

# The digital finance revolution: unleashing the power of inclusion, growth, sustainability & security



*DIGITALEUROPE - The voice of  
digitally transforming industries*



# Executive Summary

This report demonstrates why **a successful digital finance ecosystem is a must-have if we want a more inclusive, green, prosperous and secure Europe**. Take the example of cloud computing, which can lead to a 10% reduction in fraudulent financial activities.[1]

Consumer demand for digital financial services is driving significant disruption in the industry and financial actors are answering the call. They are introducing new products and services more quickly and with a richer user experience, all while continuing to reduce costs and maintaining a high-level of security. **Today, the EU must actively recognise and incorporate the potential of digitalisation into its policies for the financial sector, to allow for its continued innovation in an efficient way.**

## There is no time to lose

The digital transformation of financial services will deliver **five core benefits for society in the EU**. This report points to **areas of action** that we advise the EU to take on board, that will allow the transformation of the sector to be accelerated, rather than stifled, ultimately benefitting society as a whole.

## 5 Societal Benefits & their Action Areas:

### 1. Enhanced security and resilience

*by developing the EU's digital capabilities whilst maintaining open markets;*

### 2. Growth and competitiveness

*by prioritising regulatory sandboxes over prescriptive regulatory requirements, and by incorporating global standards;*

### 3. Data-driven sustainability gains

*by speeding up data sharing through contracts via encouraging standardised data formats across sectors;*

### 4. Improved customer experience

*by making public data sets available to the financial ecosystem to drive better AI inferences;*

### 5. Societal inclusivity

*by accelerating the implementation of the Recovery and Resilience Facility to improve citizens' financial literacy.*

[1] Microsoft, Financial technology company catches more fraud with Microsoft Azure AI, 2020, <https://customers.microsoft.com/en-us/story/823366-moneris-azure-ai-financial-services-canada>

# A day in the life of a small business owner

in a European, harmonised and consumer-centric digital finance ecosystem

*Context: The year is 2030. Olivia is an ambitious small business owner in her 20s, living and working in the EU.*



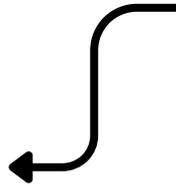
Olivia wakes up to a message from the tax office. It informs her that she has an outstanding debt of €1,000 that she must quickly pay to avoid being charged interest. She recognises the tell-tale signs of the authorised push scam – sense of urgency, threatening consequences, unusual payment method request. As a result, she blocks the number. A month ago, Olivia's initial reaction would have been concern but since starting the [free 6-week financial literacy course offered by the EU](#), the scam attempt doesn't faze her.



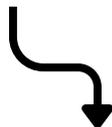
Ready for the day, Olivia sets out for her daily jog. Her phone recognises when she is 5 minutes away from her local café and she voices an order for her go-to matcha latte which is [paid automatically and ready when she arrives](#). Sipping her drink, she receives a recommendation to book a table at a new burger restaurant that is within the weekly 'dining-out' budget she has set herself. She takes this moment to look through the [personalised financial status overview](#) that she has opted to receive by sharing her data. As she does this, she receives a reminder that she can opt out of sharing this data anytime, and that her data is [her data](#).



Olivia hops in a community car share unlocked through an app. Arriving at her co-working space, she plugs the car into an unattended terminal for EV charging and makes [an instant and contactless payment within 30 seconds](#).



The CEO of a sustainable clothing brand launched during the COVID-19 pandemic, Olivia was able to register her – then – micro-business online. This allowed her to pay for material, receive funds and importantly, to [build a transaction history that later helped her obtain her first loan](#). Today, she manages a team of six and thanks to her cloud provider, they are able to run their operations from across Europe as easily and securely as if they were sitting next to one other.





12:30

Whilst on her lunch break, the external provider she uses to monitor security threats notifies her that an unknown user has attempted to log into their business account. **Her provider has already blocked the attempt thanks to DORA-enabled cybersecurity** so there is nothing for Olivia to worry about - back to her sandwich!



€ 14:00

Time to take care of the business finances. Through her financial services app, Olivia has access to an **overview of bills to be paid**. **She pays them easily via the same app** - all in one place. She has implemented a smart contract with her recycled-cotton provider and as the predetermined conditions have been met on both sides, the programmable payment has already been carried out automatically.

17:00



By **leveraging a mix of climate data and Olivia's business data**, her financial services provider has been able to provide an investor with evidence showcasing why Olivia's business was contributing to the EU's sustainability agenda and thus was worthy of their investment - success! Her AI assistant has set up a call to finalise the details.



18:00

Now for some personal investing. Her financial services provider lets her know that upon analysis, to purchase the flat she has her eyes on in Barcelona by 2032, she should spend €98 less on eating-out each month and delay purchasing her own electric car.

