


# Technological Innovations

## Which strategies for Asset managers?

**AFG**'s 3<sup>rd</sup> white paper on technological innovations, following those published in 2017 on "SGP 3.0" and "innovation for investors", this new online opus is intended to be both operational and forward-looking. It is based on use cases to help asset management companies in their strategic thinking and their digitalization processes. As a result of a collective work within the Technological Innovations Commission, it is based on testimonials from professionals involved in digital transformation within Asset management companies (AMCs) and on numerous contributions.

Stratégies      Parcours client  
 Données  
 Intelligence Artificielle      Cryptoactifs  
 Blockchain      Open innovation  
 Cybersécurité

All the strategic challenges of digital transformation (evolution of organizations, investment in human capital, deployment of new technologies across the entire value chain) are addressed, as well as the perspectives offered by blockchain and crypto-asset technologies. This digital white paper also devotes a large part to data, the control and proper use of which, in an increasingly competitive environment, offers real opportunities for AMCs.

**Themes developed:**

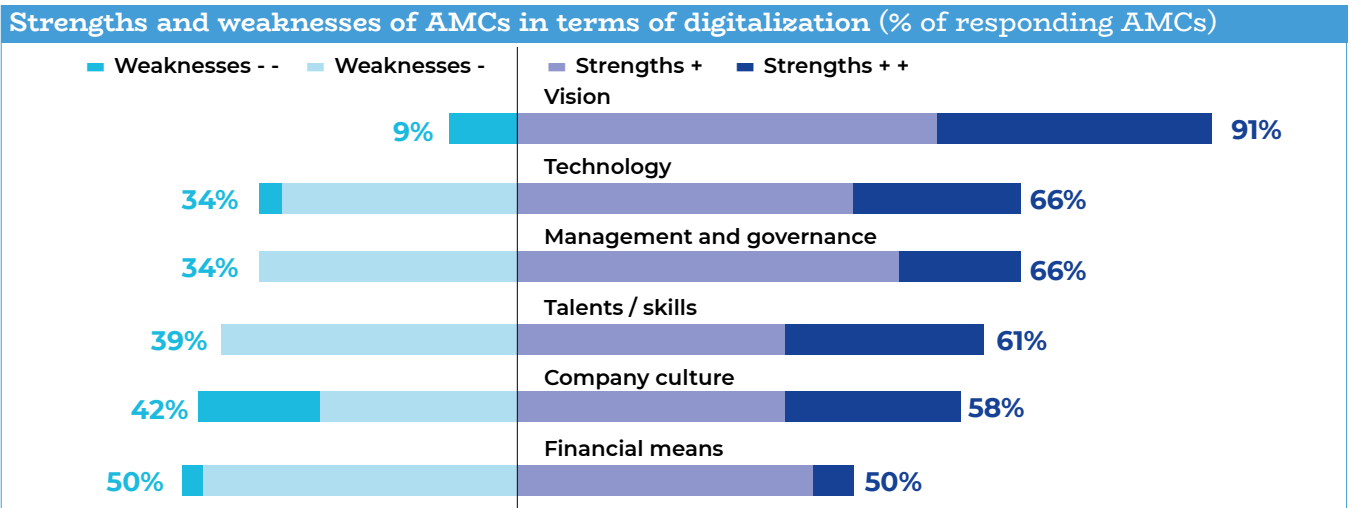
- Organizational strategies and technological innovations
- Adapting human capital and managing change
- Data, fuel at the heart of an AMC's reactor
- Protecting its systems against cyber-attacks
- Technological innovations to enhance the customer experience
- New technological uses in the investment cycle
- Improving the efficiency of support functions
- Introduction to crypto-assets, to blockchain (DLT) and decentralized finance (DeFi)
- Impacts of blockchain in business processes
- Investment management offer in crypto-assets
- 5-10 year vision of the asset management industry in France

About ten recommendations divided into two categories of actions are made:

- ▶ **support actions for AMCs:** competitiveness, information awareness/training, human capital, digital sobriety, client-oriented organizations
- ▶ **regulatory actions:** services and investment activities in crypto-assets, decentralized finance, euro central bank digital currency

