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# FINTECHS: AN ALTERNATIVE TO DIGITAL BANKING

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**Abstract**
*FinTechs have experienced significant growth in the post-pandemic period, both in terms of the number of new companies established and, more importantly, their complexity. Their advantages attracted the attention of many banking clients, forcing the traditional banking institutions to reduce their fees and integrate the newly technological developments into their processes and products. As we look ahead, several exciting trends are expected to redefine the FinTech industry. Within this paper we investigate the benefits and risks that arise with the development of the FinTech industry and provide an overall image of the financial technologies landscape in the European Union and Romania. This paper points towards the fact that FinTechs have the potential to significantly change the financial sector landscape by providing innovative products and services which respond to users' needs for security, speed, and low cost.*
**Keywords:** Fintech, international payments, financial inclusion, blockchain, banking, technologies
**JEL Classification:** E51, G23

## 1. INTRODUCTION

Over the last decade, financial technologies have experienced remarkable growth. As well as being closer to customers, they offer low-cost alternatives to both traditional and digital banking. Since their emergence in the 21st century, financial technologies have been destined to be integrated into the backend systems of established financial institutions, such as banks. The digitization trend and the need for the population to adapt to this process has facilitated the development of FinTechs, with a shift towards consumer-oriented services.

FinTechs are non-bank financial institutions that operate in the digital environment, offering innovative financial solutions. Essentially, FinTechs are used to help both individuals and businesses. For example, FinTechs can help companies, business owners and consumers better manage their financial operations, as well as life itself, as it is highly diversified (investments, insurance, personal financial management, etc.)

To grasp their true importance, it is essential to examine a statistical retrospective. According to the latest data reported by *ATOS in LookOut Industry*

*Trends Banking*, recent years have seen investments in FinTechs reach approximately 50 million US dollars. Over 500 new financial technologies are developed annually, a momentum driven by high demand, as two out of three financial transactions are now conducted online.

According to the *New Age in Banking whitepaper*[1], it can be seen that different generations are adopting to new technologies differently, but the FinTech target for 2020-2030 remains the Millennials and Generation Z. Unlike Generation X, who tend to focus on simply keeping cash in their accounts, Millennials and Gen Z seek banking products that act as companions and advisors, helping them achieve their financial goals.

Moreover, in recent years, FinTech popularity has grown significantly on a global scale to a degree that:

– 96% of global consumers are aware of at least one innovative financial service.
– 3 out of 4 (75%) global consumers use FinTech services.
– 64% of global consumers have adapted to online financial services.

The trend in innovative finance over the next few years is aligned with the financial literacy trend, as 85% of Millennials surveyed by Credit Karma/Qualtrics report feeling too exhausted to think about or manage their personal finances. What's more, FinTech companies rely on a best-in-class customer experience, which is shaped by the integration of machine learning (ML) and user experience (UX).

Before proceeding with the detailed analysis of FinTechs, it's worth mentioning that, according to the global unicorn rankings for March 2024, the financial sector holds second place, with a total of 390 unicorns, depending on the industry.[2]

## 2. BENEFITS AND RISKS OF FINTECH

Those who use the services provided by FinTechs enjoy a diverse range of benefits[3], including:

- **low costs**: the key advantage when FinTechs compete with traditional finance companies is that most offer lower fees than banks, as they have lower staff costs and fewer fixed assets compared to physically-based institutions.
- **fast and efficient service**: customers no longer need to visit a physical location to carry out transactions. Counters are replaced by a user-friendly interface accessible 24/7, optimizing time. On average, FinTechs provide

[1] Intellias "New Age in Banking Whitepaper: The Era of Tech Change Has Arrived",2022. Available online: https://intellias.com/new-age-in-banking-whitepaper/
[2] Statista, "Number of global unicorns as of 2024, by industry",2024.
[3] Mfsa "FinTech: Risks and Benefits",2023.

a response to applicants in a short period, ranging from 10 minutes to 48 hours.

