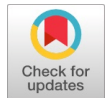


Humital Banking: The Future of Banking at the Intersection of Human and Digital Touch

Kumar Vikas



Abstract: The global banking sector is undergoing a rapid and multidimensional transformation. This study examines the transition from conventional, human-centric service models to an increasingly digital-first landscape. This paradigm not only redefines customer expectations but also challenges the traditional foundations of trust and engagement in the banking industry. At the heart of this transformation lies the concept of Humital Banking—a strategic convergence of human empathy and digital efficiency. This paper introduces and articulates the scope, application, and impact of this hybrid model, designed to bridge the emotional intelligence of human interactions with the convenience and scale of digital platforms. The research employs a qualitative methodology, incorporating analyses of recent banking trends, reviews of policy developments, and empirical insights from real-world case studies involving top Indian banks. It critically assesses the limitations of traditional banking practices, such as limited accessibility, operational inefficiencies, and demographic constraints. Simultaneously, it acknowledges the significant advancements brought by digital technologies, including Automated Teller Machines (ATMs), Cash Deposit Machines (CDMs), Unified Payments Interface (UPI), Net Banking, and Central Bank Digital Currencies (CBDCs). Emerging digital banking formats, such as Digital Banking Units (DBUs) and phygital branches, are also examined for their role in reshaping the banking experience across diverse regions. Findings from this study reveal that while digital transformation has increased operational speed and scalability, it often fails to address emotional engagement, trust deficits, and the digital divide prevalent in rural and underbanked populations. This gap can be effectively filled by the Humital Banking model, which integrates digital tools with personalised human support. Video-enabled relationship management, multilingual banking interfaces, and digitally trained personnel in hybrid branches serve as key components of this model. The implications of this approach are particularly significant in developing economies like India, where technology adoption is uneven, and large segments of the population remain outside the formal banking system. By deploying Humital Banking, financial institutions can deliver a more inclusive, trustworthy, and emotionally intelligent banking experience. The paper concludes that such a model not only enhances customer satisfaction and loyalty but also facilitates cost optimisation, risk mitigation, and increased financial inclusion. Overall, Humital Banking represents a forward-thinking framework—an adaptive strategy that aligns with the digital age without compromising the relational essence of traditional banking. It offers a resilient pathway for banks seeking to strike a balance between operational efficiency and human-centric service delivery in a rapidly evolving financial landscape.

Keywords: Humital Banking, Digital Transformation, Customer Experience, Financial Inclusion, CBDC, Phygital Branches, DBUs, UPI, Net Banking, ATMs, CDMs

Abbreviations

ATM: Automated Teller Machine
CDM: Cash Deposit Machine
UPI: Unified Payments Interface
CBDC: Central Bank Digital Currency
DBU: Digital Banking Unit

I. INTRODUCTION

The global banking industry is undergoing a profound transformation driven by the convergence of technological advancements, shifting customer expectations, and pressing financial inclusion objectives. The proliferation of digital innovations, including mobile banking, cloud-based financial systems, artificial intelligence, and biometric verification, has revolutionised the delivery of banking services, making them more efficient, accessible, and responsive. Customers today expect seamless, personalised, and instant banking experiences—preferences shaped by their interactions with digital-first industries, such as e-commerce and telecommunications.

While digital banking has undeniably improved operational efficiency, reduced costs, and expanded outreach, it also brings forth complex challenges. A significant proportion of the population, particularly in developing countries like India, remains digitally excluded due to inadequate infrastructure, limited digital literacy, cybersecurity concerns, and linguistic or physical barriers. Additionally, over-reliance on automation can dilute the relational aspect of banking, leading to a loss of trust and personalized engagement—elements historically vital to the success and sustainability of financial institutions.

Against this backdrop, there is a growing need for a balanced approach—one that retains the human-centric values of traditional banking while leveraging the speed and scalability of digital technologies. This need has given rise to a new conceptual framework termed “Humital Banking”—a synthesis of “Human” and “Digital”. Humital Banking proposes a hybrid service delivery model that integrates digital infrastructure with empathetic, human-led interventions to offer both convenience and trust. This model acknowledges the evolving nature of customer expectations and seeks to humanise digital banking experiences by incorporating elements such as video-assisted relationship management, multilingual interfaces, and human-supported digital onboarding.

By blending emotional intelligence with technological intelligence, Humital Banking offers a scalable, inclusive path forward. It not

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only addresses operational imperatives but also fosters deeper customer relationships, builds trust, and ensures equitable access to banking services across demographic and geographic divides. This framework is particularly relevant in emerging economies, where the digital divide coexists with a strong demand for personalised services and financial empowerment.

