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Governance models for blockchain in creative industries: state of the art and future directions

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Blockchain is often framed as a governance mechanism for creative industries, offering new ways to record provenance, manage rights and distribute value. Yet its governance implications extend beyond technical functionality to questions of institutional legitimacy, intermediation, value distribution and participation. This scoping review maps 83 peer-reviewed studies published between 2018 and 2026 and is reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR). Structured data charting is combined with bibliometric mapping in VOSviewer to examine recurring applications, advantages, barriers, actors and governance patterns. Four governance dimensions emerge from the corpus: intellectual property and rights governance, institutional governance of cultural organisations, financial governance and value distribution, and decentralised ecosystem governance. Traceability and decentralisation are the most frequently reported advantages (14.5% of studies each), followed by transparency (13.3%); regulatory uncertainty (8.4%) and the absence of shared technical standards (6.0%) are the largest reported barrier categories. Building on recurrent patterns across the literature, the article proposes an analytical framework organised around institutional, technological and social dimensions. The framework is intended to support comparative research on how governance conditions shape blockchain applications across creative-industry contexts.

KEYWORDS
blockchain, creative industries, cultural heritage, governance, intellectual property, open innovation, scoping review, traceability

Introduction

Creative industries[1] generate employment and sustain cultural expression worldwide (Howkins, 2002; OECD, 2022), while the digitisation of creative production has intensified longstanding governance questions around attribution, ownership, licensing, provenance and value distribution. Rights chains can involve

1 In this article the term creative industries is used following the UNCTAD (2008) framework, which defines "creative and cultural industries" as coordinated categories at the intersection of arts, culture, business and technology. For reasons of terminological economy, and in line with the predominant usage in the indexed literature reviewed, "creative industries" serves as the reference term encompassing the cultural dimensions of the corpus, without implying a hierarchical relationship between the two denominations. The search strategy included both terms ("creative industr*" OR "cultural industr*") to capture common variants used in the indexed literature.

multiple actors and uneven access to information, but intermediaries play varied roles whose value depends on the functions they perform and the costs they impose. The governance question therefore concerns which intermediary functions blockchain reconfigures and under what institutional arrangements (O'Dwyer, 2020; van Haaften-Schick and Whitaker, 2022). Blockchain has entered this debate as a distributed ledger technology (DLT) that can record transactions, support provenance and automate selected contractual functions through smart contracts (Tapscott and Tapscott, 2016; Whitaker, 2019).

Two complementary perspectives help explain why blockchain matters here. Open innovation scholarship (Chesbrough, 2003; Bogers et al., 2019) emphasises the coordination of knowledge and value across organisational boundaries, while the creative economy perspective (Howkins, 2002) foregrounds intellectual property as a mechanism through which creative work becomes economic value. Blockchain can affect both by changing how rights, transactions and coordination are recorded and executed. Intermediation therefore remains relevant. Franceschet et al. (2021) show that crypto-art galleries and platforms continue to perform functions related to verification, authentication, curation and user onboarding. van Haaften-Schick and Whitaker (2022) show that blockchain can reduce transaction costs and automate selected contractual functions, including resale royalties. Research on crypto art likewise shows that technical decentralisation does not by itself determine how authority, validation or value are distributed across an ecosystem (Franceschet et al., 2021). Blockchain is therefore treated here as a potential governance infrastructure rather than as a technical substitute for institutions.

The literature, however, remains fragmented across technical applications, intellectual-property questions, market arrangements and institutional uses. Visual arts and non-fungible token (NFT) markets are prominent, while other studies examine cultural heritage, music, rights management and platform governance (Del Vacchio and Bifulco, 2022). This fragmentation makes it difficult to see how different governance questions relate to one another across creative sectors. The indexed literature is also geographically uneven. Latin American and Caribbean research institutions are sparsely represented in the corpus, but this should be read as a characteristic of scholarly production captured by the databases, not as evidence of limited artistic practice, platform activity or blockchain use in the region. More broadly, center-periphery relations in cultural production are multidimensional and cannot be inferred from a single geographic indicator (Buchholz, 2018). As the analysis will show, the reviewed literature places greater emphasis on institutional, regulatory and social barriers than on technical performance, a pattern that underscores the importance of examining governance conditions across different institutional and regional contexts.

This review addresses these issues through a scoping review of 83 peer-reviewed studies on blockchain in creative industries published between 2018 and 2026. A scoping review is suited to mapping a broad and heterogeneous field, identifying recurring concepts and gaps without treating the available evidence as a single body of comparable effects (Arksey and O'Malley, 2005; Tricco et al., 2018). The contribution is threefold. First, the review maps blockchain applications, advantages, barriers, actors and governance arrangements across creative and cultural sectors. Second, it organises recurrent governance concerns into four interrelated dimensions: intellectual property and rights governance, institutional governance of cultural organisations, financial governance and value distribution, and decentralised ecosystem governance. Third, it develops an analytical framework across institutional, technological and social dimensions. The framework is presented as a synthesis of recurring conditions in the literature and as a basis for comparison and empirical testing, rather than as a prescriptive model of how blockchain governance must be designed.

The article proceeds as follows. Section *Methodology* sets out the scoping-review methodology, search and selection process, data charting and analytical procedures. Section *Bibliometric analysis* presents the bibliometric results. Section *Thematic synthesis* synthesises applications, advantages and challenges, ecosystem actors and governance dimensions across the corpus. Section *A governance framework for blockchain in creative ecosystems* develops the analytical governance framework, and Section *Discussion* discusses its implications, limitations and directions for future research. Section *Conclusions* concludes the article.

Methodology

This study employed a scoping review design following the methodological approach proposed by Arksey and O'Malley (2005) and was reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR; Tricco et al., 2018). A scoping review is designed to map the breadth and characteristics of an emerging or heterogeneous body of literature, rather than to estimate pooled effects or formally rank evidence quality. This design was therefore appropriate for examining the range of blockchain applications and governance questions across creative industries. The search logic and eligibility criteria were established before screening began.

Research questions

The review was guided by one central question: what governance models and innovation frameworks characterise blockchain applications in creative industries, and what advantages, challenges and actor configurations does the literature attribute to them? Three related questions structured the analysis: which creative and cultural subsectors and blockchain-related technologies have been studied; what advantages and barriers are associated with adoption; and what governance configurations emerge from documented applications, including the actors involved and the functions they perform?

Search strategy and databases

The search was conducted in Scopus and Web of Science (WoS), two multidisciplinary databases covering management, cultural studies, information systems and related interdisciplinary fields.