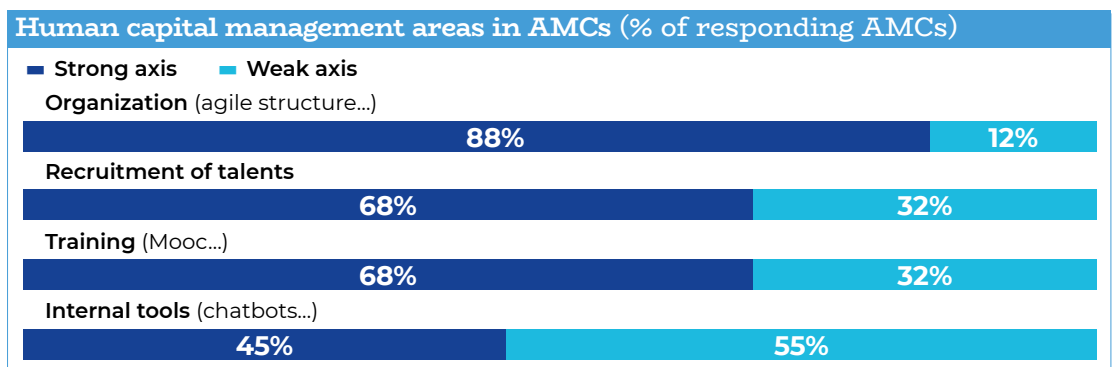
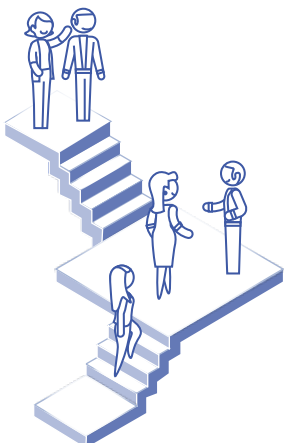
# THE CHALLENGES OF DIGITALIZATION

The growing digitalization of the economy is the driving force behind the transformation of companies, their modernization, and their adaptation to the needs of their clients. In an internationalized and highly competitive third-party asset management market, digital transformation is a major challenge for all AMCs. It requires them to think about **the use of technologies and the strategy of the company in its organizational and human dimensions**. While AMCs perceive the impact of digitalization on their value chain, they recognize<sup>1</sup> that they have strengths and weaknesses in carrying out this digital transformation.



This transformation process, primarily driven by the company's managers, involves prioritizing its most competitive and differentiating activities. It is carried out by successive learning stages, with time dedicated to these subjects in the organizations. Thus, **change management projects are carried out collectively** by the teams dedicated to digital transformation and / or by service providers who bring technological innovation, business managers, human resources, communication and, in some cases, the end user. As part of these projects, the company must communicate, support and train, for example via e-learning and gamification tools, etc. The objective is to successfully unite all employees around these projects and to accept failure.

To carry out their digital transformation projects, **AMCs implement different organizational strategies** depending on their size, culture, or technological appetite: internal industrialization, intrapreneurship, pooling, outsourcing, acquisition of a stake or partnerships with fintechs or with the academic world. Thus, working with fintechs in the context of technological partnerships makes it possible to benefit from the expertise of dynamic and agile teams. AMCs must decide which jobs and skills they keep in-house and **have staff with multidisciplinary expertise** (i.e. profiles that meet traditional operational needs and selected technological skills).

