BAILMENT IN THE AGE OF DIGITAL ASSETS: TRADITIONAL CONCEPTS SURVIVING INTANGIBLE GOODS

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ABSTRACT

This research paper examines whether traditional bailment principles under Sections 148–181 of the Indian Contract Act, 1872, a 150-year-old statute never amended for digital realities can adapt to intangible assets like cloud data, crypto currencies, and NFTs (Non fungible tokens). It highlights definitional gaps in "goods" and "delivery," judicial reluctance to impose bailee duties (Sections 152–157) or return obligations (Sections 160–171) in cases like Vuenow fraud and WazirX hack, favoring IT Act or negligence instead and proposes reforms including constructive possession, "digital return" mandates, and a hybrid model inspired by PTC India and UK precedents. In this research the qualitative analysis has affirmed the need for a Digital Bailment Amendment Bill to ensure bailment's survival in the digital economy.

Keywords: Bailment, digital assets, Indian Contract Act, intangible goods, judicial reforms.

INTRODUCTION

Bailment, as defined under Section 148 of the Indian Contract Act, 1872, involves the delivery of goods by a bailor to a bailee for a specific purpose, with the obligation to return or dispose of those goods as directed once the purpose is fulfilled. This traditional framework presupposes tangible, movable property capable of physical handover. Digital assets: intangible forms of economic value such as crypto currencies, cloud-stored data, and NFT[1]s lack physical substance and are instead controlled through private keys, blockchain records, or digital interfaces, challenging the core notions of "goods" and "delivery."

Indian contract law, unchanged in its bailment provisions for over 150 years, has yet to explicitly address these intangibles, leading courts to improvise through analogies like constructive possession while frequently bypassing bailment in favor of IT Act[2] remedies or negligence claims. High-profile disputes, such as data losses from cloud breaches or crypto exchange hacks like WazirX, reveal judicial reluctance to enforce bailee duties under Sections 152–157 or return obligations under Sections 160–171, leaving users exposed to unaccountable custodians including digital platforms and service providers.

This study reconceptualizes bailment for the digital age by tracing judicial deviations, proposing a hybrid model blending bailment with negligence principles, and advocating legislative reforms such as expanding Section 160 to mandate "digital return" equivalents. Drawing doctrinal analysis, case precedents, and comparative insights from jurisdictions like the UK, it employs qualitative methods to review statutes and commentaries, ultimately urging a Digital Bailment Amendment Bill to impose strict liability on custodians and ensure bailment's relevance in the modern economy.

OBJECTIVES OF THE STUDY

This study is led by 4 objectives –

1. Examine Sections 148–181 applicability to digital assets like cloud data.

2. Analyze judicial reluctance in extending bailment to tech disputes.

[1] *Non-fungible tokens*
[2] *Information Technology Act, 2000*

3. Identify reforms needed for bailment framework with intangible goods.

4. Propose legislative updates to enforce custodian duties for crypto/NFTs.

RESEARCH PROBLEM

Sections 148–181 of the Indian Contract Act, 1872, govern bailment as delivery of tangible goods, remaining silent on intangibles like digital assets (cloud data), crypto currencies, and NFTs. Courts face challenges extending Section 148's "goods" definition and Section 149's delivery requirements to non-physical digital transfers. In data breaches and service outages, judges sidestep bailee obligations under Sections 151–158, favoring IT Act remedies instead. Gaps in Sections 160–171 exacerbate unaccountability of digital custodians (e.g., crypto exchanges, cloud providers), exposing users to irrecoverable losses amid rising tech disputes. This research problem demands doctrinal adaptation through statutory reforms to redefine goods, delivery, and return duties for the digital economy.

RESEARCH QUESTION AND HYPOTHESIS

This study is led by 4 research questions -

1. How does Section 148's "goods" definition extend to intangible digital assets?

2. How have courts avoided bailment duties in data breach cases post-2020?

3. What interpretive challenges arise in bailment delivery for non-physical items?

4. What amendments to Sections 160–171 protect users from custodian losses?

Hypothesis- Traditional bailment rules under Sections 148–181 fail for digital assets without amendments redefining goods, delivery, and custodian duties.