The same conceptual search logic was applied in both databases, with field syntax adapted to each platform. The search string was pilot-tested against known relevant articles before finalisation. The Scopus formulation was:

TITLE-ABS-KEY ((“blockchain” OR “block chain” OR “distributed ledger” OR “smart contract*” OR “NFT” OR “non-fungible token*” OR “tokenization”) AND (“creative industr*” OR “cultural industr*” OR “creative econom*” OR “digital art” OR “artistic production” OR “cultural heritage”) AND (“governance” OR “open innovation” OR “intellectual property” OR “copyright” OR “rights management” OR “traceability” OR “innovation ecosystem”)) AND PUBYEAR > 2016 AND (LIMIT-TO (DOCTYPE, “ar”) OR LIMIT-TO (DOCTYPE, “re”) OR LIMIT-TO (DOCTYPE, “cp”)) AND (LIMIT-TO (LANGUAGE, “English”) OR LIMIT-TO (LANGUAGE, “Spanish”))

The database query technically permitted records from 2017 onward, while the predefined eligibility window applied during screening was 2018–2026; no 2017 records were present in the retrieved dataset. The review therefore covered publications from 2018 through 2026, capturing the period in which blockchain applications became visible in creative-industry scholarship beyond cryptocurrency-focused research (Zeilinger, 2018; Whitaker, 2019). The sectoral component of the query deliberately used targeted descriptors including “creative industr*,” “cultural industr*,” “creative econom*,” “digital art”, “artistic production” and “cultural heritage” rather than the generic term “art”, which can retrieve substantial noise through expressions such as “state of the art”. This precision-oriented choice may have reduced sensitivity to adjacent art and humanities scholarship using broader disciplinary terminology; this limitation is acknowledged explicitly in Section Limitations and directions for future research.

Eligibility criteria

Inclusion and exclusion criteria were set before screening began. Studies were included if they addressed the application, implications or governance of blockchain, DLT, smart contracts or NFTs in a creative or cultural industry context; were published as peer-reviewed journal articles or reviews, or conference papers; were written in English or Spanish; and fell within the 2018–2026 window. Studies were excluded if they focused on domains such as financial services, healthcare or supply-chain management without a substantive creative-industry dimension; consisted of grey literature, editorials, letters or opinion pieces without a substantive analytical contribution; or treated blockchain primarily as general technical infrastructure with no meaningful reference to cultural or creative applications.

Selection process

The initial searches retrieved 112 records (Scopus: n = 92; WoS: n = 20). After 14 duplicates were removed through automated and manual cross-referencing, 98 unique records remained for title and abstract screening. Six records were excluded at this stage (three outside the scope of the review, two with insufficient creative-industry relevance and one ineligible grey-literature record), leaving 92 reports for full-text assessment. All 92 reports were successfully retrieved. Full-text assessment identified nine additional records in which blockchain governance or its application to creative and cultural industries was not sufficiently substantive; these primarily concerned food systems, agricultural traceability, general technical infrastructure or other non-creative applications. The final analytical corpus therefore comprised 83 studies. The nine reports excluded at full-text assessment, together with the primary reason for each exclusion, are reported in Supplementary Table S2. Figure 1 sets out the identification, screening and eligibility process.

Data charting and analysis

Data were charted using a structured Microsoft Excel form piloted on ten studies before full implementation. The form comprised 25 fields across four blocks: bibliographic identification (author, year, title, source, document type, citation count, DOI and affiliations); technological and sectoral characteristics (blockchain technology, creative subsector, governance dimension, advantages, barriers, ecosystem actors, methodology and author keywords); analytical synthesis (main findings, referenced innovation model, policy recommendations and author-reported limitations); and review administration. Geographic representation was coded from the institutional affiliations reported for study authors. It therefore describes the geographic distribution of the scholarly corpus and does not measure the nationality of creative practitioners, the location of blockchain platforms or the intensity of blockchain activity in a region. The lead author completed the charting and cross-checked coded information against the source texts. A subset of 15 studies was rechecked against the full texts to assess consistent application of the charting criteria.

Bibliometric analysis, a quantitative approach to mapping patterns and relationships in publication metadata, was conducted using VOSviewer (version 1.6.20; Van Eck and Waltman, 2010). Keyword co-occurrence mapping was used to identify thematic concentrations, while bibliographic coupling mapped intellectual proximity among studies based on shared references. Citation counts were taken from the Scopus metadata available at the time of database export (3 June 2026) and are used only as descriptive indicators; citation values vary by database and over time and are not treated as standardised measures of scholarly impact. Frequency analyses were conducted in Python 3.11 across the final 83-study dataset. The thematic synthesis consolidated the detailed charting codes into four higher-order governance dimensions. These dimensions are analytically distinct but not mutually exclusive, and individual studies may address more than one dimension. Contextual works cited outside the 83-study corpus are used only to frame governance concepts or scope limitations and are not included in bibliometric, frequency or thematic counts.

Bibliometric analysis

The 83 included studies form a recent and still expanding corpus. Publication counts increase markedly after 2021 (Figure 2). Because publication dates reflect research, peer-review and production lags, the period labels used here are descriptive

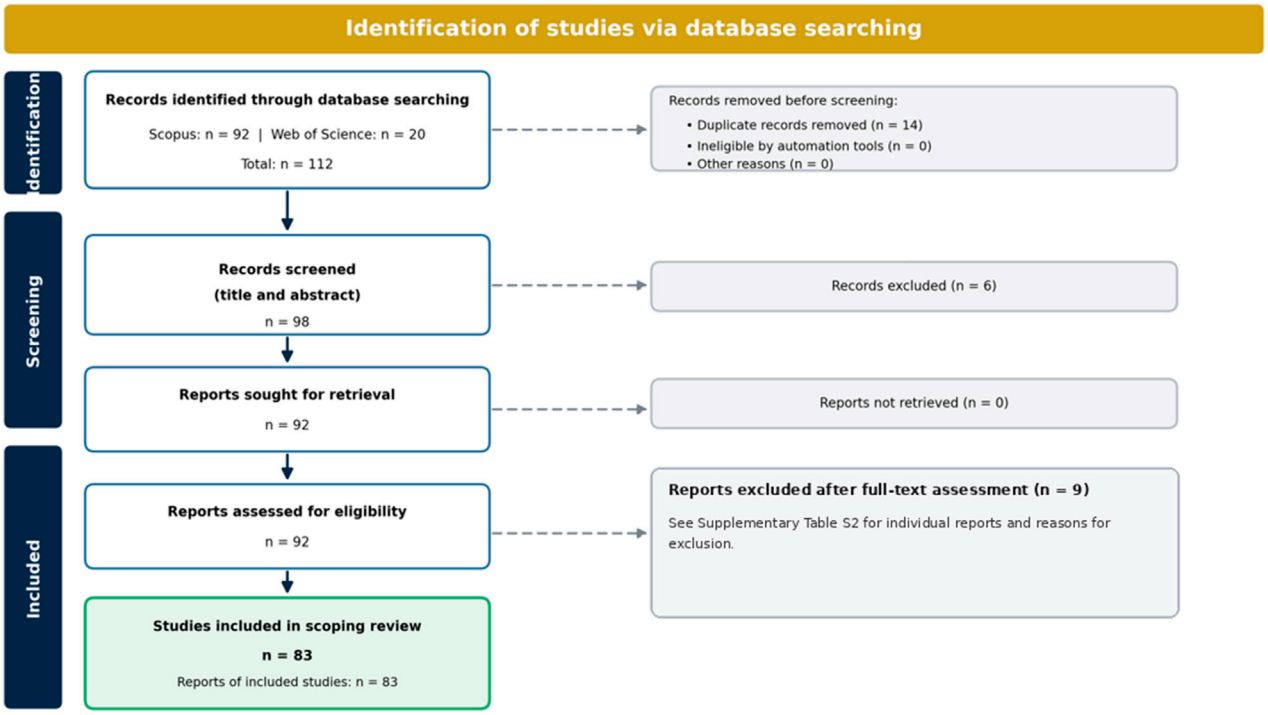

FIGURE 1
PRISMA 2020 flow diagram adapted for the scoping review: identification, screening, eligibility and inclusion of studies (n = 83). Source: authors' own elaboration following Page et al. (2021) and Tricco et al. (2018).