- **enhanced protection:** in certain cases, FinTech offerings provide enhanced protection for consumers and investors. For example, solutions using blockchain technology (Distributed Ledger Technology, DLT) offer full transparency and traceability of transactions made on the platform. Furthermore, the continuous development of Machine Learning (ML) and Artificial Intelligence (AI) is applied for identity verification and fraud detection to reduce financial crime.
- **inclusion**: a major benefit of financial technologies is the increase in financial inclusion. In 2023, it is estimated that 2 million people will be able to engage with the financial market through mobile financial apps[4]. The need for FinTech has never been greater than during the pandemic and post-pandemic years, when several financial services companies transitioned to digital solutions in response to COVID-19 restrictions.
- **diversity of choice**: FinTech promotes competition by offering a wide range of products and services to consumers. To stand out, companies will innovate and focus on attracting customers with various customizations and suitable financial products


**Figure 1. Top FinTech benefits for consumers**
*Source: Report Plaid's 2022 Fintech Effect Survey*

In Figure 1, we highlight and reinforce the fact that, for consumers, the greatest advantage of financial technologies is the ability to save precious time and better manage their resources.

In fact, FinTech is fundamentally transforming the way financial transactions are conducted. Living in the era of the "FinTech Revolution," it is crucial to take certain risks while remaining vigilant. It is natural that a financial transaction is not completely risk-free, this is also true of innovative financial technologies.

[4] Atos,2024"Atos reports full year 2023 results". Available online: https://atos.net/en/2024/press-release_2024_03_26/atos-reports-full-year-2023-results

Some of the most common risks are:

- **possible fraud or illegal behavior:** FinTech companies themselves warn that many of their customers are not well-equipped to manage their money. This suggests that consumers are often unfamiliar with complex financial models and techniques. As a result, operators or related parties may engage in illegal activities, which increases the risk of fraud.
- **lack of transparency about fees and other features**: when there is misinformation or a lack of transparency regarding changes in prices, features, and risks of the products purchased, consumers may become wary and perceive the situation as risky.
- **lack of physical communication branches**: this disadvantage arises when services are provided, and difficulties are typically resolved directly through the app or via email. While some FinTechs use blockchain technology as a differentiator to enhance security, not all do so, which can jeopardize user data security. Moreover, the reliance on online communication excludes a large portion of the population who lack internet access, making it difficult for them to become banked.
- **high risk of product unsuitability and ethical issues**: while FinTech provides access to a wide array of financial products, including the newest and most complex ones, consumers who lack the knowledge and experience to evaluate such products may end up purchasing products or services that are unsuitable for their financial needs. The absence of human intervention can also lead to ethical concerns related to accountability, transparency, data bias, and determining responsibility in cases of algorithmic error or bias.

As we can see, however, the benefits are overwhelmingly customer-cantered, as are the risks. Having measures in place to minimize but not exclude these risks can help both companies and the customer. As highlighted in Figure 2, the balance tends to prevail in favour of the benefits, which denotes an opportunity for entrepreneurs and creates a safe environment for customers.

It is recommended that the consumer should find out as much as possible about the FinTech company they wish to use, make sure that the contractual clauses (terms and conditions of the application, privacy policy and security practices) satisfy them and find out from the outset what risks they are taking on and which ones the company is assuming.

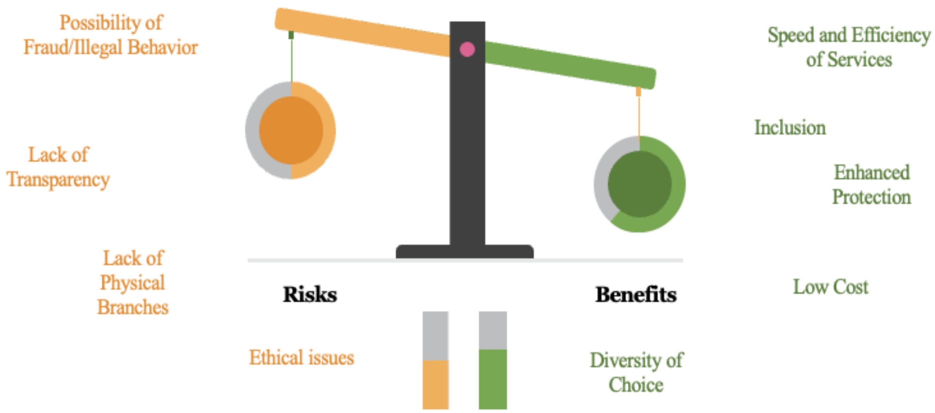


**Figure 2. The balance of benefits and risks of FinTechs**
*Source: created by the author based on the sources studied*

In terms of security when interacting with the app it is preferable to create strong passwords and additional security features such as two-factor authentication. Monitoring financial account activity on a regular basis mitigates the risk of suspicious transaction going undetected. And as a final recommendation would be to avoid using public Wi-Fi to access financial accounts.

