

PTGR AG

Zug, Switzerland

FEASIBILITY STUDY

Blockchain Technology Adoption in Vietnam's Banking Sector

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1. Executive Summary

Vietnam's banking sector stands at a structural inflection point. Rapid digitisation, a large unbanked population, and surging cross-border remittance flows create compelling commercial conditions for blockchain adoption. At the same time, the passage of the Law on Digital Technology Industry (DTI Law, July 2025) and Resolution 05/2025/NQ-CP provide, for the first time, a formal legal basis for digital-asset trading and custody.

This feasibility study, prepared by PTGR AG, assesses whether blockchain-based financial infrastructure can be viably deployed within Vietnam's banking system. The analysis evaluates technical readiness, the regulatory environment, existing commercial deployments, the risk landscape, and a phased implementation pathway.

Key findings:

- Vietnam ranks 4th globally in cryptocurrency adoption and has over 69 million fintech users – market readiness is strong.
- Three commercial banks (TPBank, BIDV, Vietcombank) have already deployed blockchain in live operations, demonstrating technical feasibility.
- The legal framework is nascent but moving: the DTI Law formally recognises digital assets; critical gaps remain in DeFi regulation, smart-contract enforceability, and real-world asset tokenisation.
- Vietnam's FATF grey-list status (since 2023) imposes stringent AML/KYC obligations; anonymity risks are the single largest compliance barrier.
- A phased, guardrails-first approach – prioritising VND monetary sovereignty, real-name wallet linkage, and mandatory smart-contract auditing – offers the most risk-adjusted path to full deployment.

Overall verdict: Blockchain adoption in Vietnam's banking sector is technically and commercially feasible, conditional on the execution of the regulatory and compliance roadmap outlined in this report.

2. Strategic Context

2.1 Vietnam's Digital Economy Trajectory

Vietnam's digital economy contributed an estimated USD 72.1 billion to GDP in 2025, with the government targeting a 30% digital GDP share by 2030 (Vietnamnet, 2026). The National Digital Transformation Programme (Decision No. 749/QĐ-TTg) identifies blockchain as foundational infrastructure for digital identity, transparent governance, and financial services modernisation (MIC, 2025).

The banking sector reflects this momentum: 27 listed commercial banks reported aggregate profits of approximately VND 299 trillion in 2023 (+17.2% YoY), and 13 Vietnamese institutions ranked among the world's top 500 banking brands by brand value in 2025 (Thị trường Tài chính Tiền tệ, 2025). Yet systemic inefficiencies persist.

2.2 Pain Points in the Traditional Banking System

Cross-Border Payment Friction

International transfers routed through the SWIFT correspondent-banking network incur intermediary fees of USD 20–50 per transaction, multi-day settlement times, and opaque cost structures (Hayes, 2024; Wise, n.d.). This is commercially significant: Vietnam received over USD 19 billion in remittances in 2023, the ninth-largest inflow globally.

Fragmented KYC/Identity Infrastructure

Each commercial bank maintains a siloed customer database. A customer completing eKYC at Vietcombank must repeat the entire process at Techcombank, creating redundant cost and fraud risk. Blockchain-based shared KYC ledgers (already piloted in Singapore and Thailand) offer a direct solution.

Trade Finance Inefficiency

Letter-of-Credit (L/C) workflows remain paper-intensive, resulting in settlement cycles of 5–10 business days and high administrative overhead. Smart-contract automation can compress this to near-real-time.

3. Regulatory and Legal Framework

3.1 Recent Legislative Developments

Vietnam's regulatory posture toward digital assets underwent a fundamental shift in 2025:

- July 2025 – DTI Law (Law No. 71/2025/QH15): Formally recognises digital assets as legally tradeable instruments for personal and commercial investment. Prohibits their use as fiat currency substitutes, preserving VND monetary sovereignty (National Assembly of Vietnam, 2025).
- 2025 – Resolution 05/2025/NQ-CP: Establishes a five-year regulatory sandbox granting five licensed exchanges (including VIX Securities and Sun Group) explicit permission to

issue, trade, and custody digital assets under SBV/MoF oversight (People's Army Newspaper, 2025).

