DOI: 10.71317/jgst.2.11.2026.1085
Journal of Global Social Transformation
Journal homepage: https://rjsaonline.org/index.php/JGST

Blockchain Adoption in Commercial Real Estate Transactions: A Narrative Review of Capabilities, Applications, Tokenization, and Barriers

Ahmed Raza[1], Syeda Dua[2]
[1] BBA Student, NUML University Hyderabad Campus.
Email: ahmedrazayousufzaki@gmail.com
[2] BBA Student, NUML University Hyderabad Campus.
Email: duasyeda659@gmail.com

ARTICLE INFO

Submission:
October 08, 2026
Revised:
October 31, 2026
Accepted:
November 10, 2026
Available Online:
November 20, 2026

Keywords:
blockchain; commercial real estate; smart contracts; tokenization; fractional ownership; property technology; transaction efficiency; adoption barriers; land registry

Corresponding author:
Ahmed Raza
Email: ahmedrazayousufzaki@gmail.com

ABSTRACT

Commercial real estate (CRE) transactions remain characterized by manual verification, fragmented record keeping, and heavy reliance on intermediaries, producing high transaction costs and limited transparency. Blockchain technology has been proposed as a response capable of introducing immutable transaction records, automating agreements through smart contracts, and reducing dependence on intermediary verification. This paper presents a narrative literature review examining the technological capabilities of blockchain, its documented applications, the fast growing area of property tokenization, adoption drivers, and barriers within the CRE sector. Thirteen peer reviewed and reputable industry sources published between 2019 and 2025 were identified through targeted searches of academic publisher databases (Emerald, Elsevier, Springer, MDPI, PLOS, AIS, Vilnius Gediminas Technical University) and verified industry reporting (Deloitte), then analyzed thematically. Findings indicate that blockchain applications are most developed in transaction process redesign, title and registry integration, cost efficiency use cases, and, most recently, the tokenization of property into tradable digital shares. Empirical pilot evidence is available primarily from the Netherlands, Sweden, and Switzerland, while market projections from Deloitte place tokenized real estate on a path from under 300 billion United States dollars in 2024 to more than 4 trillion by 2035. Adoption nevertheless remains constrained by unresolved legal questions around smart contract enforceability and registry integration, technological integration costs, and low practitioner trust, particularly regarding data privacy and security. The review finds a persistent gap between the volume of conceptual, pilot stage research and empirical evidence of blockchain delivering sustained gains at scale. We conclude that the near term value of blockchain in CRE lies in targeted, registry complementary deployments and carefully structured tokenization rather than wholesale platform replacement, and we outline priorities for future empirical research.

Introduction

The commercial real estate (CRE) sector plays a substantial role in the global economy, underpinning business operations, institutional investment portfolios, and municipal revenue systems. Despite this significance, CRE transaction processes have historically lagged behind other financial sectors in digitization. Property transfers typically require manual verification of title and

lien history across fragmented registries, and they rely on intermediaries such as brokers, notaries, escrow agents, and legal counsel to establish trust between counterparties who otherwise have no independent means of verifying one another's claims (Wouda & Opdenakker, 2019). The resulting transaction cycles are often lengthy, costly, and opaque, and they expose participants to document fraud and to the operational risk that accompanies any heavily paper based process.

The scale of the sector makes even incremental friction expensive. Commercial property underpins a very large share of institutional wealth and of the collateral that supports lending, so delays, disputes, and errors in the transfer of title translate into real costs for investors, lenders, and tenants alike. Each transaction typically assembles a chain of independent professionals who duplicate one another's verification work, and the information they rely on sits in separate systems that do not communicate. This structure is robust and well understood, which is one reason it has endured, yet it also builds in cost, delay, and opacity that a shared and trustworthy record could in principle reduce. It is against this backdrop that interest in distributed ledgers has grown.

Blockchain technology, the distributed ledger infrastructure originally developed to support cryptocurrency transactions, has been proposed across both academic and practitioner literature as a mechanism to address these inefficiencies. Its principal features of decentralization, cryptographic security, immutability, and programmable smart contracts map closely onto the persistent pain points of CRE, namely fragmented data, document fraud, and delay prone manual verification (Deloitte, 2025a). At the same time, a growing body of critical scholarship cautions that much of the enthusiasm surrounding blockchain in real estate has outpaced the empirical evidence for its performance in practice, and that many widely cited pilots use permissioned, centrally governed ledgers rather than the trustless, decentralized architecture that proponents of the technology describe (Konashevych, 2020).

