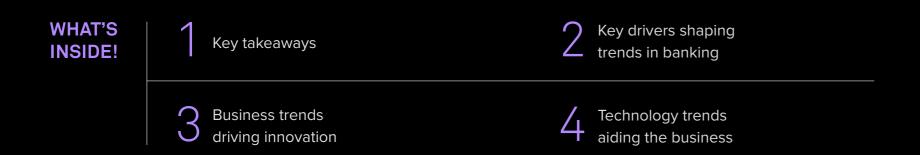
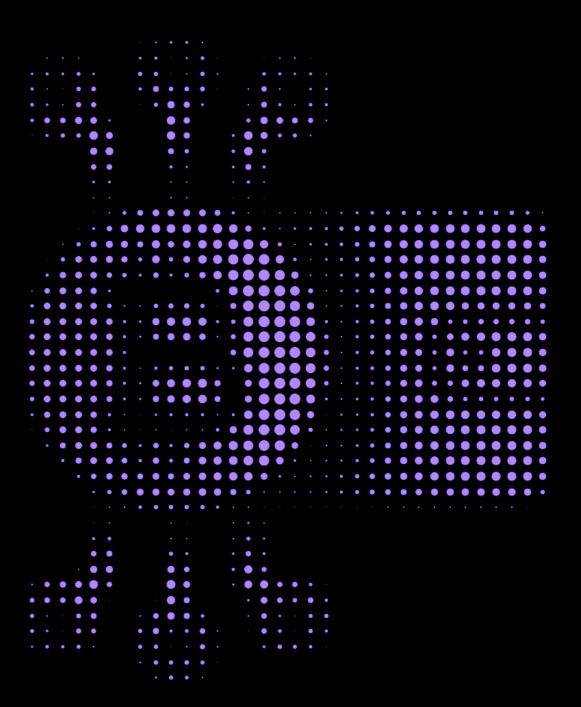


Banking trends: Disruptions and innovation A Primer

The banking sector is experiencing significant changes in its business, operations, and technology. This is primarily driven by the growing integration of technology into consumers' daily lives, evolving customer expectations, increasing interest in digital money, the volatility of cryptocurrencies and the uncertain financial environment.





Key takeaways

Changing IT spend

IT spending in banks is shifting from Capex to more Opex, with significant shifts to Cloud. Also, banks are focusing more on buying software and services that will aid greater business potential than on operations. Banking software market is expected to grow at a CAGR of 20% from 2024 to 2030.

Future of banks

Neobanks can play a crucial role in addressing and responding to all the key drivers. Neobanking market stood at \$69 billion in 2022, and is expected to reach \$3.3 trillion by 2032, growing annually at a CAGR of 47%.

Rise of fintechs

The emergence of fintechs is shaping business trends and expanding the range of choices available to customers. Studies indicate that from now until 2028, the growth rate of fintech companies is expected to be

Sustainable finance will catalyze the world's journey to net zero, as it holds enormous power in fulfilling the funding needs of companies across industries.

three times that of the banking industry as a whole.

Impact of emerging technologies

New technologies like GenAI, Blockchain, IoT are likely to cause banks to change the way they work and will influence the majority of the business trends. Gen AI can potentially add up to 340 billion to industry revenue due to increased productivity¹.

Key technologies

Advanced analytics, AI and Cloud technologies will play a critical role in the implementation of the majority of business trends. Banks are expected to spend an extra \$31 billion on AI embedded into existing systems by 2025².

Cybersecurity resilience

Cybersecurity is evolving from being solely a technological concern to becoming an important consideration for new business strategies. Banking industry is considered 300 times more prone to cyberattacks³ compared to any other business.

Open banking

With lower investment and lower implementation complexity among other initiatives, Open banking can yield substantial KPI gains for banks. Global open banking to reach \$135 billion in value by 20304.

Sustainability increases in priority

While Sustainable finance enables banks in financing sustainable projects for other businesses, banks must also prioritize making their own operations sustainable. As per CEO study survey, 83% of CEOs anticipate that sustainability investments will yield enhanced business outcomes in the coming five years⁵.

SECTION 02

Key drivers shaping trends in banking

Leaders will need to deal with the following 5 key drivers that are impacting the banking industry.