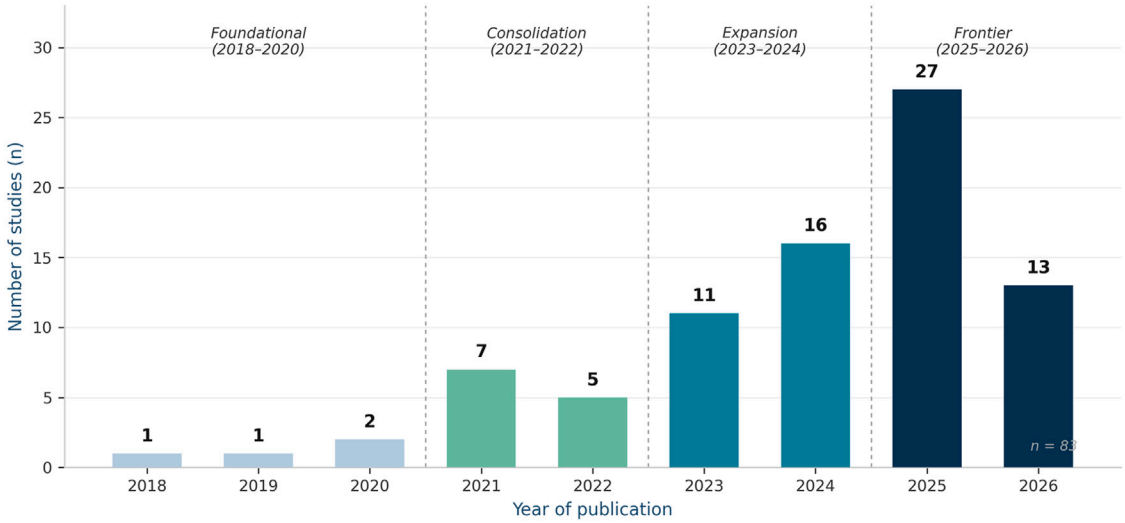

FIGURE 2
Temporal distribution of included studies by year of publication (n = 83). Colour bands provide descriptive publication-period groupings: foundational (2018–2020), consolidation (2021–2022), expansion (2023–2024) and frontier (2025–2026). These labels describe the chronology of indexed publications and do not imply that publication year coincides exactly with the timing of underlying research or market developments. Source: authors' own elaboration based on corpus data extracted during the charting process (2026).

groupings of indexed output rather than direct proxies for when developments occurred in practice. The 2018–2020 group accounts for four studies (4.8%); 2021–2022 contributes 12 studies (14.5%); 2023–2024 contributes 27 studies (32.5%); and 2025–2026 accounts for 40 studies (48.2%). Across these publication periods, the literature broadens from early philosophical, legal and technical work toward a wider range of heritage, rights-management and institutional applications.

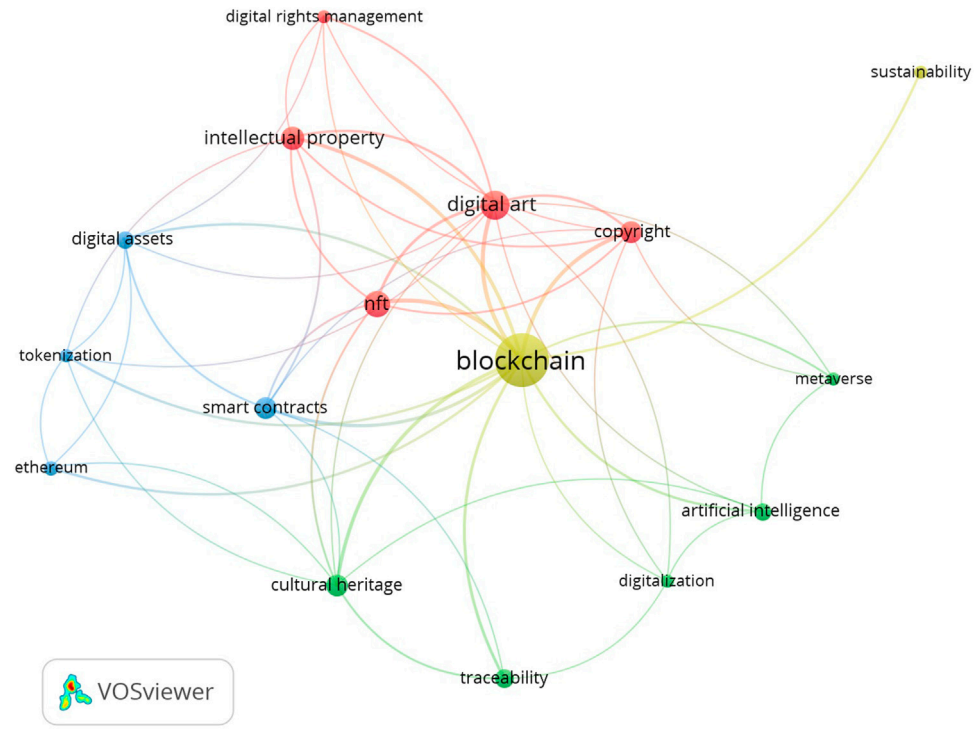

FIGURE 3
Keyword co-occurrence network of the reviewed corpus generated in VOSviewer. Node size reflects keyword occurrence, link thickness indicates co-occurrence strength, and colours represent clusters identified by the VOSviewer clustering algorithm. Lexical variants were harmonised before generating the final map.

Journal publications, comprising 47 articles and 2 reviews, account for 49 studies (59.0%), while conference papers account for 34 studies (41.0%). Based on the institutional-affiliation coding used in the review, geographic representation is concentrated in Asia: China (n = 24, 28.9%) and India (n = 19, 22.9%) together account for more than half of the studies, followed by Italy (n = 7, 8.4%) and Spain (n = 5, 6.0%). The seven Italy-associated studies are distributed across several institutions, including the University of Trento, University of Naples Federico II, University of Bologna, University of Verona and University of Insubria, rather than concentrated in a single research group. Only one study in the coded corpus is associated with a Latin American institutional affiliation. This indicates limited representation of Latin American research institutions in the indexed literature captured by the search; it does not measure the nationality of artists, the location of platforms or the prevalence of blockchain activity in the region.