A more recent development has sharpened both the promise and the scrutiny. Property tokenization, the representation of real estate ownership or debt as digital tokens that can be divided and traded on a blockchain, has moved from a niche experiment toward an institutional agenda. The Deloitte Center for Financial Services (2025b) projected that tokenized real estate could grow from under 300 billion United States dollars in 2024 to more than 4 trillion by 2035, a compound annual growth rate of roughly 27 percent. Figure 1 presents an illustrative trajectory consistent with that forecast. These numbers should be read with care, because they originate in consultancy modelling rather than audited market data, yet they signal a level of institutional attention that earlier blockchain pilots never attracted.

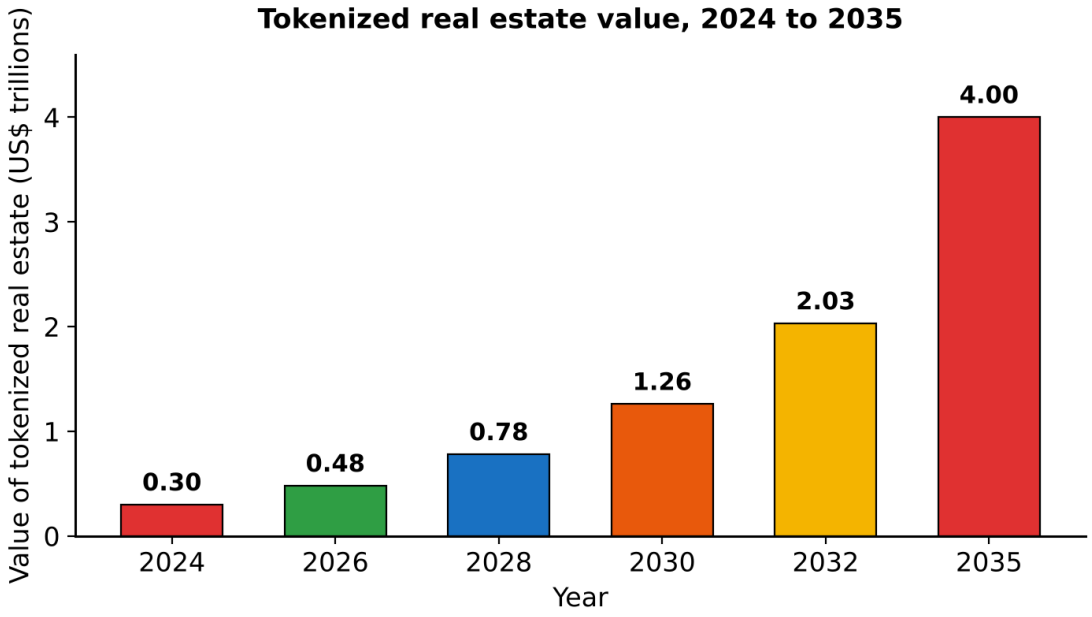

Figure 1. Illustrative growth path of tokenized real estate, 2024 to 2035. Values in United States dollars (trillions), based on an annual growth rate of roughly 27 percent anchored on Deloitte Center for Financial Services (2025b). The trajectory is illustrative, not a precise annual forecast.

This review synthesizes the peer reviewed and reputable industry literature on blockchain in CRE transactions to assess what has actually been demonstrated, where genuine barriers remain, and what a realistic near term adoption pathway looks like. It is guided by four research questions:

- **RQ1:** What technological capabilities of blockchain are most directly relevant to CRE transaction processes?
- **RQ2:** What documented applications, tokenization models, and pilot stage evidence exist for blockchain use in CRE, and what outcomes have they produced?
- **RQ3:** What factors predict practitioner adoption intention, and what legal, technological, and behavioral barriers constrain wider implementation?
- **RQ4:** What does the balance of evidence suggest about the realistic near term role of blockchain in CRE transactions?

Unlike primary empirical studies, this paper does not collect new data. It synthesizes and critically evaluates existing verified literature to answer these questions, following the review methodology detailed in Section 2.

Methods

Review Design

This study employed a narrative literature review design, appropriate for synthesizing a heterogeneous body of legal, technical, and empirical literature around a defined set of research questions (Saari, Junnila, & Vimpari, 2022, employ a comparable systematic approach at larger scale). A full systematic review with formal PRISMA reporting was judged premature given the modest and uneven volume of peer reviewed empirical work specifically on commercial, as opposed to residential or general, property blockchain applications. This limitation is addressed directly in Section 6.

Search Strategy

Sources were identified through targeted keyword searches, including blockchain commercial real estate, blockchain real estate transactions, blockchain land registry, real estate tokenization, smart contracts property law, and blockchain adoption real estate. Searches were conducted across publisher hosted academic databases, including Emerald Insight, ScienceDirect (Elsevier), SpringerLink, MDPI (Applied Sciences), PLOS, the AIS Electronic Library, and the International Journal of Strategic Property Management, supplemented by SSRN and arXiv preprint records and verified industry reports from Deloitte. Searches covered publications from 2019 through 2025 to capture both foundational design science work and the most current adoption and tokenization research.