19:00



Olivia meets friends for dinner. Taking into consideration her recent financial advice, she opts for the budget-friendly burger. They pay with a mix of smartphones and contactless cards, **splitting the bill on the spot with ease**. On the 15-minute taxi drive home, Olivia pays a medical bill, buys a flight-ticket for her weekend getaway to Rome, and places her weekly supermarket order. Olivia frequents these websites often so there is no need to enter her card details or authenticate her payments - **she pays securely and quickly**.



22:00

Lounging on the sofa, Olivia looks into the **personalised pension plan** she has requested and been recommended. She would like more information about the rate and asks her bank's 24x7x365 chatbot who responds in three seconds. The interaction also leads to a meeting with a financial advisor for the next morning.

# 1. Enhanced Security

**Why is this important?** Reduced fraud rates and increased financial security for consumers

3 Key Takeaways:

The financial sector's increased use of digital technology does not equate to a higher security threat

The distributed nature of the cloud is a must as it keeps operations running no matter where, and no matter what

Technology has a proven ability to detect and protect against fraud and cyber-threats with increasing precision

## DIGITALEUROPE RECOMMENDATION:

### Develop the EU's digital capabilities whilst maintaining open markets

Financial institutions must have the flexibility to choose the best service providers for their needs. It is positive to see the EU developing its own digital capabilities in key technologies like cloud, AI, blockchain, digital identity, and quantum to guarantee long-term competitiveness. This should rest on an open regulatory approach, that places innovation, competitiveness, and security at its core.

Data transfers are a clear example. Data localisation does not necessarily increase data safety and instead presents challenges and costs for companies operating both locally and internationally. It stifles international data flows and demands regulatory compliance investments. It may even lead to an increase in financial actors' exposure to cyber and operational risks, as it hinders companies' abilities to have multiple copies of data and multiple systems in place to ensure data availability or accessibility even in the event of a failure or outage.

Similarly, data residency poses an issue for global firms, and even more so if the processing of data is included in this requirement. A major barrier would arise if the European Union Agency for Cybersecurity (ENISA)'s proposed cybersecurity certification of Cloud Services (EUCS) ignored the important principle of technology neutrality. Public stakeholders should promote the creation of **an EU cybersecurity certification based on technical merit to ensure the safety of European data** and the global adoption of EU certification. Ultimately, financial services institutions want to choose a cloud provider that can help them meet these goals. **European citizens will not benefit from localisation principles within the EUCS, nor will EU cyber resilience in the financial sector.**

Switching is also a relevant topic for the adoption of cloud in financial services as easier and cost-effective switching between cloud services will foster competition and user choice.

However, switching from one cloud provider to another is a complex effort. Any switching rules should take into account the variety of cloud services and the volume and complexity of the data stored and processed on them. It should promote cloud adoption through an applicable and adaptable switching framework that reflects technical reality, market needs, and that provides legal clarity. Switching rules should reflect the shared responsibility between cloud providers and customers.

### **The financial services sector's increased use of digital technology does not increase security threats. Quite the opposite.**

After the Schrems-II ruling, EDPB recommendations follow a risk-based approach for the transfer of personal data outside the European Economic Area, which involves substantial efforts for data controllers and a certain level of uncertainty with respect to the assessment undertaken by data exporters. We welcome the implementation of the new EU-US Data Privacy Framework that is expected to provide the legal certainty for international data transfers between the EU and the US.

Finally, the EU must focus on **adopting and engaging with international standards**. This will allow European companies to be more efficient and to compete and innovate using the most relevant technology. Industry stands ready to provide input when standards are being considered.



### **Why is this important?**

The financial services industry needs a regulatory model that prioritises security, privacy and resilience outcomes over prescriptive, inflexible requirements on third-party technology use.

Contrary to common misconceptions, the financial services sector's increased use of digital technology does not increase security threats. In fact, companies are developing increasingly secure IT infrastructure, allowing financial services institutions to be more agile and better protect their customers. The industry has rapidly modernised its systems and moved to the cloud for essential functions, including worker productivity and business applications. External factors such as COVID-19, cyber threats and even geopolitical events exacerbated this trend, emphasising the importance of relying on the cloud's distributed nature to keep operations running no matter where business is conducted worldwide.

**Regulation should be flexible enough to align with technological progress and maintain safety and security goals**, without becoming obsolete too quickly or stifling the uptake of new IT applications, including in cloud computing. Financial services institutions understand the importance of consumer and regulator trust and maintain the highest standards of security and privacy in their highly regulated sector. It is against this background that the increasing reliance on third-party ICT service providers has prompted global regulators to implement measures to improve digital operational resilience, with the EU's NIS2 and DORA legislations serving as an example of these efforts. They will strengthen prevention, identification and responses to ICT-related incidents.

# Use Case

*Santander*

## Digitalisation of core banking with cloud technology to improve service and efficiency

### Why it matters

Providing consumers with efficient, reliable and secure services.

### Challenge

Ever-increasing need and demand for improved service and efficiency.

### Solution

Having already migrated 80% of its IT infrastructure to the cloud, Santander is focussed on digitalising its core banking. To enable this transformation, the bank is using an in-house bespoke software.