Keyword co-occurrence analysis

Four thematic clusters emerge from the keyword co-occurrence analysis (Figure 3). The red cluster groups NFTs, digital art, copyright, intellectual property and digital rights management, reflecting a strand centred on digital creative assets and rights governance. The blue cluster connects smart contracts, tokenization, digital assets and Ethereum, representing the technological infrastructure and mechanisms through which blockchain-based creative applications are implemented. The green cluster brings together cultural heritage, traceability, digitalization, artificial intelligence and the metaverse, indicating a broader strand related to heritage management, traceability and emerging digital applications. Finally, the yellow cluster is organised around blockchain and sustainability. Blockchain occupies the most central position in the network and acts as a connecting node across the thematic areas identified. Taken together, the map reveals a structure in which rights and digital assets, technological infrastructure, and heritage and digital transformation appear as distinguishable but closely interconnected areas within the literature on blockchain in creative industries.

Bibliographic coupling analysis

Bibliographic coupling reveals four consolidated intellectual clusters, alongside a smaller set of recent nodes that has not yet formed a stable current (Figure 4). Zeilinger (2018) and O'Dwyer (2020) anchor a philosophical-legal cluster centred on intellectual property and digital art commodification; Zeilinger (2018) had 110 Scopus citations at the time of data retrieval. Whitaker (2019), Whitaker et al. (2021) anchors a second cluster on art-market governance and collection management, with Wei and Guan (2021) and Kharitonova and Rahmatulina (2022) as secondary nodes. The largest cluster centres on Rehman et al. (2021), which had 129 Scopus citations and groups technical NFT research. Patrickson (2021) anchors the cluster closest to digital creative-industries governance, with Bilogrivic and Stublic (2023), Jia and

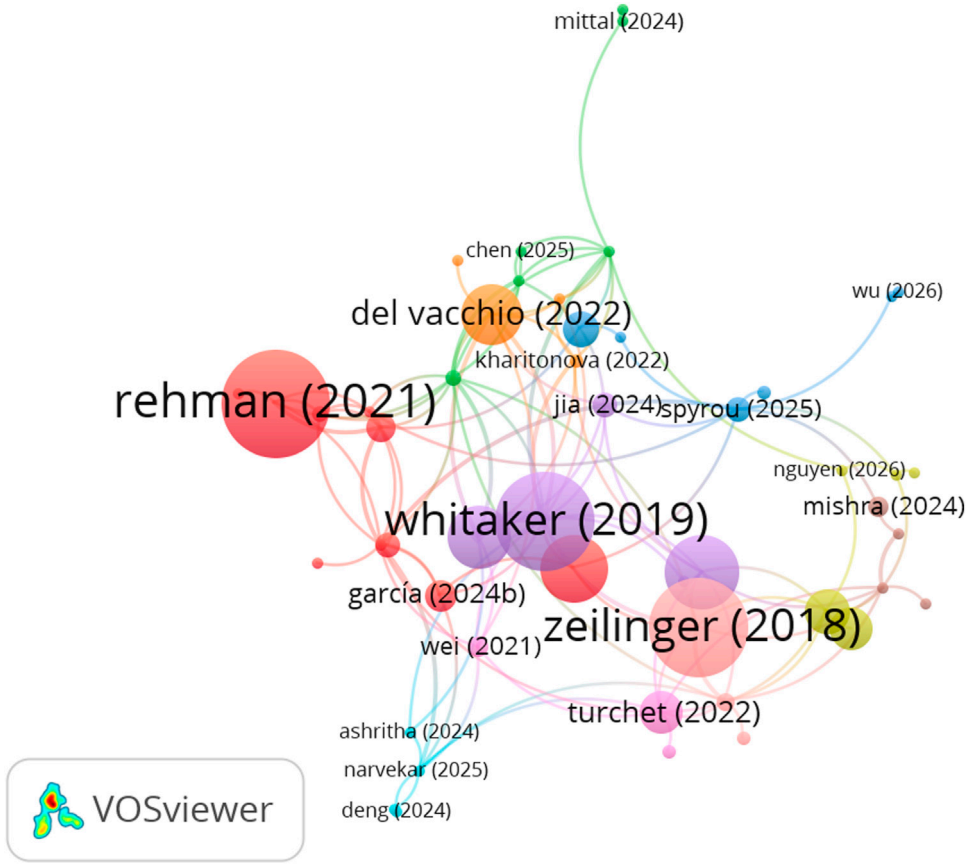

FIGURE 4
Bibliographic coupling map of the 83 included studies (VOSviewer). Node size reflects Scopus citation counts at the date of retrieval (3 June 2026); edge thickness reflects coupling strength. Colours identify the four consolidated intellectual clusters discussed in Section *Bibliographic coupling analysis*. Source: authors' own elaboration using VOSviewer 1.6.20.

Yao (2024) and Spyrou et al. (2025) as secondary nodes. Citation counts are used descriptively and are not normalised for publication age. No consolidated cluster is anchored by a study associated with a Latin American or Caribbean institutional affiliation in the coded corpus.

Not every included study is discussed by name in the narrative synthesis; many are represented instead as individual nodes (labelled by first author and publication year) in the bibliographic coupling map (Figure 4). Because of the density of the network, some node labels overlap and are not fully legible at print resolution. Every one of the 83 included studies is listed in full in Supplementary Table S1.

Thematic synthesis

The synthesis is organised around four analytical components captured through the charting process: blockchain applications across creative subsectors; advantages and challenges of adoption; ecosystem actors and their roles; and governance dimensions. These components are related rather than mutually exclusive and together provide the evidence base for the governance framework proposed in Section *A governance framework for blockchain in creative ecosystems*.

Blockchain applications in creative industries

The reviewed literature can be organised into two broad temporal emphases in publication output, alongside a smaller cross-cutting domain of traditional and indigenous creative expressions. These are descriptive patterns in the corpus rather than claims about the exact timing of technological change in practice.

Studies published between 2018 and 2021 place particular emphasis on the commercialisation and rights management of digital creative assets, especially in visual arts and music. Non-fungible tokens are the primary technological vehicle in this part of the corpus, with 36 studies (43.4%) explicitly addressing NFT applications (Rehman et al., 2021; Martins, 2023). A recurrent theme is the use of tokenisation to create verifiable ownership and scarcity in digital environments. As O'Dwyer (2020, 874) argues, NFTs reintroduce elements of the scarcity logic of physical art markets into the digital domain, with implications for how value is produced and distributed. Blockchain-enabled tokenisation can also allow artists to register works and, where platform and contract design support it, program resale royalties through smart contracts. In music, smart-contract-based distribution can automate payments and potentially shorten

TABLE 1 Distribution of blockchain applications across creative industry subsectors (n = 83; multiple subsectors per study possible).