RESEARCH METHODOLOGY

The research uses a **qualitative approach** based on primarily **non-empirical analysis of primary sources**: (Indian Contract Act, 1872 Sections 148-181; Statutes such as the IT Act 2000; and Judicial Precedents from the Supreme Court and High Courts on Data Breach and Cloud Disputes since 2020), and on secondary sources including Scholarly Papers, Legal

Commentaries and Journal Articles regarding Bailment/Digital Assets available through online repositories such as SSRN, Manupatra and others. This study emphasises on interpretive textual analysis, comparative doctrinal analysis, and critical analysis of statutory voids and current judicial trends to formulate potential reforms.

LITERATURE REVIEW

- ***Vuenow Group Fraud Case (Cloud Storage Dispute, Allahabad High Court/Punjab & Haryana HC, 2025)*** [3]

Vuenow Group Fraud Case highlights a major cloud storage scam involving oversold digital capacity, raising questions on bailment for intangibles. Courts prioritized fraud probes over contractual defenses, signaling limits in traditional frameworks.

Vuenow Infotech and affiliates promoted "cloud particles" (1TB units) via sale-and-leaseback, amassing ₹2,236 crores from 25,000+ investors with perpetual return promises. Actual capacity was 2,701 TB, yet 129,294 TB (or up to 5.4 lakh units) sold without powered servers or operations. ED (Enforcement directorate) raids exposed Ponzi mechanics new funds paid old returns triggering FIRs under BNS[4] Sections 316 (cheating) and 318 (breach of trust)

Allahabad High Court (Jan 2025) dismissed FIR quashing pleas, stressing economic offense scrutiny despite no individual complaints and bailment-like delivery claims. Punjab & Haryana HC (early 2025) denied account defreezing, favoring PMLA[5]probes over investor relief. Rulings framed cloud data as fraudulent intangibles, bypassing Contract Act Section 148 bailment and Sections 152–157 duties.

This disputes Sections 148–181 applicability to cloud data, treating it as non-bailable goods. It exemplifies judicial reluctance in tech frauds, prioritizing PMLA/BNS over doctrinal custody. Reforms needed for digital bailment to address intangible oversights.

- ***Umesh Verma v. State (Delhi High Court, 2025 - DHC:5548)*** [6]

[3] *Venow Group Fraud Case, 2025*
[4] *Bharatiya nyaya sanhita, 2023*
[5] *Prevention of money laundering, 2002*
[6] *Umesh Verma v. State, 2025*

The court case Umesh Verma v. State exposes the inherent risks of investing in unregulated custody programs as well as testing the limits of bailments through this type of asset. The case revolves around Umesh Verma allegedly operating over ₹50 crore in cryptocurrency as a Ponzi scheme via unregulated virtual digital asset platforms and that he misused funds and wallet holdings from investors through his use of trust-like arrangements between himself and his investors. Regulatory gaps that arose after 2020 from a lack of regulation for cryptocurrency investments, particularly for custodial roles, created significant risk of committing Fraud, U/S 318 BNS and under the provisions of PMLA. There is a risk for possible larger-scale disruptions to our economy arising from these types of Ponzi schemes. Thus, it is important to understand how the court views this issue going forward.

Delhi High Court (DHC:5548, 2025) denied bail, emphasizing systemic havoc from digital mismanagement and rejecting bailment framing under Section 148 due to lack of tangible goods. It applied PMLA/BNS lenses, viewing wallets as trusts but not invoking bailee care obligations.

The ruling underscores hesitance to apply Sections 148–181 to crypto custody , reinforcing precedents of prioritizing crackdowns over doctrinal bailment duties and signaling tweaks needed for intangible returns.

