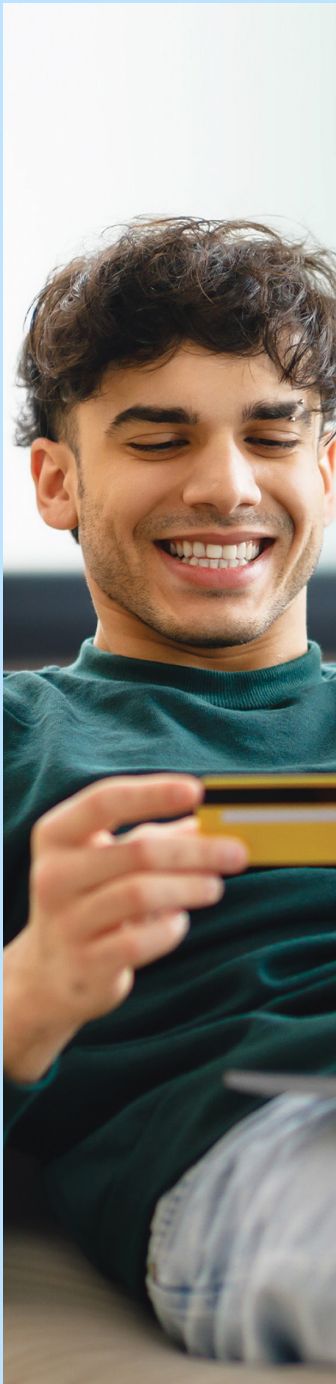


VIEWPOINT



BANKING WITHOUT BORDERS



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Virtual banking is already a reality, allowing people to transact and access financial services online without visiting a branch. The benefits are compelling for both the customer and the bank.

Banks operating without physical brick-and-

mortar have lower costs, need less staff, and can harness powerful technology to respond faster and personalize their services.

Banking customers can instantly access accounts and other banking services, such as fund transfers, bill payments and loans anytime and from anywhere.

The demanding new customer

Changing culture and demographics, technological evolution, next-generation competition, and supportive legislation and licensing have driven virtual banking adoption. For example, tech-savvy younger customers, are demanding hyper-personalized advice, seamless transactions, and a wide range of services, all delivered on their digital devices. Unlike the older generations, these customers are willing to switch providers for innovative, highly-personalized experiences and superior service.

Virtual banking meets these expectations through 24/7 borderless access to services, personalized product recommendations, and seamless experiences to help customers make better financial decisions. However, the lack of human touch can be a problem in scenarios such as wealth management, where the customer may prefer high-touch service and contextual advice provided by a trusted relationship manager.

A vision for better virtual banking

The ideal proposition is a “banking without borders” service for customers with financial interests in more than one geography, along with personal advisory. This range of banking services would be powered by Artificial Intelligence and advanced automation to curate a comprehensive, expanding range of financial services from cradle to grave. A secure and accessible single source of truth would allow customers to access liquidity and localized financial products at the touch of a button.

Realizing this vision will require not only technology but also a fundamental shift in organizational structures and banking controls to foster competition on a global scale while maintaining regulatory integrity. Many of these aspects already exist, but in other areas, an example being blockchain whose peer-to-peer structure allows control as well as transactional freedom.

Peer-to-peer (P2P) banking

Banks are custodians of their customers’ assets, with a fiduciary obligation to act in the interest of their clients. Facilitating this is a Single Supervisory Mechanism (SSM), a central authority supervising banking activities, for example, the European Central Bank (ECB) in Europe.

Besides providing a trusted banking framework, centralization plays an important role in currency stabilization and anti-money laundering. However, centralized decision-making suffers from a “subsidiarity deficit” and therefore, may not take into account the local knowledge held within various National Competent Authorities (NCAs) on their domestic markets, legal frameworks, and business practices.

A model where banks operate as peer-to-peer entities that can transact at local level but also have a global reach, combines the best of both worlds.

Banking without borders

Let us explore this further. Imagine that a virtual bank was not domiciled in any particular geographic location, but had digital twins in other countries. In this instance the Digital

twin would be a digital replica of the physical bank including assets, accounts, balance sheets and processes but with a local banking license and the ability to transact at a local level.