Creative subsector	n studies	% corpus	Primary application
Visual arts/Art market	43	51.8%	NFT tokenisation, provenance, royalties
Cultural heritage	27	32.5%	Traceability, authentication, restitution
Creative industries (general)	15	18.1%	Rights management, open innovation
Museums/Galleries	7	8.4%	Collection governance, digital twins
Music industry	7	8.4%	Smart contract royalties, IoMusT
Traditional crafts/Gastronomy	5	6.0%	Origin certification, anti-counterfeiting

Source: authors' own elaboration based on data extracted from the reviewed corpus.

payment cycles associated with conventional rights administration (Turchet and Ngo, 2022).

From 2022 onward, a second emphasis becomes more visible in publications on cultural heritage governance, preservation of intangible cultural expressions and traceability of culturally significant assets. Cultural heritage accounts for 32.5% of the reviewed studies (n = 27). Applications range from provenance tracking for museum collections to documenting archaeological sites, digitalising intangible heritage and authenticating traditional crafts and artisanal products (García-León et al., 2024). Del Vacchio and Bifulco (2022) identify cultural heritage as a particularly diverse institutional context for blockchain applications because provenance and authenticity are central management concerns that align with blockchain-based traceability. Whitaker et al. (2021), 312 show how blockchain can support more differentiated arrangements for contested heritage by recording ownership, exhibition rights and revenue streams separately rather than reducing governance to a binary ownership decision.

A third, smaller domain concerns the protection of traditional and indigenous creative expressions. Five studies (6.0%) address blockchain's use for authenticating and tracing artisanal products, traditional medicinal knowledge and culturally specific gastronomy. This domain is especially relevant in contexts where formal intellectual-property protections for traditional knowledge are limited or difficult to access, and where decentralised verification is being explored as a complement to existing registration mechanisms (Aounzou et al., 2025; Irwan et al., 2025). The governance questions include collective intellectual property, community consent and the risk that digitalisation can detach cultural expressions from the social context that gives them meaning.

Table 1 summarises the distribution of blockchain applications across the main creative subsectors identified in the reviewed corpus.

Advantages and challenges of blockchain adoption

The reviewed literature identifies recurring advantages and barriers associated with blockchain adoption in creative-industry contexts. The coding shows a varied pattern: governance and regulatory issues appear prominently among the reported barriers, while explicitly technical-performance constraints are less frequent.

Traceability and decentralisation are the joint-largest coded advantage categories, each appearing in 14.5% of studies (n = 12). In cultural heritage, traceability addresses provenance gaps and periods of undocumented ownership that can facilitate the circulation of looted or stolen cultural property. Whitaker et al. (2021), p. 317, show that blockchain-based provenance registries, applied at the point of discovery in active archaeological contexts, can function as a form of fair-trade-equivalent certification. In digital art, traceability can allow artists and institutions to follow a work across ownership transfers, supporting chain-of-custody records used for authenticity and royalty claims (García et al., 2024; Lv and Lin, 2026).

Transparency appears in 13.3% of studies (n = 11). It operates on two levels in the literature: transactional, making the terms and execution of agreements visible to relevant parties, and institutional, providing verifiable audit trails for organisational decisions. Migliorini et al. (2025) illustrate the latter in cultural-heritage crowdfunding, where publicly verifiable donation flows address donor-trust concerns without requiring cryptocurrency transactions. Decentralisation, coded in 14.5% of studies (n = 12), is associated with reducing dependence on single points of control and with enabling more direct interaction between creative practitioners, audiences and collectors, although the extent of disintermediation depends on platform design and governance arrangements (Patrickson, 2021; O'Dwyer, 2020).

Other frequently coded advantages include automated smart-contract execution (13.3%, n = 11) and authenticity verification (12.0%, n = 10). García et al. (2024) propose CopyrightLY, a decentralised application combining blockchain-based authorship registration with semantic NFTs and token-curated incentives. The case illustrates how blockchain can support both registration of authorship claims and mechanisms for contesting those claims through community governance.

Regulatory uncertainty is the largest coded barrier category (8.4%, n = 7). The reviewed studies describe uncertainty over the evidentiary status of blockchain records, the classification of NFTs for tax and intellectual-property purposes and the jurisdiction applicable to disputes arising from decentralised transactions (Mittal et al., 2024; Vega García, 2024). These concerns relate primarily to the legal and institutional conditions surrounding blockchain use rather than to technical operation itself.

Other recurrent barriers include privacy concerns (7.2%, n = 6), low adoption rates (7.2%, n = 6), the absence of technical standards (6.0%, n = 5) and energy consumption (4.8%, n = 4). Turchet and Ngo (2022), for example, identify interoperability as a challenge for

the Internet of Musical Things, where heterogeneous devices and platforms make shared blockchain protocols difficult to establish. Privacy concerns are particularly relevant where blockchain transparency interacts with data-protection requirements such as the EU General Data Protection Regulation.

Taken together, the coded barriers place greater emphasis on institutional, regulatory and social conditions than on technical performance alone. This pattern motivates treating governance conditions as an analytical complement to technological design in the framework developed in Section *A governance framework for blockchain in creative ecosystems*.

Ecosystem actors and roles

The reviewed literature identifies a wide range of actors whose interactions shape the governance ecology of blockchain in creative industries. Mapping their roles and relationships helps distinguish where authority, coordination and value distribution are located within blockchain-based creative ecosystems.

Artists or creators (19.3%, n = 16) and digital platforms (16.9%, n = 14) are the two largest coded actor categories. Their prominence brings the platform-creator relationship into view as a recurring governance issue. Patrickson (2021) shows that, although blockchain can enable more direct creator-audience relationships, network effects and technical complexity can preserve dependence on intermediary systems. O'Dwyer (2020, 888) similarly cautions that private platform control can reintroduce intermediation even when the underlying infrastructure is technically decentralised.

Cultural institutions and regulators (8.4% each, n = 7) appear less frequently but occupy coordinating and legitimating roles in the reviewed literature. Sinha et al. (2026) develop a governance scoring framework in which museums and galleries each score 58% on composite governance indicators, compared with 78% for digital platforms; the differences reflect, among other factors, automated royalty-distribution capacity and exposure to market volatility. Whitaker et al. (2021) emphasise the participation of source communities, cultural authorities, international organisations and legal systems in blockchain-based cultural-heritage governance. Their analysis of the Byzantine Frescoes case illustrates how technical mechanisms interact with, rather than substitute for, institutional authority and participation.

Universities and research centres appear in a smaller number of studies, primarily as producers of research and technical knowledge. Only one study in the corpus is associated with a Latin American institutional affiliation, consistent with the bibliometric pattern reported above. This is best interpreted as limited representation of Latin American research institutions in the indexed scholarly corpus, not as evidence that regional artists, platforms or blockchain communities are absent. It therefore identifies a limitation in the available knowledge base for comparative governance analysis rather than a direct measure of regional practice.

