

## **FIN-TECH AND DIGITAL ASSETS**

# The Rise of Digital Assets: Embracing a New Chapter for Digital Banking

By

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## and Red Octopus Innovation



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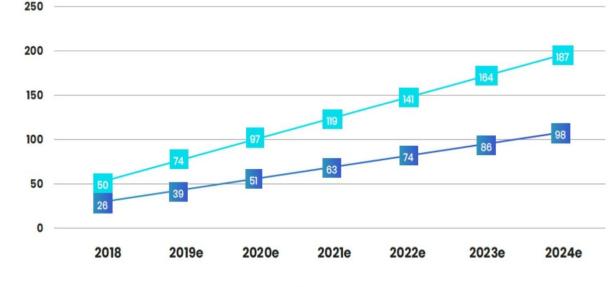
## **Attul Sehgal & Red Octopus Innovation**

## The Rise of Digital Assets: Embracing a New Chapter for Digital Banking

## 11 June 2025

### **Executive Summary**

- Digital Assets Revolution: The retail banking sector is undergoing a radical transformation given the rise of fintech innovations, digital assets, blockchain, and neobanks, which are reshaping customer expectations and financial models.
- Legacy Challenges: Traditional banks struggle with outdated systems and risk-averse cultures that slow down innovation, leaving them vulnerable to agile, digital-first competitors.
- Customer Expectations: Gen Z and younger users demand seamless, personalized, and mobile-centric experiences, pressuring banks to transform rapidly.
- Fintech Disruption: Challenger banks like Revolut are leading with open banking, cryptocurrency integration, and user-friendly digital platforms.
- Big Tech Influence: Companies like Amazon and Facebook show how iterative innovation, ecosystem thinking, and user-centric design can disrupt banking.
- Open Banking: Regulations like PSD2 are forcing banks to open their data, enabling fintechs to create competitive services that enhance customer value.
- Crypto Integration: Cryptocurrencies and stablecoins are reshaping payments, remittances, and asset management, challenging traditional banking revenue streams.
- Web 3.0: Blockchain and decentralized finance promise peer-to-peer transactions without intermediaries, disrupting banks' traditional role.
- Regulatory Landscape: Uncertain rules create both challenges and opportunities for banks to innovate with stablecoins and digital services.
- Strategic Imperatives: Traditional banks must prioritize digital transformation, open banking, and customer-centric innovation to remain relevant.
- This paper explores the evolution of digital banking, the rise of neo banks to take advantage and the impact of new digital services, and some strategic steps traditional banks must take to remain relevant to the new generation of banking customers.



Key Picture: Growth In Digital Banking by Number of Users and Accounts (2018-2024)

Source: Payments Industry Intelligence. Note: Figures are in Millions.

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## **1. Traditional Banking at a Crossroads: Adapt or Perish**

It was announced in February 2025 that Revolut will report roughly \$1 billion in profit before tax in 2024. This is up from \$545 million a year earlier. This values the bank at \$60 billion up from \$45 billion just six months earlier. A month earlier in January 2025 I was upskilling commercial executives from a legacy tier 2 bank on digital transformation, there was a view in the large audience that digital transformation was something 'technical' and very far from the delivery of real business outcomes.

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Like many regulated industries many traditional banks have been slow to adopt new AI driven technologies, such as visual recognition tools, due to a lack of creative thinking by seasoned commercial decision makers who are not close enough to understanding how digital can bring in new revenue streams and improve processes. In unregulated industries, companies have fallen by the wayside as new entrants redefine client relationships through digital across all levels in the organisation – think of Amazon and how they have destroyed industries. As challenger banks lever, digital-first infrastructure, and take innovation approaches from big tech, traditional banks risk becoming irrelevant if they fail to modernise their thinking.

## Figure 1: Real Cost of Sending £100 to a US Bank Account (USD)



Source: <u>https://builtformars.co.uk/banks/opening/.</u>Note : Cost expresses in GBP, sender and FX fees.