The group expects to complete the transition in its core markets and businesses within two to three years. The transformation will allow for easier and faster access to data, more simplicity and faster time-to-market, making it possible to deliver new capabilities in hours, instead of days, and more frequent app updates, while helping the bank drive value using real-time analytics to provide better products and services.



# Use Case

Microsoft

## Increased fraud detection with AI<sup>[2]</sup>

### Why it matters

Increased ability to detect and prevent fraud.

### Challenge:

Increased cyber-threats and fraudsters.

### Solution:

Financial technology company Moneris – who support the payment processing needs of 350,000 merchants – illustrate how with the use of AI, they have increased security within their sphere of the financial system by allowing them to monitor and identify suspicious behaviour and assess risk in a far more efficient manner.

AI allowed Moneris to improve its visibility of anomalous activity – moving away from the lengthy process of using multiple screens running various systems to compile a view of a risk profile and instead, bringing this data into a single view.

Moneris 'has realised a 450% increase in its ability to view and assess incidents, with a resulting 10% reduction in fraudulent customer and merchant activities'.<sup>[3]</sup>



[2] Microsoft, Financial technology company catches more fraud with Microsoft Azure AI, 2020, <https://customers.microsoft.com/en-us/story/823366-moneris-azure-ai-financial-services-canada>

[3] Same as above.

# Use Case

*Microsoft*

## Technology's ability to detect and protect against cyberthreats<sup>[4]</sup>

### Why it matters

Better protection for consumers against fraud and security threats.

### Challenge

Increased cyber-threats and fraudsters.

### Solution

Microsoft allowed ING to develop a manageable and future-proof security position by providing a single view into ING's multi-cloud environment through capturing the logs and signals from its platforms.

Microsoft analyses the logs and signals, enabling the company's security analysts to review and respond to potential threats quickly and proactively.

It is in the interest not only of ING but of all of its customers and society as a whole that it is adequately protected against security threats.

[4] Microsoft, ING uses Microsoft Security solutions to reimagine banking for a digital audience, 2022, <https://customers.microsoft.com/en-sg/story/1556735723585984123-ing-banking-microsoft-security-solutions>

## 2. Growth and Competitiveness

**Why is this important?** Rising living standards, high-quality job creation, and a GDP-boost

3 Key Takeaways:

We must strike a balance between stability and innovation to allow Europe to become a leader in digital finance

Europe cannot be a standard-setter on the global stage unless it fosters an environment that allows for it, by adopting regulation based on principles and guidelines to evolve with the market

Regulatory sandboxes can ensure that appropriate consumer protection safeguards are incorporated into new products and services before reaching the mass market

### DIGITALEUROPE RECOMMENDATION:

#### Prioritise regulatory sandboxes and incorporate global standards

Europe cannot be a standard-setter on the global stage unless it fosters an environment that allows for it. Adopted regulation must be based on principles and guidelines in order to be able to anticipate and evolve with the market and technology. This will allow the financial services industry to innovate and to reap the benefits that digitalisation has to offer. Similarly, supervision should be simple and future-proof, based on said principles and guidelines.

Technology fosters scalability and fragmented regulation limits the effectiveness of the investment in technology.

Encouraging responsible innovation and regulating digital assets requires public-private collaboration, such as greater use and alignment of regulatory sandboxes across jurisdictions. Initially introduced for FinTech firms, regulatory sandboxes allow firms to experiment in a controlled environment while enabling regulators to assess risks and unintended consequences within and across jurisdictions. This collaboration ensures that appropriate consumer protection safeguards are incorporated into new products and services before reaching the mass market.

Of note, [Spain's new AI supervisor, AESIA, is launching its first AI regulatory sandbox pilot](#). This initiative aims to provide clarity on novel AI system requirements laid out in the AI regulation, transfer compliance know-how with the legislation, and enable the development of an innovative trustworthy system. The pilot will eventually consult with the recently established national supervisory authority (AESIA), [provide practical learning to support the development of standards and guidance at the national level, and support the implementation of the future AI regulation](#).

Finally, the question of liability must be addressed. As companies share, and may be mandated to share more client data with third parties, it is crucial that liability in the case of a data breach or misuse by a third party, be adequately allocated. Often, data is shared with customer consent so it is not clear where liability lies. Liability frameworks should be established, across legislation and across geographies, to properly identify liability, together with a market-driven dispute settlement framework. The EU's Data Act may become a first step in the right direction as it starts recognising the liability of third-parties.

## Why is this important?

Europe can lead in digital finance by choosing [a policy model that strikes a better balance between stability and risk reduction, today often prioritised, with enabling financial firms to compete and innovate globally](#), which tend to be considered less relevant public goals.

Collaboration between the public and private sector will be crucial to strike this balance, as it will allow for an understanding of opportunities and the managing of risks. Take the positive examples of finance-specific regulatory sandboxes and the role of banks in helping deliver EU funds and loans, or indeed what other jurisdictions are doing world-wide: post-Brexit UK has unveiled a regulatory overhaul – the “Edinburgh Reforms” – to make its financial actors more competitive internationally[5] and Switzerland has introduced the promotion of blockchain-based finance.