Governance dimensions of blockchain in creative industries

The thematic analysis organises blockchain governance in creative industries across four interrelated dimensions. They are analytically distinct but overlap in practice; the frequencies reported below indicate how often each dimension was coded as a prominent governance focus rather than mutually exclusive categories. Their relative salience varies by sector, institutional context and technological maturity, while each addresses a different aspect of authority, coordination or value distribution. For example, resale royalties may involve both intellectual-property governance and financial governance: the former concerns the creator's legal claim to the royalty, whereas the latter concerns how the resulting revenue is distributed among actors.

Dimension 1. Intellectual property and rights governance

This is the largest coded governance dimension, appearing in 32.5% of studies (n = 27), and it concerns authority over creative works: who can register, license, transfer and enforce rights. These functions have traditionally been mediated through collecting societies, publishers, record labels and IP registries. Such intermediaries can provide coordination, certification and market functions, while the literature also identifies transaction and information frictions in some rights chains (O'Dwyer, 2020, 875; Mittal et al., 2024). Blockchain may reconfigure parts of this architecture by enabling automated licensing and royalty distribution and by maintaining persistent authorship records; these capabilities can complement or substitute particular intermediary functions rather than eliminating intermediation as such (García et al., 2024; Lv and Lin, 2026). Vega García (2024) shows that legal recognition remains a separate issue: technically verifiable rights records and smart-contract terms do not automatically determine their enforceability under intellectual-property law. Mittal et al. (2024) similarly identify persistent regulatory gaps for blockchain-based copyright management beyond cryptocurrency-oriented regulation.

Dimension 2. Institutional governance of cultural organisations

Appearing in 18.1% of studies (n = 15), this dimension concerns how museums, galleries, archives and heritage organisations govern themselves and how blockchain may affect internal decision-making, accountability and relationships with other institutional actors. Del Vacchio and Bifulco (2022) describe this as an organisationally complex area because cultural institutions combine public accountability, professional curatorial authority and community stewardship in ways that do not map straightforwardly onto blockchain properties such as transparency and immutability. Sinha et al. (2026) find that institutions with stronger prior governance arrangements, measured through provenance documentation, IP-compliance readiness and income stability, tended to report more favourable blockchain-integration outcomes in their study contexts. This suggests that pre-existing governance conditions may shape implementation, particularly where resources, regulatory clarity or interinstitutional coordination are limited.

Cultural heritage governance provides several institutional applications. Whitaker et al. (2021), 320 propose four blockchain-based governance models for contested cultural

heritage, including portfolio approaches that separate ownership rights from exhibition rights and revenue streams. These models allow more differentiated arrangements than a binary repatriation-or-retention decision. Migliorini et al. (2025) provide a complementary example: a blockchain-based crowdfunding platform for heritage restoration that makes donation flows publicly verifiable without requiring cryptocurrency transactions, addressing donor-trust concerns while separating blockchain's record-keeping functions from cryptocurrency use.

Dimension 3. Financial governance and value distribution

Appearing in 12.0% of studies (n = 10), this dimension concerns how economic value is produced, captured and distributed within creative ecosystems. Smart contracts can automate royalty distribution on consumption or resale, potentially reducing delays and administrative frictions in rights administration (Turchet and Ngo, 2022; Migliorini et al., 2025). van Haaften-Schick and Whitaker (2022), drawing on the historical Artist's Contract (Siegelaub and Projansky, 1971) and contemporary blockchain practice, show how blockchain can make resale-royalty arrangements more operational in art markets. In jurisdictions where the droit de suite—a statutory resale royalty right entitling artists to a share of qualifying secondary sales—applies, blockchain-based automation may complement legal mechanisms by making resale-payment terms easier to execute and trace (Vega García, 2024).

Financial governance also entails risks. O'Dwyer (2020, 887) argues that the artificial-scarcity logic of NFT markets can expose creative works to speculative dynamics that may pull against cultural value. The reviewed literature does not support a single distributional outcome: blockchain can create new mechanisms for artist compensation while also exposing creators, collectors and platforms to volatile markets and platform-dependent rules. Sinha et al. (2026), for example, report high automated royalty-distribution efficiency for digital platforms alongside high exposure to market-price volatility, illustrating how potential gains and risks can coexist.

Dimension 4. Decentralised ecosystem governance

Appearing in 8.4% of studies (n = 7), this dimension concerns the rules and mechanisms used to coordinate multiple actors without a single central authority. Mechanisms discussed in the corpus include decentralised autonomous organisations (DAOs), token-curated governance and peer-to-peer marketplaces, through which creators, collectors and cultural practitioners may participate in collective decisions about shared resources (García et al., 2024; Patrickson, 2021).

Zeilinger (2018), 16 cautions that technical decentralisation does not automatically produce social decentralisation. Governance outcomes also depend on who owns and operates infrastructure and who sets the rules through which participants interact. In contexts where creators or communities rely on externally operated platforms, protocol-level decentralisation can therefore coexist with organisational dependence. The relevant governance question concerns how decision rights and control are distributed across actors under different forms of decentralisation.

Table 2 synthesises the four governance dimensions, their frequency in the corpus, the primary studies that characterise each dimension and their principal implications for governance design.

Taken together, the four dimensions show that the corpus repeatedly frames adoption challenges in governance terms: regulatory uncertainty, interoperability and standards, institutional coordination and stakeholder participation appear alongside technical concerns. This pattern provides the analytical bridge to Section *A governance framework for blockchain in creative ecosystems*, which examines how institutional, technological and social conditions can be considered together.

A governance framework for blockchain in creative ecosystems

The four governance dimensions identified in Section *Thematic synthesis* suggest that blockchain governance in creative industries is shaped by more than technical functionality. Across the corpus, regulatory uncertainty, interoperability and standards, institutional coordination, platform dependence and stakeholder participation recur alongside questions of technological performance. These concerns are often examined in separate disciplinary conversations—legal and regulatory, technical, organisational and social—making their interaction less visible. The framework developed here therefore offers an analytical synthesis across three dimensions: institutional, technological and social, providing a way to examine how governance conditions interact across different creative-industry contexts without assuming a universal recipe for successful adoption. Those four dimensions derive from the charted corpus; the three-dimensional framework that follows is the authors' interpretive synthesis of relationships among those recurring concerns.

The four governance dimensions from Section *Thematic synthesis* contribute different pieces to this synthesis. Intellectual-property and rights governance focuses on authority over creative works and the recognition and enforcement of claims. Institutional governance concerns accountability and coordination within cultural organisations. Financial governance examines how value is produced and distributed, while decentralised ecosystem governance addresses collective coordination where no single actor holds formal control. These dimensions overlap in practice, and the three-dimensional framework below reorganises their recurrent concerns at a higher analytical level. Blockchain governance can therefore redistribute coordination functions across protocols, platforms, communities and legal arrangements.

The three dimensions of the proposed framework

This article organises recurrent governance concerns into three analytical dimensions—institutional, technological and social. The dimensions are considered together when relevant, while their

TABLE 2 Four governance dimensions of blockchain in creative industries, as identified in the reviewed corpus (n = 83).

