

Reconciling Innovation And Access: Intellectual Property Protection In The Digital Platform Economy – A Multi-Case Study

Elena Varga¹ and Sofia Lindström²

¹Associate Professor of Intellectual Property Law,
Northbridge University, Rotterdam, Netherlands

³ Lecturer in Business Law and Digital Regulation, Scandinavian
Institute of Commercial Studies, Stockholm, Sweden

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ABSTRACT

The rapid expansion of digital platforms has fundamentally altered the manner in which intellectual property is created, commercialised, distributed, and enforced. Conventional intellectual property frameworks were principally designed around identifiable creators, tangible products, geographically bounded markets, and relatively stable channels of dissemination. Digital platforms, by contrast, facilitate instantaneous global distribution, algorithmic content recommendation, user-generated creation, automated reproduction, and increasingly complex interactions between creators, intermediaries, consumers, and artificial intelligence systems. These developments create substantial opportunities for innovation while simultaneously intensifying longstanding tensions between intellectual property protection and public access.

This article examines these tensions through a comparative, fictional multi-case study involving three digital enterprises operating in different sectors: a digital publishing platform, a software development marketplace, and an artificial-intelligence-assisted design platform. The cases illustrate three distinct intellectual property challenges: unauthorised digital reproduction, ownership of software developed collaboratively through platform-mediated work, and disputes concerning authorship and ownership of AI-assisted creative output. The analysis demonstrates that intellectual property disputes in the digital economy increasingly involve overlapping rights rather than isolated claims. Copyright, trade secrets, trademarks, contractual rights, database interests, and technological protection measures may operate simultaneously within a single commercial relationship.

The study argues that effective intellectual property governance requires a movement away from purely rights-centred enforcement towards a more balanced framework incorporating contractual transparency, technological safeguards, procedural fairness, proportionality, and access-oriented considerations. The cases further demonstrate that platform architecture itself can influence the distribution of intellectual property risks. The article concludes by proposing a platform-sensitive

model of intellectual property governance that recognises creators' rights while preserving legitimate innovation, competition, interoperability, and public access.

Keywords: intellectual property; digital platforms; copyright; trade secrets; artificial intelligence; software ownership; digital innovation; platform governance; authorship; intellectual property enforcement.

1. INTRODUCTION

Intellectual property law has traditionally performed a dual function. On one hand, it grants legal protection to creators, inventors, businesses, and other rights holders in order to encourage investment in creative and innovative activity. On the other hand, intellectual property law places limits on the scope and duration of those exclusive rights in recognition of the broader social value generated by knowledge, competition, education, cultural participation, and technological development. The resulting legal framework is therefore inherently concerned with balancing private incentives against public interests.

The emergence of digital platforms has made this balancing exercise considerably more complicated. Digital technologies have reduced the marginal cost of reproducing and distributing information to almost zero, while online platforms have created commercial infrastructures capable of connecting millions of creators and consumers across jurisdictions. A photograph created in one country may be incorporated into a digital product in another country, distributed through a platform headquartered in a third country, and accessed by users in hundreds of jurisdictions within seconds. Similarly, software code may be collaboratively produced by programmers who never meet physically and whose contractual relationships are governed by different legal systems.

The digital environment has also challenged assumptions concerning authorship and ownership. Artificial intelligence systems can now generate text, images, music, software code, and other forms of content with varying degrees of human involvement. This raises questions that existing intellectual property frameworks were not necessarily designed to answer. Who owns an AI-assisted work? Does a person who provides instructions qualify as its author? Does the operator of an AI platform acquire rights in generated output? What happens when training data contain protected works? These questions remain subject to significant legal and policy debate.

The problem is not limited to copyright. Digital platforms routinely rely upon trademarks, confidential information, patents, database rights, contractual restrictions, technological protection mechanisms, and trade secrets. Consequently, a single platform dispute may involve multiple layers of intellectual property protection. A company may claim copyright in its software, trademark protection for

its brand, trade-secret protection for its recommendation algorithm, and contractual rights governing access to its database.

This article examines these issues through three fictional case studies. The purpose is not to present the cases as actual judicial decisions but to construct realistic scenarios that illustrate contemporary intellectual property problems. The fictional cases have been developed to reflect recurring disputes encountered in the digital economy and to facilitate comparative legal analysis.

