

EXAMINING IRAQ'S PATH TO FINANCIAL MODERNIZATION WITH FINTECH AND BLOCKCHAIN

Roman Jamal | April 24, 2025



Executive Summary

Fintech and blockchain technologies hold immense potential to modernize Iraq's financial sector, improve transparency, and drive inclusive growth. However, progress remains constrained by regulatory uncertainty, limited digital financial literacy, and inadequate infrastructure. There is a critical need to establish a stable legal framework and deploy regulatory sandboxes to safely pilot modern technologies. The responsible introduction of stablecoins or CBDC-backed currency can enhance cross-border payments. Aligning Iraq's digital financial systems with international frameworks, stringent oversight, transparent licensing criteria, and a politically neutral supervisory body are essential measures. Implementing a robust cybersecurity framework rounds out the foundational steps needed to foster a resilient digital finance ecosystem.

Introduction

In the contemporary landscape of global development, financial exclusion remains a formidable barrier, particularly for underdeveloped and marginalized communities striving to build wealth and attain economic parity. Amid this challenge, a transformative force has emerged at the intersection of innovation and necessity: fintech. Fintech's contribution lies in its capacity to bridge the gap between the unbanked and the formal financial sector, serving as a beacon of inclusion—illuminated by success stories such as M-Pesa in Kenya and Paytm in India. Even within developed economies, fintech has emerged as a leveling force. In the United States, for instance, 92% of Hispanic and 88% of African American populations,¹ actively engage with fintech services. By 2021, nearly half of all U.S. consumers had utilized at least one fintech product. To put that in perspective, it is a time when many might have never stepped inside a bank branch yet carry multiple finance apps on their personal devices. This is a sign of a new era in payments. Around 73% of global banking interactions now take place through digital platforms.²

Originally, fintech was envisioned as a complementary layer to the evolution of financial services. Today it is an inclusive term that permeates other sectors like³ healthcare, education, retail banking, fundraising, and investment.

Given these emerging conveniences, Iraq stands as a compelling case for fintech embracement within the wider region. The COVID-19 pandemic, paradoxically, served as a digital catalyst. Faced with curfews and restrictions, Iraqi merchants, and consumers— many for the first time— turned to online commerce. Yet, this shift was partial and did not culminate in the full development of a digital mindset. Cash was the dominant transaction mode through the cash-on- delivery option.

The technological building blocks of fintech work on enhancing the ease of integration and the security of the digital financial services. Blockchain is one of these innovations that is increasingly within reach, but for Iraq, the trust component is much harder to solve than the technological aspect. Decades of war, financial mismanagement, and the inadequacy of local banking institutions have left Iraqis wary of handing their money to third parties. This paper sheds light on challenges, regulatory frameworks, and incentive structures needed for driving the transformation of Iraq's financial sector. Furthermore, it presents evidence-based perspectives and expert insights intended to inform policy recommendations.

Iraq's Fintech Landscape

The Central Bank's vision for a cashless economy accelerated fintech adoption. Consumers are increasingly open to digital payments, yet fintech firms face persistent challenges from outdated infrastructure and rigid regulatory systems. The surge in mobile and digital wallet payments is less a matter of choice than necessity. Traditional banks offer limited digital services, and institutional access to credit and funding. The obstacles are apparent in

currency-related bottlenecks; obtaining foreign currency or making cross-border payments remains difficult, despite Iraq's heavy reliance on imports.

These constraints present fintech with a unique opportunity to solve long-standing problems in financial accessibility and transaction efficiency. However, the absence of legal and institutional trust remains a major barrier. Questions around the protection of digital assets, data security, and intellectual property rights deter both local entrepreneurs and foreign investors. With no clear mechanisms for dispute resolution or legal cases, major global payment providers such as PayPal and Apple Pay, have avoided entry, viewing Iraq as a high-risk market.

A further limitation lies in the shortage of specialized talent. The issue is not a lack of intelligence, but a deficit in experience and training needed to support advanced financial technologies.

Expert Interviews

Bayar Shahab



Dr. Bayar Shahab is the Managing Director of both Wedo Consulting— a leading firm providing business consulting across Iraq and MENA, and Wedo Ventures— an investment

venture studio. He is a leading expert in fintech, digital transformation, economic development, and business consulting with over 13 years of experience across Iraq, and MENA. He holds a PhD in Digitalization and Management of Information Systems from the University of Rome Tor Vergata -Italy.

Dr. Bayar has led high-impact projects in, fintech, digital banking, access to finance, entrepreneurship, and public sector reform— working with institutions such as Gol, KRI, GIZ, RVO, and the Central Bank of Iraq. He has played a central role in launching major fintech products like NassWallet and NassPay, and advised on regulatory frameworks, financial literacy, Access to Finance and Small and Medium-Enterprises (SMEs) inclusion. Dr. Bayar bridges business strategy, technology, and policy to solve real-world challenges and promote inclusive innovation.

- Fintech is evolving rapidly, with various technologies playing a key role. Why is fintech important for the financial sector, and how will its benefits extend to banks, merchants, and consumers? With the proliferation of fintech, do you see traditional banking structures evolving in Iraq, or does the lack of regulatory clarity hinder this transition?