The banking sector has been historically resistant to rapid technological change, primarily due to the complexity of its regulatory environment, the sheer scale of legacy infrastructure and the loyalty that customers show to incumbent banks. On average, people stay with their bank for 17 years—which implies that it's either too much effort to switch, or that they have brand loyalty beyond belief. Thus, many traditional banks still rely on decades-old core banking systems, which are not designed to integrate seamlessly with modern APIs, exploit the richness of their data to derive new customer understanding and build new revenue streams. This inability to innovate quickly has created a significant innovation gap between traditional banks and digital-native challengers thus gambling on the loyalty and patience of their existing customers and not reaching the expectations of new customers.

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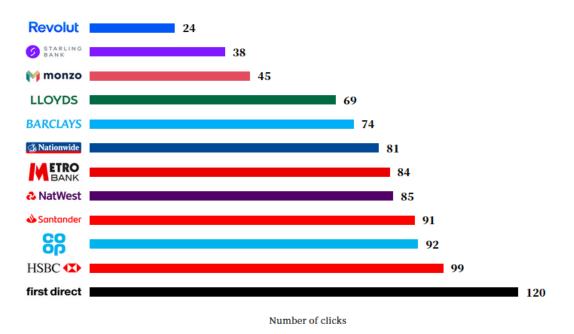


## 2. Why Traditional Banks Struggle to Keep Up: Legacy Banks versus Digital Disruptors

Today's battleground for high customer engagement across all sectors is by creating compelling user experiences. However, the digital knowledge gap among incumbent staff prevents them from effectively addressing these emerging trends, such as simple UI experiences and easy payments. While traditional banks still debate the effects of digital transformation on customer relationships, value propositions, product innovation, new competitors and the power of data to inform, challenger banks rapidly build market share by Page | 5 offering seamless, native financial services from a totally fresh viewpoint. To illustrate, Peter Ramsey from Builtformars, a UK based UI consultancy, carried out a comparison of the internal costs to transfer money of £100 from a UK financial institution to a US bank highlighting the gap in innovation (Figure 1). Figure one below shows the comparison results. The difference in real costs between the challenger banks and the incumbents is quite striking (see Reference 2).

One of the main reasons for this struggle is the difficulty of changing organizational culture. Banks have long operated in a risk-averse manner, prioritizing security and regulatory compliance over innovation.

However, customer expectations from Gen Z and younger have changed dramatically. Consumers now demand simple, clever, personalised, and easy banking experiences on their smartphone, akin to what they receive from e-commerce and social media platforms. The need to attract new customers is also imperative. Figure 2 shows results of analysis of the number of clicks needed to set up a new UK account.



#### Figure 2: Number of Clicks to Create an Account

## Source: Peter Ramsey, Builtformars.com

A 2024 report called Rethinking Banking from Capita, an outsourcer to the public sector, provided some stark statistics on the situation across UK demographic segments ((Rethinking Banking Report - Capita.pdf)

- Loyalty under fire Over 55% of customers said they had switched bank account providers with over 21% on multiple times
- Inertia over Satisfaction For 1 in 4 the biggest reason for not switching banks was the 'hassle of moving all their money from one provide to another'
- Drivers for Switching: Almost 1 in 3 stated the main driver was 'incentives and benefits' .
- Digital access to accounts is the prime criterion for choosing a bank
- The main benefit from the switching was 'easy online/mobile banking' •

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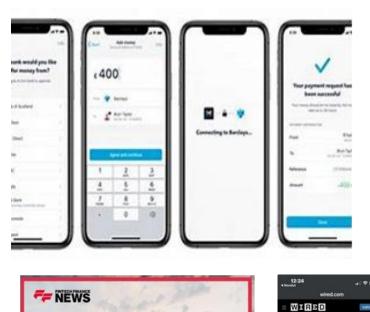
Figure 3 below shows how Neo banks are using digital assets to revolutionise customer experiences.

BRANDED CONTENT

Revolut

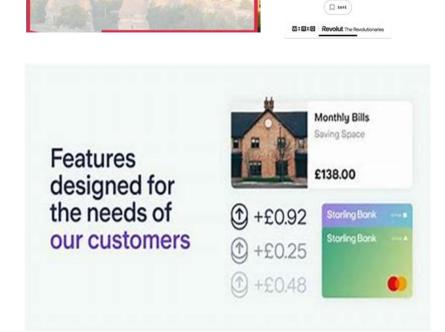
Revolut & WIRED Present The Revolutionaries

## Figure 3: Neo Digital Experiences



Revolut

launches marketplace with over 300,000 tours, activities and attractions Page | 6



Source: New Digital Experiences Driven by Neo Banks (Maney Manager, UI, Life Experiences)

So how is that digital transformation has provided such a threat to traditional banking methods?