- ***STA Token Ponzi Scheme Case (Orissa High Court, 2024)***[7]

Accused promoted STA[8] Token crypto investments as high-return schemes, drawing investors into what resembled a Ponzi amid RBI's crypto scrutiny. Post-RBI ban lift, courts assessed if tokens qualified as "money" under Prize Chits and Money Circulation Schemes (Banning) Act, 1978 or involved fraud.

Orissa High Court (2024) granted bail, deeming tokens non-"money" and dealings voluntary speculation absent fraud proof, thus non-criminal. It confined Section 148 to physical goods, avoiding bailee liabilities under Sections 152–157.

By recasting crypto as risk-based investments, it reveals statutory limits on bailment for NFTs/crypto, judicial avoidance in tech Ponzis, and gaps requiring expanded frameworks.

[7] *STA Token Ponzi Scheme Case, 2024*
[8] *Solar techno alliance*

- ***WazirX Cyber-Attack Dispute (Madras High Court, 2025 - MHC:2437)***[9]

WazirX suffered a $230M cyber-attack in 2024, leading user Rhutikumari to sue over frozen XRP holdings unaffected by the hack. This challenged exchange custody practices and loss socialization via arbitration clauses.

Madras High Court (MHC:2437, 2025) ruled crypto as "property" under trust law with fiduciary duties, granting injunctions for interim custody and jurisdiction over arbitration. It blended constructive possession akin to Section 148 delivery but deviated from strict Sections 152–157 duties.

This innovatively extends bailment-like protections to digital assets, countering reluctance trends while testing reforms for custodian accountability in intangibles like crypto.

- ***Digital Bailment in the Cloud by Ayushmaan (SSRN, 2025)***[10]

This paper examines how bailment principles apply to cloud storage arrangements between users and providers. The author argues for contractual reforms to better protect intangible data rights, drawing on cases like PTC India[11] Financial Services Ltd. v. Venkateswarlu Kari, where India's Supreme Court upheld constructive possession of dematerialized shares under the Indian Contract Act.

The paper posits that traditional bailment requiring physical delivery of goods must evolve for digital contexts, treating cloud data as bailable property via constructive possession. It analyzes provider duties (care, return, non-misuse) and user remedies, using PTC to illustrate how electronic records can evidence bailment without physical handover. Recommendations include statutory amendments for "digital possession" standards and liability caps tailored to data volatility.

This research on "Bailment in the Age of Digital Assets" broadens beyond cloud-specific dyads to encompass crypto, NFTs, and broader intangible goods, questioning survival of core concepts like "goods" under outdated laws. But the SSRN paper stays narrower, focusing on cloud-user contracts and Indian precedents, while this paper tackles global asset types and

[9] *WazirX Cyber-Attack Dispute, 2025*
[10] *Digital Bailment in the Cloud by Ayushmaan (SSRN, 2025)*
[11] *Power Trading Corporation of India Limited*

proposes framework survival strategies.

It overlooks non-cloud digital assets (e.g., blockchain tokens) and empirical risks like smart contract failures, leaving space for comprehensive intangible classifications which this work addresses through survival analysis of traditional doctrines amid diverse digital paradigms. This extends its cloud-centric reforms into a holistic reevaluation.

DISCUSSION AND ANALYSIS

The traditional bailment principles within Sections 148-181 of the Indian Contract Act, 1872 come with several limitations concerning their scope and implementation when dealing with digital assets such as crypto currencies, non-fungible tokens, and digitally stored information in the cloud. Digital assets are intangibles and therefore cannot be physically delivered to someone; courts in India have consistently declined to recognize the Bailment Principles within this context and instead rely on other theories (such as negligence) or statutes (like Data Protection) and have considered applying Constructive Possession doctrine to dematerialized shares or 'demats'. As a result, reforms are required to redefine what constitutes 'goods', refine the concept of 'delivery', and set out obligations for those who safeguard digital property; thereby confirming the premise that amendments are needed to properly regulate digital assets.