## 3. TYPES OF PRODUCTS AND SERVICES

The variety of offers provided by FinTechs attracts both customers and investors, who are increasingly eager to finance them every year.

Thus, the world of FinTech can be classified into 3 main categories, depending on the service they offer[5]

- Payment and settlement services.
- Investment management services;
- Loans, deposits and attracting/mobilizing capital.
- InsureTech is considered a supplementary service.

In the following, we describe each component in detail, noting the importance and weights in total services.

One of the biggest categories is **payments, clearing and settlement services**.

FinTech has developed services to ease the relationship between traditional bank payments. FinTechs offer services that overcome some of the restrictions of the traditional payments system (such as: geographical barriers, the need to go to

[5] Constantin-Marius Apostoaie, "Finance and Risk Management, Digital finance"

a bank to transact, and bank hours of service). Subcategories of these services being:

- digital and mobile wallets.
- mobile points of sale.
- peer to peer transfers.
- foreign exchange.
- digital currency/crypto.

1. ***Digital wallets*** are platforms, accessible via web browsers and apps, used for making online payments. These platforms are linked to various traditional payment options, such as debit or credit cards, coupons, gift cards, and loyalty cards. ***Mobile wallets*** are digital wallets accessible through mobile phone apps, which sometimes include digitized versions of credit or debit cards. The biggest beneficiaries of the eWallet market are retail and e-commerce, which hold the largest market share, with an overall share of 30%. The eWallet app industry is valued at 100 billion dollars, with leading apps like PayPal - a digital payments platform that enables users to connect and transact online, on mobile devices, through an app, or in person - generating millions in profits. Some of the most widely used mobile wallets include Google Wallet, which offers services to send money via their app, Gmail, or on the web using the recipient's email address or cell phone number, along with merchant transactions. Apple Pay and Samsung Pay operate in a similar manner.

2. ***Mobile Point of Sale*** (MPOS) although serving the same purpose as debit and credit card payment terminals, there are 3 main differences between mPOS and traditional POS:

- Connection, mPOS are connected to mobile phones via audio jacks or Bluetooth so fintech companies connect them to banking networks
- Portability, mPOS are more portable than traditional POS because allow merchants to accept payments anywhere the internet is available.
- Proprietary, mPOS are owned by the fintech companies that provide them, many of which are cloud-based.

One drawback is that customers may be hesitant to use these services due to concerns about the potential misuse of their debit or credit card information by FinTech providers. We can further emphasize the growth potential of mPOS (mobile point of sale) systems with numbers. According to Fact.MR, the mPOS market is predicted to witness a Compound Annual Growth Rate (CAGR) of 33.5%. The estimated market value for 2032 is expected to reach USD 446.3 billion, compared to just 23 million in 2022. Key players in the mPOS market include Bixolon Co., Ltd., Citizen Systems Europe GmbH, Dspread Technology, Inc., Oracle Corporation, and Zettle.

3. ***Peer-to-peer transfers*** (P2P) transfers are services that provide digital or mobile wallets, allowing users to transfer money between any two wallets within the platform. The process works as follows: a user adds funds to their personal

wallet by depositing money into a bank account associated with the P2P transfer company. To make a P2P transfer, the service provider charges a fee to move money from the sending user's wallet and add it to the receiving user's wallet. The key benefit of this system is that it doesn't require money transfers between banks, as the funds associated with both wallets are part of the provider's payment ecosystem. P2P transfer services typically perform fewer security checks and serve customers exclusively through online or mobile platforms. FinTech P2P transfer services benefit from lower operating costs and can charge lower fees compared to traditional providers, which contributes to their growing market share. In response, some traditional companies are partnering with or acquiring FinTech competitors to modernize their operations and regain market share by offering services to unserved or underserved populations.

Among the most popular and widely used are:

- Wise (formerly TransferWise) offers money remittance services using the ratio of real (middle market) exchange for transactions.
- Remitly is the US-based digital remittance company, it allows people to send money from Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, the Netherlands, Norway, Spain, Sweden, the United Kingdom and the USA to over 150 around the world including the Philippines, India, Mexico and over 40 African countries.

The popularity of these services is evident in the market assessment, highlighting the widespread adoption of this technology. The global P2P payments market has been valued, as we observe in Fig.3, at USD 2.21 trillion in 2022 and is expected to reach around USD 11.62 trillion by 2032, its growth is indubitable.