The first case concerns a digital publishing platform that allegedly allowed unauthorised reproduction of independent authors' works. The second examines ownership of software developed through an international freelance platform. The third focuses on an AI-assisted design platform and the competing claims of a human designer, the platform operator, and a corporate customer.

The central research question is:

How should intellectual property law balance the protection of creators and businesses with innovation, competition, and public access in an increasingly platform-mediated digital economy?

Three subsidiary questions are considered. First, how does platform architecture affect the allocation of intellectual property rights and risks? Second, to what extent are contractual arrangements capable of resolving ownership and enforcement disputes? Third, what principles can assist policymakers and courts in addressing emerging forms of digital and AI-assisted creation?

The article adopts a qualitative comparative case-study methodology. Each fictional case is analysed according to the nature of the intellectual property involved, the competing interests of the parties, the contractual and technological environment, and the potential legal remedies. The objective is not to advocate a particular jurisdictional outcome but to identify broader principles capable of informing intellectual property governance.

2. INTELLECTUAL PROPERTY IN THE DIGITAL PLATFORM ECONOMY

The traditional intellectual property system assumes that legal rights can be attached to identifiable objects, creators, inventions, brands, or confidential information. Digital platforms complicate this assumption because the same digital asset can exist simultaneously in numerous locations and can be incorporated into multiple products and services.

A digital photograph, for example, may constitute a copyrighted work. The photographer may license it to a platform, which may permit a customer to use it in advertising. The platform may simultaneously store metadata associated with the photograph and employ the image within an algorithmic recommendation system. A dispute concerning the photograph could therefore involve copyright ownership,

licensing terms, database interests, contractual obligations, and potentially privacy or consumer protection issues.

Another characteristic of digital markets is the increasing importance of intermediaries. Platforms frequently do not create the content that they distribute. Instead, they establish the infrastructure through which third parties create, upload, exchange, and monetise intellectual property. This intermediary position produces difficult questions concerning responsibility.

A platform may argue that it is merely a neutral intermediary and should not be treated as the infringer of every act committed by its users. Rights holders, conversely, may argue that platforms benefit financially from infringing material and possess technological capabilities that allow them to detect and prevent infringement.

The economic structure of platforms further complicates this relationship. Many platforms derive value from network effects: the more creators participate, the more valuable the platform becomes to consumers, and vice versa. Intellectual property disputes may therefore have consequences extending beyond the immediate parties. Removing content may protect a rights holder while simultaneously reducing the availability of information to legitimate users.

This tension is particularly visible in digital publishing, software development, and artificial intelligence.

3. METHODOLOGY

This study employs a qualitative multiple-case-study methodology. Three fictional cases were constructed to represent distinct intellectual property disputes arising in digital platform environments.

The cases were selected according to four criteria. First, each case had to involve an identifiable intellectual property interest. Second, the dispute had to arise within a digital platform ecosystem. Third, the case had to involve competing interests rather than a straightforward instance of infringement. Fourth, each case had to raise questions with broader implications for intellectual property policy.

The three cases are designated as follows:

1. **Varga Publishing Collective v. ReadSphere Technologies** – digital copyright and platform responsibility;
2. **NordCode Solutions v. GlobalCode Marketplace** – software ownership, contracts, and trade secrets; and
3. **Mira Solberg v. Artifex AI Systems** – AI-assisted creation, authorship, and ownership.

All names, institutions, companies, contractual provisions, factual circumstances, financial figures, and outcomes presented in the cases are fictional and created solely for academic illustration.

The analysis uses a common framework consisting of five dimensions: ownership, control, contractual allocation, enforcement, and public interest. The objective is to determine whether conventional intellectual property principles are sufficient to address disputes generated by contemporary platform structures.

4. CASE STUDY I: VARGA PUBLISHING COLLECTIVE v. READSPHERE TECHNOLOGIES

4.1 Background

Varga Publishing Collective was a fictional association of independent authors established in Rotterdam in 2021. The organisation represented approximately 1,800 writers who independently produced academic essays, short fiction, professional manuals, and specialist publications.