Fintech offers Iraq a chance to go beyond traditional banking and extend services to the unbanked, with greater efficiency, reduced transaction costs, and significantly expanded financial access, allowing banks and financial service providers to reach new markets at lower operational costs. Mobile money and e-wallet adoption is rising rapidly – over 4.5 million Iraqis hold mobile money accounts with providers like NassWallet, ZainCash, FastPay and AsiaPay. Fintech is also a key enabler of financial inclusion in Iraq. Mobile wallets and e-payment apps allow people to access basic financial services without a bank account, reaching segments that banks traditionally miss. For example, Iraq's banks grew from 6 million accounts in 2020 to 13 million in 2023. Further innovative fintech companies like Wayl and Simma in Iraq are also transforming the financial and eCommerce

market, providing easier, more affordable, and accessible financial solutions to the public. This growth is also fueled by widespread smartphone use (20+ million internet users) and a young population eager for digital services. Fintech innovations (digital payments, mobile banking, lending platforms) can spur financial inclusion and SMEs growth, expanding on the banking sector's recent gains (now 23% of GDP).

Fintech enhances merchants benefit from quicker settlements, reduced cash handling, and increased customer bases, while consumers enjoy convenience, affordability, and broader service choices

However, Iraq's traditional banking structures remain slow to adapt due to regulatory ambiguities. Clear, proactive regulation by the Central Bank of Iraq (CBI) is essential to accelerate the modernization of traditional banking through fintech.

With current supportive policies and regulation enhancements from CBI, fintech startups might be able to deliver convenient payments, online banking, and remittance services, driving economic activity and modernizing Iraq's financial landscape.

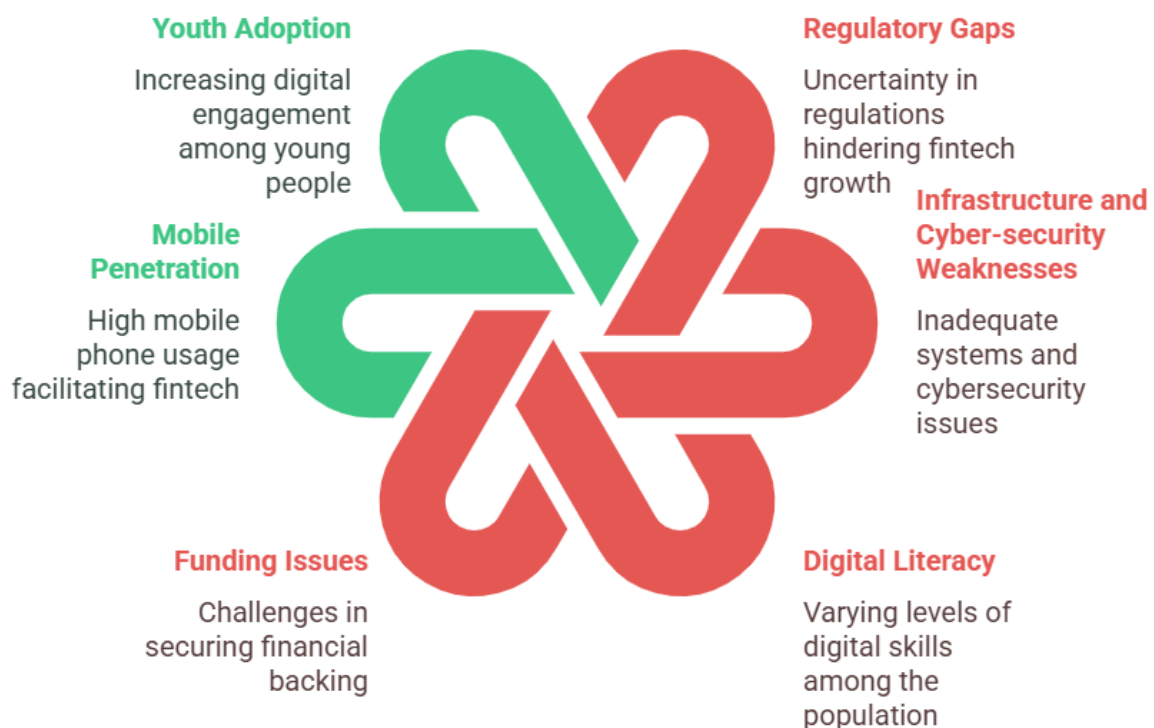
- Many developing regions face challenges like capital controls and reliance on cash transactions. How can fintech solutions address these issues and help Iraq integrate better into global financial systems? What factors are accelerating or hindering fintech adoption in Iraq?

Despite its promise, Iraq's fintech sector faces significant barriers. A dominant state-bank sector and cash culture limit adoption— state banks hold 63% of private deposits, and many SMEs avoid banks entirely. Iraq has a very low formal financial usage (historically among the lowest SME financial inclusion rates) in the region.

Regulatory gaps and uncertainty have posed hurdles for innovators, although the CBI is beginning to address these issues with new guidelines. Infrastructure and cybersecurity weaknesses are

concerns— reliable internet, payment networks, and data protection frameworks need improvement. Digital literacy is also uneven, especially in rural and conflict-affected areas, meaning consumers and small businesses may not trust or know how to use fintech solutions. Additionally, fintech startups struggle with funding and investor confidence in Iraq's market. These challenges require coordinated efforts in policy reform, capacity building, and infrastructure investment. On the other hand, accelerating factors include high mobile penetration and rising digital adoption among youth.

Factors Accelerating or Hindering Fintech Adoption in Iraq



Source: iNNOV8

- Your company has been involved in fintech initiatives in Iraq. Could you share insights into the nature of these projects, their objectives, and any milestones achieved? How has the Iraqi government, including the Central Bank, responded to these efforts?