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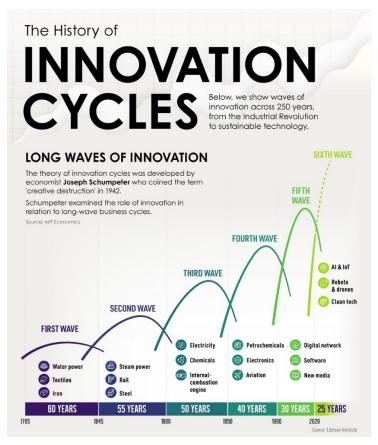




## 3. How We Got Here: The Digital Evolution of Banking

Innovation is nothing new and economists have tracked innovation curves all the way back to 1785 and the age of steam but digital transformation has accelerated innovation across all spheres considerably. **Figure 4** below shows the innovation cycles.

#### **Figure 4: The History of Innovation Cycles**



#### Source: Edelson Institute

## 4. The Shift from Brick-and-Mortar to Digital-First Banking

Bank digitalisation began in the 1960s with mainframe computers and ATMs. The 1990s introduced online banking, followed by mobile banking in the 2000s. The rapid evolution of fintech has disrupted traditional financial models, necessitating a shift toward digital-first strategies.

This shift was further accelerated by the rise of the internet and e-commerce. By the early 2000s, banks started offering online services, allowing customers to check balances, transfer funds, and even apply for loans without visiting a physical branch. Mobile banking, introduced in the 2010s, made banking even more accessible, allowing customers to manage their finances on the go.

## Key Milestones in Financial Digital Transformation

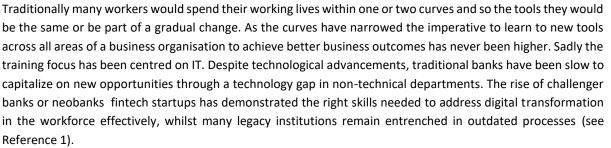
- 1960s-1970s: Adoption of computer technology, ATMs, and electronic funds transfers.
- 1990s: Rise of telephone and internet banking (web 1.0)
- 2000s: Mobile banking apps and digital wallets (web 2.0).
- 2010s: Open banking and API-driven financial services.
- 2020s: Crypto, AI-driven banking, and decentralized finance (DeFi).

Until 2000s, the speed of innovation followed the innovation curves described in Figure 3. But the fifth and sixth waves on innovation have narrowed and many sectors including banks have found it hard to keep up.

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## 5. Digital Transformation: Banks Taking lessons from Big Tech

Big tech companies like Apple, Google, and Amazon have slowly entered financial services, embedding payments and lending into their ecosystems. **Figure 5** below shows the ways Amazon are unbundling the bank services in the US. The shift from standalone banking apps to integrated financial experiences further disrupted traditional banks, which struggled to compete with agile, customer-focused fintech offerings.

## Figure 5: How Amazon Have Been Unbundling Bank Services



#### Source: CB Insights

The rapid innovation of digital platforms like Facebook offers an insightful parallel to the disruptive nature of fintech companies such as Revolut. Facebook evolved from a simple social networking site into a powerhouse of features, incorporating news feeds, live streaming, marketplace services, and financial transactions. This iterative approach to product development allowed Facebook to maintain user engagement and remain at the forefront of digital interaction. **Figure 6** shows the evolution from 2006 to 2019.

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## Figure 6: Facebook's Product Evolution



#### Source: Facebook

Revolut has continuously expanded its offerings beyond basic banking services with a similar iterative approach. What started as a simple foreign exchange card has now evolved into a comprehensive financial ecosystem that includes cryptocurrency trading, stock investments, insurance products, and even savings vaults. Just as Facebook's relentless innovation has kept it relevant in an ever-changing digital landscape, Revolut's agility in product development has allowed it to challenge traditional banking norms (**Figure 7**).