This paper delves into the rationale, architecture, and impact of the Humital Banking model, with a focus on its strategic benefits, implementation challenges, and transformative potential within the broader context of global financial evolution [1].

II. TRADITIONAL BANKING: THE HUMAN TOUCH ERA

Before the rise of digital technologies, traditional banking was centred on personal relationships, physical infrastructure, and manual processes. Customers interacted directly with branch personnel, often developing long-standing relationships with bank managers, tellers, and clerks. These human interactions served not only transactional purposes but also played a critical advisory role. For many, a visit to the bank was akin to a visit to a trusted confidant, especially when it involved savings, loans, or financial planning.

In this era, trust was built over time through consistent face-to-face engagement, and banking was perceived as a relationship-driven service rather than a commoditized utility. This deep personal connection often translates into higher customer loyalty and long-term business for banks. Decisions regarding loans, investments, and creditworthiness were influenced not just by data, but also by personal knowledge and social context.

A. Key Features of Traditional Banking:

- i. Personalized Customer Service: Bank employees knew their customers by name and were aware of their financial histories, fostering a sense of security and trust.
- ii. Manual Record-Keeping and Ledgers: Transactions were recorded manually, requiring physical documentation and verification. This often led to delays but was considered thorough and secure.
- iii. In-Person Support for Complex Transactions: Loan applications, account openings, and other high-value services were handled through face-to-face consultations.
- iv. Limited Service Hours and Geographical Reach: Services were available only during business hours, and customers had to visit their local branches in person, which limited accessibility and convenience.

Despite its relational strengths, the traditional model was constrained by operational inefficiencies. Manual processes were time-consuming, error-prone, and costly to scale. Furthermore, limited physical reach meant that rural and remote populations remained underserved, creating barriers to financial inclusion.

As customer expectations evolved and the need for scalability, speed, and convenience became paramount, the limitations of this model became more pronounced. This recognition paved the way for the introduction of digital banking tools that promised to transform the customer

experience, though often at the expense of human warmth and trust [2].

III. DIGITAL BANKING: TRANSFORMATION THROUGH TECHNOLOGY

The advent of the digital era marked a significant turning point in the evolution of banking. Fueled by technological breakthroughs and rising customer expectations, banks began transitioning from branch-centric operations to more agile, digitally empowered service models. The emergence of financial technology (fintech), increased internet penetration, smartphone proliferation, and government-led digital initiatives catalyzed this transformation.

Digital banking is characterised by the use of electronic channels and platforms to deliver financial services in real time, at the customer's convenience. Unlike traditional banking, where physical presence was necessary for most interactions, digital banking enables remote, automated, and continuous access to financial services, redefining the customer-bank relationship.

This evolution has significantly improved operational efficiency, scalability, speed, and user experience, allowing banks to serve broader populations with fewer physical constraints. It has also introduced a new wave of financial inclusivity, although with its own set of challenges, particularly around trust and digital literacy.

A. Key Innovations in Digital Banking:

- i. ATMs/CDMs (Automated Teller Machines and Cash Deposit Machines): These machines revolutionized basic banking by offering 24/7 access to cash withdrawal and deposit services without human intervention. They minimized queues and extended banking services beyond business hours, particularly in urban and semi-urban regions [1].
- ii. Net Banking: By enabling customers to manage their accounts, transfer funds, pay bills, and access banking services from their computers or smartphones, net banking eliminated the need for physical branch visits and introduced a new era of self-service banking [2].
- iii. UPI (Unified Payments Interface): A game-changer in digital payments, UPI allows instant money transfers across banks using mobile apps with minimal input (like mobile numbers or QR codes). It has enabled peer-to-peer and merchant payments on an unprecedented scale and has become the backbone of India's digital economy [2].
- iv. CBDCs (Central Bank Digital Currencies): These are digital forms of sovereign currency issued by central banks. Unlike cryptocurrencies, CBDCs are state-backed and regulated, aiming to enhance the efficiency and security of currency management. They are expected to complement the existing digital payment infrastructure while offering a stable and credible medium of exchange [3].
- v. DBUs (Digital Banking Units): As part of India's push towards a cashless economy, DBUs are dedicated outlets offering only



digital services. Staffed with digitally trained personnel, they support onboarding, digital literacy, and assisted transactions, especially in underserved areas [7].