EU firms should be given [room for manoeuvre whilst regulation catches up with new products, services](#) and even with non-regulated actors. Regulation tends to apply automatically to financial services players and [proportionality should be assessed so that firms may innovate and compete on a level playing field](#).

Additionally, the digital transformation of financial services must be [overseen by a digitally transformed regulator](#), who will need new ways of working, new skillsets, new forms of engagement, new technology, new policy solutions, and increased collaboration, internally and with other regulators in industry. [It is promising to see that supervisors are getting ready by strengthening their tech capabilities and hiring experts with digital skills](#). We welcome the EU-Supervisory Digital Finance Academy (EU-SDFA), established by the European Commission in cooperation with the three European Supervisory Authorities (ESAs) and the Florence School of Banking and Finance. [6]

[5] UK Government, Edinburgh Reforms hail next chapter for UK Financial Services, 2022,

<https://www.gov.uk/government/news/edinburgh-reforms-hail-next-chapter-for-uk-financial-services>

[6] EU Supervisory Digital Finance Academy, Creating a common European Culture of Digital Finance Supervision, <https://eusdfa.eu.eu/>

It is crucial that the regulation of digital finance is well developed and proportionate and this programme has the potential to inform and allow regulators to ‘understand the potential of technology for enhancing regulation’.[7]

There are also [clear economic advantages and growth opportunities tied to digital finance](#). Just as online payment services allowed individuals and businesses to continue operating during COVID-19, they today continue to allow business to thrive and thus, the economy to grow.

## The economic advantages of digital technologies even extend to cracking down on tax evasion and corruption

The economic advantages of digital technologies even extend to cracking down on tax evasion and corruption. This is because they increase transparency (easier to track financial flows and detect suspicious activity), reduce the use of cash (digital payments leave a digital trail, unlike with cash), and increase access to financial services (helping to reduce the need for informal and illegal financial activities), inter alia. Governments are already imposing mandates outside of open banking to target tax evasion (such as CESOP and DAC7) however [even more could be done to lower tax evasion and corruption through digital finance](#).

As for ensuring a healthy capital market, finalising the EU’s Banking Union (BU) and the Capital Markets Union (CMU) initiatives will strengthen and further integrate the EU financial services industry.

Finally, the leveraging of new financial tools such as programmable finance could lead to economic gains.

Tokenisation, which represents assets in a digital form, [8][9] could [make the EU more competitive by enabling fast, secure and automated execution of business and financial processes](#) with reduced transaction costs, including for cross-border payments. The development of a token economy in Europe could also act as the backbone for the [transformation of Europe’s economy into a digitalised industry 4.0, creating fully automated supply chains, new business models, and improved business relations through increased transparency of processes](#).

Payments are becoming programmable through various digital forms, such as Central Bank Digital Coins (CBDCs) and stable coins. Unlike how other digital objects are able to be easily copied, the past few years have shown us how to make this token unique, fungible and composable whilst remaining under the full control of its owner (a person, entity or even another computer programme). Programmable payments can eliminate the need for many intermediaries – like escrow agents and central clearing parties – and make settlement instant and risk-free. It is also leading to all kinds of applications, like decentralised finance, that we can barely imagine today. Programmable payments could also serve as the backbone for implementing smart contracts, which carry out contractual and monetary obligations automatically when predetermined conditions are met.

[7] EU Supervisory Digital Finance Academy, Strengthening Supervisory Capacity in Innovative Digital Finance, <https://eusdfa.eu/wp-content/uploads/2022/10/EU-SDFA-Factsheet.pdf>

[8] A token represents an asset in a digital form – either tangible physical assets or intangible assets only existing in digital form – combined with information and assignable digital rights, all of which are connected in a programmable and heavily automated way.

[9] Tokenise Europe 2025, Should Europe Develop into a Token Economy?, 2022, <https://www.santander.com/content/dam/santander-com/es/documentos/notas-de-prensa/2023/01/np-2023-01-19-informe-tokenise-europe.pdf>

# 3. Data-driven sustainability gains

**Why is this important? Achieving the EU's 2050 climate-neutrality target**

3 Key Takeaways:

The same financial data that forms the base of new products and services can also be used to tackle climate change, particularly when combined with other types of datasets

By leveraging climate data, financial services institutions can better assess the climate risks and opportunities associated with investments which can help investors direct investments towards climate-friendly technologies and businesses

Digital finance can help promote transparency and accountability in financial transactions, making it easier to track environmental and social impacts of investments and lending

## DIGITALEUROPE RECOMMENDATION:

**Speed up data sharing through contracts via encouraging standardised data formats across sectors**

'Sustainability gains' may not be what comes to mind when thinking about digital finance. Yet, [the same financial data that forms the base of new products and services can also be used to tackle climate change](#), particularly when combined with other types of datasets (i.e. cross-sectoral data).