Governance dimension	n (%)	Key studies	Primary governance question
Intellectual property and rights	27 (32.5%)	García et al., 2024; Mittal et al., 2024; Vega García 2024; Lv and Lin 2026	Who has authority over creative works and how is it enforced?
Institutional governance of cultural organisations	15 (18.1%)	Whitaker et al., 2021; Del Vacchio and Bifulco 2022; Sinha et al., 2026; Migliorini et al., 2025	How do cultural institutions govern provenance, access and accountability?
Financial governance and value distribution	10 (12.0%)	O'Dwyer 2020; Turchet and Ngo 2022; Vega García 2024; Sinha et al., 2026	How is economic value produced, captured and distributed?
Decentralised ecosystem governance	7 (8.4%)	Zeilinger 2018; Patrickson 2021; García et al., 2024	How are collective decisions made without central authority?

Source: authors' own elaboration based on data extracted from the reviewed corpus.

relative salience may vary across applications. Each identifies a distinct set of questions that can shape governance outcomes and provides a common basis for comparing cases across sectors and contexts.

Institutional Dimension. This dimension asks who has legitimate authority to govern creative works and how blockchain-mediated claims relate to existing legal and organisational arrangements. Blockchain can make records immutable or contracts automatically executable, but technical execution does not by itself establish legal validity, jurisdiction or institutional legitimacy. Mittal et al. (2024) show that regulatory initiatives remain concentrated on cryptocurrency-related uses and provide limited guidance for blockchain-based copyright management; Vega García (2024) similarly highlights unresolved questions in Spanish intellectual property law about NFT classification and creator rights. The relevant issue concerns how legal and institutional systems recognise blockchain-based records, smart-contract terms and rights claims. Ansell and Gash (2008) provide a broader governance rationale: coordination depends on legitimate rules, accountable participation and mechanisms for resolving disputes. Decentralisation can redistribute coordination functions across protocols, platforms, communities and legal arrangements, with effects that depend on the governance context in which they operate. Related work on online governance likewise treats digital spaces as designed institutional environments in which rules, participation and accountability remain matters of governance rather than automatic consequences of technical architecture (Schneider, 2024).

Technological Dimension. This dimension asks which technical architecture fits the governance needs of a given creative context and how accessible it is to non-technical participants. Blockchain is not a single technological configuration: permissionless and permissioned architectures differ in control, transparency, transaction costs, interoperability and participation. Del Vacchio and Bifulco (2022) and Turchet and Ngo (2022) show that these design choices have governance consequences because technical standards, interfaces and interoperability shape who can participate and how easily systems can connect. In settings where local technical capacity is limited, reliance on external infrastructure providers can also raise questions about dependence, control and adaptability. Migliorini et al. (2025) illustrate a context-sensitive alternative through a heritage crowdfunding platform that uses blockchain for provenance and auditability without requiring cryptocurrency transactions. The analytical focus is therefore the fit between technological choices and the institutional and user conditions of the application.

Social Dimension. This dimension concerns participation in governance design and the distribution of benefits and burdens among creative communities. Legal recognition and technical functionality do not by themselves determine who influences rules or who captures value. Zeilinger (2018) cautions that technical decentralisation does not automatically produce social decentralisation, while Patrickson (2021) documents how blockchain can support both decentralising and control-oriented practices depending on how systems are organised. In cultural heritage, Whitaker et al. (2021) show that source-community participation can be central to governance arrangements around contested assets. These studies suggest that participation, contestability and value distribution should be examined explicitly rather than inferred from the technical architecture. The social dimension therefore asks whose interests are represented in governance design, who can challenge decisions and how benefits and risks are distributed across creators, institutions, platforms and communities.

Table 3 synthesises the three dimensions as an analytical framework, specifying the governance question associated with each, relevant governance conditions, key actors and potential risks highlighted in the literature when those conditions are underdeveloped.

The integrative argument: interdependence across governance dimensions

The value of the framework lies in examining interactions among dimensions rather than treating them as independent checklists. Patterns across the corpus suggest that governance tensions can arise when one set of conditions receives limited attention relative to the others. A technically efficient rights-management system, for example, may still face legitimacy or participation problems if legal recognition or stakeholder involvement remains unresolved; conversely, participatory arrangements can be constrained by poor interoperability or

TABLE 3 A governance framework structured across three dimensions for blockchain in creative ecosystems.

Dimension	Governance question	Relevant governance conditions	Key actors	Potential governance risks
Institutional	Who has legitimate authority to govern creative works, and how are blockchain-mediated claims recognised?	Recognition of blockchain records and smart-contract terms; regulatory clarity; interinstitutional coordination; legitimate and accountable governance arrangements	State regulators, collecting societies, cultural ministries, legal systems, universities	Legal uncertainty; unclear enforceability; fragmented authority; concentration of governance in private platforms
Technological	Which blockchain infrastructure is used, how does it fit the specific creative context, and how accessible is it to non-technical users?	Context-appropriate protocol design; interoperability standards; accessible interfaces; infrastructure compatible with local technical and cost conditions	Technology providers, standards bodies, developers, digital infrastructure operators, universities	Technical lock-in; interoperability failures; barriers to participation; dependence on external infrastructure providers
Social	Who participates in designing governance rules, and how are decision rights, benefits and risks distributed among creative communities?	Participation of affected communities; mechanisms for contesting decisions; transparent value-distribution rules; attention to traditional and collective knowledge	Artists, creators, indigenous communities, cultural collectives, civil society organisations, audience communities	Uneven participation; concentration of value or decision power; exclusion of less-resourced creators; inappropriate commodification of collective knowledge

Source: authors' own elaboration, informed by the reviewed corpus and the governance framework proposed in Section *A governance framework for blockchain in creative ecosystems.*

uncertain enforceability. These patterns support an integrative analytical proposition: governance outcomes are shaped by the alignment among institutional, technological and social arrangements, although the relative importance of each dimension is likely to vary by sector and context. This proposition is derived from the reviewed literature and requires empirical testing rather than being treated as a causal rule.

This comparative logic is especially relevant where institutional arrangements, digital infrastructure and participation conditions differ markedly across settings. The current corpus is too geographically uneven to conclude that the framework is more determinative in the Global South or in Latin America and the Caribbean. Instead, the limited representation of these contexts identifies a priority for future empirical research: testing whether and how the relationships among the three dimensions differ across regulatory systems, infrastructure conditions and forms of creative organisation. The framework therefore treats geographic variation as an empirical question, not as an assumed deficit.

The framework contributes to governance literature in two ways. First, it brings together recurring concerns that are often analysed separately in legal, technical, organisational and social scholarship, providing a common vocabulary for comparative analysis. Second, it shifts attention from asking only what blockchain can do for creative industries toward examining how rules, infrastructures and participation arrangements shape its governance effects. In this sense, the framework extends the collaborative-governance logic of Ansell and Gash (2008) to blockchain-mediated creative ecosystems while remaining open to empirical refinement. Sections *Discussion and Conclusions* consider the implications of this analytical synthesis for research, practice and policy.