- 2024 – Decision No. 1236/QD-TTg: National Blockchain Strategy to 2025/2030, designating blockchain as a core digital transformation pillar and funding the National Blockchain Platform (NDACHain), launched July 2025 (Vietnam Government, 2024).

Regulatory jurisdiction is divided among three bodies: the State Bank of Vietnam (SBV) governs AML/CFT and CBDC research; the Ministry of Finance (MoF) and State Securities Commission (SSC) manage security tokens and exchange licensing; and the Ministry of Information and Communications (MIC) oversees utility tokens and NDACHain (PwC Vietnam, 2025).

3.2 Material Legal Gaps

Despite progress, four critical gaps limit commercial deployment:

- Taxonomy ambiguity: No binding legal definitions distinguish e-money, virtual currency, crypto-assets, utility tokens, and CBDCs creating compliance uncertainty for issuers and investors (PwC Vietnam, 2025).
- DeFi/non-custodial voids: Resolution 05 covers only five centralised exchanges; decentralised finance protocols and self-custody wallets operate in a regulatory vacuum (GFTN, 2025).
- Smart-contract legal status: Smart contracts are treated as software code, not enforceable legal instruments. Disputes arising from code errors have no statutory resolution mechanism (GFTN, 2025; People's Army Newspaper, 2025).
- Real-world asset (RWA) tokenisation: No clear property-rights framework governs tokenised real estate, invoices, or carbon credits, impeding institutional capital formation (PwC Vietnam, 2025).

4. Market Readiness Assessment

4.1 Infrastructure

Broadband fibre coverage exceeds 80% of Vietnamese households, with fixed broadband speeds of approximately 104 Mbps (42nd globally) as of late 2023 (Vietnamnet, 2026). The government-backed NDACHain, launched July 2025, provides a state-supported distributed ledger backbone for financial transactions, digital identity (VNeID), and product traceability (Vietnam Government, 2025).

Cybersecurity gaps remain a constraint: only 9.2% of government information systems met national cybersecurity standards as of 2023 (National Digital Transformation Authority, 2023). The 2022 Ronin Bridge hack (USD 625 million), perpetrated against a Vietnamese-founded project, remains a cautionary benchmark (GFTN, 2025).

4.2 Fintech Ecosystem

By 2025, Vietnam had licensed 48 non-bank payment intermediaries and recorded approximately 69 million fintech users. MoMo leads the e-wallet market with an estimated 40–50% share (Vietnam Government, 2024). Over 260 fintech companies operated domestically at end-2022, of which ~12% specialised in blockchain/crypto (Nguyen & Tran, 2023).

The Axie Infinity / Sky Mavis case illustrates both the depth of Vietnam's blockchain talent pool and the regulatory cost of inaction: the company relocated to Singapore due to the absence of a domestic digital-asset framework, a pattern repeated by Kyber Network (VietnamBiz, 2022). Retaining the next generation of Vietnamese Web3 companies requires the regulatory clarity that Resolution 05 begins to provide.

4.3 Proven Commercial Deployments

Three live blockchain deployments in Vietnamese banking confirm technical feasibility:

- **TPBank / RippleNet:** TPBank became the first Vietnamese bank to apply blockchain to international transfers (2019), achieving real-time settlement and transparent fee disclosure via Ripple's distributed ledger protocol (TPBank, 2019).
- **BIDV / Contour (R3 Corda):** BIDV implemented digital Letters of Credit on the Contour platform, digitising paper-based L/C workflows and reducing processing time from days to hours (Pham & Nguyen, 2020).
- **Vietcombank / VCB Loyalty:** Vietcombank deployed blockchain for its customer rewards programme, enabling tamper-proof point ledgers and real-time redemption tracking via VCB Digibank (VnExpress, 2021).

