

## Categorisation of banks' KPIs



## Objectives of key digital projects



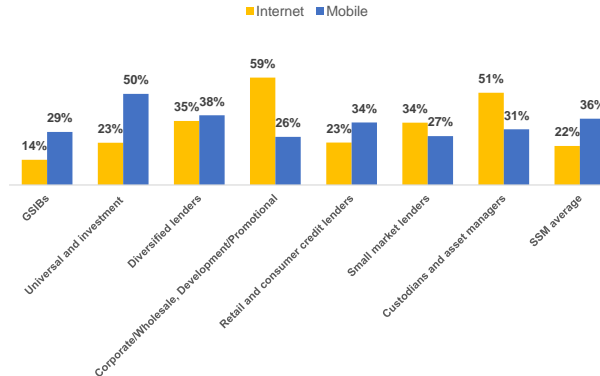
## 2<sup>nd</sup> focus point: Digital business



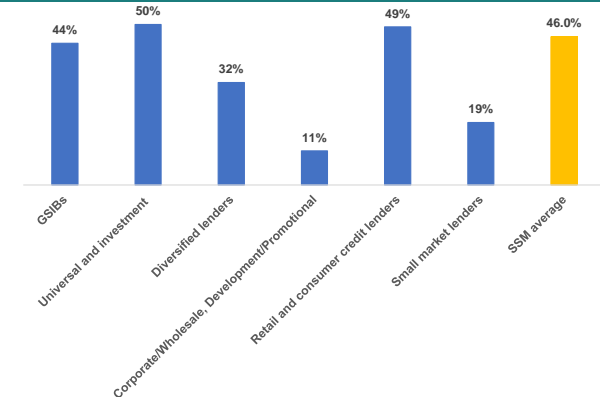
### Most digital strategies are customer-centric, but keeping track of digital customers and sales remains heterogeneous

- There is widespread willingness to improve customer experience by conducting business digitally: banks identify **almost half of their customer base as digital**.
- The **mobile channel** is more popular than internet banking, especially for bigger banks: **36%** of bank customers use mobile banking while **21%** use internet banking.
- **Monitoring the actual use and contribution of digital channels is heterogeneous:**
  - Half of the sampled banks do not monitor the number of customers digitally onboarded.
  - Only one in four banks can quantify the volume of digital sales.
  - Half of the sampled banks **monitor the number of digitally concluded loans** (e.g. pre-decided loans, consumer credit), which stands at around 45% of their total loan portfolio.

Internet vs mobile customers (% of total customers)



Digitally concluded loans (% of total loans)



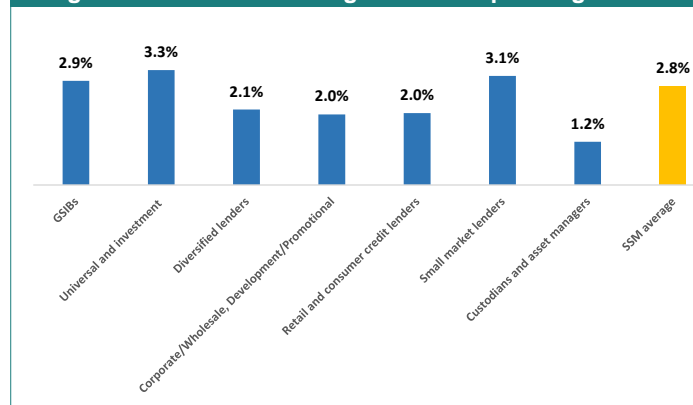
# 3<sup>rd</sup> focus point: Investments and resources



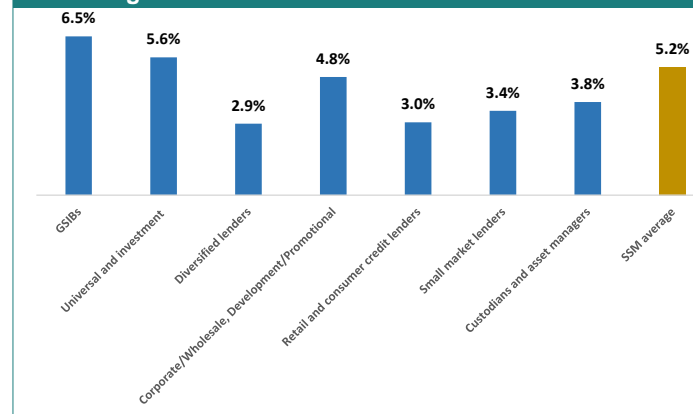
## The self-assessment provided a very preliminary estimate of banks' digital spending at the end of 2021

- On average, banks invested **2.8% of their operating income**<sup>1</sup> in digital transformation projects in 2021.
- 61% of banks reported having a digital transformation budget embedded in the IT budget. For these banks, their digital transformation budget is reported to be 22% of the IT budget.
- On average, banks allocated **5.2% of their workforce**<sup>2</sup> to digital transformation projects at the end of 2021.
- The heterogeneity in the answers provided may result in a diverging image for individual banks, particularly as digitalisation is on average found to be more advanced in retail oriented business.