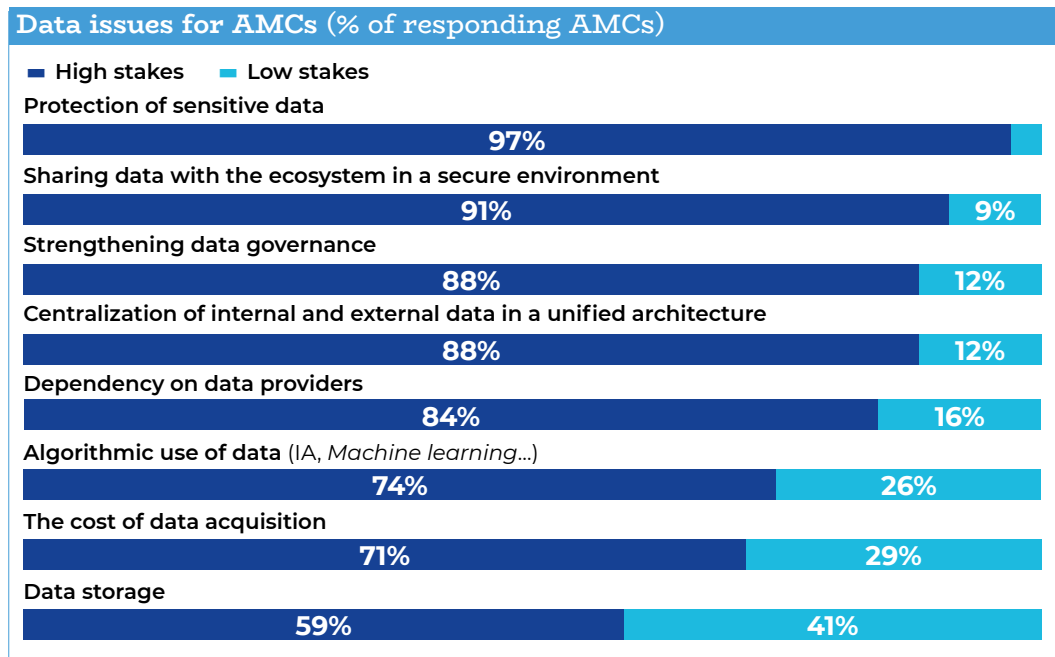


<sup>1</sup>) Results of the AFG survey aimed at understanding the expectations, priorities and objectives of AMCs on topics related to digital transformation.

### Data is at the heart of this transformation.

New technologies allow to collect massive amounts of data in real time (Big Data), to store and share them (Cloud, Data Lake, Blockchain), to analyze and interpret them (Artificial Intelligence, Machine and Deep Learning, Natural Language Processing), to automate processes (Robotic Process Automation).

Data is the fuel at the heart of the reactor for AMCs. They have realized that the development of a clear data management strategy represents real gains and a competitive advantage: having heterogeneous and incomplete data is an obstacle.



The mapping of business objects makes it possible to know where the data is present and where it is distributed in the organization. **New professions have emerged** for all activities related to data management: data analyst, data scientist, data architect, data quality manager. To be attractive, AMCs must integrate employees' aspirations in terms of meaning, meet their needs for flexibility and autonomy, and enable the transfer of skills. In order to retain their employees, asset management companies must train them and build an organization that encourages collaboration and synergies between different teams. Strengthening the diversity and mix of profiles is also a key element.