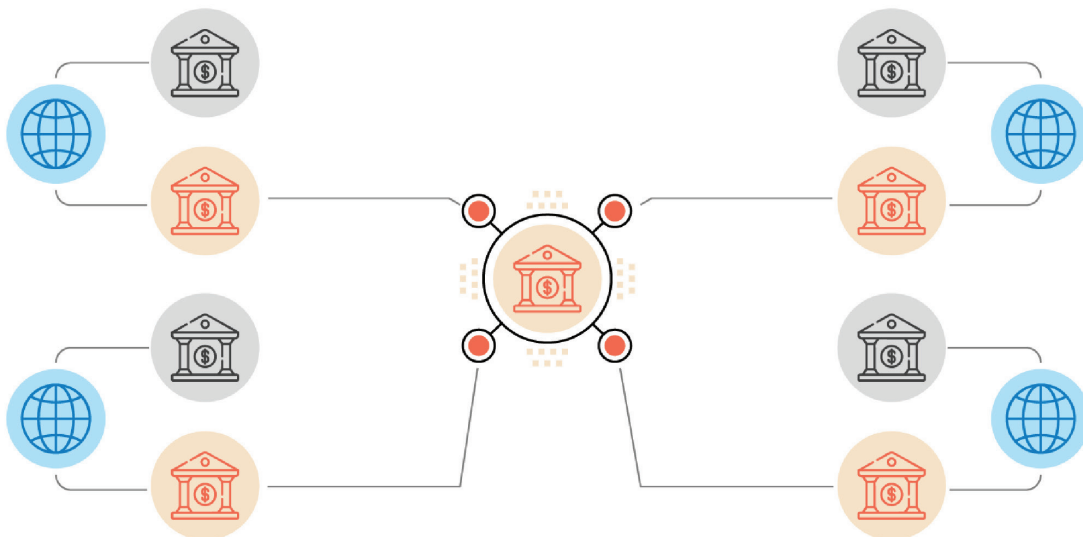
These twins would interact at an NCA within those geographies, leveraging local knowledge about those markets; they would seamlessly interact on the customers' behalf to access any localized services through their digital bank.

An example may be useful here. With such an arrangement, a U.A.E. citizen would be able to buy a house in Spain without ever interacting with a Spanish bank, taking a Spanish mortgage or undertaking any local conveyancing. Enhanced AI systems would completely automate exchange rate conversions, reconcile bank transfers, translate contract language, and simplify legalese. The virtual bank would to help the customer use any local banking or financial service with minimal effort.

Another model is one where a bank works with local banks in regions where its customers have business interests; the (primary) bank owns the customers and works on their behalf with secondary financial institutions. This is similar to how telcos own and handle their customers' connectivity across borders through international roaming: for example, ATT partners with local services in different countries, such as Etisalat/ Du in Dubai and Airtel/ Jio in India, to provide customers with international roaming services.

There is some precedent for the creation of such structures in the operations of digital assets or crypto-currencies working within a peer-to-peer network. This does not mean that central banks become obsolete; rather, they would continue to provide a legal and governance framework for inter-bank interactions occurring at NCA-level through global virtualized proxies.

Each digital twin would hold a local banking licence and adhere to the applicable banking regulations in that location. Theoretically, the digital twin could agree on any local financial product and transact locally on behalf of its client. A separate ledger for that product could be replicated for the client in the region of domicile. The system would automatically and seamlessly synchronize and manage the two ledgers, allowing the client to take advantage of any global product without physically moving assets.



Learnings from blockchain

The model above bears similarities to a Distributed Autonomous Organization (DAO) where multiple entities contract with each digital twin individually. The substance of the contract may vary from location to location because of regulatory and other nuances. However, this is where the similarities stop because this model neither relies on a blockchain or digital ledger, nor does it govern itself.

That being said, DAO and blockchain have played a role in the use of digital wallets.

Digital wallets

A digital wallet is a software-based vault containing a user's banking information and identity that makes it easier to pay for purchases. Starting out as a simple, secure holder of debit and credit card information, the wallet has evolved substantially to enable users to maintain deposits, complete peer-to-peer transactions, and access various financial services.

The information held within a digital wallet can easily be expanded to encompass both identity and economic/solvency status, enabling users to meet KYC requirements and checking agencies to understand their creditworthiness in real-time.