## Figure 7: Revolut's Path to 2 Million Customers

## Source: Revolut Product Review on Medium.Com

Both platforms have leveraged data analytics, artificial intelligence, and customer feedback loops to refine and expand their features. Their commitment to rapid innovation demonstrates that digital transformation is not just about adopting new technology but about continuously iterating and improving services to meet evolving user demands. Digital Transformation is not a death sentence for legacy banks. Many large banks have invested heavily in digital transformation, with institutions like JPMorgan Chase, Goldman Sachs, and DBS Bank demonstrating that legacy banks can modernize successfully while maintaining their strengths of trust, stability and regulation.

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## 6. Tech-Driven Finance: The Transformation Is Now

## Open Banking: Can Traditional Banks Embrace this?

After many years of providing customers with basic products, regulatory changes, such as PSD2, have forced banks to share the data down to transaction level to provide better services for customers, enabling customers to share financial data securely.

This has paved the way for new financial intermediaries that offer more personalized banking experiences. For example, fintechs can use open banking APIs to offer customers automated budgeting tools, better loan comparison services, and seamless payment solutions and money wallets.

Open banking represents a fundamental shift in how financial services are delivered. By allowing third-party providers to access customer financial data (with consent), open banking fosters competition, encourages innovation, and ultimately benefits consumers. Legacy banks need to embrace this way of looking at retail customers and start delving into their data to offer clever customer tools themselves.

## 7. Digital Currencies Changing the Game

Bitcoin and stablecoins have introduced new financial paradigms. Crypto transactions offer faster, more costeffective cross-border payments, reducing reliance on traditional banks.

The adoption of digital currencies has significant implications for the banking industry. Cryptocurrencies operate on decentralized networks, eliminating the need for intermediaries. This poses a direct challenge to banks, which have traditionally profited from facilitating transactions and currency exchanges.

The future of cryptocurrencies received a significant boost when the Trump administration announced in March 2025 the establishment of a crypto reserve comprising five digital assets: Bitcoin, Ethereum, Solana, Cardano, and Ripple. This marks a groundbreaking shift in perspective, recognizing cryptocurrency as a commodity independent of any physical asset.

Neobanks are offering crypto wallets for everyday customers to buy and sell tokens like Bitcoin, Ethereum, USDC and many other coins. By 2021, crypto commissions comprised 30% of Revolut's revenue and very soon they will be offering Stablecoins too.

Stablecoins, which are pegged to fiat currencies, have gained traction as an alternative to traditional bank deposits, especially in regions with high inflation or unstable financial systems. According to the Economist, Turkey is now the home of stablecoin transactions: in the year to March 2024 purchases alone were worth 4.3% of GDP. In the year to June, Ethiopia saw the fastest growth—almost a tripling—in transactions of less than \$10,000, most of which were probably remittances and everyday payments<sup>1</sup>.

## 8. The Leap from Web 1.0 to Web 3.0. Finance Redefined

The shift from Web 1.0 (static websites) to Web 2.0 (interactive and social platforms) was revolutionary. Legacy banks must recognize the pace of such change. Over a decade ago, while working at a legacy bank, we failed to see how quickly we were losing visibility into customer payment transactions as they embraced PayPal as their payment intermediary. Simultaneously, frustrated customers were forming Facebook groups to voice their dissatisfaction with our services. By the time the bank realised what was happening, the opportunity to take the lead had already passed. We have to take lessons from this for the future.

Now, Web 3.0 promises to take this transformation even further by decentralizing control from centralized institutions to users, enabling peer-to-peer transactions without intermediaries. Blockchain technology underpins Web 3.0, allowing users to own their data, conduct transactions securely, and participate in decentralized financial ecosystems. DeFi (Decentralized Finance) protocols from Web 3.0 are a set of rules and smart contracts that enable users to conduct financial transactions without a bank or intermediary.

This could change the way we borrow, lend or trade, get our payments approved, and reduce bank costs even further (Figure 8).

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<sup>&</sup>lt;sup>1</sup> See: <u>The Economist</u>

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## Figure 2: Shift from Web 1.0 to Web 3.0



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## Web 1.0

- Static web pages with limited interactivity.
- Content creators controlled the information flow.
- Limited user participation and contribution.
- Basic HTML and early web browsers.
- Emphasis on information dissemination rather than user collaboration.