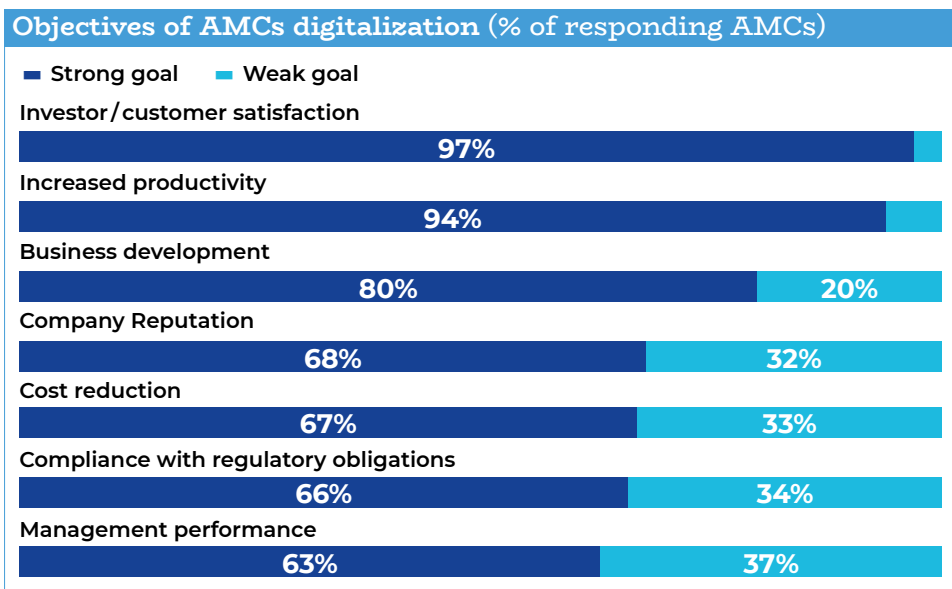
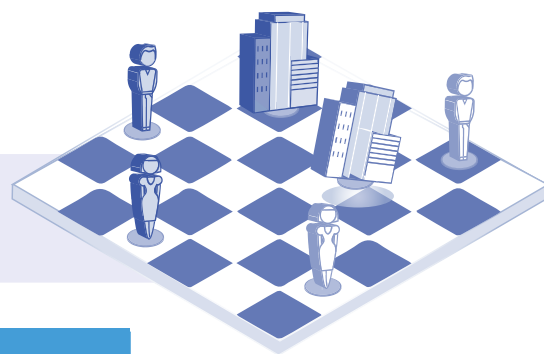
**ESG is a change accelerator for data management.** The strong growth in volume and diversity of ESG data requires investments in data management to ensure its quality. The lack of standardization of extra-financial data makes it important to cross-reference sources. Working with non-auditable data from issuing companies can lead to contradictions. In a constant concern to increase the quality of their products and services, AMCs must also better organize and exploit the data they use.

**The question of data architecture and IT infrastructures** to meet these challenges arises acutely. Ecosystems connecting different players and partners in the investment cycle value chain are emerging thanks to the possibilities offered by APIs and the cloud. These interconnections via APIs have existed for a long time for banks. AMCs must learn to work with third parties such as fintechs. Regarding the cloud, this technology is a real asset to centralize data, improve its accessibility and thus make its exploitation more profitable.

As in other industries, **data and technological sovereignties** have become issues at European level. The European Commission will accelerate the "datafication" of industries. Financial services should be concerned through DORA (Digital Operational Resilience Act), which should be adopted at the end of 2022, the "Data Governance Act", which will come into force in September 2023 and the "Data Act" which will come into force in 2024. These regulations aim to create a European data space promoting cyber risk management and access, circulation and exchange of data on secure infrastructures and technologies.

# THE OBJECTIVES OF DIGITALIZATION

These organizational strategies engage the company in human and technological investments with multiple objectives.



First, **meeting clients' expectations and needs through a "democratization" of managed savings**. Over the past few years, trends, already noticeable before the health crisis, which are reshaping investors behavior, have been accentuated. They are now looking for more fluid, near real-time interactions with a personalized customer experience via dashboards and simulators combined with a financial education approach and *storytelling*.

Technologies make it possible to provide information to investors about savings products in terms of financing and impact, particularly environmental and social.