In 2024, the collective discovered that hundreds of its members' publications appeared to have been reproduced on ReadSphere Technologies, a fictional digital reading platform headquartered in Dublin. ReadSphere operated a subscription service through which users could access millions of digital documents.

ReadSphere maintained that most of the material had been uploaded by users and that the platform merely provided storage and search functionality. The authors, however, argued that ReadSphere's business model extended beyond passive hosting because the platform categorised, indexed, recommended, and commercially promoted the uploaded works.

The dispute became particularly significant when the authors discovered that ReadSphere's recommendation system prioritised frequently accessed documents. According to the authors, unauthorised copies of their publications were therefore receiving greater visibility than legitimate copies sold through authorised channels.

4.2 Nature of the Intellectual Property Dispute

The central issue concerned copyright. The authors maintained that they had retained copyright in their works and had never granted ReadSphere a licence to reproduce or commercially distribute the material.

ReadSphere argued that the platform's terms of service granted it a broad licence to host, reproduce, index, and technically process user-uploaded content. The platform further argued that the licence was necessary for ordinary operation of the service.

The dispute therefore depended partly on the distinction between a licence necessary to provide a technical service and a licence authorising commercial exploitation.

This distinction illustrates an increasingly important problem in digital contracts. Users frequently agree to lengthy platform terms without understanding the legal significance of provisions concerning intellectual property. A clause stating that users grant a platform a worldwide, transferable, sublicensable licence may have consequences extending considerably beyond the user's immediate purpose.

4.3 Platform Responsibility

The authors argued that ReadSphere could not reasonably claim ignorance because its recommendation system analysed uploaded documents and its commercial department actively promoted popular material.

The platform responded that automated processing should not transform an intermediary into the legal author or infringer of every work uploaded by users. It also claimed that removing content without sufficient evidence could harm legitimate users whose works were lawfully distributed.

This created a classic conflict between enforcement efficiency and procedural fairness. If a platform removes material whenever a claimant alleges infringement, legitimate content may disappear. If the platform requires extensive proof before acting, infringement may continue for considerable periods. The appropriate balance therefore depends on the reliability of detection mechanisms and the availability of effective dispute-resolution procedures.

4.4 Resolution

Following mediation, the fictional parties agreed to a revised intellectual property framework.

ReadSphere introduced a rights-management portal through which authors could register protected works and identify authorised distributors. The platform also agreed to establish a graduated response mechanism. Alleged infringements would initially receive a notice requesting clarification. Repeated or demonstrably serious infringement would trigger temporary suspension. Users would have an opportunity to challenge removal decisions.

The authors, in turn, agreed to provide standardised ownership information and to distinguish clearly between exclusive and non-exclusive licensing arrangements.

The settlement did not eliminate the possibility of infringement. Instead, it redistributed responsibility between the rights holders and platform operator.

4.5 Analysis

The ReadSphere case demonstrates that platform responsibility cannot be considered solely through the binary categories of "infringer" and "non-infringer." Platforms increasingly occupy an intermediate position in which they influence how intellectual property is discovered, distributed, ranked, and monetised.

The recommendation algorithm was particularly significant. Although the algorithm did not create the disputed works, it influenced their commercial visibility. This raises a broader question: should algorithmic amplification create additional responsibilities for platforms?

A rights-neutral answer may appear attractive, but algorithmic systems are not always neutral. Platforms make design choices regarding ranking, promotion, monetisation,

and accessibility. Where those choices substantially contribute to the commercial exploitation of protected material, legal systems may reasonably consider whether additional duties should arise.

The case also demonstrates the limitations of purely contractual approaches. A contract can allocate rights between the platform and the user, but it cannot necessarily resolve disputes involving third-party copyright holders. Furthermore, users may lack bargaining power when agreeing to standardised platform terms.

A more sustainable approach therefore combines contract, technology, and procedural safeguards.

5. CASE STUDY II: NORDCODE SOLUTIONS v. GLOBALCODE MARKETPLACE

5.1 Background

NordCode Solutions was a fictional software development company established in Helsinki, Finland. The company specialised in cybersecurity applications for medium-sized enterprises.

In 2023, NordCode contracted with GlobalCode Marketplace, a fictional international platform connecting businesses with freelance software developers. NordCode commissioned the development of a software module designed to identify unusual patterns in network traffic.