Inclusion and Exclusion Criteria

Sources were included if they directly addressed blockchain or distributed ledger technology applications in real estate or property transactions, if they were retrievable and verifiable against a publisher, indexing service, or institutional repository record such as a DOI or a publisher landing page, and if they were published in a peer reviewed journal, a recognized scholarly proceedings or book, or by a recognized industry research body. Sources were excluded if their bibliographic details, meaning author, title, journal, or DOI, could not be independently verified. This criterion led to the exclusion of the reference list accompanying the original draft of this manuscript: sixteen citations attributed to generic sounding outlets, for example a Journal of Real Estate Technology and an International Journal of Technological Innovation, could not be matched to any indexed publication, contained exact duplicate entries, and were judged unverifiable and unsuitable for scholarly citation. They were removed in full and replaced with the verified literature described here.

Analytical Approach

Included sources, numbering thirteen and summarized in Table 1, were read in full and coded thematically by hand into five recurring categories that map onto the research questions: technological capabilities, documented applications and tokenization, adoption drivers, barriers, and market outlook. Findings are reported narratively by theme in Section 3, with source characteristics summarized in Table 1 and with quantitative context presented in Figures 1 through 4. The distribution of the evidence base by study type is shown in Figure 3, which makes visible the central methodological observation of this review, namely that review, conceptual, and framework studies outnumber production scale empirical work.

Findings

Technological Capabilities Relevant to CRE (RQ1)

Across the reviewed literature, four blockchain features recur as directly relevant to CRE transaction processes. The first is decentralization, which removes reliance on a single controlling authority for record keeping. The second is transparency, achieved through a shared and immutable ledger visible to authorized stakeholders. The third is cryptographic security, which protects records against unauthorized alteration and supports fraud prevention. The fourth is the smart contract, self executing code that automates agreement performance once predefined conditions are met (Deloitte, 2025a). Konashevych (2020) adds an important qualification. Many implementations described as blockchain in practice use permissioned or private distributed ledger technology (DLT) rather than a fully decentralized, authority independent architecture. This means that some of the trust benefits attributed to blockchain in the applied literature depend on the specific governance model chosen rather than on the technology category alone.

Exter and Radosavljevic (2024) extend the capability picture toward the specific transactional geometry of commercial property. Working with an open real estate ecosystem in Switzerland, they used action design science research to develop a conceptual smart contract model built on the Ethereum blockchain. Their central argument is that the defining problem of CRE is informational asymmetry among many intermediaries, and that a well designed smart contract layer can let buyers and sellers transact in an informationally symmetrical way. This reframing matters, because it locates the value of blockchain not only in cost reduction but also in the redistribution of information that underpins negotiating power and trust.

Documented Applications and Pilot Evidence (RQ2)

The most detailed empirical application in the reviewed literature is Wouda and Opdenakker (2019), who used design science research to build and test a blockchain application intended to speed up office building transactions in the Netherlands. After interviewing multiple transacting parties to identify process pain points, the authors designed a solution that structures the physical and contractual information of a property in one place and uses blockchain verification to guarantee data quality, directly targeting the fragmented record keeping identified as a core CRE inefficiency.

Beyond the Netherlands case, the most extensively documented real world pilot is the land registry trial in Sweden, led by the government agency Lantmateriet in partnership with ChromaWay, two banks, and the telecommunications provider Telia. The pilot tested blockchain recorded property transfers and smart contract automated transaction steps, with independent consultancy estimates suggesting potential annual savings in the range of 100 million euros from reduced paperwork and faster processing (Konashevych, 2020). Notably, the academic analysis by Konashevych (2020) of this same pilot cautions that the underlying platform is a permissioned, centrally governed ledger rather than a decentralized blockchain in the strict sense, and that the project had not, at the time of writing, moved beyond proof of concept toward full legal implementation. This illustrates the gap between publicized pilot outcomes and demonstrated performance at production scale.

From a practitioner perspective, the advisory report by Deloitte (2025a) identifies six discrete points in the leasing and sale process where blockchain integration could add value: improving property search, expediting pre lease due diligence, easing leasing and cash flow management, enabling smarter decision making, making title management more transparent and less costly, and streamlining financing and payment processing. Deloitte (2025a) frames adoption as a targeted cost benefit exercise rather than a wholesale system replacement, a framing consistent with the proposal of Podshivalov (2022) that blockchain functions best as a complement to existing land registries, integrating cryptographic verification into government record keeping systems rather than attempting to displace them. The book chapter by Bronckers (2024) reaches a similar conclusion from an industry vantage point, mapping the key stakeholders and core processes of commercial property to identify where in the value chain blockchain can realistically add value rather than assuming that it transforms every step.