1.Applicability to Digital Assets

Section 148 defines bailment as delivery of goods for a purpose, with the bailee obligated to return them unchanged, but digital assets like cloud data challenge this by being intangible and transferred via non-physical means such as API access or encryption keys. Courts might interpret 'delivery' constructively, akin to demat shares in PTC India Financial Services Ltd. v. Venkateshwarlu Kari (2022)[12], where electronic records sufficed for possession under the Depositories Act. However, user data in cloud storage does not fit neatly, as it lacks physical form, raising interpretive hurdles under Section 149's actual delivery requirement; analogies to software licenses fail due to non-exclusivity in shared cloud environments. This mismatch exposes users to risks like unauthorized access without bailment remedies. Extending Section 148 requires viewing data as 'goods' with economic value and deliverability, but without statutory clarity, bailee duties under Sections 152–157 (care, preservation) remain unenforceable. Policymakers could draw from UK's digital bailment analogies, proposing

[12] *PTC India Financial Services Ltd. v. Venkateshwarlu Kari (2022)*

'virtual possession' to encompass upload to providers like AWS[13]. Ultimately, while partial applicability exists for crypto wallets via constructive transfer, cloud data demands redefinition to prevent doctrinal voids.

The 'goods' definition under Section 148, borrowed from movable property, excludes pure intangibles like NFTs, as they exist as blockchain entries rather than tangible items. Challenges arise in bailment's delivery norm, where physical handover is impossible; for instance, transferring private keys for crypto could qualify as symbolic delivery, but cloud access tokens do not confer exclusive possession. Judicial expansion, as in recognizing virtual digital assets under IT Act Section 2(47A), offers hope, yet bailment's mutuum (loan for consumption) variant struggles with NFTs' uniqueness. Reform via analogy to pledges in demat securities is promising but limited, as Section 172 requires possession transfer, unproven for data streams. This gap undermines user recourse in breaches, favoring tortious negligence over contractual bailment.

2. Judicial Reluctance and Precedents

Indian courts have largely avoided bailment in post-2020 tech disputes, such as cloud outages or data breaches, opting for IT Act or consumer protection remedies due to the intangibility barrier under Section 148. In cases like Vuenow Group cloud storage sales (2025), judges sidestepped bailment duties under Sections 152–157 (reasonable care), citing absence of physical goods, and invoked misrepresentation instead. Similarly, crypto exchange failures post-2022 crashes saw reliance on negligence or fiduciary duties, deviating from preservation obligations in Section 154. This reluctance stems from delivery challenges; no precedent equates API grants to Section 149 handover. Precedents like PTC India (2022) affirm constructive possession for securities but confine it to statutory silos like Depositories Act, not generalizing to cloud data. Post-2020 disputes, including AWS-like interruptions, preferred DPDP Act 2023 for accountability, avoiding bailment's strict liability. Courts favor flexible doctrines like unjust enrichment under Section 72, as in Amitabha Das Gupta v. UBI[14], recognizing intangible property rights selectively. This pattern reveals a doctrinal pivot, prioritizing tech-specific laws over archaic contract principles, leaving digital users without tailored custodian duties.

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[13] *Amazon Web Services*

[14] *Amitabha Das Gupta v. UBI*

In data breach litigation, such as hypothetical cloud provider hacks, tribunals under Consumer Protection Act 2019 have deviated to deficiency of service, bypassing Section 151's preservation duty. No direct bailment application appears in reported judgments; instead, alternative remedies like damages under Section 73 dominate. For cloud interruptions (e.g., 2023-2025 outages), courts invoke force majeure or service contracts, rejecting Section 156's expense recovery for non-goods. Crypto cases, like exchange insolvencies, lean on PMLA or IT Rules for fiduciary breaches, not bailment return under Section 160. This judicial conservatism preserves traditionalism but exposes gaps, as bailment's remedies (lien under Section 170) remain untapped for digital custodians.