**Any data-sharing framework should be voluntary, customer-centric and cross-sectoral to harness the potential of data**

In order for financial services institutions to provide customers with the highest quality and most consistent financial advice, they need access to cross-sectoral data and the availability of such data is missing. [The combination of data from different sectors holds the greatest potential for delivering new services and experiences for people and businesses](#). In the case of financial services, non-financial data is also important for the development of better financial products and services.

For instance, the access to public data on individuals, necessary for the creation of an in-depth customer profile most likely varies from country to country. More alignment is needed to offer the same level of data access across the Union so that the data can be accessible from a technical perspective. There are important national differences in access to customer data as well as for instance, fundamental differences in local pension and tax systems. This highlights the importance and urgency of establishing national solutions, and connecting them to wider EU open data framework solutions, leveraging a EU open data framework.

Importantly, any data-sharing framework should be voluntary, customer-centric and cross-sectoral to harness the potential of data. Such framework should also ensure adequate protections from a privacy perspective, including giving more transparency and visibility of the data shared with the customer. Citizens must understand the value of the data they generate. Data literacy in one form or another consistently emerges as a very relevant element to consider as it will improve consumers' overall trust in the data sharing ecosystem.



## Why is this important?

**Digital finance can help promote transparency and accountability in financial transactions, making it easier to track environmental and social impacts of investments and lending. This can help ensure that finance is directed towards more sustainable and socially responsible projects.**

By leveraging climate data, financial services institutions can better assess the climate risks and opportunities associated with investments which can help investors direct investments towards climate-friendly technologies and businesses. By acquiring climate-related data (energy efficiency or energy consumption data for example) financial services institutions would be able to provide consumers with details about their carbon footprint and offer services and products which aim to reduce their environmental impact, for instance through green financing, green bonds[10], insurance covers, providing comparison and recommendations for consumers regarding specific services/products.

Similarly, merging financial datasets with satellite imaging and client data can help in tracking land development for sustainable agricultural practices.

Consumers can benefit by lowering expenses and saving money through reduced energy consumption and carbon footprint. Financial institutions can also benefit by helping to establish and adhering to existing corporate social responsibility (CSR) policies within the financial institution, and commercial development (products and services proposals).[11]



[10] Green loans and green bonds are types of financing that are used exclusively to fund projects with environmental objectives and that adhere to specific principles and standards set in applicable regulation.

[11] Expert Group on European financial data space, Report on Open Finance, 2022, p.81, [https://finance.ec.europa.eu/system/files/2022-10/2022-10-24-report-on-open-finance\\_en.pdf](https://finance.ec.europa.eu/system/files/2022-10/2022-10-24-report-on-open-finance_en.pdf)

# Use Case

*Santander (on behalf of the Spanish Banking Association)*

## The power of climate data in providing financial services to consumers<sup>[12]</sup>

### Why it matters

Allowing consumers to be aware of how much CO2 they generate, offset it and reduce it.

### Challenge

On a daily basis, all of our activity generates greenhouse gas emissions, which build up in the atmosphere and are responsible for climate change.

### Solution

Santander has been working with a consultant specialising in climate change, to develop a methodology to calculate the CO2eq emissions associated with every consumer transaction (credit cards, debit cards and direct-debit charges), depending on the amount in euros and on the sector of activity associated with each transaction.

Santander offers consumers the possibility of offsetting their carbon footprint by purchasing carbon credits which is important, as each carbon credit is a tonne of CO2eq prevented or mitigated in the atmosphere.

Examples:

Reforestation in Vichada (Colombia). This project, located at the base of the River Orinoco in Colombia, combines reforestation with protection of biodiversity and restoration of ecosystems. The offsetting price per kg is EUR 0.012.

Reforestation in Monto (Teruel, Spain) is a project in a fire-damaged area, which plants autochthonous species over 5 hectares. The offsetting price per kg is EUR 0.055.

[11] Santander, what is the carbon footprint? <https://www.bancosantander.es/en/santander-sostenible/huella-de-carbono>



## 4. Improved customer experience

**Why is this important? High-quality financial advice for all, increased financial understanding and health, and efficiency gains**

3 Key Takeaways:

The financial services sector is undergoing a digital transformation driven by advancements which prioritise customer experience and convenience

For true improvements in customer experience with financial products and services, a framework for voluntary cross-sectoral data-sharing that includes public and private data is needed

With access to customers' data, financial services institutions will be able to facilitate the provision of high-quality and personalised financial advice: for instance through providing retirement planning advice that is tailored to specific customer needs

### DIGITALEUROPE RECOMMENDATION:

**Make public data sets available to the financial ecosystem in order to drive better AI inferences**

AI has the potential to enable greater agility, cost-efficiency and time-saving with regard to customers' engagement with their financial services institutions.