5. Risk Analysis

The following matrix summarises the five principal risk dimensions, their likelihood and impact ratings, and recommended mitigations:

Risk Category	Key Threat	Likelihood	Impact	Mitigation
Legal & Regulatory	Undefined DeFi/P2P frameworks deter FDI	High	High	Fast-track DTI Law secondary regulations; engage SBV working groups
AML / KYC	FATF grey-list; pseudonymous transactions enable illicit flows	High	High	Real-name bank linkage; FATF Travel Rule above USD 1,000; Chainalysis analytics

Macroeconomic	USDT adoption erodes VND monetary sovereignty	Medium	High	VND-only settlement on pilot exchanges; stablecoin usage caps
Cybersecurity	Smart-contract exploits (cf. Ronin hack, USD 625 m)	Medium	High	Mandatory pre-deployment audits; multi-sig + HSM key custody; NDACHain integration
Talent / Operations	Shortage of blockchain architects & compliance specialists	High	Medium	VietChain Talents programme; university curriculum reform; international secondments

AML/KYC and legal/regulatory risks are rated High–High and constitute the critical path for any commercial deployment. Cybersecurity risk is structurally manageable through technical controls (audit requirements, HSM custody, NDACHain integration) but demands sustained investment. The talent gap is addressable over a 2–3 year horizon through public-private training initiatives.

6. Phased Implementation Roadmap

A three-phase roadmap, grounded in the guardrails-first principle, provides a structured pathway from regulatory sandbox to full-scale deployment:

Phase	Timeframe	Objectives	Key Actions
Phase 1	0–12 months	Eliminate regulatory ambiguity; initiate controlled sandbox testing	Launch 5-exchange pilot under Resolution 05; standardise digital-asset taxonomy; commence interbank blockchain settlement trials; establish real-name wallet linkage mandate
Phase 2	1–2 years	Build formal VASP licensing regime; enforce compliance infrastructure	Issue multi-tier VASP licences (VND 10 trillion min. capital); full FATF Travel Rule implementation; mandatory smart-contract audits; NDACHain as national backbone; launch VietChain Talents programme
Phase 3	3–5 years	Achieve mass adoption; integrate blockchain into public administration	Tokenise real-world assets (real estate, carbon credits); deploy blockchain in land registries, medical records, academic certificates; connect 80% of citizens via NDADID; establish dedicated digital-asset regulatory agency

The guardrails-first principle is non-negotiable throughout all phases: the Vietnamese Dong must remain the sole authorised fiat settlement currency on all licensed platforms; stablecoin usage is restricted to pre-approved retail and remittance use cases; and all participants must maintain real-name links to verified bank accounts. These constraints are not obstacles to adoption – they are the conditions under which sustained institutional confidence can be built.

7. Feasibility Evaluation

The following scorecard synthesises the analysis across five evaluation dimensions:

Dimension	Assessment	Verdict
Market Readiness	4th globally in crypto adoption; 69 m fintech users; >80% fibre broadband penetration	STRONG
Legal Framework	DTI Law 2025 & Resolution 05 establish sandbox; gaps remain in DeFi, smart-contract enforceability, RWA ownership	CONDITIONAL
Banking Infrastructure	TPBank (RippleNet), BIDV (Contour), Vietcombank (VCB Loyalty) demonstrate live deployments	DEMONSTRATED
AML / Compliance	FATF grey-list pressure; anonymity risks; mitigation roadmap exists but not yet implemented	REQUIRES ACTION
Human Capital	Strong software engineering base; critical shortage of blockchain architects and digital-law specialists	GAP
Overall Feasibility	Technically and commercially viable with phased, guardrails-first governance; full potential contingent on regulatory execution	FEASIBLE

The aggregate assessment is positive. Vietnam possesses the market scale, fintech ecosystem, and growing institutional infrastructure to support blockchain-based financial services. The regulatory transition initiated in 2025 is substantive, not cosmetic. The three live banking deployments demonstrate that the technology works in the Vietnamese context.

The critical variable is execution speed on the compliance and regulatory side. If the MoF/SBV/MIC coordination gap is not closed within 12 months – particularly on VASP licensing, smart-contract legal status, and FATF Travel Rule implementation – the window for Vietnam to become a regional blockchain hub will narrow, and capital will continue to flow to Singapore and Hong Kong.

