

# EXPLORING CRYPTOCURRENCY ADOPTION TRENDS IN EUROPE: A COMPARATIVE ANALYSIS OF GERMANY, FRANCE, AND ROMANIA

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## Abstract

*Cryptocurrencies have emerged as a significant innovation in the financial landscape, with their adoption varying across different regions. This paper investigates the adoption trends of cryptocurrencies in three European countries: Germany, France, and Romania. By examining regulatory frameworks, public sentiment, and market dynamics, we aim to provide insights into the factors influencing cryptocurrency adoption in these nations. Furthermore, we explore the relationship between digital banks and cryptocurrencies, analysing the potential synergies and challenges associated with their integration. Finally, we offer future projections and suggest areas for further research to better understand the evolving landscape of cryptocurrencies in Europe.*

*The motivation for studying cryptocurrency adoption in Europe stems from the region's diverse regulatory frameworks, cultural attitudes, and economic landscapes. Understanding the dynamics of cryptocurrency adoption in specific European countries can provide valuable insights into the broader trends shaping the future of finance. Moreover, as digital banking continues to gain prominence, exploring the intersection between digital banks and cryptocurrencies becomes imperative. The regulatory frameworks surrounding cryptocurrencies in Germany, France, and Romania exemplify the diverse approaches adopted by European countries in response to the emergence of digital assets. While Germany and France have made significant strides in implementing comprehensive regulatory frameworks, Romania's regulatory landscape remains in the early stages of development.*

**Keywords:** *Cryptocurrencies, trends, digital banks, market dynamics, financial markets.*

## 1. Introduction

By conducting a comprehensive analysis of cryptocurrency adoption in Europe, this paper aims to contribute to our understanding of the factors shaping the future of finance in the digital age. Through empirical research and case studies, we seek to inform policymakers, industry stakeholders, and the general public about the opportunities and challenges presented by cryptocurrencies and their integration with digital banking services.

### 1.1. Overview of cryptocurrencies and their significance in the financial sector

Cryptocurrencies<sup>1</sup> have revolutionised the financial landscape, offering a decentralised alternative to traditional monetary systems. With their decentralised nature and blockchain technology underpinning their operation, cryptocurrencies have gained significant traction worldwide. Europe stands as a key player in this global phenomenon, with countries like Germany, France, and Romania showcasing varied attitudes and approaches towards cryptocurrency adoption.

### 1.2. Motivation for studying cryptocurrency adoption in Europe

The motivation for studying cryptocurrency adoption in Europe stems from the region's diverse regulatory frameworks, cultural attitudes, and economic landscapes. Understanding the dynamics of cryptocurrency adoption in specific European countries can provide valuable insights into the broader trends shaping the future of finance. Moreover, as digital banking continues to gain prominence, exploring the intersection between digital banks and cryptocurrencies becomes imperative.

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<sup>1</sup> B.M. Lucey, S.A. Vigne, L. Yarovaya, Y. Wang, *The cryptocurrency uncertainty index*, *Financ. Res. Lett.* 45, 102147, 2022.

### 1.3. Scope and structure of the paper

This paper aims to investigate the adoption trends of cryptocurrencies in Germany, France, and Romania, offering a comparative analysis of regulatory environments, public sentiment, and market dynamics. By delving into the nuances of each country's approach towards cryptocurrencies, we seek to uncover the factors influencing adoption and identify potential areas for collaboration and growth.

Furthermore, the integration of cryptocurrencies into the digital banking sector presents both opportunities and challenges. Digital banks, characterised by their innovative approach to financial services and emphasis on digital technologies, are poised to play a significant role in shaping the future of cryptocurrency adoption. Understanding how digital banks navigate regulatory landscapes, integrate cryptocurrency services, and address consumer needs is essential for predicting the trajectory of this evolving relationship.

Through this exploration, we aim to provide policymakers, financial institutions, and cryptocurrency enthusiasts with a comprehensive understanding of the European cryptocurrency landscape. By analysing regulatory frameworks, public sentiment, market dynamics, and the relationship between digital banks and cryptocurrencies, we hope to shed light on the opportunities and challenges inherent in this rapidly evolving ecosystem. Ultimately, this paper sets the stage for future research and collaboration aimed at unlocking the full potential of cryptocurrencies in Europe's digital economy.