Tokenization and Fractional Ownership (RQ2 continued)

A distinct and rapidly expanding strand of the literature concerns tokenization, the representation of property ownership or property backed debt as digital tokens recorded on a blockchain. Tokenization reframes blockchain in CRE from a back office efficiency tool into a mechanism that can reshape ownership itself. By dividing a building, a fund, or a loan into many small tokens, it lowers the minimum investment, widens the investor base, and introduces the prospect of a secondary market for assets that have historically been illiquid.

The most comprehensive recent synthesis is El Jaouhari and colleagues (2025), who conducted a systematic literature review of 75 peer reviewed articles using the technology, organization, and environment (TOE) framework. Their findings indicate that tokenization can produce more efficient markets through automation, transparency, and liquidity, and that it enables new investment models such as crowdfunding and fractional ownership. They are equally clear about the constraints, identifying technological risk, regulatory fragmentation across jurisdictions, and organizational reluctance toward decentralized asset structures as the dominant barriers. The practitioner oriented review by Mottaghi, Steininger, and Yanagawa (2024) reinforces this reading, surveying current implementations across fractional ownership, property management, and transaction processing, and concluding that evolving standards and regulatory frameworks in North America, Europe, and Asia will determine the pace of market expansion.

Market projections lend scale to these qualitative findings. The Deloitte Center for Financial Services (2025b) describes a three stage evolution for tokenized real estate, beginning with private real estate funds, moving to securitized loan ownership, and extending to the tokenization of under construction and undeveloped land. Under this projection, tokenized debt securities would dominate the market by 2035, reaching roughly 2.39 trillion United States dollars, with private funds contributing about 1 trillion and land development assets about 500 billion. Figure 2 presents this projected composition. The same body of reporting indicates that adoption intent among firms is already substantial, with a reported 58 percent of real estate firms globally having implemented or piloted tokenization solutions by the middle of 2024, as shown in Figure 4. These figures describe intent and pilot activity rather than realized value, and the distinction is central to the measured conclusion of this review.

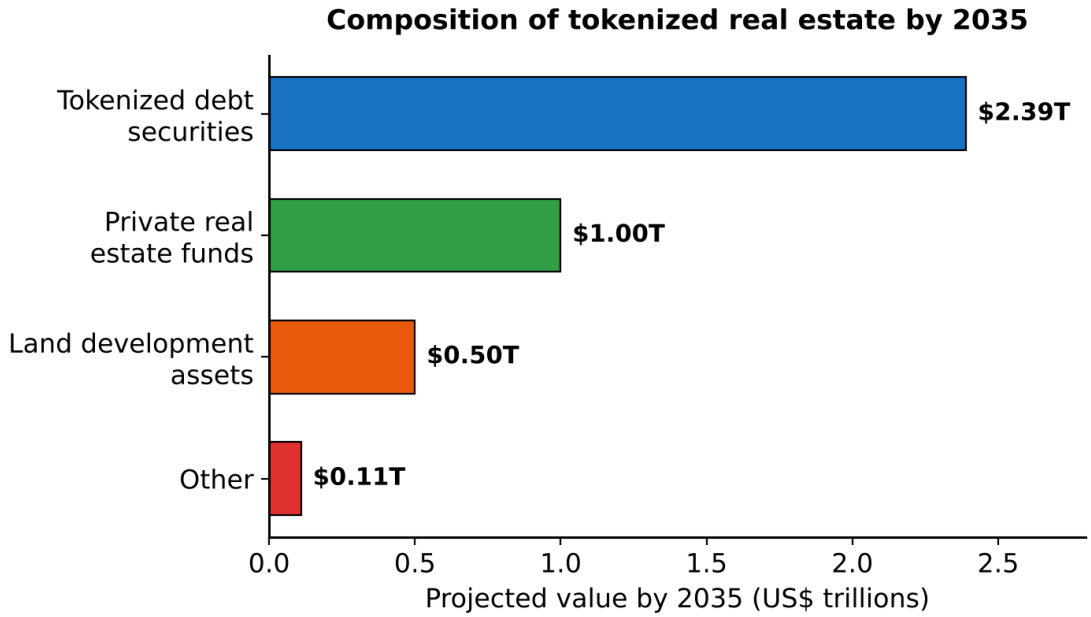

Figure 2. Projected composition of tokenized real estate by 2035, in United States dollars (trillions). Source: Deloitte Center for Financial Services (2025b).

Adoption Drivers and Stakeholder Perceptions (RQ3)

The only quantitative adoption study identified in this review is Yang, Zhang, Jian, and Ahmad (2025), who surveyed 311 real estate buyers and sellers in China and applied an integrated task technology fit and technology acceptance model using partial least squares structural equation modeling. Their results indicate that attitude, perceived usefulness, and data privacy and security concerns were the strongest predictors of blockchain adoption intention, with perceived ease of use exerting a significant effect on attitude, and task technology fit shaping both perceived usefulness and ease of use. This finding indicates that CRE blockchain adoption is substantially a behavioral and trust question, not purely a technical or infrastructural one. Practitioners must perceive a clear task fit and feel confident about data security before adoption intention forms.