Have there been any agreements, partnerships, or regulatory developments shaping this progress?

My experience spans leading and contributing to impactful fintech projects, including NassWallet eWallet, NassPay, and the CBI's AI-powered financial inclusion platform. I have also consulted with numerous banks, notably on a project to establish a digital bank in line with the CBI's 2024 Digital Banking regulations. These initiatives have delivered solutions like digital onboarding, cash disbursement, government salary accounts, and financial education to underserved populations, merchants, and businesses.

The CBI's promotion of electronic payments has significantly accelerated financial inclusion, with the widespread deployment of over 13,000 POS terminals across 17 licensed companies. Furthermore, our projects with GIZ and the CBI have advanced financial literacy and digital finance training for youth and SMEs, and we developed Iraq's most comprehensive Access to Finance Guide for Micro, Small and Medium Enterprises (MSMEs).

Driven by these public-private efforts, financial inclusion in Iraq surged by 48.5% in 2023, empowering more Iraqis to participate in the formal financial system. Fintech is pivotal to achieving Iraq's 60% inclusion target by next year.

The CBI's responsiveness through licensing payment providers and enabling digital banks demonstrates growing institutional support, though continued regulatory clarity is essential.

- How does Iraq's fintech landscape compare to that of other countries? What unique challenges or opportunities make fintech adoption in Iraq more difficult or promising compared to regional or global counterparts?

Iraq's regulatory framework for fintech is evolving but needs strengthening. The CBI started issuing licenses for payment service providers and mandating digital payment acceptance, signaling support for fintech innovation.

There is a need for comprehensive fintech regulations to provide clarity and protect consumers. There is also a need to establish clear data protection and e-payment laws. Key steps include developing specific regulations on data privacy and consent in digital finance as well as promoting international security standards (e.g., Payment Card Industry Data Security Standard (PCI-DSS)) across Iraq's financial institutions.

Iraq can create a safe space for startups to pilot new services under CBI oversight. Additionally, reforms to enable digital banks and open banking are vital— the neighboring Jordan's Central Bank (CBJ) has a sandbox (JoRegBox, since 2018) and is piloting open banking solutions, similarly to Egypt's Central Bank, which launched a fintech sandbox in 2019 to safely test innovations. Further, compared to regional leaders (UAE, Saudi Arabia) and established markets like Kenya (M-Pesa) and India (UPI), Iraq's fintech landscape remains nascent but promising.

Iraq's Retail Payment System Infrastructure (RPSI) platform— the national payments switch connecting banks, financial service providers, fintech providers, and e-wallets, merchants, and so forth— could lead Iraq to a great interoperable financial system.

Moving forward, regulators should streamline licensing, encourage fintech-bank partnerships, and update laws (for crowdfunding, crypto assets, etc.) to foster a dynamic yet safe fintech ecosystem.

- Cybersecurity and fraud prevention are major concerns for financial institutions, including in Iraq. How can fintech solutions enhance security and trust in financial transactions? Are there efforts to use fintech to combat fraud or money laundering in Iraq?

As Iraq's fintech sector expands, prioritizing cybersecurity and user awareness is crucial. Robust security measures are essential to safeguard consumer data and funds within digital channels. Currently, a strong legal framework for data security is lacking. To address this, Iraq should implement comprehensive data protection regulations and mandate financial institutions to adhere to industry best practices, such as ISO 27001 compliance. Regular audits and stress tests of fintech platforms are also vital for identifying and mitigating potential vulnerabilities.

Simultaneously, the government and the CBI should invest in advanced cyber defense capabilities to protect against hacking and fraud, particularly as online transactions increase. Equally important is enhancing digital literacy among Iraqi citizens, many of whom are new to online finance. Targeted consumer education campaigns are necessary to promote safe digital habits, including protecting personal information and recognizing scams.

Recognizing these needs, Iraqi authorities are taking initial steps. The Iraqi Private Banks League is advocating for the integration of financial inclusion concepts into school curricula, and organizations like GIZ are conducting workshops on digital financial services, educating citizens on e-wallet usage, budgeting, and fraud prevention. By fostering strong "cyber-hygiene" practices among users and institutions, Iraq can build public trust in fintech. This process involves combining technical safeguards, such as encryption, authentication, and compliance checks, with comprehensive nationwide digital literacy initiatives. These combined efforts will ensure that fintech growth is balanced with effective risk management, protecting both consumers and the financial system.

In a recent regulatory move to combat money laundering through international transfer companies like Western Union and MoneyGram, the CBI mandated that fintech and digital wallet solutions implement biometric authentication.

Furthermore, fintech platforms in Iraq have begun integrating advanced compliance and monitoring systems, aligning with international standards like Anti-Money Laundering (AML) and Know Your Customer (KYC) regulations. However, a comprehensive regulatory framework specifically

addressing digital finance-related fraud and money laundering is still under development and requires further reinforcement by Iraqi authorities.

- A significant portion of Iraq's population faces literacy barriers, limiting access to digital financial services. How can we integrate these individuals into the digital economy? Can fintech platforms offer a more accessible entry point than traditional banks?

Fintech solutions, particularly mobile wallets and simplified digital payment apps, provide an accessible entry point compared to traditional banks, due to user-friendly interfaces, visual aids, voice-assisted technology, and wide distribution via agent networks. To effectively integrate populations with literacy barriers, fintech providers should offer localized language options, extensive agent support networks for in-person assistance, and widespread financial literacy training supported by government and NGO initiatives. Further, organizations like GIZ and ILO, in collaboration with CBI have launched multiple financial inclusion and literacy programs to educate individuals and businesses. As mentioned, Wedo is also collaborating with CBI to launch an AI-powered fintech platform to provide financial literacy and inclusion education and access to finances for individuals and businesses.