## 2. Regulatory Frameworks

### 2.1. Examination of cryptocurrency regulations in Germany, France, and Romania

Germany has emerged as a key player in the European cryptocurrency market, with a regulatory framework characterised by a balance between innovation and investor protection. The country recognizes cryptocurrencies as „units of account” and financial instruments, subjecting them to regulatory oversight by the Federal Financial Supervisory Authority (BaFin). Notably, Germany has implemented the Fifth European Anti-Money Laundering Directive (AMLD5), requiring cryptocurrency exchanges and custodial wallet providers to register with BaFin and comply with stringent anti-money laundering (AML) and know-your-customer (KYC) regulations. Moreover, Germany's stance on Initial Coin Offerings (ICOs) remains cautious, with the regulator emphasising investor protection and transparency.

France has adopted a progressive approach towards regulating cryptocurrencies, aiming to foster innovation while safeguarding investors and maintaining financial stability. The country's regulatory authority, the Autorité des Marchés Financiers (AMF), oversees cryptocurrency-related activities and has implemented measures to combat illicit activities and ensure market integrity. France introduced a regulatory framework for ICOs in 2019, providing issuers with optional approval from the AMF, subject to compliance with disclosure requirements and investor protection measures. Additionally, France has proposed legislation to establish a regulatory sandbox for blockchain and cryptocurrency projects, allowing experimentation under controlled conditions while engaging with regulators.

Romania's regulatory stance towards cryptocurrencies is relatively nascent, reflecting the broader Eastern European trend of cautious observation and gradual adaptation. While the National Bank of Romania (BNR) has issued warnings about the risks associated with cryptocurrencies and advised caution to investors, comprehensive regulatory frameworks are yet to be established. Romania has not implemented specific legislation addressing cryptocurrencies, leaving the regulatory landscape fragmented and subject to uncertainty. However, recent developments indicate a growing interest in regulating digital assets, with proposals for regulatory frameworks and tax treatment under consideration.

### 2.2. Comparison of regulatory approaches and their impact on adoption

Recent Developments: Across Europe, recent developments in cryptocurrency regulation reflect a growing recognition of the need for comprehensive regulatory frameworks to address the evolving nature of digital assets. In Germany, amendments to the Banking Act (KWG) have been proposed to facilitate the issuance and custody of cryptocurrencies by banks, signalling a potential shift towards mainstream adoption. Similarly, France has introduced legislation to enhance regulatory clarity for cryptocurrency service providers and promote innovation through the establishment of a digital assets sandbox. In Romania, ongoing discussions among

policymakers, regulatory authorities, and industry stakeholders highlight the need for coordinated efforts to develop a cohesive regulatory framework that balances innovation with investor protection.

### 2.3. Analysis of recent developments and proposed legislative changes

The regulatory frameworks surrounding cryptocurrencies in Germany, France, and Romania exemplify the diverse approaches adopted by European countries in response to the emergence of digital assets. While Germany and France have made significant strides in implementing comprehensive regulatory frameworks, Romania's regulatory landscape remains in the early stages of development. Moving forward, collaboration between policymakers, regulatory authorities, and industry stakeholders will be essential to foster innovation, ensure market integrity, and facilitate responsible cryptocurrency adoption across Europe.

## 3. Public Sentiment and Awareness

Public sentiment and awareness play a crucial role in shaping the adoption and acceptance of cryptocurrencies within a society. In this section, we delve into the attitudes, awareness levels, and perceptions of cryptocurrencies in Germany, France, and Romania, providing insights into the factors influencing public sentiment in each country.

### 3.1. Survey of public attitudes towards cryptocurrencies in each country

In Germany, public sentiment towards cryptocurrencies is characterised by a mix of curiosity, scepticism, and cautious optimism. While a segment of the population views cryptocurrencies as a novel investment opportunity with the potential for high returns, others express concerns about volatility, security risks, and regulatory uncertainty. Despite these reservations, there is a growing awareness of cryptocurrencies driven by media coverage, educational initiatives, and the emergence of cryptocurrency-related businesses. Moreover, the involvement of established financial institutions and regulatory clarity provided by BaFin contribute to increasing trust and legitimacy within the German cryptocurrency ecosystem.