8. Conclusion and Recommendations

Blockchain adoption in Vietnam's banking sector is feasible, commercially significant, and strategically aligned with the country's 2030 digital economy targets. The following five recommendations are offered to policymakers, financial institutions, and market participants:

- **Accelerate legal taxonomy:** The MoF should publish binding definitions for digital-asset categories (e-money, utility token, security token, stablecoin, CBDC) within six months of this report, aligned with FATF and MiCA standards.
- **Operationalise real-name wallet linkage:** The SBV should mandate that all digital wallets on licensed exchanges link to a verified, real-name bank account before the first sandbox year ends – mirroring South Korea's model.
- **Grant smart contracts limited legal standing:** The National Assembly should amend the Civil Code to recognise smart contracts as enforceable instruments, subject to judicial review in cases of code error or dispute.
- **Establish a cross-ministry blockchain coordination office:** A dedicated inter-agency body (SBV, MoF, MIC, Ministry of Justice) would eliminate the regulatory fragmentation that currently creates compliance uncertainty.
- **Scale talent investment:** The VietChain Talents programme should be expanded with university co-funding, industry secondments, and internationally accredited certification pathways to address the critical shortage of blockchain architects and compliance specialists.

PTGR AG, with its established track record in digital asset infrastructure and cross-border payment solutions, is positioned to support Vietnamese financial institutions in navigating this transition. This feasibility study represents a foundation for further engagement.

References

All sources were accessed between January and June 2026. Web sources were verified as live at time of access. Sources are listed in APA 7th edition format.

- Chainalysis. (2024, October). The 2024 geography of cryptocurrency report.
https://admin.lexikon.com.mx/archivos/The_2024_geography_of_crypto_report_1729164229.pdf
- Computer Industry Cooperation Center (CICC). (2023). Vietnam ICT and digital transformation report.
<https://cicc.or.jp/english/wp-content/uploads/231213Vietnam.pdf>
- DFDL Legal & Tax. (2025). Vietnam landmark law on digital technology industry: New frameworks for AI & digital assets.
<https://www.dfdl.com/insights/legal-and-tax-updates/vietnam-landmark-law-on-digital-technology-industry-new-frameworks-for-ai-digital-assets/>
- Faust, J. (2025). Vietnam digital asset risk and compliance outlook. [Internal reference, cited in GFTN 2025].
- Global Finance & Technology Network (GFTN). (2025). GFTN global digital assets report: Policy evolution, market development, future pathways.
<https://gftn.co/hubfs/GFTN%20Global%20Digital%20Assets%20Report%20Combined%20-%2010%20Nov%202025-1.pdf>
- International Monetary Fund (IMF). (2025). Global financial stability report: Digital money and financial stability. Washington, D.C.: IMF.
- Ministry of Information and Communications of Vietnam (MIC). (2025). National digital transformation program 2025–2030: Progress report. Hanoi: MIC.
- National Assembly of Vietnam. (2025). Law on Digital Technology Industry (Law No. 71/2025/QH15). Effective 1 January 2026.
<https://thuvienphapluat.vn/van-ban/EN/Cong-nghe-thong-tin/Law-71-2025-QH15-Digital-Technology-Industry/668801/tieng-anh.aspx>
- Nguyen, V. T. (2024). Fintech development in Vietnam: Opportunities and challenges. *Journal of Finance & Accounting Research*, 2(27), 37–42.
<https://scholar.dlu.edu.vn/thuvienso/bitstream/DLU123456789/274468/1/CVv266S02A2024037.pdf>
- People's Army Newspaper (VNA). (2025, October 14). Vietnam steps into the blockchain era.
<https://en.qdnd.vn/economy/special-reports/vietnam-steps-into-blockchain-era-583595>
- Pham, D. K. (2026, April 23). Vietnam advances pilot digital asset framework. *Vietnam Investment Review*.
<https://vir.com.vn/vietnam-advances-pilot-digital-asset-framework-151211.html>
- PlatON & TOPOS. (2025). SEA crypto & payment ecosystem report – Vietnam 2025.
https://www.platon.network/blog/SEA_Crypto_and_Payment_Ecosystem_Report_Vietnam_2025.pdf
- PTGR AG. (2025, October 17). Feasibility study on digital asset adoption in Ethiopia. LinkedIn Pulse.
<https://www.linkedin.com/pulse/feasibility-study-digital-asset-adoption-ethiopia-ptgr-wioxe>
- PTGR AG. (2026, March 20). Blockchain in Africa: 2026 – Accelerating a major opportunity. LinkedIn Pulse.
<https://www.linkedin.com/pulse/blockchain-africa-2026-accelerating-major-opportunity-ptgr-h7obf>
- PwC Vietnam. (2025). Vietnam's cryptocurrencies: Legal framework and market outlook.
<https://www.pwc.com/vn/en/publications/2025/vietnam-cryptocurrencies.pdf>
- State Bank of Vietnam (SBV). (2025). Strategic guidance on fintech and distributed ledger technology in banking operations.