However, there is a real possibility that these potential benefits may be impaired depending on how the on-going regulatory negotiations under the EU AI Act evolve: *it must be developed with industry-friendly measures and flexibility in mind, to allow innovation to thrive.*

DIGITALEUROPE recommends carefully considering the regulation's future effect for AI. Moreover, *for true improvements in customer experience with financial products and services, governments can better make available public data sets to the financial ecosystem.* Currently there is no EU-wide obligation for public bodies to share pension-related data – for instance – with third parties upon individuals' requests.

## Why is this important?

Advancements which prioritise customer experience and convenience are driving the digital transformation of the financial services sector. The increasing demand for digital financial solutions, particularly among the younger generation, is pushing the sector to innovate and deliver more user-friendly and efficient products and services.

The integration of advanced technologies such as AI and data analytics are enabling the development of myriad new personalised financial products and services. For instance, digital identity and biometric technologies are being used to streamline customer onboarding processes whilst ensuring the same level of security as face-to-face onboarding. Chatbots and other digital customer service channels are able to provide 24x7x365 support, accommodating those who may be unable to contact their financial service provider during traditional working hours.

With access to customer data, financial services institutions will be able to facilitate the provision of high-quality and personalised financial advice: for instance through providing retirement planning advice that is tailored to specific customer needs and that supports long-term savings.

The result is more transparent, trustworthy, and accessible financial services for all, positioning the industry to meet the evolving needs of consumers and businesses in the digital age. The customer is, and should continue to be, at the heart of the digital finance transformation as consumers today increasingly expect every facet of their lives to have the potential to be digitised. Finance is no exception.

**Chatbots and other digital customer service channels are able to provide 24x7x365 support, accommodating those who may be unable to contact their financial service provider during traditional working hours**

# 5. Societal Inclusivity

**Why is this important?** Bringing the vulnerable out of the margins of the economy, bridging the digital divide, and equal access to finance

3 Key Takeaways:

If properly harnessed, digital finance can make financial services more accessible and affordable to underserved populations by lowering transaction costs, reducing the need for physical infrastructure, and allowing individuals to conduct financial transactions through mobile devices

EU citizens must have the opportunity to educate themselves on how to detect financial scams, such as the increasingly present authorised push scam

Today, new companies and citizens who were previously left behind in the physical world are growing and participating in the economy on equal footing due to online payments

## DIGITALEUROPE RECOMMENDATION:

**Accelerate the implementation of the Recovery and Resilience Facility to improve citizens' financial literacy**

The EU should consider **introducing basic financial education into school curriculums, and offering free financial education courses to EU citizens.** Financial literacy can be promoted through various activities: awareness-raising campaigns, compendium of best practices and public-private partnerships. To this end, funding should be unlocked from the Recovery and Resilience Facility under NextGenerationEU, as well as from the Digital Europe Programme.

This is important because about half of the adult population did not have a solid enough understanding of basic financial concepts in 2020[15] and around 42% of Europeans lack basic digital skills.[16]

**Financial literacy would give citizens the financial freedom to make sound financial decisions,** leading - for instance - to an increase in financial investments by retail customers into capital markets – one of the objectives of the European Commission.

[15] OECD, 2020 International Survey of Adult Financial Literacy, <https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf>

[16] European Commission, Shaping Europe's digital future, Digital skills, <https://digital-strategy.ec.europa.eu/en/policies/digital-skills>

[17] CEDEFOP, Investing in skills pays off: The economic and social cost of low-skilled adults in the EU, 2018, <https://op.europa.eu/en/publication-detail/-/publication/4b1b1d68-caa6-11e8-9424-01aa75ed71a1/language-en>

## Financial literacy would give citizens the financial freedom to make sound financial decisions

The net economic benefit of significantly reducing the size of the low-skilled adult population in the EU is estimated at as much as €200 billion per year over a decade, roughly 1% of the EU's GDP.[17] As well as the economic aspects, a more digitally savvy society is key for a more secure, green and healthy Europe. Financial literacy will lead to general well-being.

## Financial literacy will lead to general well-being

The right digital tools and education also play a valuable role in cyber-attack prevention, mitigation and response. [When it comes to digital financial literacy, education is key to reduce poverty, bolster economic inclusion and promote wealth creation\[18\].](#)

As payments move increasingly online, new types of fraud have emerged such as authorised push scams.[19] Here, [it is the EU's responsibility that citizens have the opportunity to educate themselves on how to detect financial scams.](#) For years, financial services firms have been working to develop more comprehensible economic concepts to allow clients to make informed financial decisions. While Payment Services Providers are improving their capabilities to prevent new types of fraud, the liability regime should also evolve to better allocate liability to fraudsters.

It is essential to note that [even if EU citizens are financially literate, pre-contractual information requirements do not work in practice as people tend not to read them, due to length and complexity.](#) Regulation must either investigate how this could be made to work or leave room for providers to convey this information in a manner that is able to be absorbed by customers – for instance in a digitally engaging manner. In this scenario, the prescriptiveness of regulation is not helping the customer to truly understand their given financial services or products.