In France, public sentiment towards cryptocurrencies is marked by a progressive outlook and growing interest in blockchain technology. The French population exhibits a relatively high level of awareness regarding cryptocurrencies, attributed to extensive media coverage, educational programs, and government initiatives aimed at promoting digital innovation. While some individuals remain cautious due to concerns about volatility and regulatory ambiguity, there is a growing acceptance of cryptocurrencies as a legitimate asset class and medium of exchange. Moreover, France's proactive approach towards regulating cryptocurrencies and fostering blockchain<sup>2</sup> innovation contributes to a favorable environment for cryptocurrency adoption and experimentation.

In Romania, public sentiment towards cryptocurrencies is characterised by a blend of curiosity, scepticism, and limited awareness. Despite the increasing popularity of cryptocurrencies globally, awareness levels among the Romanian population remain relatively low, with many individuals having limited understanding of the technology and its potential implications. Scepticism towards cryptocurrencies is fuelled by concerns about volatility, security risks, and lack of regulatory oversight. However, there is a growing interest in cryptocurrency investment and trading among tech-savvy individuals and young adults. Initiatives aimed at raising awareness and educating the public about cryptocurrencies are gaining traction, albeit at a slower pace compared to other European countries.

### 3.2. Assessment of awareness levels and perceived risks and identification of key influencers shaping public opinion

Public sentiment and awareness of cryptocurrencies vary across Germany, France, and Romania, reflecting the diverse socio-cultural contexts and regulatory environments within each country. While Germany and France exhibit relatively higher levels of awareness and acceptance, Romania lags behind due to limited education and regulatory clarity. Moving forward, initiatives aimed at raising awareness, fostering education, and enhancing regulatory transparency will be essential to facilitate informed decision-making and promote responsible

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<sup>2</sup> Y. Lee, B. Son, S. Park, J. Lee, H. Jang, *A survey on security and privacy in blockchain-based central bank digital currencies*, J. Internet Serv. Inf. Secur. 11 (3), 2021b, p. 16-29.

cryptocurrency adoption across Europe. Additionally, efforts to address concerns about security, volatility, and regulatory uncertainty will play a crucial role in building trust and confidence in cryptocurrencies among the general public.

#### **4. Market Dynamics**

The cryptocurrency market dynamics in Germany, France, and Romania are influenced by a myriad of factors, including regulatory frameworks, technological advancements, investor sentiment, and economic conditions. In this section, we delve into the market trends, trading volumes, and adoption rates of cryptocurrencies in each country, providing insights into the evolving landscape of digital assets.

##### **4.1. Analysis of cryptocurrency market trends and trading volumes**

Germany boasts a vibrant cryptocurrency market characterised by robust trading volumes, a diverse range of cryptocurrency exchanges, and a growing ecosystem of blockchain startups. The country's regulatory clarity provided by BaFin has instilled confidence among investors and facilitated the emergence of cryptocurrency-related businesses. Bitcoin and Ethereum remain popular investment choices among German investors, with a significant portion of trading activity occurring on regulated exchanges. Moreover, the integration of cryptocurrencies into traditional financial services, such as banking and asset management, signals a maturing market landscape in Germany.

France: France's cryptocurrency market exhibits steady growth and increasing adoption driven by favorable regulatory measures, government support for blockchain innovation, and a tech-savvy population. The country's proactive approach towards regulating cryptocurrencies has fostered investor confidence and facilitated the emergence of cryptocurrency exchanges and service providers. French investors show a preference for a diverse range of cryptocurrencies, including Bitcoin, Ethereum, and altcoins, with trading activity concentrated on both domestic and international platforms. Furthermore, France's efforts to promote blockchain research, education, and adoption across various sectors contribute to the overall dynamism of the cryptocurrency market.

Romania: Romania's cryptocurrency market is characterised by a burgeoning interest in digital assets, driven by tech-savvy individuals, young investors, and the growing adoption of digital payment solutions. While regulatory uncertainty and limited awareness pose challenges, Romania's cryptocurrency market exhibits potential for growth, fuelled by increasing internet penetration and smartphone usage. Bitcoin remains the most widely recognised and traded cryptocurrency in Romania, with a burgeoning community of enthusiasts, traders, and entrepreneurs. Moreover, the integration of cryptocurrencies into online commerce and peer-to-peer transactions reflects the evolving nature of the Romanian cryptocurrency landscape.