- Regulation is crucial for fintech adoption. What is your view on Iraq's regulatory environment for digital finance? Are there positive steps toward regulatory clarity, and what reforms are needed?

Iraq's regulatory environment for digital finance is currently fragmented and unclear, limiting the fintech sector's growth. Positive developments include recent licensing initiatives, digital bank regulation and licensing, and mandatory electronic payments policies by the CBI, indicating movement toward better regulation. However, substantial reforms are needed, including

comprehensive fintech-specific regulations, clear licensing frameworks, robust data protection and cybersecurity laws, a regulatory sandbox to pilot innovations safely, and clear guidance on digital banking and open banking systems.

- What do you see as the future of fintech in Iraq, especially concerning decentralized finance and emerging technologies? What promising opportunities or trends do you believe will shape the next phase of fintech development in the country?

Looking ahead, Iraq's fintech landscape will be influenced by emerging global trends, and proactive adaptation will be key. One major trend is decentralized finance (DeFi) and blockchain-based services, which are creating new avenues for lending, payments, and asset management without traditional intermediaries. While still nascent in Iraq, interest in cryptocurrency and blockchain is growing worldwide— Iraqi regulators should study these developments to craft balanced policies that prevent misuse while allowing innovation.

Currently, blockchain-based services, digital currency platforms, stocks, and cryptocurrency deals are prohibited by CBI, leading to major drawbacks in innovative financial services and access to different financing options. CBI has confirmed its commitment to taking all legal measures against fraudulent companies, amid warnings about fake electronic trading companies falsely claiming to be licensed by the bank.

Nevertheless, the CBI has been working on a Central Bank Digital Currency (CBDC) project that tries to establish a digital currency equivalent for the Iraqi dinar, but this project has been suspended or not moved forward for unknown reasons. Luckily, in a recent move aimed at addressing the liquidity crisis, the CBI is working again to introduce a digital currency as an alternative to cash. This transition could reshape the payments landscape and the national economy entirely.

Another trend is the push for open banking and API integration, already underway in places like Europe and Bahrain, which could enable secure data sharing between banks and fintech startups to spawn personalized financial products. Embracing such innovation would require Iraq's banks and the CBI to modernize legacy systems and regulations. Additionally, the rise of digital ID systems and e-

KYC utilities can streamline customer onboarding, which is crucial for a country where verifying identities can be challenging in remote or post-conflict areas.

Further, AI-driven fintech (for credit scoring, chatbots, fraud detection) and Green fintech (to finance sustainable projects) may also gain traction, aligning with Iraq's development needs. To harness these trends, Iraq should continue its regulatory reforms (e.g., updates to the Electronic Payment Services law), and possibly establish a dedicated Fintech Innovation Unit within the Central Bank or government. By doing so, stakeholders can pilot new technologies (as Egypt's fintech sandbox did) and craft rules in parallel. In sum, the future of Iraqi fintech will depend on staying agile and forward-looking by integrating global best practices, investing in infrastructure and human capital, and creating an enabling environment. With sustained efforts, Iraq can transform its financial sector, leveraging fintech not only for convenience and growth but also as a tool for economic resilience and inclusion in the decade ahead.

Meer Kawa



Meer Kawa is a tech consultant, architect, and entrepreneur with a hands-on approach to solving real-world problems through technology. He is the founder of a forward-thinking tech and design company in Iraq that also has operations in the US and UK, working with clients across a variety of sectors. Since 2014, he works in a variety of fields, from software and app development to AI, blockchain, fintech, game design, architecture, and full-service cloud hosting. In his role as a tech consultant for the Sulaymaniyah Chamber of Commerce and Industry, Meer has helped guide businesses through the ever-changing landscape of digital tools and innovation.

His latest fintech project focuses on digitizing Iraq's traditional street currency exchange markets. He also works closely with some financial institutions, providing them with secure, reliable hosting infrastructure. His work has led to real, measurable results that have earned him multiple awards locally and internationally.

For Meer, tech is not just about shiny new ideas, it is about making systems better and fairer. He is focused on creating tools that actually help people, especially in places where old systems are still holding things back.

- Fintech is evolving rapidly, with various technologies playing a key role. Why is fintech important for the financial sector, and how will its benefits extend to banks, merchants, and consumers? With the proliferation of fintech, do you see traditional banking structures evolving in Iraq, or does the lack of regulatory clarity hinder this transition?

The emergence of fintech is not just a trend— it has become an essential structural necessity in Iraq and the Kurdistan Region. Traditional banking systems in these areas are usually slow, with long processing times and outdated procedures that hinder day-to-day financial activities, often influenced by politics and limited accessibility, which makes it challenging for both businesses and individuals to rely on these systems for consistent financial services.

Fintech presents a practical alternative, offering the kind of transparency, speed, and scalability that legacy systems often lack. For financial institutions or traditional banks, embracing fintech is more than an upgrade, it provides a path to survival and relevance. It is a strategy for staying competitive by cutting operational expenses and meeting customer needs more effectively.