3. Reforms for Intangible Goods

Amend Sections 160–171 to mandate 'digital return' restoring access or equivalent value for custodians like crypto exchanges, addressing gaps where intangible losses (e.g., hacked NFTs) evade physical redelivery. Insert proviso to Section 160 defining return as verifiable blockchain transfer or data reconstruction, imposing strict liability on bailees for non-compliance. This counters current exposures, as users suffer unremedied losses from exchange collapses without pledged asset recovery akin to Section 176. A 'Digital Bailment Code' could standardize care duties, expanding Section 151 to include cybersecurity protocols. Harmonize with DPDP Act[15] for privacy, ensuring Section 152's diligence applies to encryption standards. For NFTs/cryptos, redefine 'goods' in Section 148 via amendment: "including intangible digital assets with economic value and transferability." This fulfills the hypothesis by adapting delivery (constructive/symbolic) and liabilities. Comparative models from US cloud bailments suggest tiered reforms: explicit inclusion plus presumptive negligence for breaches.

Targeted changes to Section 160 could specify "return in original digital form or equivalent," closing gaps for volatile assets like crypto where market losses compound non-delivery. Amend Section 161 for partial returns (e.g., data subsets) and Section 171 for digital liens on user wallets. Doctrinal shift via judicial guidelines, building on PTC precedent, would enforce bailee audits. Statutory insertion of 'virtual possession' resolves delivery issues, imposing liabilities on exchanges for commingled funds under Section 155. These reforms, paired with SOGA[16] updates, enable bailment's survival for intangibles.

[15] *Digital Personal Data Protection Act, 2023.*

SUGGESTION

This paper recommends legislative reforms to the Indian Contract Act, redefining 'goods' under Section 148 to encompass digital assets like cryptocurrencies and NFTs. It proposes mandating 'digital return' equivalents, cybersecurity diligence for custodians, and hybrid models integrating bailment with DPDP Act norms, urging the Law Commission to draft a Digital Bailment Amendment Bill.

CONCLUSION

In conclusion, this study demonstrates that traditional bailment principles under Sections 148–181 of the Indian Contract Act, 1872, struggle to accommodate digital assets like cloud-stored data, crypto currencies, and NFTs due to their intangible nature and the absence of physical delivery mechanisms. The analysis reveals persistent interpretive challenges in expanding the definition of 'goods' under Section 148 and adapting delivery requirements under Section 149, as evidenced by judicial precedents like PTC India Financial Services Ltd. v. Venkateswarlu Kari, which limit constructive possession to statutory contexts rather than broader digital applications. Furthermore, courts' reluctance in cases such as Vuenow Group Fraud (2025) and WazirX cyber-attack dispute underscores a doctrinal pivot toward alternative remedies like negligence, PMLA provisions, and the DPDP Act 2023, leaving users vulnerable to unremedied losses from custodian failures.

The hypothesis is affirmed: without statutory amendments, bailment cannot effectively govern intangible goods, as gaps in bailee duties (Sections 152–157) and return obligations (Sections 160–171) expose digital users to risks in an era of escalating tech disputes. Judicial deviations in post-2020 cases, including Umesh Verma v. State and STA Token Ponzi, highlight a preference for flexible frameworks over rigid Contract Act applications, prioritizing economic offense probes and fiduciary accountability. This pattern not only preserves traditionalism but also signals the need for hybrid models blending bailment with modern data protection norms, drawing insights from comparative reforms in jurisdictions like the UK.

To bridge these gaps, policymakers should prioritize legislative updates redefining 'goods' to include economic intangibles, mandating 'digital return' equivalents, and imposing cybersecurity diligence on custodians, as proposed in the reforms section. Future research could

[16] *Sale of Goods Act, 1930*

empirically test these adaptations through stakeholder surveys. A key suggestion is for the Law Commission of India to urgently draft a Digital Bailment Amendment Bill.

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