- vi. **Phyigital Branches:** A fusion of physical and digital, these branches use self-service kiosks, biometric authentication, and video banking to combine the accessibility of traditional branches with the speed and convenience of digital platforms. They are particularly effective in bridging the gap between digitally literate and digitally hesitant customer segments [5].

Digital banking has brought convenience and innovation to the forefront of financial services, enabling banks to become more responsive, cost-effective, and customer-focused. However, this shift also necessitates the careful integration of human-centred values and trust-building mechanisms, laying the foundation for the Human Banking model.

IV. CHALLENGES OF A FULLY DIGITAL MODEL

The transformation of banking into a digital-first ecosystem has yielded numerous benefits, including enhanced operational efficiency, reduced transaction times, and expanded service accessibility. However, this rapid digitalisation has introduced new challenges that must be acknowledged and addressed for banking to remain inclusive, trustworthy, and resilient.

While digital banking systems are increasingly robust, they often struggle to meet the full range of customer needs, particularly those of vulnerable and less tech-savvy populations. Below are key challenges that limit the full potential of an exclusively digital banking model:

- A. Digital Divide:** Despite technological advancements, a substantial portion of the population, particularly in rural areas, semi-urban regions, and among senior citizens, continues to face barriers to accessing digital banking services. These include limited internet connectivity, lack of digital devices, low digital literacy, and linguistic or cultural hurdles. As a result, many remain excluded from the benefits of financial inclusion promised by digital transformation. This divide highlights the need for hybrid models that can accommodate varying levels of digital readiness [4].
- B. Cybersecurity Risks:** With the rise in online transactions, cybersecurity threats, including phishing, ransomware, identity theft, and online fraud, have become increasingly prevalent. These risks not only endanger customer data and financial assets but also undermine trust in digital platforms. Financial institutions must therefore invest continuously in cyber risk management frameworks, robust encryption protocols, and customer awareness programs to safeguard their digital infrastructure [3].
- C. Loss of Human Interaction:** While automation offers speed and scalability, it often lacks the emotional intelligence and personal understanding that human bankers bring to the customer experience. For complex needs—like resolving grievances, securing loans, or handling life events—customers still prefer empathetic, face-to-face engagement. A fully digital

approach risks alienating customers who value human connection and personalised guidance, especially those unfamiliar with digital interfaces.

D. Technical Downtime and System Vulnerability:

Digital platforms are susceptible to technical glitches, server outages, software bugs, and overloaded systems, particularly during high-demand periods such as festivals, salary disbursement days, or during emergencies. Any disruption in service continuity not only hampers customer satisfaction but can also lead to financial losses and reputational damage for the institution [6].

In summary, while digital banking marks a significant leap forward, it cannot be a one-size-fits-all solution. These challenges emphasize the critical need for a balanced model that retains the strengths of traditional human engagement while leveraging digital innovations. This very balance forms the foundation of the Humital Banking concept, which is explored further in this paper.

V. HUMITAL BANKING: A HYBRID MODEL

The future of banking lies not in choosing between digital efficiency and human empathy, but in integrating both in a strategically balanced service framework. This fusion is encapsulated in the term “Humital Banking”—a portmanteau of “Human” and “Digital.” It signifies a transformative approach that aims to harmonize the speed and scalability of digital tools with the trust, understanding, and empathy of human interaction.

A. Definition:

Humital Banking is a hybrid service delivery model that integrates advanced digital infrastructure with personalised human support to create banking experiences that are efficient, inclusive, and emotionally intelligent. This approach is especially critical in contexts where the digital divide persists and where customer expectations require both technological convenience and relational assurance.

Unlike purely digital systems, which may struggle with nuanced or emotional customer needs, Humital Banking preserves the human touch for services that demand understanding, guidance, or personalisation, without compromising the benefits of automation and real-time digital access.

B. Key Components of Humoral Banking:

i. Digital Platforms Integrated with Human Support:

Banks implementing the Humantech model offer services that combine digital interfaces with human assistance. For example, online customer journeys are supported by chat or voice support agents and co-browsing features, allowing customers to navigate digital channels with confidence.

ii. Video-Assisted Relationship Managers:

One of the most promising innovations under this model is the use of video-enabled banking for personalized consultations. Customers can connect with relationship managers in real-time through Secure video calls for services such as loan advisory, dispute resolution, and financial

planning, bringing face-to-face empathy into virtual environments [6].

iii. Multilingual and Accessible Interfaces:

Digital services under the Humital model are designed to be inclusive and adaptive, offering multilingual options, large-text displays, and simplified user interfaces. These features enable customers from varied linguistic, educational, and socio-economic backgrounds to access banking services independently.

iv. Staffed DBUs and Phygital Branches:

DBUs (Digital Banking Units) and phygital branches are physical locations equipped with self-service kiosks, biometric verification systems, and digitally trained staff. These outlets serve as on-the-ground extensions of digital banking, especially in rural or semi-urban areas. Customers receive digital services with human assistance as needed, fostering trust and easing digital adoption [7].