- <https://vnba.org.vn/en/sbv-unveils-the-strategy-for-digital-transformation-of-the-banking-sector-until-2030-19604.htm>
- Techcombank. (2026, January). Techcombank: Pioneering innovation in Vietnam [Investor presentation].
<https://techcombank.com/content/dam/techcombank/public-site/documents/2026-01-tcb-investor-presentation-vf.pdf>
- Tiger Research. (2025, July 29). Vietnam's crypto regulation: From regulatory gray zone to controlled experimentation. Chi Anh & Yoon, R.
<https://reports.tiger-research.com/p/vietnams-crypto-regulation-from-regulatory-eng>
- Tilleke & Gibbins. (2025, July 11). Vietnam's regulatory sandboxes: Paving the way for digital innovation.
<https://www.tilleke.com/insights/vietnams-regulatory-sandboxes-paving-the-way-for-digital-innovation/>
- TPBank. (2019, November 4). TPBank is the first Vietnamese bank to successfully apply blockchain for international money transfers [Press release].
<https://tpb.vn/tin-tuc/tin-tpbank/tpbank-la-ngan-hang-viet-nam-dau-tien-ung-dung-thanh-cong-chuyen-tien-quoc-te-qua-blockchain>
- Vietnam Government. (2020). Decision No. 749/QĐ-TTg: National digital transformation programme 2025 with orientation to 2030. <https://vanban.chinhphu.vn/?pageid=27160&docid=200163>
- Vietnam Government. (2024). Decision No. 1236/QĐ-TTg: National strategy for blockchain application and development to 2025, orientation to 2030. <https://vanban.chinhphu.vn/?pageid=27160&docid=211462>
- Vietnam Government. (2025). Resolution 05/2025/NQ-CP: Five-year regulatory pilot programme for digital asset markets. Hanoi.
- VinaCapital. (2025, September 19). Formalizing Vietnam's digital assets markets.
<https://vinacapital.com/wp-content/uploads/2025/09/VinaCapital-Insights-Formalizing-Vietnams-Digital-Assets-Markets.pdf>
- Vietnamnet. (2026, January 12). Digital economy contributes USD 72.1 billion: Can Vietnam bridge the gap to 2045?
<https://vietnamnet.vn/en/digital-economy-contributes-72-1-billion-can-vietnam-bridge-the-gap-to-2045-2480957.html>
- VnExpress. (2021, September 23). Vietcombank applies blockchain on digital banking.
<https://vnexpress.net/vietcombank-ung-dung-blockchain-tren-ngan-hang-so-4360238.html>
- World Bank. (2025). Vietnam digital economy assessment: Infrastructure, inclusion, and governance. Washington, D.C.: World Bank Group.

Note: Vietnamese-language sources cited within the body of the report (Thời báo Ngân hàng, Thị trường Tài chính Tiền tệ, Bình dân học vụ số Lâm Đồng, Báo Chính Phủ, Cafebiz, MoMo, Vietnambiz) have been retained as primary market data sources. English-language equivalents are cited where available.