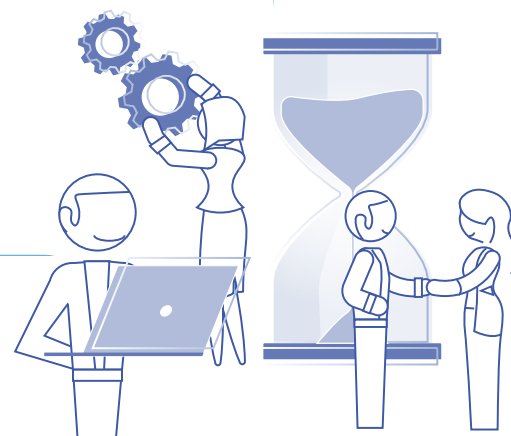
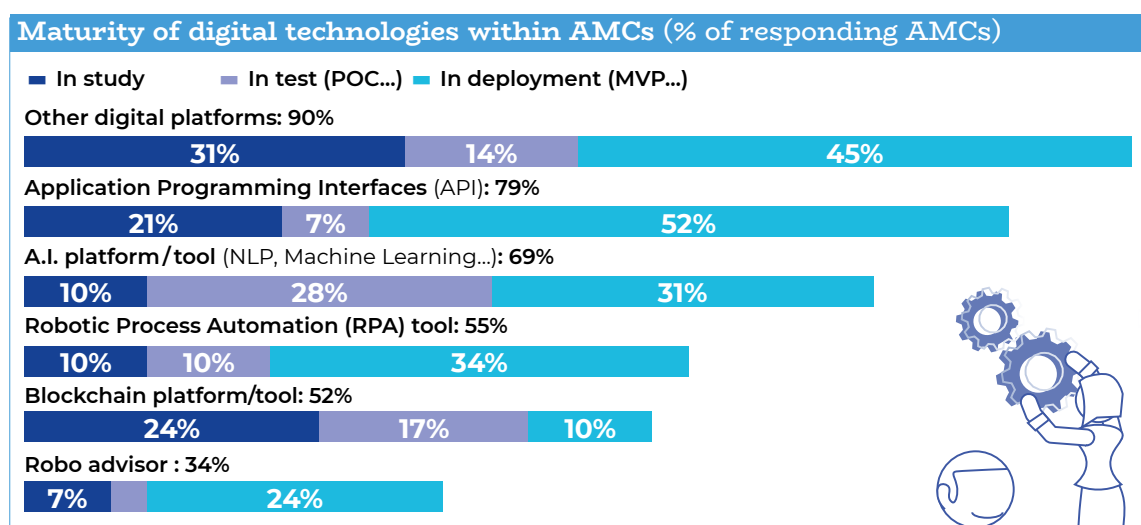


New clients are interested in the assets invested and are asking for portfolio transparency. AMCs must be able to respond by building communication on the history of the companies in their portfolios. AMCs must invest or establish partnerships with companies that analyze client data to offer tailor-made solutions according to the needs of life projects and in particular retirement savings. The two main levers in the hands of AMCs to respond to these trends are **branding** (and product strategy) and investment in technology. Branding aims to convey values and a "mission" in line with a more "responsible and sustainable" product offering for the community. Going forward, management will not only be judged on financial results but also on impact measures. This will enhance the value of truly active management and strengthen the role of management in financing the economy. **Improving the client experience through technology** will democratize savings by positioning and making them accessible like other consumer goods.

**On the liability side, blockchain technology offers management companies a unique opportunity to rethink their distribution strategy** and its efficiency throughout the value chain. Today, distribution platforms capture a significant part of the client relationship to the detriment of asset managers. To reduce their lag, AMCs will need to take the turn of disintermediation by investing in technologies such as blockchain and artificial intelligence. Distribution models are evolving thanks to technology and customer experience towards more direct distribution with a digitalization of the customer journey (subscription, KYC, etc.).

The asset management industry is at the beginning of this digital transition, with only 15% of savings products distributed via a web channel and 5% via a mobile channel. Without adapting to the **platformization of finance**, AMCs could miss out on the emerging market of millennials. In order to best market their products, AMCs will have to be visible on more and more platforms, metaverse being one of them.

Blockchain technologies hold great promise for simplifying liability management and enable AMCs to gain accurate knowledge of their investment funds clients.



For the asset management industry, **blockchain / DLT is a long-term disruption**. Of all the financial professions, asset management remains one of the most intermediated, with a particularly long and complex chain of operations. Blockchain enables AMCs to reduce transaction costs and delays. The disruption of the asset management value chain seems inevitable, and players need to assess their future position and seize this new technology bringing operational transformations. In France, Iznes, and in Luxembourg, Funds DLT, two platforms allowing the keeping of investment funds registers on the blockchain as well as the execution of investor orders via smart contracts, show that the use of blockchain to simplify the distribution chain is a reality. **In portfolio assets**, the development of crypto-asset management will also become a reality with a regulatory framework which, after the PSAN regime created by the PACTE law, is being implemented at European level