### Digital transformation budget as % of operating income



### Digital transformation FTEs as % of total staff



<sup>1</sup> Finrep – Net operating income {F.02.00 - R.0355 ; C.0010}

<sup>2</sup> Finrep – Total staff {F.44.04 - R.0050 ; C.0020}

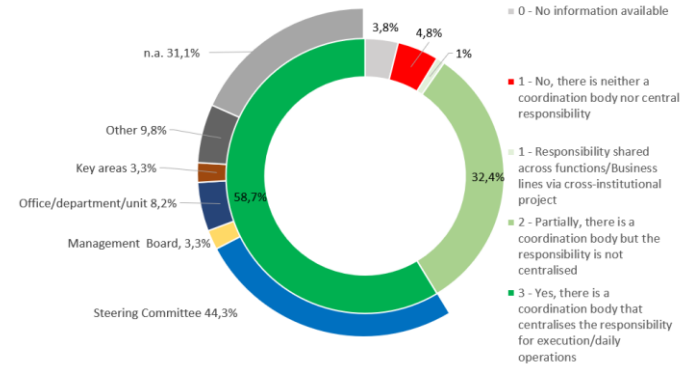
# 4<sup>th</sup> focus point: Governance and cooperation

## Banks recognise the importance of the “tone from the top” to steer digital strategies and the need to increase IT/digital skills

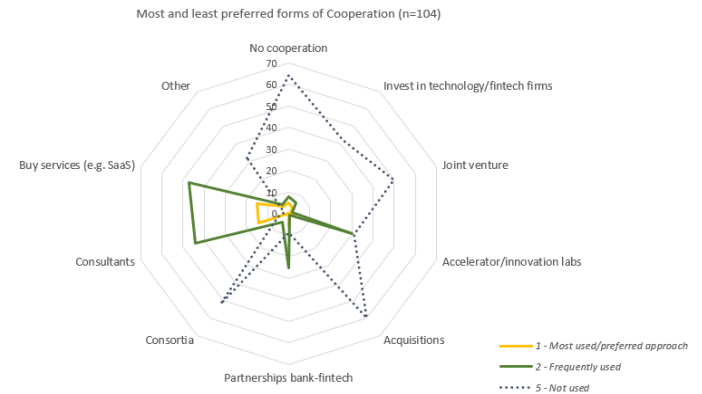
- **Most banks have in place a coordination body** (normally at non-executive level) to steer the design and implementation of the digital strategy.
  - Top management is often involved in the definition and design of the digital strategy. However, its **reporting is heterogeneous across banks.**
- The **2nd and 3rd lines of defence are often involved** in the implementation and monitoring of the digital strategy.
- Banks identify a **“war for talents”** in the market to **attract and retain digital and IT experts** as a key challenge at all levels within their organisation.
- To implement their digital transformation strategy, banks prefer to **cooperate with external partners**, mostly by buying in services (software as a service – SaaS) and using consultants. The majority of banks (61%) make use of at least one form of cooperation.



### Coordination body to steer digital transformation



### Preferred forms of cooperation



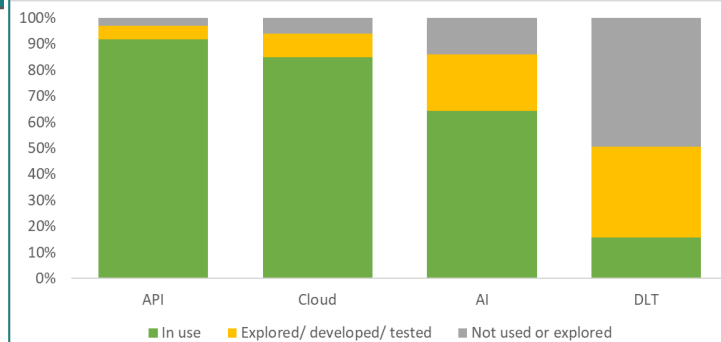
## Technologies enable banks' digital transformation

- **APIs** (application programming interfaces) and **cloud computing** are **widely used** across banks and the cloud is considered a foundation for digital transformation.
- **AI** (artificial intelligence) has on average a **lower business relevance**, but 60% of banks are already using AI, with more use cases in development.
- **DLT** (distributed-ledger technology) based solutions are currently **barely used across banks** (less than 20%) with limited business relevance so far. In terms of **crypto-related activities and exposures, this is still insignificant**.