This shift in financial infrastructure impacts various groups in distinct ways. For merchants, it provides them with smoother and faster transactions that allow them to scale operations and reach a broader customer base with less reliance on unpredictable cash-based systems. It makes bookkeeping much easier through automated records. While, for consumers, they gain more control over their finances and improved access to modern financial tools, which makes it possible to access financial services and buy anything, anytime, and from anywhere. Despite all of its potential, fintech's growth in Iraq and the Kurdistan Region is held back by the absence of independent and well-defined regulations.

That said, without a well-defined legal structure, it is challenging for innovative fintech companies or startups to establish themselves and expand. The current regulatory environment is vague, which creates significant barriers to progress. The process of developing financial regulations can be influenced by a range of interests, which adds to the complexity.

While there is a willingness among people to embrace effective solutions, and that people generally will adopt what works, the lack of a strong regulatory foundation prevents the development of a fair and sustainable digital finance ecosystem.

- Many developing regions face challenges like capital controls and reliance on cash transactions. How can fintech solutions address these issues and help Iraq and KRI integrate better into global financial systems? What factors are accelerating or hindering fintech adoption in Iraq?

The rise of fintech has offered a practical alternative to the people of Iraq and the Kurdistan Region's heavy reliance on cash-based transactions, especially in rural areas, where regular banks are far away or just not available. Digital options like mobile wallets or local payment agents are starting to make a difference. These tools let people use basic financial services without needing to visit a bank branch, which saves time and opens access for more communities. It is also a step toward linking Iraq's economy with the rest of the world.

But there are still some major issues slowing things down. In Iraq and Kurdistan Region, using cash is just the norm; it is how things have been done for a long time, and people are used to dealing with physical money. They only trust what they can see and hold. Many people still feel hesitant to trust digital systems, and it is not difficult to see why. Due to political instability and corruption, many Iraqis approach the government and its institutions with a degree of caution. There have also been cases where banks have collapsed, people have been hacked, or people have not been paid their salaries on time. On top of that, there are no solid rules in place, and politics tend to get in the way. That kind of mix even makes it tough for investors; they do not want to put money into something that feels risky or unstable.

Interestingly, one reason many people started using fintech so fast in Iraq had more to do with profit than convenience. There has been a big gap between the official exchange rate and what you get on

the streets. Some users have found ways to profit by exploiting arbitrage opportunities through fintech apps.

Although, technically, making money from differences in exchange rate is not illegal, the nature of some of these transactions raises concerns, as they resemble questionable financial practices, especially when it is hard to trace. This kind of activity does not just hurt the system; it can lead to bigger problems. It damages the country's financial reputation and might lead to tighter international restrictions.

So, while fintech has huge potential in Iraq, it requires a solid legal framework for safeguarding consumers' rights, ensuring compliance, and fostering an environment where innovation can thrive safely. Without that, it risks becoming more of a drawback than a solution.

- How does Iraq's fintech landscape compare to that of other countries? What unique challenges or opportunities make fintech adoption in Iraq more difficult or promising compared to regional or global counterparts?

While fintech is gaining momentum in many parts of the world, things look a bit different here in Iraq. Cash-based transactions are still the main way people do business, and there is a general hesitation when it comes to trusting digital tools.

There is also another major factor at play, the long-established, informal financial networks that already exist. There are multiple well-known streets known as "Bazari Dollar,"; i.e. The Dollar Market, where most of the region's currency trading happens. It is an established zone, with influential stakeholders and long-running businesses built around practices that depend on things being off the book. A lot of money moves there, but not always in ways that would survive scrutiny or benefit from transparency. Some individuals within these systems might view fintech as a potential disruptor to their established practices. Innovation is not always welcomed when it disrupts profitable habits.

Compared to neighboring countries, Iraq deals with more uncertainty when it comes to regulations, with political factors often playing a role in adding complexity to the situation. Even so, the world continues shifting toward decentralized and digital finance.

But at the same time, Iraq has a young population, mobile phones are abundant, and more people are getting online every day. That opens the door for digital finance to make a real difference, especially in areas where banking options have always been limited.

If laws and regulations improve, and people start to feel more confident in digital systems, fintech could do more than just upgrade Iraq's financial system, it might in fact set an example for other countries in the MENA region that are dealing with the same kinds of issues. There is real room for growth here, even if the path is not easy. If fintech providers can work around the usual roadblocks of traditional banking and focus on solutions that actually fit the local context, the industry could expand quickly.

- Cybersecurity and fraud prevention are major concerns for financial institutions, including in Iraq. How can fintech solutions enhance security and trust in financial transactions? Are there efforts to use fintech to combat fraud or money laundering in Iraq?

Keeping financial systems safe from cyber threats is becoming more important than ever in Iraq, especially as fintech tools become more common. With the shift toward a digital economy, there is a growing risk of things like online scams, phishing attempts, and other forms of fraud. This risk is even more concerning in areas where people might not have much experience with digital tools or cybersecurity.

Many people may not realize how to spot fake messages or shady online offers, which makes them easy targets for scammers. At this very moment, I am aware of several social engineering advertising campaigns running on social media, designed to mislead people and get them to unknowingly give up access to their digital wallets.

Hopefully, modern fintech technologies will have the potential to greatly improve cybersecurity and reduce fraud risks, with tools like AI, machine learning, blockchain, and advanced encryption methods playing a key role in this shift. Blockchain, for instance, creates a clear and unchangeable record of

transactions, which makes tampering much more difficult. At the same time, AI can spot unusual activity as it happens, helping stop fraud in its tracks.