- Growing customer expectations
 - Customers today want personalized, convenient, and seamless banking experiences. Sometimes, they even want to co-create solutions for banking challenges. Over 60% of banking executives report rising customer experience expectations, with 45% struggling to keep up⁶.
- Rise of fintech disrupting traditional banking
 Fintechs are revolutionizing banking with mobile
 apps, online lending, and personalized experiences
 using AI. They hold 2% of global financial services
 revenue but are expected to reach \$1.5 trillion by
- 3 Prioritizing sustainability

To address environmental risks and foster responsible economy, banks are focusing on sustainability.

Banks representing 41% of the global banking assets have joined Net-Zero Banking Alliance⁸.

2030, constituting 25% of all banking valuations⁷.

- 4 Rapid evolution of emerging technologies
 The integration of emerging technologies like
 blockchain and AI is reshaping both business
 operations and everyday interaction for consumers.
- Regulatory requirements and compliance changes

Banks must comply with various regulations, from anti-money laundering to data protection laws.

Approximately \$2 trillion a year is laundered, with only 10% getting caught by regulators⁹.

However, there is considerable regulatory nervousness around the use of AI as it requires an understanding of multiple country regulatory requirements to ensure various aspects of data security, ethics and other guardrails.

Wipro Lab45 has identified a set of trends that are likely to shape the industry in the near future. They are divided into business and technology trends; the business trends identified will drive a host of technology trends and vice versa.

Business trends

- Hyper personalization
- Banking as a service
- Banking process automation
- Open banking
- Sustainable finance
- Sustainable banking operations
- Marketplace banking
- Privacy enhancing
- Computation
- Neobanks
- Digital currency and decentralized finance

Technology trends

- Artificial intelligence
- Banking in cloud
- Data analytics
- Cybersecurity resilience
- Mobile banking
- Blockchain
- loT in banking
- Green IT banks
- Composable architecture
- Immersive technologies

Business trends driving innovation

The table below gives a snapshot of some of the key drivers shaping the current and upcoming business trends in the industry.

	Key drivers						
Business trends	Growing customer expectations	Rise of fintech disrupting traditional banking	Prioritizing sustainability	Rapid evolution of emerging technologies	Regulatory requirements and compliance changes		
Hyper personalization	•			•			
Banking as a service	•			•			
Banking process automation				•	•		
Open banking		•		•			
Sustainable finance			•	•	•		
Sustainable banking operations			•	•	•		
Marketplace banking		•					
Privacy enhancing computation				•	•		
Neobanks	•			•	•		
Digital currency and decentralized finance		•		•			

Key insights

Rise of fintechs

The emergence of fintechs is shaping business trends and expanding the range of choices available to customers.

Future of banks

Neobanks will have a crucial role in addressing and responding to all the key drivers.

Impact of emerging technologies

Emergence of new technologies is likely to cause banks to change the way they work and will influence the majority of the business trends.

A lot of the trends are reflecting the move to extended value chains or ecosystems thinking. Technology platforms support a lot of this, and banks and financial service providers are seeing the benefits of these. You can see glimpses of this in Hyper personalization, Open Banking and Marketplace banking.

- Hyper personalization Hyper personalization in banking entails analyzing customer data like transactional, behavioral, demographic, and other external data to generate insights and correlate these insights with their real-time activities to offer customized and context specific products and services. For instance, banks analyze customer debits and credit card payment transactions to offer personal loans at competitive interest rates.
- Banking as a service (BaaS) BaaS allows third parties to connect with a bank's API infrastructure to build and integrate products. Banks benefit from fintech's involvement and can create additional revenue streams. The BaaS market is growing at an annual rate of 17%.

JP Morgan partnered with a fintech firm to expedite processing of micro business loans.

Banking process automation In order to expedite automation efforts, banks should now move from using a single tool such as Robotic Process Automation (RPA) to utilize a combination of various technologies,

including AI,RPA, Low-code/No-code, and NLP.

It can enable banks to automate on a wider scale and empower employees by automating complex tasks. With automation, banks can now reduce their lending processing time from weeks to a couple of days. Automation is growing by 25% annually.

Open banking

Open banking, also referred to as open bank data, enables banks to share customer financial information with third-party service providers. These providers, often tech startups and financial vendors, can utilize this data through APIs to offer relevant financial products and services to the existing customers.

With Open banking, banks can now open online accounts in just three minutes, 10010 times faster than before.