## Web 2.0

- User-generated content and social media platforms.
- Interactivity and two-way communication.
- Web applications and cloud-based services.
- Collaboration and sharing among users.
- Personalization and targeted content based on user behavior.
- Emergence of blogs, wikis, social networking, and video-sharing platforms

## Web 3.0

- Decentralization and use of blockchain technology.
- Enhanced data security and privacy protection
- Integration of AI and machine learning for smart applications.
- Seamless connectivity and interoperability between different platforms and devices.
- Personalized experiences based on user preferences and behavior.
- Enhanced automation and efficiency in various processes

## Source: <u>https://sifted.eu/articles/revolut-stablecoin</u>

## 9. Regulatory Uncertainty: A Barrier and an Opportunity

The crypto rules in Europe can provide challenges. Some of the rules include a requirement that at least 60% of reserves are held in credit institutions in low risk assets that can be easily redeemed by users. The EU rules also ban issuers from offering interest payments to stablecoin holders, further limiting potential use cases<sup>2</sup>.

While some governments seek to regulate digital assets, others embrace them. The U.S. is drafting a new regulatory framework, while El Salvador has adopted Bitcoin as legal tender. All of these potential use cases, however, hinge on adoption. Euro stablecoins, compared to their US counterparts, are a fraction of the market, with only \$252m in supply compared to \$203bn in USD stablecoins.

One of the early advocates of stablecoin in Europe is Societe Generale. Societe Generale's subsidiary, Societe Generale Forge issued a stablecoin "EUR CoinVertible (EURCV)" in 2023. EUR CoinVertible is a digital asset that serves as a stablecoin linked to the value of the Euro. SG-FORGE announced its EURCV stablecoin in April 2023 to "bridge the gap between traditional capital markets and the digital assets ecosystem", As of December 22, 2024, EURCV had a circulating supply of €39.7 million, fully backed by reserves of the same amount<sup>3</sup>.

It remains to be seen if this had gained a real first mover advantage for the bank as a stable asset.

## **10. Five Strategic Imperatives for Retail Banks**

On the back of the considerations above, we can see five strategic imperatives emerging for banks:

## 1. Build on the Strengths of Traditional Banks: Stability, Trust and Regulation

Unlike many fintech start-ups, traditional banks are built on stability and trust and operate within strict regulatory frameworks, ensuring compliance and security—factors that are crucial in financial services.

<sup>&</sup>lt;sup>2</sup> See: <u>https://sifted.eu/articles/europe-regulation-crypto-mica</u>

<sup>&</sup>lt;sup>3</sup> See: <u>Societe Generale</u>

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## 2. Make UI Experiences a Core Focus

Align with customers' demand for seamless digital interactions by embedding UI expertise across all divisions of the organization.

## 3. Redefine 'Technical'

Leverage no-code and low-code tools to make experimentation a core practice, fostering creativity and Page | 12 enabling non-technical teams to drive product innovation. (Ref. 3)

## 4. Use Open Banking to Attract New Customers

Rather than resisting open banking, traditional banks should lead by building API-driven ecosystems. Partnering with fintech startups can expand service offerings and enhance customer engagement.

## 5. Put Customers at the Centre of Digital Transformation

Traditional banks must break free from legacy mindsets and foster a culture of continuous innovation focused on tangible business outcomes. Learning from digital transformation leaders like DBS Bank can provide a roadmap for success.

## 12. Conclusion

The banking industry stands at a crucial crossroads where digital transformation is no longer optional—it is a matter of being relevant. Fintech disruptors, blockchain technology, and changing customer expectations have redefined the financial landscape, leaving traditional banks with a clear choice: adapt or risk obsolescence over time.

Legacy banks' reliance on outdated systems, risk-averse cultures, and slow innovation cycles have placed them at a disadvantage against agile neobanks and fintech firms. As demonstrated by Revolut's rapid rise, digital-first strategies and customer-centric innovations are the keys to success in the modern financial ecosystem.

To remain competitive, traditional banks must embrace technological change by modernizing their infrastructure, leveraging open banking, and prioritizing seamless digital experiences whilst maintaining their reputation for stability and trust. More importantly, they must foster a culture of innovation that extends beyond IT departments, empowering all areas of the organization to drive transformation. They need to get better training to align with the P&L.

The future of banking belongs to those who can evolve. By taking strategic steps to integrate AI, blockchain, and customer-focused digital solutions, legacy banks can reclaim their relevance and position themselves as leaders in the financial industry's next chapter.

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