##### **4.2. Comparison of popular cryptocurrencies and their adoption rates and Examination of factors driving market growth or hindering adoption**

The cryptocurrency market dynamics in Germany, France, and Romania underscore the diverse trends and opportunities present within the European landscape. While Germany and France exhibit robust market infrastructure, regulatory clarity, and growing investor confidence, Romania's market is characterised by nascent development and untapped potential. Moving forward, efforts to enhance regulatory clarity, promote investor education, and foster innovation will be essential to drive sustainable growth and mainstream adoption of cryptocurrencies across Europe. Moreover, collaboration between policymakers, industry stakeholders, and the public will be crucial in navigating the evolving challenges and opportunities within the dynamic cryptocurrency market.

#### **5. Digital Banks and Cryptocurrencies**

##### **5.1 Overview of digital banking landscape in Europe**

Digital banks, characterised by their innovative approach to financial services and emphasis on digital technologies, are increasingly exploring the integration of cryptocurrencies into their offerings. In this section, we examine the relationship between digital banks and cryptocurrencies, exploring the potential synergies, challenges, and future implications of their integration in Germany, France, and Romania.

## 5.2. Exploration of digital banks' integration of cryptocurrency services

**Expanded Financial Services:** Digital banks can leverage cryptocurrencies to offer expanded financial services to their customers, including cryptocurrency wallets, trading platforms, and investment products. By providing access to cryptocurrencies, digital banks can cater to the growing demand for diversified investment options and alternative financial assets.

**Enhanced Customer Experience:** Integrating cryptocurrencies into digital banking platforms can enhance the overall customer experience by providing seamless access to both traditional and digital assets. Customers can conveniently manage their cryptocurrency holdings alongside their fiat currencies within a single interface, streamlining their financial management process.

**Innovation and Differentiation:** Digital banks that embrace cryptocurrencies differentiate themselves in the competitive financial landscape, positioning themselves as innovative and forward-thinking institutions. By offering cutting-edge financial services and embracing emerging technologies, digital banks can attract tech-savvy customers and stay ahead of traditional banking competitors.

## 5.3. Evaluation of benefits, challenges, and regulatory considerations

**Regulatory Compliance:** Digital banks must navigate complex regulatory frameworks surrounding cryptocurrencies, including anti-money laundering (AML) and know-your-customer (KYC) requirements. Ensuring compliance with evolving regulations is essential to mitigate legal risks and maintain regulatory legitimacy.

**Security Concerns:** Cryptocurrencies are susceptible to security vulnerabilities, including hacking, fraud, and theft. Digital banks must implement robust security measures, such as multi-factor authentication, encryption, and cold storage solutions, to safeguard customers' cryptocurrency holdings and mitigate cybersecurity risks.

**Volatility and Risk Management:** Cryptocurrency markets are highly volatile, with prices subject to rapid fluctuations and market speculation. Digital banks must educate customers about the inherent risks of investing in cryptocurrencies and implement risk management strategies to protect against potential losses.

## 5.4. Future Implications

**Mainstream Adoption:** The integration of cryptocurrencies into digital banking platforms can facilitate mainstream adoption by providing a user-friendly gateway for customers to access digital assets. As digital banks continue to expand their cryptocurrency offerings and improve usability, cryptocurrencies may become increasingly integrated into everyday financial transactions.

**Financial Inclusion:** Digital banks that offer cryptocurrency services can promote financial inclusion by providing access to digital assets for underserved populations, including the unbanked and underbanked. By democratising access to financial services and digital assets, digital banks can empower individuals to participate in the global economy.

**Regulatory Evolution:** The integration of cryptocurrencies into digital banking poses regulatory challenges and opportunities, prompting policymakers to develop clear and coherent regulatory frameworks to govern digital asset transactions. As regulatory clarity improves and compliance standards evolve, digital banks and cryptocurrencies may become more seamlessly integrated into the broader financial ecosystem.

In conclusion, the integration of cryptocurrencies into digital banking represents a transformative opportunity for the financial industry, offering expanded financial services, enhanced customer experiences, and opportunities for innovation. While challenges such as regulatory compliance, security concerns, and risk management must be addressed, the future implications of this integration are profound, potentially leading to mainstream adoption, financial inclusion, and regulatory evolution within the digital banking landscape.

## 6. Case Studies

Examining case studies of digital banks integrating cryptocurrencies provides valuable insights into successful strategies, challenges faced, and lessons learned. In this section, we present case studies of prominent digital banks in Germany, France, and Romania that have embraced cryptocurrencies in their offerings.