Sustainable finance

Sustainable finance is crucial for global economies to achieve net zero. The market size is expected to grow from 3.6 Trillion USD in 2022 to 23 Trillion by 2031¹¹. A world's leading bank, for instance, has committed \$500B towards financing sustainable business/projects.

As banks progress with these initiatives, the biggest hurdle is to accurately measure sustainability of the businesses/projects. Technologies such as AI, Big data and IoT are being evaluated to address these concerns.

Sustainable banking operations

Banks are taking steps towards sustainability by moving their infrastructure to cloud, meeting their energy needs with renewable energy sources, moving their branch and offices to LEED certified buildings, and digitizing their operations to reduce the paper usage.

40% increase in funding for energy transition in 2023 from 2020¹².

Marketplace banking

Marketplace banking is the financial equivalent of an online retail platform or super app. It integrates various financial services into a single platform, enabling customers to access a wide range of options. Banks can establish their own marketplace or collaborate with existing ones. By leveraging open banking APIs, banks can empower their partners to integrate products, data, or specific processes into their value propositions.

Privacy enhancing computation

Privacy enhancing computation techniques transform banks' financial crime detection by enabling secure data exchange and complying with data protection regulations. It facilitates sharing information between banks and other entities without disclosing sensitive data.

By 2025¹³, 60% of large organizations will implement these techniques.

Neobanks

Neobanks are digital banks with no physical branches, operating entirely online. Due to their technological prowess, they can operate on a low-cost model, which can be instrumental in improving the accessibility of banking services. They offer higher interest rates on savings and fixed deposits and have features such as instant account freezing through mobile app. Chime, Varo, Revolut, Unifimoney, etc. are some of the top Neobanks in the world.

Digital currency and decentralized finance

Digital currency is electronic money that can be centralized or decentralized. Central Bank Digital Currencies (CBDCs) are the centralized

digital currency issued by the central bank of a country aimed at addressing the concerns related to the integrity and solvency of the currency. Conversely, decentralized digital currencies operate independently using cryptography for secure transactions.

Decentralized finance is a financial ecosystem based on crypto and blockchain technology, eliminating intermediaries like banks and brokers. Smart contracts manage transactions and transfer funds automatically, replacing the need for trusted third-party intermediaries.

As per a Citibank survey, 87% of respondents see CBDCs as a viable option for shorter settlement cycles by 2026¹⁴.

Chime, one of the leading **US-based Neobank**, generated revenue of \$1.8 billion in 2022 and has a customer base of over 14.5 million.¹⁵

The next step though would be a focus on profitability as less than 5% of Neobanks are profitable today.

Key banking stakeholders



Customers

Their needs, preferences, motivations, and behavior influences the banking product and services



Regulators and government bodies

Responsible for setting the rules, regulations, and policies that govern the operations of banks and financial institutions



Employees

Vital for efficient operations, customer service quality, and mitigating operational risks



Technology providers and fintechs

Provide banks with infrastructure for digital transformation and enable them to offer innovative products and services to customers

Technology trends aiding the business

The graphic below shows how different technology trends impact each of the business trends. For example, Artificial Intelligence and Data analytics will have a high impact on Hyper personalization whereas Blockchain or Green IT banks have no impact.

	Technology trends									
Business trends	Artificial intelligence	Banking in cloud	Data analytics	Cybersecurity resilience	Mobile banking	Blockchain	loT in banking	Green IT banks	Composable architecture	Immersive technologies
Hyper personalization	•		•							
Banking as a service		•							•	
Banking process automation	•	•		•				•		
Open banking		•		•					•	
Sustainable finance		•				•	•	•		
Sustainable banking operations		•						•		
Marketplace banking		•							•	
Privacy enhancing computation	•			•		•				
Neobanks		•			•				•	•
Digital currency and decentralized finance				•		•		•		

Key insights

- Key technologies
 - Al and Cloud technologies will play a critical role in the implementation of the majority of business trends.

important consideration for new business

- Cybersecurity resilience
 Cybersecurity is evolving from being solely a technological concern to becoming an
 - strategies.
- Sustainability
 - While sustainable finance enables banks in financing sustainable projects for other businesses, banks must also prioritize making their own operations sustainable.