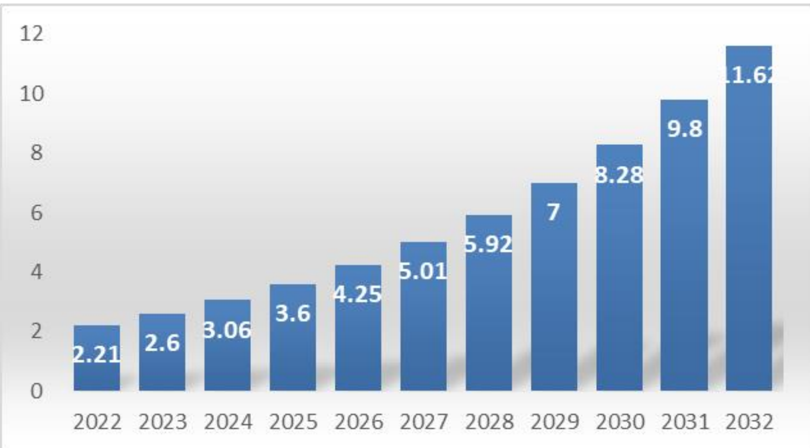


**Figure 3. P2P payment market size 2022 - 2032 (USD trillions)**

*Source:* SDK.FINANCE, 2024, Alex Malyshev [Understanding P2P Payments: Functionality, Trends and Benefits, Available at: https://sdk.finance/understanding-p2p-payments/

4. **Foreign exchange** (FX) FinTechs leverage P2P technology to match currencies in one country (typically in small amounts) and mirror transfers with foreign currencies in another country through digital wallets or a digital platform that utilizes an asset-backed digital currency. These platforms help reduce currency risk by converting money in near real-time, minimizing the impact of fluctuating market rates. Representative platforms in the FX FinTech space include Bitso, Berry FX, Kuarix, and Kantox.

5. **Digital/crypto currencies** are a medium of exchange created and stored electronically, using encryption techniques, to control the creation of monetary units and to verify the transfer of funds, decentralized from the Central Bank.

Nowadays, people have started to immobilize their monetary resources in digital models, but due to some disadvantages nevertheless most of them remain reserved. The disadvantages being: irreversible transactions, anonymous owners behind the accounts and the uniqueness of making transactions only in a particular cryptocurrency system.

The most popular cryptocurrencies in April 2024[6] are shown in the chart below (Fig.4), as well as their market capitalization and annual returns. We observe that the leading position is held by Bitcoin, with the largest and considerably larger than the others, market share of USD 1.3 trillion.

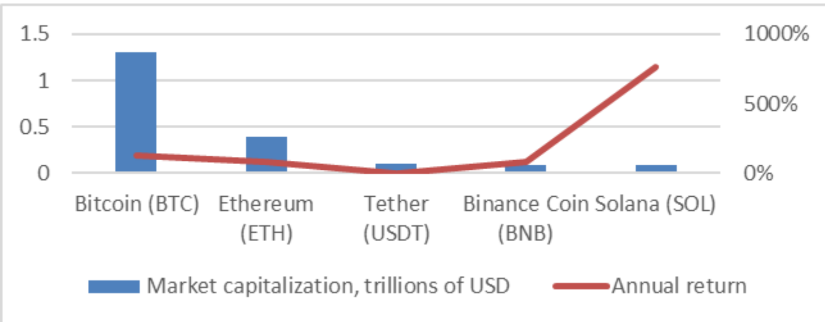


**Figure 4. Top digital currencies in April 2024**

*Source:* M. Adams, L. Dammeyer, "Top 10 Cryptocurrencies of April 2024", Forbes, 2024.

The second main category, **investment management services**, is characterized by online and mobile investment platforms, automated investment advice, investment simulation platforms and foreign exchange trading supported by virtual currencies

Main services provided including trading, investments and foreign exchange.

[6] M. Adams, L. Dammeyer, "Top 10 Cryptocurrencies of April 2024," Forbes, 2024.

1. E-Trading and high-frequency trading allows managing a portfolio of financial assets as in traditional trading and investing (includes stocks, bonds and equity holdings of start-ups). There are also automated trading platforms that use powerful computerized resources to trade many orders in a very short time: frequency trading (HFT); profits are made by buying low and selling high quickly, but at speeds on the order of milliseconds. The platforms that speak for themselves are Kuspit and Admiral Markets.