Fintech services also make it easier to use biometric checks, such as fingerprint and face ID scans, to protect users from identity fraud, which are currently being rolled out by some fintech apps and digital wallets in Iraq.

Furthermore, AI and big data can support anti-money laundering efforts by identifying suspicious financial behavior early on. Altogether, these technologies are shaping a safer and more trustworthy environment for digital finance.

As financial services continue to go digital at a rapid pace, it is becoming increasingly important to prioritize consumer education and awareness. People need to know how to spot phishing scams, avoid falling for social engineering tricks, keep their personal data safe, and use trusted and secure platforms. It is also essential for regulators to establish clear rules that hold fintech companies to high security standards and shield users from fraud and scams.

While new technologies in fintech can improve security, they also introduce new challenges. Cybercriminals may try to take advantage of new system weaknesses, so it is important to always try to strengthen platform security, educate users, and build public trust in digital tools. These are all are vital for the successful rollout and adoption of fintech in Iraq.

- Regulation is crucial for fintech adoption. What is your view on Iraq's regulatory environment for digital finance? Are there positive steps toward regulatory clarity, and what reforms are needed?

Fintech in Iraq is still trying to find its footing, especially when it comes to rules and regulations. Things are quite unclear, and fintech startups do not exactly know what the true legal path looks like, and the whole system is still shaped by political uncertainties. That kind of clarity makes it challenging for new players to enter the space, let alone thrive.

What could help alleviate some of these concerns are clear and fair guidelines, a licensing process that is straightforward, and oversight that is not tied to politics. Establishing these elements could pave the way for tangible advancement and draw in the necessary investment for the sector.

It is important to remember that fintech did not emerge from within the traditional banking system, it came as a challenge to it. It was born out of frustration, innovation, and a desire to build something more accessible, more flexible, and closer to the needs of real people. Most of the breakthroughs in this space came from startups, not legacy institutions. Young entrepreneurs, not the old guard, were the ones pushing the boundaries.

So, if the same system that fintech was meant to disrupt ends up controlling it through rigid regulations, outdated licensing rules, or favoritism, then what is left is not innovation. It is just a rebranded version of the old system with a slicker interface. Without giving space for fresh players to grow, fintech risks becoming nothing more than a digital extension of traditional banking, and that completely misses the point.

Currently, the requirements from the Central Bank of Iraq (CBI) for getting a license to operate an e-payment service are overwhelming. While they are well-intentioned, they create major barriers for innovation in Iraq's emerging fintech ecosystem. They require three years of audited profits, which is just not realistic for most local startups or even smaller players from the region. Plus, there is a strong bias toward companies with big names in banking or fintech, which leaves out the small startup teams, and the folks with creative solutions but no long legacy. Add to that an approval process that depends heavily on subjective interviews and vague criteria.

If Iraq really wants to unlock fintech's potential, it is going to need a more flexible system. Something like a phased approval process or a regulatory sandbox could give smaller, local innovators a chance to prove themselves without getting buried in red tape. That shift could make all the difference.

- What do you see as the future of fintech in Iraq and KRI, especially concerning decentralized finance and emerging technologies? What promising opportunities or trends do you believe will shape the next phase of fintech development in the country and the region?

Fintech in Iraq and the Kurdistan Region is not just about keeping up with global trends, it is a chance to rethink everything. The traditional banking system has not worked for everyone, and most of the real innovation in this space has not come from banks anyway. It has come from young people, startups, and small teams with fresh ideas. They are the ones who built this movement, not the institutions that have been running things for decades.

The way the world handles money is changing. We are moving from physical banks and rigid systems to something more open and flexible. Blockchain and peer-to-peer technologies are giving people new ways to take control of their money, and for places like Iraq, where a lot of people are left out of the formal system, that is a big deal.

Of course, this change is not something that happens overnight. You still need trust, good laws, strong security, and clear education so people know how to use these tools safely. But if Iraq and KRI can get that part right, there is a real opportunity to leap ahead instead of playing catch-up.

This debate is not just about technology. It is about access, fairness, and independence. If the same stakeholders who slowed things down in the old system are the only ones allowed to shape the new one, we have missed the point. Fintech should not become just another version of a traditional bank with a prettier app. The goal is something better, more open, fairer, and more useful to everyday people.

Blockchain's Role in Shaping Iraq's Digital Economy

Blockchain technology, although relatively new, is rapidly becoming a foundation of fintech innovation. Operating as a distributed ledger, it ensures the integrity of complex, multiparty digital transactions while removing the need for intermediaries. Institutions such as the EU Intellectual Property Office are utilizing blockchain for patent verification.⁴ Its ability to offer transparent tracking, such as tracing material origins in carbon-intensive supply chains,

makes blockchain a key tool in verifying environmental claims. As financial platforms evolve, blockchain's role in delivering secure, scalable, and transparent systems is indispensable.

The convergence of blockchain and AI marks a new frontier. AI-powered algorithms within smart contracts create financial systems that are not only secure and transparent, but also intelligent and adaptive. Systems like IBM's Watson integrate these technologies⁵ to streamline financial operations.

In Iraq, where fintech infrastructure is still developing, blockchain can support key innovations such as digital wallets— offering transparency, trust, and secure data management. Its application is vital to the country's financial future.