[17] CEDEFOP, Investing in skills pays off: The economic and social cost of low-skilled adults in the EU, 2018, <https://op.europa.eu/en/publication-detail/-/publication/4b1b1d68-caa6-11e8-9424-01aa75ed71a1/language-en>

[18] Vanguard, Championing Financial Literacy in the digital economy, 2021, <https://www.vanguardngr.com/2021/12/championing-financial-literacy-in-the-digital-economy/>

[19] This refers to a person or business being tricked into sending money to an account controlled by a fraudster, who poses as a legitimate player.

## Why is this important?

Digital finance has **proven potential for financial inclusion**. For example, online payments allowed consumers to access necessary products and services during COVID-19, preventing the economy from coming to a halt. Today, **new companies and citizens who were previously left behind in the physical world are growing and participating in the economy on equal footing**. Importantly, this is not a transfer from physical to digital businesses with a net-zero total impact, but a net growth involving new companies and citizens.

If properly harnessed, **digital finance can make financial services more accessible and affordable to underserved populations** by lowering transaction costs, reducing the need for physical infrastructure, and allowing individuals to conduct financial transactions through mobile devices. Digital finance has the **potential to help bridge the gap between different demographics and provide financial services to all groups, including traditional minorities in this area** such as women, those living in rural areas, both the young and the elderly, the needy, inter alia.

Whilst digital finance is not a substitute for addressing the underlying social, economic and political factors that contribute to inequality and exclusion, it can act as a helping force.

Digital can increase access to financial services for people living in rural or impoverished areas, or those who are physically unable to travel to branches. It can also **help people with disabilities for whom financial exclusion can take many forms**. 'HandSome' for instance, is an application designed for the blind, visually impaired and dyslexic that "speaks" the payment protocol once the card has been inserted into the merchant's terminal.[20] This way, the visually-impaired person cannot be taken advantage of by a merchant entering an incorrect monetary amount in the terminal.

Bearing in mind that about 15% of the world's population has a disability of some description[21], such digital solutions are no small feat.

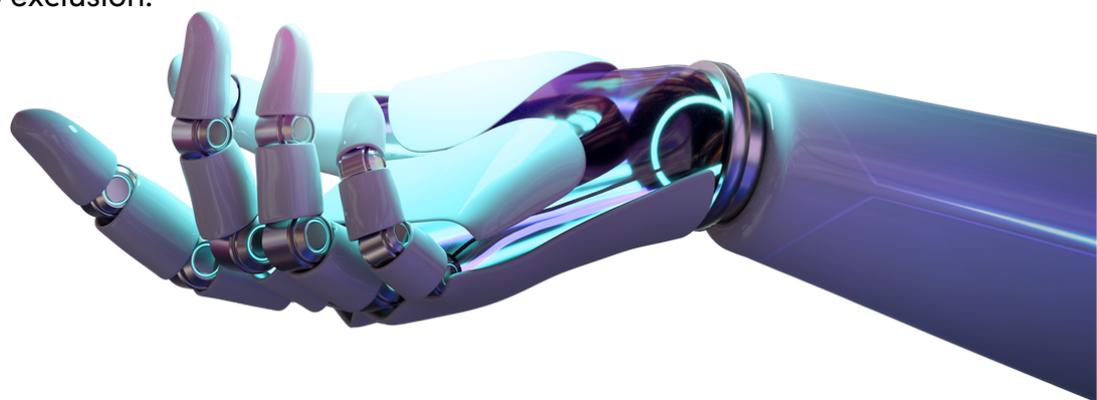


[20] Handsome, <https://www.howtobehandsome.fr/>

[21] The World Bank, Towards an Inclusive World: Collecting Better Data on Disability, 2022, <https://www.worldbank.org/en/news/video/2022/03/05/toward-an-inclusive-world-collecting-better-data-on-disability#:~:text=More%20than%20a%20billion%20persons,%2D%20and%20middle%2Dincome%20countries>

AI is allowing individuals with little or no credit history to enter the financial world by using algorithmic models infused with data from various sectors that enable more accurate creditworthiness assessments. This could help someone to build a transaction history and obtain a loan. A 'simple' yet potentially life-altering benefit. This also applies to SMEs who often struggle to obtain credit because lenders lack sufficient information to assess their creditworthiness, price credit risk and tailor credit products. To make sure the credit provided is appropriate to the SMEs' needs and adapted to their financial circumstances, credit institutions providing loans will benefit from contract-based access to data stored by private entities in other sectors, as well as access to public data - allowing them to better tailor their offers. Regulatory consistency with other frameworks is crucial to allow for thin-file customers to reap the benefits, whilst avoiding the pitfalls. Misaligned anti-money laundering regulations for instance can pose as an obstacle.

All this being said, digital finance may exacerbate existing exclusions if not designed and implemented properly with harmonised regulation. For example, those lacking digital literacy skills or access to technology may face exclusion, as digital finance requires a certain level of technological infrastructure and digital skills. Similarly, with regard to the use of algorithms for creditworthiness assessments, AI must be governed properly, to avoid biases that may lead to exclusion.