This behavioral reading is consistent with the tokenization literature. El Jaouhari and colleagues (2025) place organizational reluctance alongside technological and regulatory risk, and the market reporting compiled by Deloitte (2025b) shows that pilot

activity, captured in Figure 4, has already outrun realized deployment. The pattern across these sources is that interest and experimentation are widespread while committed, at scale adoption remains comparatively rare, which is precisely the signature of a market held back by trust and institutional readiness rather than by the absence of a working technology.

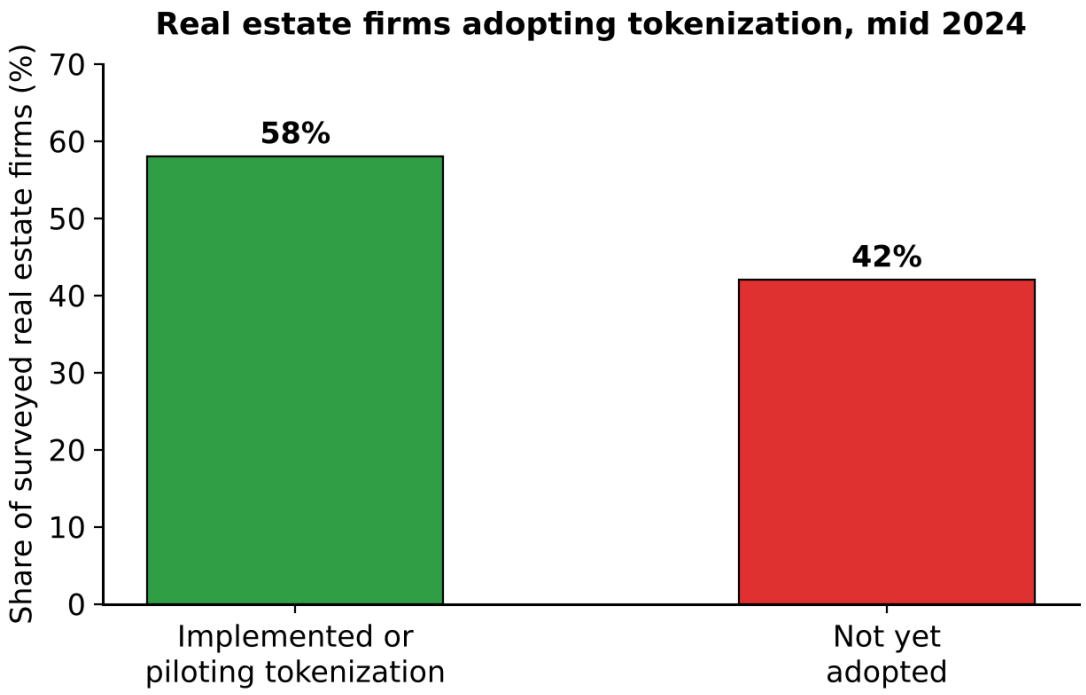

Figure 4. Share of surveyed real estate firms that had implemented or piloted tokenization by mid 2024. Source: Deloitte, as reported in 2024 industry analysis.

Barriers to Adoption (RQ3 continued)

The literature converges on three interlocking barrier categories. First, legal and regulatory uncertainty is substantial. The doctrinal legal analysis by Garcia-Teruel (2020) finds that the interaction of blockchain with existing property law remains unresolved in many jurisdictions on questions that include how a blockchain record relates to the official land registry of a jurisdiction, who bears legal liability when a smart contract executes incorrectly, and whether blockchain based transfers satisfy the formal legal requirements for property conveyance. Konashevych (2020) extends this concern to digital identity, privacy compliance, and the enforceability of smart contracts at the state level, arguing that blockchain implementation requires an overlay of supporting legal and technical architecture that most current pilots have not fully built out.

Second, technological complexity remains a persistent constraint. Integrating blockchain based verification with the many legacy systems already used by lenders, title companies, brokers, and municipal registries carries a steep learning curve and a material integration cost (Ullah & Al-Turjman, 2023). Ullah and Al-Turjman (2023) argue that successful smart contract adoption depends on aligning system design with the specific regulatory and infrastructural context of each jurisdiction rather than applying a uniform template across markets. The Switzerland focused design of Exter and Radosavljevic (2024) implicitly supports this view, because their model is tailored to the legal and informational structure of one national market rather than offered as a universal solution.