Hans-Peter Gier



Hans-Peter holds a degree in economics from the University of St. Gallen (Lic.oec.HSG). He is the founder and CEO of Trustwise AG company and serves as a board member at Banking Concepts AG. He is an entrepreneur in the fintech space. After taking up leading positions as Head of Strategic IT Planning and in Quantitative Portfolio Management Systems at Swiss Bank Corporations (one of the predecessors of UBS AG), he was the founder and managing

partner of Banking Concepts AG, a management consultant firm in the banking sector that advised major European financial institutions.

After selling a majority stake to his partners, he founded Trustwise AG, a start-up focused on DLT technology. He is working on digital share registries, carbon emission management solutions, health and education certificates, as well as CBDC. In 2017/2018 he co-authored a government-sponsored study on the impact of blockchain technology for Switzerland.

- Your company has been involved in blockchain initiatives in Iraq. Could you provide insights into the nature of these projects, their objectives, and any milestones achieved? Additionally, how does your company leverage blockchain technology to drive economic advancements? How has the Iraqi government, including the Central Bank, responded to these efforts?

The economic value of blockchain technology:

To provide background on what we do, our study started in 2018 and was supported by the Swiss government, through TA Swiss. The study explores the economic value of blockchain, particularly in reducing transaction costs. Historically, advancements like the internet have reduced information costs, while artificial intelligence is poised to lower bargaining costs by streamlining negotiations. Blockchain, in turn, minimizes settlement costs by enabling secure, automated agreements via smart contracts. For example, in cross-border trade, escrow agreements currently incur substantial costs, whereas blockchain-based smart contracts could automate payments upon fulfillment of specified conditions. This capability extends to trust verification in transactions, ensuring authenticity in industries such as airline parts. Studies from the Universities of Ljubljana and Utrecht indicate that a 0.1% reduction in transaction costs can yield a three- to sixfold increase in GDP per capita. By reducing transaction costs, blockchain technology can play an important role in increasing the wealth of nations.

Blockchain has the potential to enhance transparency and trustworthiness in financial systems, although perspectives on its adoption vary within Iraq. The technology supports various applications, including financial instruments, tokenized ownership, and certification systems such as health, environmental, and safety certificates, ensuring legitimacy in transactions. Additionally, blockchain enables secure trade settlements and purpose-bound payments, such as vouchers restricted to essential goods like medicine and food, a function relevant in crisis situations. A notable example of blockchain's applicability is the carbon ledger initiative, which we demonstrated in a tech sprint in Dubai, providing verifiable data and a marketplace for trading carbon credits.

In Iraq, blockchain technology seems to be still in its early stages. CBDC or CBDC-backed stablecoins which are crucial for its widespread adoption, have not been initiated yet. One of the topics we pursue with a partner company concerns environmental intelligence, focusing on collecting and analyzing data related to soil, water, and air quality. Once collected, the question of making use of the data to reduce environmental pollution arises. Typically, governments can pursue two fundamentally different regulatory approaches: imposing strict measures for non-compliance or providing incentives for compliance. In my opinion, the latter, which offers financial rewards for demonstrated improvements, is a more effective approach, encouraging compliance rather than evasion. Blockchain technology facilitates such incentive systems through mechanisms like pollution credits, similar to carbon markets, which could be extended to water pollution for the Tigris and Euphrates rivers as well.

- With the rise of decentralized finance, do you foresee traditional banking structures evolving, particularly in regions like Iraq, or does the lack of regulatory clarity make this transition unrealistic?

The financial sector has experienced significant evolution with the increasing adoption of blockchain and other technologies. Banks, as key players in this sector, primarily manage money, securities, assets, and loans. It is anticipated that in the future, whether banks embrace it or not, core banking systems will transition to blockchain technology. This shift will result in the decentralization of key

financial systems, fundamentally changing how banks manage their position-keeping systems. While blockchain will facilitate this transition, services such as consultancy, credit checks, and financial advisory will likely remain within the banks' domain. The banking system is efficient, and this presents a point of resistance for many banks.

At present, banks engage in contract trading to generate additional revenue. However, some major institutions, such as JPMorgan and Citibank, have already begun issuing payment tokens on blockchain platforms, utilizing these tokens for transactional agreements. These banks recognize blockchain's potential as a tool to offer new services, leveraging their global reach. Nonetheless, most banks remain conservative in their approach due to regulatory uncertainties.

A key issue hindering the broader adoption of blockchain in the financial sector is the lack of regulatory clarity. A reliable and trustworthy legal framework is necessary to ensure that blockchain technologies can be integrated without risk. To our knowledge, a legal framework for the use of blockchain technology has not been established yet. The introduction of regulatory sandboxes could mitigate these challenges, offering a structured environment in which blockchain innovation could be tested. However, for sandboxes to be effective, legal certainty and guarantees are essential.

- A significant portion of Iraq's population faces literacy barriers, limiting access to digital financial services. How can we integrate these individuals into the digital economy? Do you believe blockchain platforms can provide a more accessible entry point?

In addressing the challenge of integrating Iraqi individuals with literacy barriers into the digital economy, it is essential to recognize the need for education and, more importantly, incentives. While training is crucial, it must be paired with incentives to encourage active participation. It is well understood that only a small percentage of people are motivated to learn without any possibility to apply this knowledge in practice, while the majority are more likely to engage if they perceive benefits. Therefore, incentivizing learning, such as offering bonuses for passing training or exams, would significantly increase participation rates.

In terms of educational strategies, online courses are the most effective method for introducing blockchain technology to individuals who have little to no understanding of it. These courses could be developed in collaboration with foreign institutions to ensure quality and credibility. To prevent fraud and ensure authenticity, each participant's progress could be tracked and recorded on the blockchain as well. Testing would also be conducted with safeguards, such as personal verification, to ensure that participants complete the training independently.