# Use Case

*Mastercard*

## Card design as a lever for inclusion

### Why it matters

Furthering inclusivity and accessibility.

### Challenge

Payments are a key lever for inclusion in society. It is therefore of paramount importance to ensure payment methods are adaptable to individuals with different needs, providing the right features so that cardholders do not face obstacles when transacting with a merchant.

### Solution

Mastercard introduced a feature allowing for all persons to use a chosen name on their bank card. For many people in the LGBTQIA+ community, the legal name on their credit or debit card does not reflect their true identity and can be a daily source of sensitivity. According to a survey conducted by Mastercard, 4% of the Belgian LGBTQIA+ community have experienced this feeling.

Additionally, with bpost (Belgium's postal operator) Mastercard developed and launched a card that is accessible for blind and partially sighted people. The notches on the card's short side allow the person to distinguish it between a credit, debit or prepaid card, providing a greater sense of security and independence. Data from the World Health Organization suggests 1 person in 1000 are blind in Belgium and 1 person in 100 are visually impaired and thus this digital solution is no small accomplishment.



Mastercard

## Strengthening the resilience of Belgian SMEs via modern financial tools

### Why it matters

Strengthening the resilience of Belgian SMEs.

### Challenge

As the COVID-19 pandemic struck, many SMEs – particularly those in retail – struggled to keep their businesses running due to limited income as non-essential businesses closed and travel was limited. However, e-commerce presented a growth opportunity for MSMEs to diversify their revenue and build their businesses. In Belgium, 80% of Belgians who ordered online during the first week of the pandemic planned to keep doing so. [22] This not only benefitted SMEs across Europe but also reinforced the resilience of the Belgian economy.

### Solution

Belgium's e-commerce market lags behind its leading neighbouring countries: the UK, Germany, France and the Netherlands. Therefore, to help Belgian SMEs innovate and thrive, the Belgian ecommerce association BeCommerce and Mastercard launched a free, skill-up, coaching program open to existing MSMEs in need of e-commerce guidance to help expand their services and boost financial resilience.

Every merchant that signed up to the program received web design support as well as a practical e-commerce guide which explained how to navigate the world of e-commerce: understanding the choices that exist for payment platforms (e.g. in-house or outsourced, checklists and best practices showcasing e-commerce success stories) to support them in making informed decisions.

This program helped 2163 entrepreneurs to start-up or improve their webshop and such initiatives have been replicated in other countries such as the UK[23] and the Czech Republic.[24]



[22] Mastercard, BeCommerce and Mastercard join forces to support micro and small-medium businesses to accelerate e-commerce in Belgium, 2021, <https://www.mastercard.com/news/europe/en/newsroom/press-releases/en/2021/april/becommerce-and-mastercard-join-forces-to-support-micro-and-small-medium-businesses-to-accelerate-e-commerce-in-belgium/>

[23] Mastercard, Striving to thrive 2022: The state of play for micro and small businesses, 2022, <https://www.mastercard.com/news/europe/en-uk/research-reports/striving-to-thrive-2022/>

[24] Mastercard, Strive Czechia: supporting 250,000 small businesses to succeed in the digital economy, <https://www.strivecommunity.org/programs/strive-czechia>

# DIGITALEUROPE's 7 key regulatory recommendations:

## To achieve Enhanced Security:

- Ensure EUCS by ENISA focuses on technical merit and technology neutrality for Europe's data safety
- Align cloud switching rules with market needs, legal clarity, and shared responsibility principles

## To achieve Growth and Competitiveness:

- Promote regulatory sandboxes across borders
- Any regulation must be future-proof, seeking harmonisation of regulatory frameworks at a global scale

## To achieve Sustainability Gains:

- Promote standardised data formats across industries to contribute to voluntary, contract-based data sharing

## To achieve Improved Customer Experience:

- Develop the EU AI Act to truly only capture high-risk applications, to give companies the legal certainty to continue innovating

## To achieve Societal Inclusivity:

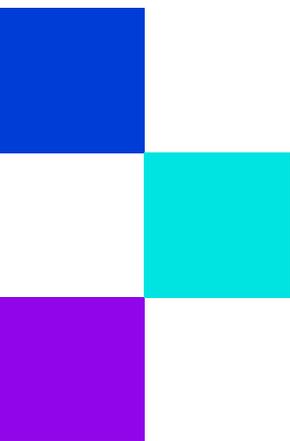
- Speed up the implementation to the Recovery and Resilience Facility to provide free, basic financial education to all EU citizens



DIGITALEUROPE represents the voice of digitally transforming industries in Europe. We stand for a regulatory environment that enables businesses to grow and citizens to prosper from the use of digital technologies.

We wish Europe to develop, attract and sustain the world's best digital talents and technology companies.

DIGITALEUROPE's membership represents over 45,000 businesses who operate and invest in Europe. It includes 100 corporations which are global leaders in their field of activity, as well as 41 national trade associations from across Europe.



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Publication date:  
17 April 2023

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