### **6.1. Examination of prominent digital banks offering cryptocurrency services. Case studies of successful integration strategies and user experiences**

N26 (Germany): N26, a leading digital bank based in Germany, has strategically integrated cryptocurrencies into its platform to cater to the evolving needs of its customer base. Through partnerships with cryptocurrency exchanges and wallet providers, N26 offers seamless access to cryptocurrency trading and investment options within its mobile banking app. By providing a user-friendly interface, transparent pricing, and robust security features, N26 has attracted a diverse customer base seeking to diversify their investment portfolios with digital assets. Moreover, N26's proactive approach to regulatory compliance and customer education has enhanced trust and confidence among users, positioning the bank as a trusted partner in the cryptocurrency space.

Revolut (France): Revolut, a digital banking app with a strong presence in France, has embraced cryptocurrencies as a core component of its product offering. By enabling users to buy, sell, and hold cryptocurrencies directly within the app, Revolut has democratized access to digital assets for its customer base. Additionally, Revolut offers features such as cryptocurrency price alerts, recurring purchases, and instant transfers between fiat and cryptocurrencies, enhancing the overall user experience. Despite regulatory challenges and market volatility, Revolut has navigated the cryptocurrency landscape adeptly, expanding its cryptocurrency services to meet the growing demand among its customer base.

ING Bank (Romania): ING Bank, a multinational banking institution with operations in Romania, has embarked on a cautious approach towards integrating cryptocurrencies into its digital banking platform. While ING Bank acknowledges the potential of cryptocurrencies as a disruptive force in the financial industry, the bank prioritizes regulatory compliance, risk management, and customer protection. ING Bank collaborates with fintech partners and blockchain startups to explore innovative solutions for digital asset management, cross-border payments, and decentralised finance (DeFi). By adopting a collaborative approach and closely monitoring regulatory developments, ING Bank aims to position itself at the forefront of digital banking innovation in Romania while mitigating potential risks associated with cryptocurrencies.

### **6.2. Lessons learned and best practices for other financial institutions**

Regulatory Compliance: Digital banks must prioritize regulatory compliance and work closely with regulatory authorities to navigate the evolving regulatory landscape surrounding cryptocurrencies.

User Experience: Providing a seamless and intuitive user experience is critical for driving adoption of cryptocurrency services within digital banking platforms. User-friendly interfaces, transparent pricing, and robust security features enhance customer satisfaction and trust.

Education and Awareness: Educating customers about the risks and opportunities associated with cryptocurrencies is essential for promoting responsible investing and mitigating potential losses. Digital banks should invest in educational resources and customer support to empower users to make informed decisions.

Case studies of digital banks integrating cryptocurrencies illustrate the diverse approaches, strategies, and outcomes observed in Germany, France, and Romania. While successful integration requires careful consideration of regulatory compliance, user experience, and customer education, the potential benefits of offering cryptocurrency services within digital banking platforms are significant. By learning from successful case studies and addressing challenges proactively, digital banks can capitalise on the opportunities presented by cryptocurrencies to enhance their offerings, attract new customers, and drive innovation within the financial industry.

## **7. Future Projections and Research Directions**

As the intersection between digital banks and cryptocurrencies continues to evolve, future projections and research directions offer valuable insights into the potential trajectory of this dynamic relationship. In this section, we explore anticipated developments, emerging trends, and areas for further research in the context of Germany, France, and Romania.

### **7.1. Predictions for the future of cryptocurrency adoption in Europe**

Research directions may include comparative studies of regulatory approaches across European countries, analysis of regulatory compliance costs for digital banks, and assessments of the impact of regulatory harmonisation on cryptocurrency adoption.

### **7.2. Exploration of potential collaborations between digital banks and cryptocurrency platforms. Identification of areas for further research, including regulatory harmonisation, technological advancements, and consumer behavior analysis**

**Regulatory Harmonisation:** Future projections suggest that regulatory harmonisation across Europe will play a pivotal role in shaping the integration of cryptocurrencies into digital banking platforms. As policymakers work towards establishing clear and coherent regulatory frameworks governing digital assets, digital banks will benefit from greater legal certainty, reduced compliance costs, and expanded market opportunities.

**Technological Advancements:** The future of digital banks and cryptocurrencies is closely intertwined with technological advancements, including developments in blockchain technology, digital identity solutions, and decentralised finance (DeFi). Research into innovative technologies such as blockchain interoperability, privacy-preserving protocols, and self-sovereign identity systems will inform the evolution of digital banking services and enable new use cases for cryptocurrencies. Additionally, studies on the scalability, security, and sustainability of blockchain networks will contribute to the development of robust infrastructure for digital asset management within digital banking platforms.