Third, the systematic review by Saari, Junnila, and Vimpari (2022) of the broader real estate blockchain literature finds that published research converges heavily on a narrow set of value propositions, namely transaction efficiency, transparency, and fraud reduction, while empirical evidence that these gains are realized at production scale remains limited relative to the much larger volume of conceptual and pilot stage studies. This evidence gap, combined with the trust and data security concerns documented by Yang and colleagues (2025) and the regulatory fragmentation emphasized by El Jaouhari and colleagues (2025), helps explain continued resistance to change among industry incumbents even where the technical case for blockchain appears strong. Figure 3

makes the imbalance concrete: within the verified evidence base of this review, review and conceptual studies together account for the largest share, while production scale empirical and quantitative work remains comparatively thin.

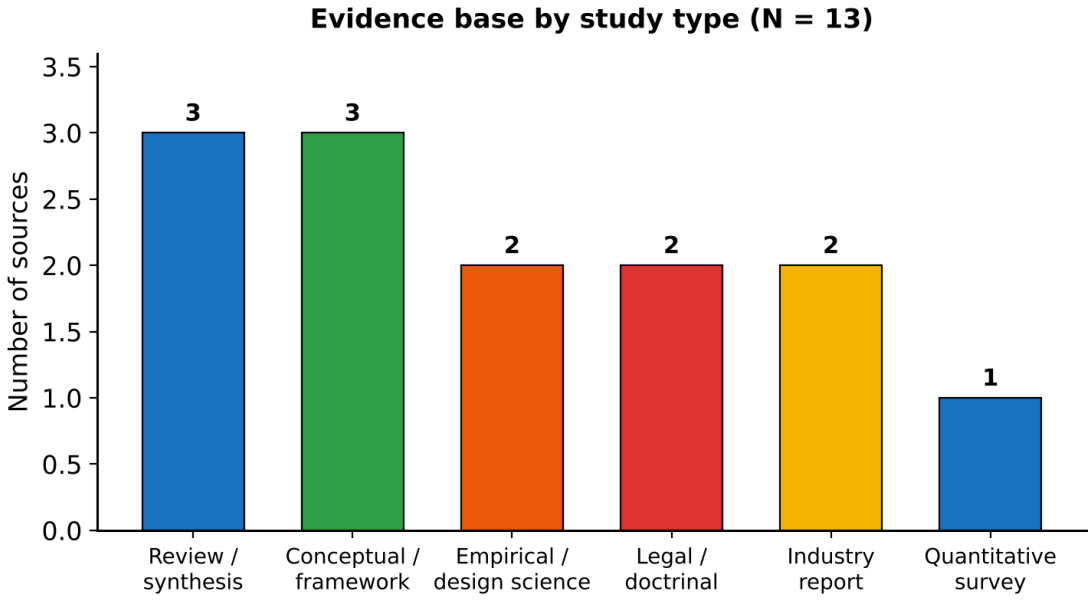

Figure 3. Evidence base of this review by study type (N = 13). Counts derived from the sources summarized in Table 1.

Discussion

Read together, the reviewed literature supports a more measured conclusion than the early promotional framing of the technology suggested. The core technological capabilities of blockchain (RQ1) are well understood and map coherently onto the known pain points of CRE. At least three substantive empirical or design oriented applications, namely the Dutch office building case (Wouda & Opdenakker, 2019), the Swedish land registry pilot, and the Swiss smart contract model (Exter & Radosavljevic, 2024), demonstrate that the technology can be engineered to fit real transaction workflows (RQ2). However, these cases also illustrate the gap between demonstrated feasibility and demonstrated performance at production scale. The Swedish pilot remained at proof of concept stage years after launch, and the analysis by Konashevych (2020) suggests that some of the trust properties attributed to blockchain pilots in practice depend on a permissioned governance model that trades away some of the defining characteristics of decentralized blockchain.

Tokenization sharpens rather than resolves this tension. The systematic evidence assembled by El Jaouhari and colleagues (2025) and the market projections of the Deloitte Center for Financial Services (2025b) show genuine momentum, and the composition of the projected market in Figure 2 indicates that the first wave of value is expected in tokenized debt and fund structures rather than in whole asset property transfers. This is an important nuance for RQ4. The near term center of gravity for blockchain in CRE may lie in financial engineering, meaning the packaging and trading of property backed claims, rather than in the conveyancing of physical buildings, which remains the step most entangled with registry law and formal legal requirements.

On adoption drivers and barriers (RQ3), the literature is unusually consistent. Legal uncertainty (Garcia-Teruel, 2020; Konashevych, 2020), integration cost and contextual misfit (Ullah & Al-Turjman, 2023), regulatory fragmentation (El Jaouhari et al., 2025), and a deficit of trust and data security among practitioners themselves (Yang et al., 2025) reinforce one another. This is a meaningful finding for RQ4, because it suggests that the binding constraint on CRE blockchain adoption is not primarily technical maturity but institutional and behavioral readiness. That conclusion aligns with the framing of Deloitte (2025a), which treats adoption as a targeted, process by process cost benefit decision rather than a platform level transformation, and with the proposal of Podshivalov (2022) and the industry mapping of Bronckers (2024) that blockchain integrate with, rather than replace, existing land registries and institutional processes.