with the Pilot regime for crypto-assets assimilated to financial instruments (2023) and MiCA for other crypto-assets (2024). **The tokenization of assets**, whether real or financial, will create opportunities for asset allocation and alpha generation for AMCs and will improve traceability, KYCs, and regulatory reporting. The return on investment of tokenization will quickly become positive. It will also bring liquidity to illiquid assets and democratize access to these asset classes for investors, by making the cost of acquiring the token lower than a financial instrument or a real asset. The launch of a **wholesale Central Bank Digital Currency** will be an accelerator of this evolution and a reality in 2023 for the Banque de France.



# RECOMMENDATIONS

Digital transformation requires rethinking the use of technological innovations and business strategy in their organizational and human dimensions. The objective of these recommendations is to help AMCs to face the challenges related to the digitalization of their business both at the level of their company and the services offered to customers. These recommendations may be completed according to the evolution of technological innovations, business practices and regulations.

## I. Support actions for AMCs

### 1. COMPETITIVENESS / VISIBILITY

Tool for measuring the digital transformation of AMCs

**EXPLANATION:** the objective is to measure the progress of the digitalization of French AMCs, as an indicator of the industry's dynamism. This indicator can then be compared to other similar international indexes.

**ACTION:** AFG will collect data annually from AMCs, via a five-section questionnaire:

- ▶ Strategy / organization
- ▶ HR / training and communication
- ▶ Data policy
- ▶ Degree of deployment by center of expertise of digital technologies and tools
- ▶ Degree of appropriation of digital technologies and digital tools

An aggregate indicator of the level of digitalization of French asset management industry will be published for the Market. At the request of the AMCs, their individual data may be returned and will remain confidential in all cases.

### 2. INFORMATION TO AMCs

Listing of advisory firms and fintechs with details of their offers by business line

**EXPLANATION:** the objective is to inform AMCs about offers of technology companies and asset management-oriented consulting firms. The offer of these companies is constantly evolving and the proper implementation of these solutions in the business activities of AMCs is a major challenge.

**ACTION:** AFG will publish on its website a list of fintechs and consulting firms, accompanied by their expertise and offers for AMCs.

### 3. AWARENESS / TRAINING OF AMCs

**EXPLANATION:** meet the need for assistance in understanding and implementing technological innovations through the dissemination of educational content and training sessions intended for AMC employees.

**ACTION:**

- ▶ organization of workshops / seminars on topics related to technological innovations and change management (AFG Formation offer);
- ▶ reinforcement of the training offer in digital technologies through integration into the six blocks of skills of the PRAM (AFG Formation offer).

### 4. HUMAN CAPITAL

Helping diversity, the inclusive dimension of recruitment in business profiles with programming / data / IT expertise

**EXPLANATION:** there is a strong demand from companies for multidisciplinary business and data profiles, and there is already a real issue of gender balance and diversity for these positions to be filled, where most candidates are men.

**ACTION:** proactive approach to associations / institutions promoting diversity, inclusion and attractiveness in training and employment and with high schools / universities.

### 5. DIGITAL SOBRIETY

Share best practices of AMCs and draw inspiration from those of other industries (cf. CIGREF - digital sobriety)

**EXPLANATION:** as partners of institutional investors and corporates, AMCs should strive to show their good practices on the energy consumption generated by their activity, in connection with the use of digital technology, either in-house and/or delegated to service providers.

**ACTION:** transversal work will be initiated within AFG to collect best practices implemented by AMCs and to work with CIGREF to draw inspiration from existing practices in other industries.

## 6. CLIENT-CENTRIC

**Transparency, explicability, and ethics of AI algorithms (see the Principles of the European Commission for Ethical Artificial Intelligence)**

**EXPLANATION:** AI is increasingly used in the customer journey, which implies on the part of AMCs an effort on the transparency and explicability of the results of the algorithms.

**ACTION:** cross-functional work will be initiated within AFG to support AMCs in their compliance with the principles of auditing and reliability of algorithms developed internally in the AMCs or via the use of a service provider.