2. Copy-trading presumes that investors and traders copy certain managed positions of licensed traders and investors through contracts for difference (CFD) platforms. Well-known firms in this sector are:

- Ayondo allows customers to track top traders, ranked by performance and number of followers to replicate or build portfolios based on these top traders (including risk-free demo accounts). The best trades in return earn rewards for allowing people to follow their trades.
- CopyFX helps users to manage their own risks, as well as to Share your trading experience for extra profit. It offers its clients to choose one of two roles: investor or trader.

3. Robo-advisers replace human brokers by offering specific investment suggestions.

The advice is calibrated according to the investor's risk appetite and objectives. The advice also includes providing users with information about the trading activities of so-called top traders (i.e. investors with unusually high returns). Further benchmarking, we have analysed the top companies in this field, indicating their strengths. For example, Robo Advisor by CMC Markets offers an excellent match for all types of traders with a wide product offering, while Interactive Brokers provides up to 4.83% interest earnings on instantly available USD cash balances, and XTB is exclusively for traders who want to minimize their costs - trading and/or foreign

The third category encompasses FinTech companies providing new channels for **lending and capital raising** that target the underserved and underserved populations.

Main channels include:

- **Lending Markets**: P2P Lending: These are online services that connect investors (who are not the originators of the loans) with borrowers through a digital platform. Successful companies in this space include Prosper, LendingClub, and Funding Circle.
- **Online Banking**: These are platforms provided by banks that allow users to perform various operations in real time. Mobile banking offers the same services as online banking platforms, but users access them through specialized mobile applications. Examples of excellent online and mobile banking services include Nubank, NatWest, Lloyds, and Halifax.

- **Crowdfunding**: This is a non-traditional method of raising funds by collecting small amounts of money from many people via an internet-based platform. Crowdfunding platforms connect project initiators with donors or contributors, whose reward depends on the crowdfunding method and the success of the project.

There are three main types of crowdfunding methods: equity crowdfunding (Crowdcube, Seedrs), reward crowdfunding (Kickstarter, IndireGoGo), crowdfunding for donations (GoFundMe).

The average funding per campaign in the crowdfunding market is $8.15k in 2024.

From a global comparison perspective, Figure 5 shows that the highest transaction value is reached in the United States (504 million USD in 2024). With a significant gap and enviable by other countries.

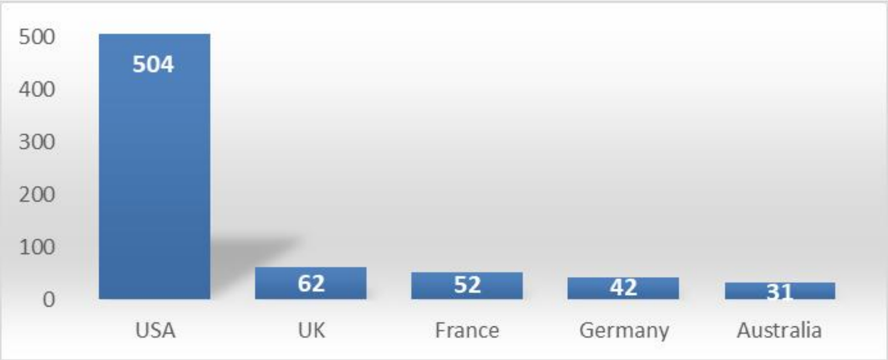


**Figure 5. Top countries in crowdfunding based on transaction values, million USD**
*Source:* Alternatives finance: Crowdfunding Statistics. Available at: https://alternatives.financesonline.com/crowdfunding-statistics/

The final FinTech category, **InsureTech**, involves the use of big data analytics, typically through machine learning methods, to assign customized insurance policies and diversify coverage options and pricing models. Providers often rely on smart contracts to automate the enforcement of insurance agreements. These contracts, created and stored using blockchain technology, are enforced through pre-programmed sets of rules that execute automatically. The global Insurtech market is expected to reach 166.7 billion USD by 2030. The compound annual growth rate (CAGR) of the Insurtech market is estimated to be around 43.9% between 2021 and 2030.