**Consumer Behavior Analysis:** Understanding consumer behavior and preferences regarding cryptocurrency adoption within digital banking is essential for designing tailored products and services that meet customer needs. Future projections indicate a growing demand for user-friendly cryptocurrency solutions, personalised investment advice, and seamless integration with traditional banking services. Research directions may include surveys, focus groups, and behavioral experiments to assess consumer attitudes, motivations, and decision-making processes related to cryptocurrency adoption. Moreover, analysis of user engagement metrics, transaction patterns, and feedback mechanisms will provide valuable insights into customer satisfaction and retention strategies for digital banks.

**Financial Inclusion and Accessibility:** Future projections suggest that digital banks and cryptocurrencies have the potential to promote financial inclusion and accessibility by providing affordable, accessible, and inclusive financial services to underserved populations. Research directions may include studies on the impact of digital banking and cryptocurrency adoption on financial inclusion metrics, such as access to banking services, credit availability, and wealth accumulation. Moreover, analyses of user demographics, socioeconomic factors, and geographic disparities will inform targeted interventions and policy initiatives aimed at reducing financial exclusion and narrowing the digital divide.

In conclusion, future projections and research directions offer a roadmap for navigating the evolving landscape of digital banks and cryptocurrencies in Germany, France, and Romania. By addressing regulatory challenges, embracing technological innovations, understanding consumer behavior, and promoting financial inclusion, digital banks can harness the transformative potential of cryptocurrencies to enhance their offerings, drive innovation, and create value for customers and society at large. Continued research and collaboration among policymakers, industry stakeholders, and academia will be essential to realise the full potential of this dynamic relationship and shape the future of finance in the digital age.

## **8. Conclusions. Summary of key findings and insights. Implications for policymakers, financial institutions, and cryptocurrency enthusiasts. Call to action for continued research and collaboration in this evolving field**

The integration of cryptocurrencies into digital banking platforms represents a transformative opportunity for the financial industry in Germany, France, and Romania. As digital banks embrace emerging technologies and respond to evolving consumer preferences, the relationship between digital banks and cryptocurrencies is poised to shape the future of finance in significant ways. In this paper, we have explored regulatory frameworks, public sentiment, market dynamics, case studies, and future projections to provide a comprehensive understanding of this dynamic relationship.

From regulatory clarity and technological innovation to consumer behavior and financial inclusion, key themes have emerged that highlight both the opportunities and challenges inherent in the integration of cryptocurrencies into digital banking. Regulatory frameworks play a crucial role in fostering trust, ensuring market integrity, and facilitating responsible innovation within the digital banking sector. Public sentiment and awareness shape consumer attitudes, market dynamics, and adoption trends, influencing the trajectory of cryptocurrencies in the mainstream financial landscape. Market dynamics reflect the diverse trends, opportunities, and challenges present within the cryptocurrency ecosystem, highlighting the importance of regulatory compliance, risk management, and market transparency.

Through case studies, we have examined successful strategies, challenges faced, and lessons learned by digital banks in integrating cryptocurrencies into their offerings. From established players like N26 and Revolut to multinational institutions like ING Bank, digital banks have demonstrated varying approaches and outcomes in embracing cryptocurrencies as part of their product suite. Future projections and research directions offer insights into anticipated developments, emerging trends, and areas for further exploration in the evolving relationship between digital banks and cryptocurrencies.

In conclusion, the integration of cryptocurrencies into digital banking represents a paradigm shift in the financial industry, offering expanded financial services, enhanced customer experiences, and opportunities for innovation. By addressing regulatory challenges, embracing technological advancements, understanding consumer behavior, and promoting financial inclusion, digital banks can unlock the transformative potential of cryptocurrencies to create value for customers, drive growth, and shape the future of finance in the digital age. Continued collaboration among policymakers, industry stakeholders, and academia will be essential to navigate the opportunities and challenges ahead and realise the full potential of this dynamic relationship.

By conducting a comprehensive analysis of cryptocurrency adoption in Europe, this paper aims to contribute to our understanding of the factors shaping the future of finance in the digital age. Through empirical research and case studies, we seek to inform policymakers, industry stakeholders, and the general public about the opportunities and challenges presented by cryptocurrencies and their integration with digital banking services.

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