## II. Regulatory actions

### 1. INVESTMENT SERVICES AND ACTIVITIES IN CRYPTO-ASSETS

**EXPLANATION:** MiCA regulation will provide a framework for investment services and activities in crypto-assets, and at the same time, offer new development prospects for AMCs. This offer in crypto-assets not assimilated to financial instruments within the meaning of MIFID (i.e., asset-referenced tokens, utility tokens, cryptocurrencies, NFTs, e-money tokens, etc.) is currently offered by unregulated players, which creates a problem of investor protection.

**POSITION:** AFG's work will pursue 3 objectives:

- ▶ strengthen regulations aimed at protecting the saver having access to the crypto-asset market via investment funds.
- ▶ extend to crypto-assets the services and investment activities authorized by the MIFID directive within the framework of the MiCA regulation. Example: crypto-asset portfolio management.
- ▶ extend to management companies the right to issue ARTs (Asset-Referenced Tokens) that could be, for example, representative of tokenized investment vehicles.

### 2. IDENTIFY AND MEASURE THE FUTURE IMPACTS OF THE DEFI ECOSYSTEM

**EXPLANATION:** Decentralized finance consists of combining the effects of one or more *smart contracts* to deliver financial services outside the traditional framework of regulated entities and without human intervention (via decentralized autonomous organizations or DAOs).

**POSITION:** the actors of the DeFi ecosystem will therefore have to be regulated and controlled by the authorities under the same conditions than investment service providers. The AFG's action will consist in promoting the creation of operating rules for the DeFi ecosystem players in order to 1) prevent distortions of competition between DeFi players and other regulated financial players, 2) create a framework for investor protection similar to the existing protection mechanisms for AMCs, 3) impose AML/CFT rules, and 4) preserve the integrity of the operation of financial markets.

### 3. SUPPORT THE CREATION OF A DIGITAL CURRENCY EURO CENTRAL BANK

**EXPLANATION:** the creation of a mean of payment for the settlement of transactions on tokens issued in DLTs is essential for the industrialization of management activities in crypto-assets (payment / delivery, cash management, collateral...) and guarantee the same level of legal security as on traditional market infrastructures.

**ACTION:** being at the heart of the market's work at the national and European levels to best support the digital transformation of the management and market infrastructure businesses, while ensuring the preservation of European sovereignty in order to avoid dependence on non-European critical service providers in the operation of these infrastructures.

## The AFG federates the asset management industry for 60 years, serving investors and the economy.

The AFG commits to the growth of the asset management industry, brings out solutions that benefit all players in its ecosystem and makes the industry shine and develop in France, Europe and beyond, in the interests of all. The AFG is fully invested to the future.

### AFG

Investing for tomorrow, together.



AFG would like to thank all the members of the Technological Innovation Commission, chaired by Muriel Faure and Olivier Taille, for their contribution to the drafting of this report, and particularly the members of the dedicated working group: Laurence Arnold, AXA IM, Pascale Cheynet, La Française, Muriel Faure, Tiepolo, Indira Vignon, Arkea IS.

The Technological Innovations white paper was produced in collaboration with Alain Yen-Pon, Director of Data & Innovation, Finegan Advisory.

This work was coordinated by Thomas Valli, Director of the Economic Studies Department and Juba Ihaddaden, Economist, AFG.



#### Publication produced by the Economic Research and Communication Departments of AFG

- Thomas Valli, Director of the Economic Studies | [t.valli@afg.asso.fr](mailto:t.valli@afg.asso.fr) | 01 44 94 94 03
- Delphine Robichon-Allouchery, Deputy Head of Communication | [d.robichon@afg.asso.fr](mailto:d.robichon@afg.asso.fr) | 01 44 94 94 09

41 rue de la Bienfaisance | 75008 Paris | T : +33 (0)1 44 94 94 00  
Avenue de Cortenbergh 100 | 1000 Bruxelles



[www.afg.asso.fr](http://www.afg.asso.fr)