Humital Banking is not just a technological upgrade; it is a philosophical shift that recognises the diversity of customer needs. By blending digital and human capabilities, banks can become more adaptive, trustworthy, and customer-centric, positioning themselves for long-term relevance in a dynamic financial ecosystem.

VI. CASE STUDIES: IMPLEMENTING THE HUMITAL BANKING MODEL

To illustrate the practical relevance and impact of Humital Banking, this section presents selected case studies from Indian banks that have successfully integrated digital infrastructure with human-centred service delivery. These examples provide empirical evidence of how hybrid banking models can improve operational efficiency, customer experience, and financial inclusion.

A. Bank of Baroda – Phygital Branches:

Bank of Baroda, one of India's leading public sector banks, has implemented phygital branches across multiple urban and semi-urban centres. These branches combine self-service digital kiosks, biometric verification, and video-assisted services with human support. Initial findings from pilot branches reported a 40% reduction in average customer wait time, demonstrating improved operational efficiency. Moreover, the uptake of digital transactions among first-time users rose significantly, indicating the successful onboarding of digitally hesitant customers. To complement this, regular digital literacy workshops were conducted, further bridging the knowledge gap and enhancing community engagement. These efforts align directly with the Humital Banking philosophy of inclusivity through assisted digitisation [5].

B. State Bank of India – Rural Phygital Pilot:

The State Bank of India (SBI) launched a pilot project in rural Maharashtra, upgrading a traditional branch to a phygital model focused on financial inclusion and digital access. Within six months, the branch experienced a 30% increase in customer footfall, accompanied by a 25% surge in digital adoption, particularly among small business owners and senior citizens. This hybrid model enabled SBI to deliver digital services with empathetic human interaction, addressing the dual challenge of trust and technological

unfamiliarity. The pilot served as a scalable template for similar initiatives in other rural and semi-urban areas [5].

C. ICICI Bank – Video Banking Services:

ICICI Bank has leveraged video-enabled banking to strengthen its relationship management framework. Through this service, customers can connect with bank representatives remotely for tasks like account setup, loan consultations, and dispute resolution. The bank reported an 18% increase in loan approval conversions, attributed to real-time, personalised assistance delivered through video interactions. This approach has proven effective in retaining high-value customers and enhancing convenience without compromising the quality of engagement. It serves as a strong example of how human interaction can be successfully reintroduced into digital channels through strategic innovation [6].

These case studies demonstrate the tangible benefits of the Humital Banking model, highlighting how integrating human support into digital frameworks can drive meaningful improvements in efficiency, inclusivity, and customer satisfaction.

VII. STRATEGIC BENEFITS OF HUMITAL BANKING

The Humital Banking model offers a dual advantage—empowering customers through humanized digital services and enabling banks to optimize operations while maintaining personal engagement. By merging the strengths of both traditional and digital banking paradigms, this hybrid approach delivers strategic value across key dimensions:

A. For Customers

i. Greater Trust and Satisfaction:

Humital Banking reinforces customer confidence by preserving the human touch in service delivery, particularly in emotionally or financially significant interactions such as loan consultations, fraud resolution, or account-related issues. When customers feel heard and supported—whether through video assistance, multilingual support, or in-person guidance—they develop greater trust in the institution, leading to higher satisfaction and loyalty.

ii. Inclusive Access for Diverse Demographics:

Digital banking often leaves behind elderly individuals, low-income populations, rural communities, and people with low digital literacy. Humital Banking addresses this challenge by offering guided digital adoption, accessible interfaces, and human support for onboarding and troubleshooting—thereby ensuring equitable access to financial services for all segments of society.

iii. Enhanced Digital Literacy and Empowerment:

By combining digital infrastructure with in-branch digital literacy programs, as seen in several case studies, banks empower customers to gradually become self-reliant in using digital platforms. This improves user confidence, promotes broader adoption of banking tools, and advances the financial inclusion agenda [4].