Additionally, integrating a financial incentive model could provide a strong motivation for participation. For example, offering a monetary reward to individuals who successfully complete the course and pass the exam would serve as a substantial incentive. These funds could be used to support new ventures in the blockchain space. Such an approach would not only provide education but also foster the creation of new startups and businesses, thus contributing to economic development. With the potential to reach many participants, the long-term benefits would be significant.

- In many developing regions, financial infrastructure struggles with challenges such as capital controls, and reliance on cash-based transactions. How do you see blockchain-based financial solutions addressing these issues? Could they help Iraq integrate better into global financial systems, and what factors are accelerating or hindering blockchain adoption in the country?

In the context of Iraq, Blockchain-based financial solutions could indeed facilitate better integration into global financial systems, particularly using blockchain to streamline cross-border payments and reduce reliance on traditional intermediaries.

For example, consider a scenario where a German or Swiss exporter seeks to supply machinery to Iraq. Traditionally, a payment guarantee would be issued by a German bank to ensure payment in case of failure. However, if a blockchain-based payment instrument were used, the settlement could occur in a stable currency like the Euro. A critical component of this system would be the establishment of a mechanism in Iraq where local companies could purchase a trustworthy - potentially Central Bank

Digital Currency (CBDC)-backed – EURO stablecoin. The use of a CBDC-backed stablecoin is likely to be the most feasible option, where the central bank guarantees the token supply corresponding to the currency deposited in a central bank account.

For this system to function effectively, Iraq would need to establish infrastructures, enabling local companies to purchase and use these tokens. However, this endeavor is not without significant challenges. The existing system, which involves issuing certificates of origin and performing other paperwork, is entrenched and serves the interests of many stakeholders who benefit financially from the current system. Breaking through this established structure would require overcoming resistance from these stakeholders, particularly as they stand to lose revenue if blockchain-based solutions reduce their role.

Moreover, the question of regulatory frameworks remains a principal issue. For instance, if Iraq imposes restrictions on holding foreign currency or requires special permissions, this could hinder the adoption of blockchain-based financial solutions. Furthermore, projects like mBridge, which provide solutions for automatic market making and cross-border payments, could help accelerate the adoption of blockchain-based financial solutions in Iraq. If Iraq were to participate in such initiatives, it could simplify the integration process.

- Do blockchain-related challenges like scalability and user adoption apply in the Iraqi context? If so, how can they be addressed?

Blockchain-related challenges such as scalability and user adoption are relevant in Iraq, but recent advancements have mitigated many technical concerns. Scalability is no longer a major issue due to Layer 2 solutions, which improve transaction speeds and costs while maintaining security. Similarly, energy consumption concerns have diminished with the adoption of Proof-of-Stake (PoS) and Proof-of-Authority (PoA) mechanisms, which require minimal electricity compared to traditional Proof-of-Work (PoW) systems. However, the real challenge in Iraq is user adoption, hindered by regulatory restrictions, and low financial literacy. While cryptocurrencies remain banned in Iraq, stablecoins like USDT and USDC have seen widespread global adoption, particularly in inflation-prone economies

such as Türkiye, where citizens use them as a means of hedging against currency depreciation. Allowing stablecoins under regulatory oversight or introducing a government-backed CBDC-linked stablecoin could provide a controlled entry point into blockchain finance. The key to adoption is enabling a blockchain-based payment instrument, as blockchain without financial integration remains limited. A progressive regulatory approach, combined with stablecoin integration, could unlock economic opportunities, and enhance Iraq's GDP.

- Looking ahead, what do you envision as the future of blockchain in Iraq? Are there any promising opportunities or upcoming trends that you believe will shape the next phase of development in the country?

I hope the momentum of blockchain adoption in Iraq continues to grow. I see significant potential in supporting the implementation of startups within this sector, as such initiatives could drive innovation and economic development. However, the successful integration of blockchain technology requires two fundamental elements: a stable legal framework and a reliable payment instrument. These prerequisites are essential for fostering a secure and functional blockchain ecosystem. Once there is a strong political commitment to establishing both, I believe Iraq will have a solid foundation for blockchain's advancement and long-term success.

Policy Recommendations

- Draft a clear legal framework to encourage long-term investment in fintech and blockchain infrastructure in Iraq. Introduce regulatory sandboxes to test blockchain and fintech innovations in controlled environments with government oversight.
- Promote inclusion by incentivizing education and training programs focused on fintech, blockchain, and related technologies, tailored to low-literacy populations. Use blockchain

to track and certify participation. Moreover, support the adoption of stablecoins or CBDC-backed instruments to streamline secure and transparent cross-border transactions.

- Facilitate compatibility with global financial systems by aligning blockchain development with international standards such as mBridge or EU digital currency frameworks.
- Regulate fintech-related scams on social media by partnering with technology platforms to detect and remove deceptive advertising campaigns targeting digital wallet users. Additionally, implement robust cybersecurity frameworks, such as ISO 27001 compliance, and promote regular security audits to protect fintech platforms from cyber threats.
- Establish a specialized, non-partisan body to oversee digital finance, minimizing political interference and enhancing public and investor confidence. Strengthen transparency in the evaluation process for new fintech licenses by minimizing subjective assessments.

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EXAMINING IRAQ'S PATH TO FINANCIAL MODERNIZATION WITH FINTECH AND BLOCKCHAIN



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