From 2019 through the first half of 2023, InsurTech companies around the world have collectively secured a total of $34.8 billion in funding.[7]

Analyzing the annual FinTech 2023 effects report, we observe that customer trends for the year are focused on three key objectives. From Figure 6, it is clear that saving and investing their own money, with 42% of respondents, remains a major area of interest for the population. This focus on financial goals will likely drive increased utilization of financial technology products and services, which will cater to the growing consumer demand.

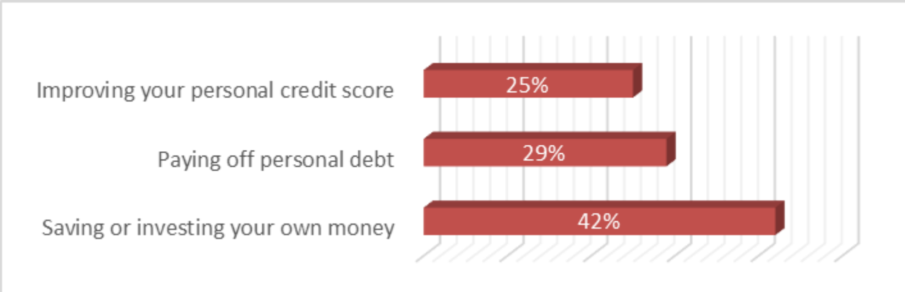


**Figure 6. Top financial targets for 2024**
*Source:* Fintech Effect | 2023 Consumer trend report

Thus, generalizing, each component of FinTech has its own attributes, with significant impact on the population, being complementary and facilitating the lives of customers.

## 4. FINTECHS IN ROMANIA AND THE EUROPEAN UNION

Among the countries of the European Union, Western Europe is home to the largest number of FinTech companies, including start-ups such as Funding Circle, Revolut, and TransferWise. Some of these FinTech start-ups have achieved "unicorn" status - an industry term used to describe companies that have reached a $1 billion valuation - and have evolved into "blue chips" within the sector.

[7] Fintech global "Global Insurtech investment falls short in H1 2023 whilst deal activity remains stable",2023. Available at: https:

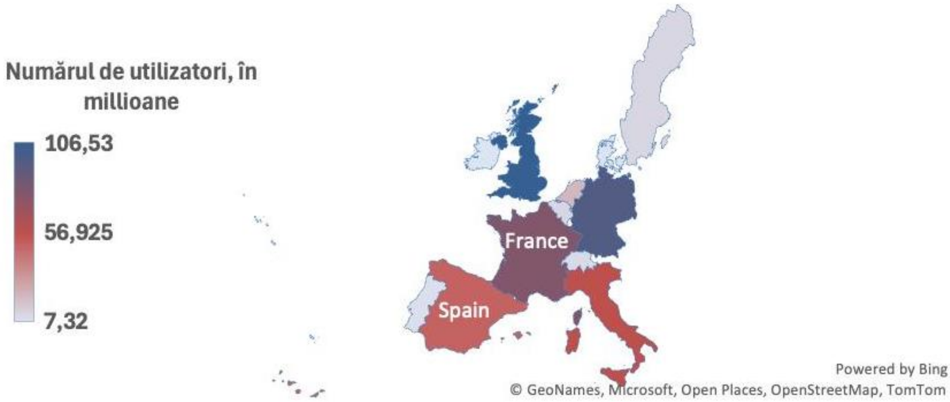


**Figure 7. Number of FinTech users in selected European countries in 2023 (in millions)**

*Source:* Statista: Fintech Users in Europe by Country. Available at: https://www.statista.com/statistics/1384900/fintech-users-europe-by-country/

In 2023, the United Kingdom (UK) had the largest number of FinTech users in Europe, with approximately 106.53 million users, as shown in Figure 7. This is despite the fact that the UK is no longer part of the EU post-Brexit, as KPIs are considered for all EU-27 countries. The UK was followed by Germany and France, with 96.4 million and 79.4 million users, respectively. Further information and methodological notes can be found in Statista's Digital Market Insights.