● High impact ● Medium impact ● Low impact a lab45 Publication | 7

Artificial intelligence

Banks can leverage AI to gain deep insights into their customers and the financial ecosystem, identifying new fraud patterns and money laundering strategies using synthetic data. NLP can automate compliance reporting amidst a surge from 10 regulatory alerts daily in 2004 to 200 regulatory daily alerts in 2022¹⁶. The AI in the banking market is growing at an annual rate of 32%, with GenAl transforming customer experience, fraud detection, and marketing campaigns. (See report on GenAl in Banking Primer for more details).

Banking in cloud

Banks are shifting their focus away from managing extensive hardware infrastructure, leaving it to cloud services providers to reduce ownership costs. While the infrastructure has been moving to the Cloud for some time, the core banking applications and other key banking applications are being run in the Cloud with multi-tenant architectures. However, the system risks associated with the Cloud are seeing banks move to the Hybrid cloud.

Data analytics Banks are migrating their analytics platforms to the cloud for complex banking analytics. Data marts are being used to store and perform analytics on sensitive bank data. Moreover, banks are now employing synthetic data generation technologies when they don't have sufficient real data to innovate faster. A lack of overall data quality is vital for AI adoption and better analytics. Analytics in the banking market is growing annually by 19%.

Cybersecurity resilience

Banks use emerging tech to enhance operations and customer experience. However, the rise in digital usage increases cybersecurity risks. Recent developments happening in cybersecurity in banks, like Zero Trust Architectures and Adversarial ML, help train ML models to be more resilient to attacks and increase cloud adoption.

Banking industry is considered 300 times more prone to cyberattacks compared to any other business.

Mobile banking

With banking services available on mobile apps, customers can perform almost all banking tasks such as KYC updates, fund transfers, bill payments, and transaction tracking. Social

messaging apps are also being integrated with bank accounts, making payments and tracking transactions even more convenient. Banks are now integrating their mobile banking apps with third-party financial services to provide a comprehensive view of all financial information.

Blockchain

Blockchain technology in banking promotes secure digital transactions, cost reduction, decentralization, and anonymous financial activities while ensuring accountability. The blockchain in banking market is growing annually by 40%, offering solutions for banks through intermediary removal, immutable transaction logs, and real-time execution.

IoT in banking

IoT in banking involves connecting sensors, smart devices, and other banking machines to the internet and quickly and efficiently gather customer data. IoT implementation helps to monitor each customer touchpoint in realtime when they bank, enabling banks to offer more relevant services and identify fraudulent activities faster. The role of IoT in banking is also becoming more crucial to monitor the growing number of automated processes.

Green IT banks

The banking industry's growing IT infrastructure requirements have resulted in increased emissions, prompting banks to prioritize sustainable IT operations. This includes the emergence of digital transformation and implementing measures such as adopting green software practices for implementation of architecture and moving entire infrastructure to sustainable data centers. Banks are also looking at rationalizing their application portfolio, implementing stringent data deletion policies, optimized architectures, etc.

Composable architecture Composable architecture breaks down traditional banking systems into modular microservices, providing flexibility for customized products and experiences. MACH principles (Microservices, API First, Cloud Native, Headless) based approach facilitates faster development and integration of services in days or weeks instead of months.

By embracing open banking, composable architectures adopt an API-driven banking platform, enabling seamless integration of banking services such as payments and lending into diverse industry platforms. But we are seeing that microservices are losing their sheen. Some companies are moving back to the monolith paradigm due to transaction resilience.

Low-code development platforms help banks create applications quickly and allow them to rapidly deploy applications such as customer onboarding, loan processing and fraud detection and generally 10 times faster¹⁷ than traditional development techniques.

Immersive technologies Metaverse banking enables conducting banking operations within a virtual reality environment. By enabling customers to conveniently perform banking activities from any location using VR glasses, metaverse banking promises an unparalleled immersive experience.

Metaverse market in banking is growing by 21% annually. Banks can leverage MR (Mixed Reality) and XR (Extended Reality) technologies to superimpose digital information onto the physical world, providing customers with real-time visualizations of financial data, investment portfolios, and real estate properties. Furthermore, Augmented Reality

can be used to develop interactive banking apps which can aid banks in creating a differentiated customer value proposition.

Banks are increasingly embracing technologies to innovate faster, reduce ownership costs, enhance resilience and responsiveness, and meet evolving customer demands.

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