B. For Banks

i. Lower Operational Costs:

Humital models leverage automation for routine tasks, such as balance inquiries, fund transfers, and eKYC, thereby reducing reliance on human labour for low-value activities. This streamlines operations, reduces overhead costs, and allows human resources to be reallocated to more value-added or relationship-driven roles.

ii. Improved Customer Retention and Loyalty:

By addressing both functional and emotional needs, Humital Banking improves overall service quality and personalization. Engaged customers are more likely to remain loyal to the bank, deepen their product engagement (e.g., cross-selling of loans and investments), and advocate for the brand within their communities.

iii. Resilience Against Systemic and Technical Disruptions:

Fully automated systems are vulnerable to network outages, cyberattacks, and software failures. In contrast, a hybrid setup ensures service continuity by allowing human intervention when systems fail. For example, manually trained staff in DBUs or phygital branches can step in to assist with technical glitches, ensuring business continuity and customer support [3].

Humital Banking, therefore, not only bridges the digital divide but also serves as a future-ready solution for sustainable growth, customer trust, and operational agility in modern banking.

FUTURE OUTLOOK

As the global financial ecosystem continues to evolve, the need for a more adaptive, inclusive, and resilient banking model becomes increasingly urgent. In this context, Humital Banking is emerging not merely as a transitional approach but as a transformational blueprint for the future of financial services. Its ability to combine the best of digital innovation with the enduring value of human connection positions it as a strategic imperative for banks navigating the complexities of modern customer expectations, technological disruption, and regulatory pressures.

In developing economies like India, where digital infrastructure coexists with stark disparities in access, literacy, and trust, the relevance of Human Banking is particularly profound. The diversity in digital readiness, coupled with regional and demographic variations, necessitates a service model that can dynamically adjust to local realities while advancing national goals such as financial inclusion, digital empowerment, and social equity.

Humital Banking enables banks to leverage digital tools without alienating customers, particularly those who are underserved or technologically unacquainted. By offering personalized human support alongside digital convenience, institutions can reach new customer segments, build deeper relationships, and ensure that no one is left behind in the digital revolution.

Looking ahead, banks that adopt and invest in the Humital model will be better equipped to handle not only competition from fintech and neobanks but also regulatory demands for inclusivity, privacy, and resilience. Moreover, as artificial

intelligence, machine learning, and blockchain technologies become increasingly integrated into core banking operations, the role of empathetic human intervention will remain crucial in areas such as ethics, dispute resolution, and building emotional trust.

In essence, Humital Banking is not a compromise but a convergence—one that empowers financial institutions to remain customer-centric, operationally efficient, and socially responsible in an increasingly digital world. It offers a vision of banking that is not just technologically advanced but also humanly aware and inclusive, marking the next wave of sustainable financial transformation.

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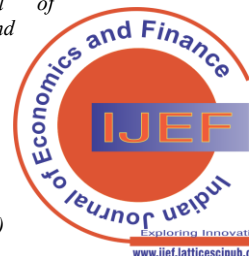
DECLARATION STATEMENT

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AUTHOR'S PROFILE



Dr. Kumar Vikas is a highly accomplished and visionary banking professional with over 17 years of progressive experience in the banking and financial services industry. Currently positioned as Chief Manager & Faculty at Baroda Apex Academy, Bank of Baroda, he plays a strategic role in nurturing future leaders and enhancing institutional capacity through training, research, and academic leadership. Holding a PhD in Management and an MBA in Marketing, Dr Vikas has developed a strong foundation in both theoretical and applied banking practices. His core expertise spans leadership development, customer experience management, retail and digital banking transformation, and strategic service excellence. He has been at the forefront of embedding innovation into learning programs and policy dialogues within the Bank of Baroda ecosystem. Dr. Vikas has been actively involved in designing role and competency-based training modules, leading cross-functional knowledge initiatives, and conducting research in emerging areas such as digital adoption, financial inclusion, customer-centric banking, and customer service innovations. He brings a rare blend of academic depth and field-level banking experience, having worked across multiple geographies, business verticals, and operational functions. Originating from Arrah, Bhojpur, Bihar, Dr. Vikas exemplifies how rooted values and global perspectives can co-exist to drive transformation. He is passionate about banking with empathy, promoting ethical leadership, and enabling inclusive finance through capability building and systemic innovation. Widely regarded as a thought leader, he frequently contributes to conferences, publishes on evolving trends in banking, and mentors young professionals entering the sector. His contributions continue to shape the discourse on future-ready banking, bridging the gap between human connection and digital convenience.

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