Applying this to the earlier mentioned scenario where a citizen of the U.A.E. wants to buy property in Spain, the virtual bank would be able to arbitrage mortgage rates anywhere the banking digital twin exists to drive down the cost of capital. It could use the customer's real-time KYC credentials for seamless verification of creditworthiness to complete a near-instantaneous transaction.

While digital wallets and blockchain-based solutions streamline payment transfers and remittances, the emergence of Artificial Intelligence promises to redefine cross-border payments (CBP) and transactions.

Succeeding with AI

AI today has the potential to secure and streamline cross-border transactions by automating existing banking systems. The top two areas of concern are centered on Governance Risk and Compliance (GRC) and data asset management.

Many financial institutions employ advanced algorithms and data analytics to sift through large volumes of data to identify anomalies and patterns indicative of fraudulent activity, including smurfing, that is, making several minimal deposits to circumvent reporting thresholds or dividing large transactions into smaller ones to avoid anti-money laundering or counter-terrorist financing (AML/CTF) regulations.

Do robots dream of electric sheep?

Advanced AI, generative AI and intelligent automation will underpin the bank of the future.

Predictive analytics and AI make data-driven decisions which correlate events or data movements to predict subsequent events, patterns or behaviours. By analyzing these patterns using transaction histories, demographic information, and market trends, banks can create personalized products and services tailored to specific groups or even individual customers, enhancing retention and profitability.

A common use case is predicting the risk of loan default by analyzing a borrower's income streams along with predicted outgoings and lifestyle spends. It helps banks to minimize the risk of bad debt and gain confidence in their loan approval process.

Ontology, a form of information representation for a specific domain, allows the semantic modelling of knowledge to create relationships between datasets to derive conclusions, often represented as a Knowledge Graph (KG).

Within banking, it is often used to cross-correlate complex relationships, for example, assess a banking customer's portfolio exposures to certain asset classes by modelling personal data, country demographics, and political risk factors associated with entity intelligence like company structures, the jurisdictions that companies operate within, and regulatory and political changes.

Generative AI includes Natural Language Processing (NLP) and Large Language Models (LLM) that products like ChatGPT are built on. Generative AI builds new content based on a number of data sources regardless of the structure of input. It can summarize both structured and unstructured data, such as voice, documents, pictures, web content and video, and make sense of vast amounts of data, creating an intellectually manageable narrative without losing complexity or nuance.



GenAI is often used in wealth management for ingesting data from multiple sources and representing it in an easily consumable form. The technology cross-correlates various data – economic, research and market information, for example – and blends it with a client's risk profile and overall financial goals to enable wealth managers to provide insights-based advice to clients.

The rise of the digital ecosystem

Banks are increasingly embarking on AI-first strategies, looking to build digital ecosystems which are both disrupting and disintermediating traditional financial services by looking at new avenues of meaningful interaction. Superapps can both consolidate and replace traditional methods of providing banking products and services to support a wider composable business ecosystem.

For example, WeChat users in China can use the same app to not only exchange messages, but also leverage a complete ecosystem of financial and non-financial services including money transfer, personal lines of credit, and taxis.

The idea of “Finternet” proposed by Infosys co-founder and non-executive chairman, Nandan Nilekani, and renowned economist, Agustín Carstens, conceptualizes multiple interconnected financial ecosystems within a composable framework of technology and governance. The Finternet is aligned with the “banking without borders” concept because it enables individuals to tap liquidity and economic leverage when and where required. That being said, banking is a people-centric service that will always need to retain a human element.

The human touch

A relationship is not automatable. “The greatest technology in the world can’t replace the ultimate relationship-building tool between a customer and a business: the human touch.” – Shep Hyken.

People with multilingual, multi-geo, complex banking requirements will occasionally require highly trained staff to advise and facilitate their transactions. Relationship managers would need to build a personal relationship with (a limited number of) clients, have access to their banking histories in real-time and also have access to advanced AI capabilities to model various banking scenarios.

Tomorrow's bank: a trusted advisor

The world of banking is evolving, virtual banking is just another evolutionary step for banking, driven by the need to reduce physical infrastructure costs and meet the demands of a new generation of customers. As banks become more customer-centric, they will be required to rethink their operating structures and customer interactions. Their stance should shift from a passive savings repository to an engine powering the financial growth of customers. The bank of the future should leverage technology to offer highly personalized services and become a trusted advisor to customers.



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Suggested tags: #banking #virtualbanks #p2pbanking #infosys #aws

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