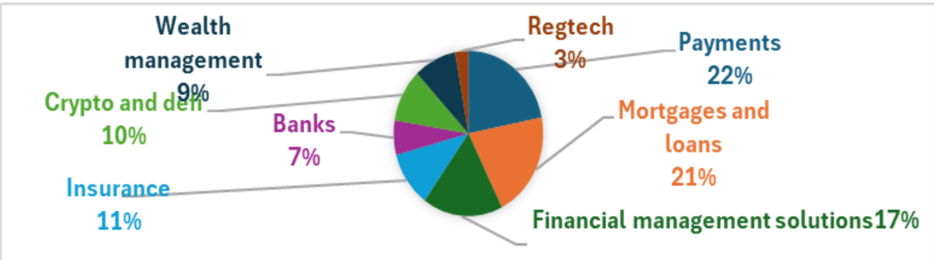


**Figure 8. FinTech industry venture capital funding by sub-industries (%)**

*Source:* https://dealroom.co/blog/fintech-q1-2023-report

Although there has been a general slowdown in FinTech activity across Europe, promising new businesses are still emerging, particularly in the early stages. These startups are focused on building the fundamental infrastructure for the future and are benefiting from the expertise of many talented engineers. Significant shares are held by companies focusing on payments (22%) and mortgages/loans (21%), followed by financial management solutions, as depicted in Figure 8. As the FinTech industry continues to evolve and mature, these companies are well-positioned to lead the next wave of innovation and growth.[8]

The analysis highlights the growth of FinTech activity across every European country, but it also reveals a significant divergence in maturity and performance between FinTech ecosystems by country. There are substantial gaps between the top third of countries and the rest, as shown in Figure 9. Two countries that stand out for their superior FinTech ecosystem performance are the United Kingdom (an ex-EU member) and Sweden.

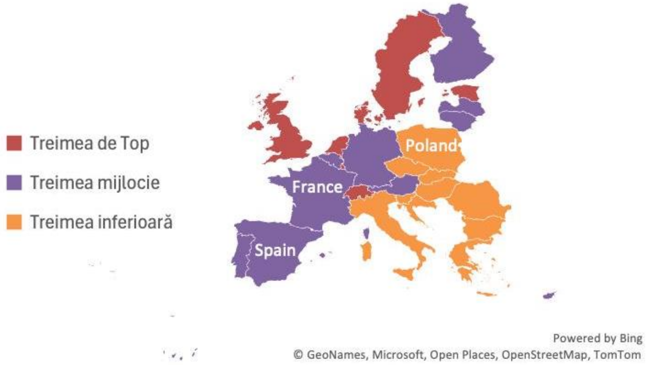


**Figure 9. FinTech industry financing with venture capital by sub-industries**

*Source:* DEALROOM.CO, L. Chiavarini,2023, [Fintech Q1 2023 report]. Available at: https://dealroom.co/blog/fintech-q1-2023-report

If the FinTech ecosystems in all European countries were able to achieve the same level of performance as the best in the region, the advantage could be substantial. The number of FinTech jobs in Europe would increase by a factor of 2.7 to over 364,000, funding volumes would more than double from €63 billion to almost €150 billion, and valuations would increase by a factor of 2.3 to almost €1 trillion - almost double the combined market capitalization of the top ten banking players in Europe as of June 2022.

Currently, the FinTech solutions market is in a state of continuous development[9] , both on both the individual and the corporate segment. According to Statista[10] , the largest market segment in Romania is Digital Payments, with a total transaction value of €8,041.00 million in 2022. In addition, Digital Payments

[8] L. Chiavarini, Dealroom.co, "Fintech Q1 2023 report," 2023. Available at: https://dealroom.co/blog/fintech-q1-2023-report

[9] , I.C.M. BĂLȚOI "The fintech ecosystem in Romania" ,2020. Available online: https://intapi.sciendo.com/pdf/10.2478/picbe-2020-0026

[10] Statista "Digital Payments - Romania"2022. Available online: https://www.statista.com/outlook/dmo/fintech/digital-payments/romania

is predicted to reach a total transaction value of 15860 million euros in 2027 in 5 years. Below, we can observe the structure of FinTech products in Romania (Figure 10), the leading sector being payments and mobile wallets, which denotes that Romanians predominantly use financial technologies for convenience and to reduce costs with intermediaries, with a 10% gap being financial infrastructure.