This synthesis also surfaces a methodological observation relevant to future research. Saari and colleagues (2022) document a substantial imbalance between conceptual and pilot stage publications on the one hand and empirical, outcomes focused studies on

the other. The present review, drawing on thirteen sources that meet strict verifiability criteria, illustrates that same imbalance at a smaller scale, as Figure 3 shows. Rigorous empirical evidence at production scale that is specific to commercial, as distinct from residential, real estate blockchain deployment remains genuinely scarce in the indexed literature as of this writing, even as market forecasts grow more confident.

A final observation concerns the relationship between the two adoption pathways identified in this review. Transaction process redesign and tokenization are often discussed as if they were competing visions, but the evidence suggests they are complementary and sequential. Reliable digital records, verified title, and automated payment steps are preconditions for credible tokenization, because an investor will only trust a token if the asset or claim behind it is itself well documented and legally sound. The near term work of cleaning and connecting records, which the Dutch and Swiss cases illustrate, therefore builds the foundation on which the tokenized markets projected by Deloitte (2025b) and analyzed by El Jaouhari and colleagues (2025) would eventually rest. Read this way, the apparently modest registry complementary deployments are not a lesser alternative to tokenization but its necessary groundwork.

Conclusions

This review indicates that blockchain technology offers a coherent and technically sound response to well documented CRE transaction inefficiencies, namely fragmented data, costly intermediation, and exposure to fraud. At least limited empirical and pilot evidence supports its feasibility in a commercial office context in the Netherlands, in a public land registry context in Sweden, and in an open ecosystem conceptual design in Switzerland. The tokenization literature adds a second, financially oriented pathway in which property and property backed debt are divided into tradable digital shares, a pathway that consultancy forecasts expect to grow substantially over the coming decade.

At the same time, the evidence base for sustained value at production scale remains thin relative to the volume of conceptual literature and the confidence of market projections. Adoption is constrained less by unresolved technical questions than by legal ambiguity, integration cost, regulatory fragmentation, and the trust and data security concerns of practitioners. The most defensible near term pathway, consistent across the practitioner and academic literature reviewed here, is targeted deployment in specific high friction processes, including title verification, due diligence data sharing, and payment automation, together with carefully structured tokenization of funds and debt, integrated with rather than substituted for existing legal and registry institutions (Podshivalov, 2022; Deloitte, 2025a; El Jaouhari et al., 2025).

Future research should prioritize longitudinal case studies at production scale of blockchain deployments that are specific to commercial, and not solely residential, real estate. It should include comparative legal analysis across jurisdictions with differing land registry architectures, empirical study of tokenized secondary market liquidity once such markets mature, and adoption research that extends the task technology fit and trust findings of Yang and colleagues (2025) beyond the single national context in which they were collected.

Limitations

This is a narrative rather than a fully systematic review, for example one reported under PRISMA. Source identification relied on targeted keyword searches across a defined set of databases rather than an exhaustive, protocol registered search of all indexing services.

The evidence base specific to commercial, as opposed to residential, real estate blockchain applications is small. Several included sources address real estate broadly, and inferences specific to commercial property are drawn carefully but should be treated as provisional.

Only English language sources were reviewed, which may exclude relevant work published in other languages, particularly on pilot programs outside the English speaking and Western European world.

Pilot outcome data and market projections, for example the projected cost savings from the Swedish land registry trial and the tokenization forecasts attributed to Deloitte, are drawn from secondary reporting and consultancy estimates rather than from audited, peer reviewed outcome studies. The values shown in Figures 1, 2, and 4 should therefore be read as indicative rather than confirmed, and Figure 1 in particular presents an illustrative trajectory rather than a precise annual forecast.

The field is evolving rapidly, and sources published after the search window of this review may materially update the adoption, tokenization, and evidence picture presented here.

Declarations

Ethical Approval

This study involved no human participants, no primary data collection, and no animal subjects. It is a literature review of previously published, publicly available sources. Ethical approval and informed consent were therefore not applicable.

Funding

No funding was received for this review.

Conflicts of Interest

The authors declare no known conflicts of interest. The literature search and citation verification for this manuscript were assisted by artificial intelligence based drafting and retrieval tools. All cited sources were subsequently cross checked by the authors against original publisher records prior to submission, and authorship and interpretive judgments remain those of the authors.

Data Availability

No new data were generated or analyzed in this review. All synthesized sources are publicly listed in the References section with DOIs or stable URLs where available.