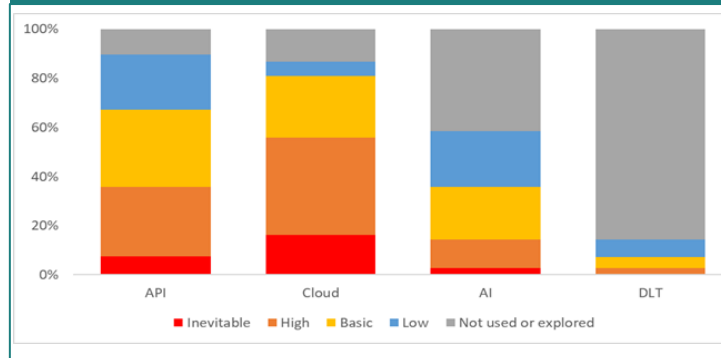
## Most relevant use cases per technology:

- **API:** Mobile apps/platforms covering account information, business as a service (BaaS) and payment solutions
- **Cloud:** Migration/IT optimisation and data platforms using SaaS solutions
- **AI:** Chatbots, credit scoring and algorithmic trading
- **DLT:** Trade finance (smart contracts) and settlements. As regards crypto: custody of crypto assets, tokenisation of traditional financial instruments

## Adoption rates of innovative technologies



## Relevance for the business model



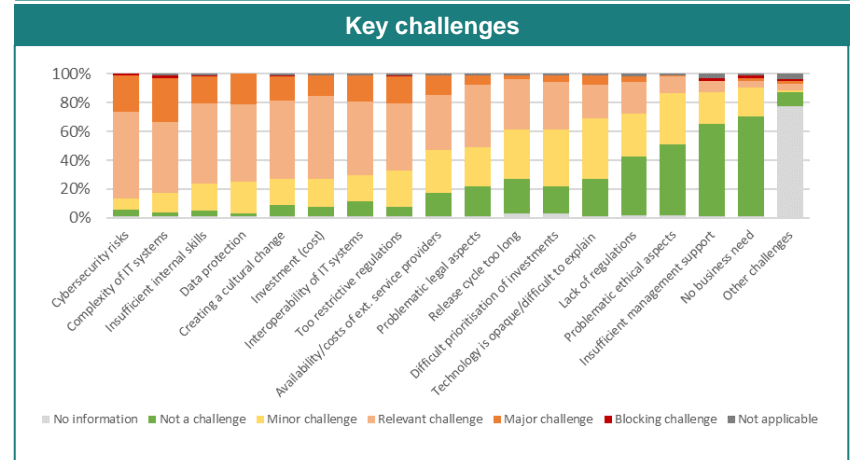
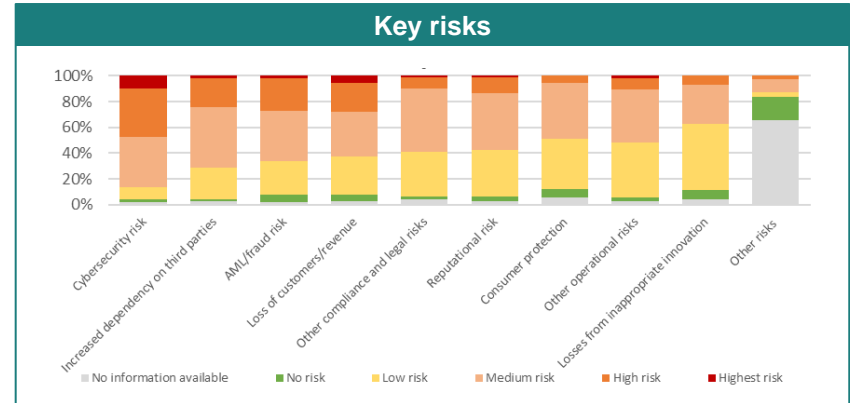


# 6<sup>th</sup> focus point: Key risks/challenges and risk management



## Banks identify key risks and challenges triggered by digital transformation

- **Risks associated with digital transformation** are mainly perceived as **cyber risk, increased third-party dependency, AML/fraud** and **potential loss of customers**.
- **Key challenges to digital transformation** are having the relevant experience and cybersecurity.
- In addition, **complexity, legacy IT** and **lack of internal skills** are leading to dependency on third parties and are perceived as a challenge.
- **Cost management is a further challenge** as digital transformation is often run under tight investment constraints.



### 3. Concluding remarks and supervisory focus

- ECB Banking Supervision's focus is on the assessment of the impact of digital transformation on risks in terms of:
  - **strategic risk** (e.g. sustainability of the digital transformation strategy, consistency with the business model, capabilities building and adequacy);
  - **governance and risk management framework**;
  - **IT and operational risks**;
  - **potential new/emerging risks**.
- The SSM remains **business model and technology neutral**, while acknowledging the importance of enhancing understanding of the impact of digital transformation on banks' business model sustainability and risk management.