Discussion

Contributions to governance research and implications for practice and policy

This review contributes to the study of blockchain governance in creative industries in two related ways. First, it maps a heterogeneous and rapidly developing body of scholarship through the combination of bibliometric analysis and thematic synthesis. The resulting corpus shows that blockchain research in creative industries extends beyond technical applications to questions of intellectual property, institutional coordination, value distribution and collective governance. It also reveals an uneven geography of indexed scholarship. In particular, only one included study was associated with a Latin American institutional affiliation. This finding concerns the geographic representation of the scholarly corpus rather than the prevalence of blockchain practice, artistic activity or platform development in the region.

Second, the review provides a conceptual synthesis of governance concerns that are frequently examined separately. The four governance dimensions identified in the corpus—intellectual-property and rights governance, institutional governance of cultural organisations, financial governance and value distribution, and decentralised ecosystem governance—describe recurring areas of governance activity. The three-dimensional framework developed in Section *A governance framework for blockchain in creative ecosystems* provides a common analytical vocabulary for examining how legal and organisational arrangements, technological design and stakeholder participation interact across different creative-industry settings, while allowing the relative importance of each dimension to vary by context.

For cultural institutions and creative-sector practitioners, the findings suggest that technical design should be considered

alongside governance conditions. Regulatory uncertainty, interoperability, institutional coordination and stakeholder participation recur in the corpus together with technical concerns. This pattern indicates that technological functionality alone provides an incomplete basis for evaluating implementation, although it does not establish that governance capacity determines the success of blockchain adoption. Questions about who has authority to validate claims, how systems interoperate, who can participate in decision making and how benefits and risks are distributed therefore warrant explicit consideration when blockchain-based applications are designed or assessed.

The policy implications are similarly broader than the incorporation of blockchain into copyright legislation. The relevant issue is how existing legal and institutional arrangements recognise blockchain-based records, smart-contract terms and rights claims, and how disputes arising from them can be addressed. Greater clarity may emerge through legislation, regulatory guidance, technical standards, contractual arrangements, cooperative governance or sector-based forms of coordination, depending on the context. Blockchain governance can therefore draw on multiple sources of coordination. Technical decentralisation operates alongside continuing needs for recognised rules, accountability mechanisms and procedures for resolving disputes.

The geographic imbalance of the corpus raises a related research and policy question. Limited representation of Latin American institutions, together with uneven representation across the wider corpus, restricts the extent to which governance patterns identified in heavily represented settings can be assumed to travel across institutional contexts. This makes comparative analysis particularly important. Future research should examine whether relationships among institutional, technological and social governance conditions differ across regulatory systems, infrastructure environments and forms of creative organisation, including—but not limited to—Latin American and Caribbean contexts.

Limitations and directions for future research

This review has several limitations that define the scope of its conclusions. The corpus is restricted to peer-reviewed publications indexed in Scopus and Web of Science and written in English or Spanish. Relevant scholarship published in other languages, regional databases, books, exhibition catalogues, curatorial writing or other arts and humanities outlets may therefore fall outside the corpus. The targeted search descriptors were selected to reduce false-positive retrieval, but the decision not to use the generic term "art" may also have reduced sensitivity to adjacent scholarship using different disciplinary terminology. Relevant discussion also exists in formats outside the eligibility criteria and, in some cases, before the review window; the edited collection Artists Re:Thinking the Blockchain (Catlow et al., 2017) is one example. The findings should consequently be interpreted as a map of the literature captured by the stated search strategy rather than as an exhaustive representation of all scholarship on blockchain and creative practice.

Methodological features of the review impose further limits on interpretation. A scoping review maps the breadth and characteristics of a field rather than formally appraising the methodological quality of each study. Citation counts were taken from Scopus and used descriptively; they vary across databases and over time and were not normalised by publication age. Geographic representation was coded from authors' institutional affiliations and therefore cannot be interpreted as a measure of artists' nationality, platform location or regional blockchain activity. The charting and coding were led by one author, with coded information cross-checked against source texts and a subset of 15 studies rechecked for consistency. Nine reports were excluded following full-text assessment because blockchain or the creative/cultural-industry dimension was not sufficiently substantive; Supplementary Table S2 identifies those reports and records the primary reason for each exclusion.

These limitations point directly to a first priority for future research: empirical testing of the three-dimensional framework. Comparative case studies could examine how institutional, technological and social conditions interact across creative subsectors and governance settings, without assuming in advance that the same configuration will be appropriate everywhere. Longitudinal research would be particularly valuable for distinguishing short-term adoption effects from more durable changes in governance arrangements.

A second priority is broader geographic and institutional coverage. The limited representation of Latin American institutions in the present corpus provides a clear rationale for research in Latin America and the Caribbean, while the broader objective is comparative investigation of contexts that remain underrepresented in indexed scholarship. Such work could test whether governance relationships observed in the current literature persist under different legal systems, infrastructure conditions, cultural-production models and forms of collective organisation.

A third direction concerns emerging forms of technologically mediated governance. The keyword map shows connections among blockchain, artificial intelligence, digitalisation and the metaverse, while the thematic synthesis identifies decentralised ecosystem governance as a comparatively small but conceptually important part of the corpus. Further research could examine how blockchain interacts with generative AI, DAOs and other forms of collective digital governance in relation to authorship, consent, attribution, participation and value distribution. These questions are especially suitable for primary empirical research because the current review identifies them as developing areas rather than established governance models.

Conclusion

This scoping review maps how blockchain governance has been addressed across 83 studies in creative and cultural industries. The literature spans intellectual-property and rights governance, institutional governance of cultural organisations, financial governance and value distribution, and decentralised ecosystem governance. Across these areas, blockchain appears as a setting in which questions of authority, coordination, participation and value distribution are negotiated alongside technical design.

The three-dimensional framework developed from this synthesis offers a basis for comparing how governance

arrangements differ across technologies, sectors and institutional contexts. It also identifies relationships that require further empirical testing without assuming that any single configuration will produce particular outcomes.

The framework's analytical contribution lies in making interactions among institutional, technological and social conditions more visible and comparable across cases. This positioning preserves the integrative insight of the review while keeping the framework open to contextual variation and empirical refinement.

The indexed evidence base remains geographically uneven and methodologically heterogeneous. Expanding empirical research across underrepresented contexts and examining how governance arrangements evolve in practice will therefore be important for assessing the framework's scope and limits.

Scoping reviews map territory rather than settle questions, and the present synthesis should be read in that spirit. The value of the framework lies in making the governance choices surrounding blockchain adoption more explicit, comparable and, ultimately, less governed by chance.

Author contributions

LM-H conceived and designed the study, developed the search strategy, conducted the screening and data extraction, performed the bibliometric analysis, and drafted the manuscript. DT-P contributed to the conceptualization of the governance framework, critically reviewed the manuscript for intellectual content, and approved the submitted version. All authors contributed to the article and approved the submitted version.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontierspartnerships.org/articles/10.3389/ejcmp.2026.17368/full#supplementary-material

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