Table 1. Summary of sources included in this review (N = 13).

Source	Year	Type / Method	Primary Theme
Wouda & Opdenakker	2019	Design science research (Netherlands office case)	Transaction process redesign; data structuring
Konashevych	2020	Interdisciplinary legal and technical analysis	Constraints of permissioned DLT versus true blockchain
Garcia-Teruel	2020	Doctrinal legal analysis	Legal liability and conveyancing formality
Podshivalov	2022	Conceptual and applied analysis	Registry complement integration model
Saari, Junnila, & Vimpari	2022	Systematic literature review	Value propositions versus the evidence gap
Ullah & Al-Turjman	2023	Conceptual framework	Smart contract adoption in smart cities
Bronckers	2024	Industry book chapter (Springer)	Stakeholder and process mapping in CRE
Exter & Radosavljevic	2024	Action design science research (Switzerland)	Smart contract model for transaction symmetry
Mottaghi, Steininger, & Yanagawa	2024	Literature and case study review	Current state and future of tokenization
Deloitte	2025a	Industry advisory report	Six practitioner facing CRE use cases
Deloitte Center for Financial Services	2025b	Industry market forecast	Tokenized real estate market outlook
El Jaouhari et al.	2025	Systematic review of 75 articles (TOE)	Tokenization enablers and challenges
Yang, Zhang, Jian, & Ahmad	2025	Quantitative survey (n = 311), PLS-SEM	TAM and TTF predictors of adoption intention

References

1. Bronckers, J. (2024). Blockchain in commercial real estate. In A. Jreisat & M. Mili (Eds.), Blockchain in real estate: Theoretical advances and new empirical applications (pp. 53–84). Springer. https://doi.org/10.1007/978-981-99-8533-3_4

2. Deloitte. (2025a). Blockchain in commercial real estate: The future is here. https://www.deloitte.com/us/en/industries/financial-services/articles/blockchain-in-commercial-real-estate.html

3. Deloitte Center for Financial Services. (2025b). The tokenization of real estate [2025 financial services industry predictions]. Deloitte Insights. https://www.deloitte.com/us/en/Industries/financial-services/articles/blockchain-in-commercial-real-estate.html

4. El Jaouhari, A., Samadhiya, A., Kumar, A., Chokshi, H., Sesplaukis, A., & Raslanas, S. (2025). Tokenization and the future of property investment: A new paradigm for real estate. International Journal of Strategic Property Management, 29(4), 297–315. https://doi.org/10.3846/ijspm.2025.24814

5. Exter, E., & Radosavljevic, M. (2024). Blockchain technology in commercial real estate: Developing a conceptual design for smart contracts. Communications of the Association for Information Systems, 55, Article 18. https://aisel.aisnet.org/cais/vol55/iss1/18

6. Garcia-Teruel, R. M. (2020). Legal challenges and opportunities of blockchain technology in the real estate sector. Journal of Property, Planning and Environmental Law, 12(2), 129–145. https://doi.org/10.1108/JPPEL-07-2019-0039

7. Konashevych, O. (2020). Constraints and benefits of the blockchain use for real estate and property rights. Journal of Property, Planning and Environmental Law, 12(2), 109–127. https://doi.org/10.1108/JPPEL-12-2019-0061

8. Mottaghi, S. F., Steininger, B. I., & Yanagawa, N. (2024). Real estate insights: The current state and the new future of tokenization in real estate. Journal of Property Investment & Finance, 42(6), 614–620. https://doi.org/10.1108/JPIF-07-2024-0087

9. Podshivalov, T. P. (2022). Improving implementation of the blockchain technology in real estate registration. The Journal of High Technology Management Research, 33(2), Article 100440. https://doi.org/10.1016/j.hitech.2022.100440

10. Saari, A., Junnila, S., & Vimpari, J. (2022). Blockchain's grand promise for the real estate sector: A systematic review. Applied Sciences, 12(7), Article 3561. https://doi.org/10.3390/app12073561

11. Ullah, F., & Al-Turjman, F. (2023). A conceptual framework for blockchain smart contract adoption to manage real estate deals in smart cities. Neural Computing and Applications, 35(7), 5033–5054. https://doi.org/10.1007/s00521-021-05800-6

12. Wouda, H. P., & Opdenakker, R. (2019). Blockchain technology in commercial real estate transactions. Journal of Property Investment & Finance, 37(6), 570–579. https://doi.org/10.1108/JPIF-06-2019-0085

13. Yang, H., Zhang, Z., Jian, C., & Ahmad, N. (2025). Exploring real estate blockchain adoption: An empirical study based on an integrated task-technology fit and technology acceptance model. PLoS ONE, 20(1), Article e0317993. https://doi.org/10.1371/journal.pone.0317993



2026 by the authors; Journal of Global Social Transformation (JGST). This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).