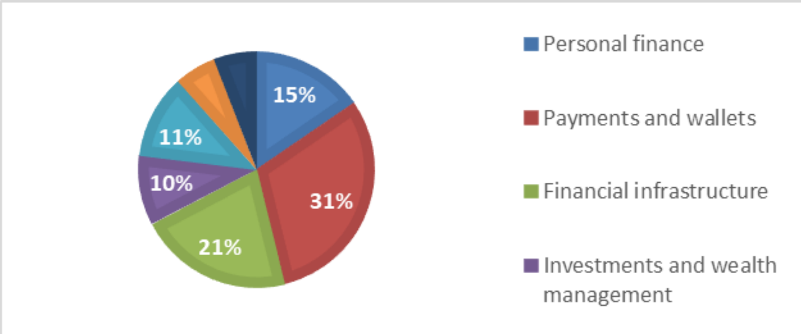


**Figure 10. Structure of FinTech product types in Romania, %**
*Source:* FUTURE BANKING, Report Romania's FinTech map 2022

For investors, Romania's labour force, business incubators and tax breaks will make Romania an even more attractive place for investors in the future, especially in this field.

## 5. CONCLUSIONS

As FinTech is a technology-driven industry, it is constantly evolving, introducing new products and services to the market. In 2024, several key trends are shaping the industry. The first trend is the integration of artificial intelligence (AI) to enhance applications and secure customer service. Green FinTechs and sustainable investments are also gaining traction, driven by the global push for addressing climate change and the promotion of Sustainable Development Goals (SDGs) by many countries. In tandem with traditional and central banks, financial technologies are providing additional support to facilitate operational processes.

New companies entering the FinTech space have the opportunity to attract funding and potentially become unicorns. In fact, the FinTech industry was the number one unicorn industry in 2021. Although the trend of new unicorns has slowed, the number of established unicorns continues to grow.

Both domestic and international markets view FinTech as an opportunity for development, capitalization, and value creation. As a result, investments are increasing year by year, with tangible effects expected in the near future rather than decades. Consumers are increasingly attracted to FinTech products but remain cautious about the security of their personal data and the integrity of their money. For this reason, traditional or digital banks remain a safer option for certain segments of the population. In this context, FinTechs can partner with banks to help improve operational efficiency, thereby gaining credibility in the eyes of consumers.

In conclusion, the FinTech landscape in 2024 is filled with potential and innovation. These trends are only a glimpse of the growing opportunities at the intersection of finance and technology. FinTechs continue to redefine and democratize financial services, promising a more inclusive and technologically advanced financial future.

## References

1. Adams, M. (2024). *Top 10 cryptocurrencies of April 2024.* Available at: www.forbes.com
2. *Advantages and disadvantages of fintech companies* (2022*).* Available at: www.bbva.ch
3. Botta, A., Deuble, S., Emmanuelli, C., Figueiredo, M., Irlbeck, C., Windhagen, E. (2022). *Europe's Fintech Opportunity*. Available at: www.mckinsey.com
4. Chang, J. (2024). *80 crowdfunding statistics you must see: 2024 platforms, Impact & Campaign Data*. Available at: www.alternatives.financesonline.com
5. Fact.MR - *mobile point of sale (mpos) market analysis by solution type (Integrated Card Reader Solutions, card reader accessories), by Technology (Hybrid Technology Solutions, EMV chip and pin, magnetic-stripe, chip and sign, NFC, biometrics), by end use & region - global forecast 2022-2032.* Available at: www.factmr.com
6. Fintech industry trends in 2024: The Year of the connected customer. (2024). Available at: www.intellias.com
7. Fintech*: Risks and Benefits (2023).* Available at: www.mfsa.mt
8. Kagan, J. (n.d.). *Financial Technology (Fintech): Its uses and impact on our lives.* Available at: www.investopedia.com
9. Malyshev, A. (2024*). P2P payments: Functionality, trends and Benefits.* Available at: https://sdk.finance
10. Money Saving Expert: *Digital Banking Guide*. Available at: www.moneysavingexpert.com
11. Niketan Sharma is the CTO of Nimble AppGenie. (2024*). Ewallet app statistics 2024*: *Market size, users & transactions*. Available at: www.nimbleappgenie.com
12. NowNow: *Fintech Trends in 2024*. Available at: www.nownow.ng
13. Published by Statista Research Department, & 27, F. (2024). *Fintech users in Europe by country 2023.* Available at: www.statista.com
14. Published by Statista Research Department, & 7, M. (2024). *Unicorns worldwide by industry 2024.* Available at: www.statista.com
15. Silicon Valley Bank: *Future of Fintech Report 2023*. Available at: www.svb.com
16. Thompsett, L. (2023). *Top 10 cross-border cross-border payment FINTECHS by funding: Fintech Magazine.* Available at: www.fintechmagazine.com
17. Top8NeoBanks. (2024). *Best Digital Banking Services: Europe.* Available at: www.top8neobanks.com