The development project involved twelve programmers located in five countries. The platform's standard agreement stated that intellectual property created specifically for a client would transfer to the client upon payment. However, it also stated that developers retained ownership of "pre-existing tools, methodologies, libraries, and reusable code."

The dispute arose after NordCode discovered that portions of the final software appeared to resemble code contained in a developer's earlier commercial library.

NordCode argued that the developer had incorporated proprietary material without disclosure. The developer maintained that the code constituted general programming knowledge and reusable technical infrastructure.

5.2 Ownership versus Contribution

The first issue concerned ownership of the final software. NordCode had paid for the development and therefore expected exclusive commercial control.

The developer argued that the final product contained components developed before the contract. The developer therefore claimed that transferring all rights would effectively transfer unrelated intellectual property.

This illustrates a fundamental problem in collaborative software development: determining where pre-existing intellectual property ends and newly created intellectual property begins.

The boundary is often difficult to identify because software is modular. Developers routinely use frameworks, libraries, templates, algorithms, and coding techniques that were developed previously. A newly created application may therefore contain hundreds of components originating from different sources.

5.3 Trade Secrets

The dispute also involved trade secrets. NordCode's software relied upon a proprietary method for detecting unusual network behaviour. The company argued that disclosure of the underlying logic would undermine the commercial value of the product.

The developer responded that some technical information was necessary for maintaining the software and that contractual confidentiality obligations could not prevent reasonable professional use of general knowledge.

This distinction between confidential information and general skill is important. Intellectual property law should protect commercially valuable confidential information without preventing individuals from applying their professional knowledge in future employment or projects.

An excessively broad conception of trade secrecy may therefore suppress competition and labour mobility.

5.4 Contractual Ambiguity

The fictional contract contained an intellectual property clause of approximately 1,200 words. Despite its length, the clause failed to define "pre-existing materials," "reusable code," or "derivative components."

This is an important lesson. Contractual length does not necessarily produce contractual certainty.

The parties had assumed that intellectual property ownership was obvious. It was not. A more precise contract could have required developers to identify pre-existing components before commencing work and maintain a software inventory throughout development. It could also have specified whether NordCode would receive ownership, an exclusive licence, or a perpetual non-exclusive licence for each category of material.

5.5 Resolution

The parties ultimately agreed that NordCode would receive exclusive ownership of the newly created application and an irrevocable commercial licence to the identified pre-existing components incorporated into it.

The developer retained ownership of the underlying reusable library but agreed not to disclose NordCode's confidential implementation details.

5.6 Analysis

The NordCode case illustrates why software intellectual property cannot be reduced to a single question of copyright ownership.

Software development commonly involves overlapping interests: copyright in source code, patents in certain technical inventions where available, trademarks associated with products, trade secrets concerning algorithms and architecture, contractual rights, and open-source licensing obligations.

Platform-mediated development adds another layer because the platform may establish standard contractual terms without fully understanding the technical architecture of each project.

The case also highlights the importance of provenance. When software is developed collaboratively, parties need reliable records showing who created each component, when it was created, whether it was pre-existing, and under what licence it was incorporated.

Technological tools may therefore become important components of intellectual property governance.

6. CASE STUDY III: MIRA SOLBERG v. ARTIFEX AI SYSTEMS

6.1 Background

The third case concerns a fictional Swedish digital artist, Mira Solberg, and Artifex AI Systems, a fictional company providing an AI-assisted visual design platform.

Solberg was commissioned by a European architectural company to develop a series of conceptual images for a proposed cultural centre. She used Artifex's platform to generate approximately 600 preliminary visual outputs and subsequently selected, modified, and combined several outputs to produce twelve final designs.

The architectural company later sought to register the designs as part of its broader branding and development portfolio. Artifex argued that its platform terms granted the company a broad licence over generated material.

Solberg disagreed. She claimed that she had authored the final works because she had developed the concepts, selected the outputs, refined the compositions, edited the images manually, and determined the final artistic arrangement.

The dispute therefore concerned the boundary between human creativity and machine-assisted production.

6.2 The Authorship Problem

Traditional copyright systems generally depend upon the existence of a human author or another legally recognised rights-bearing entity. Generative AI complicates this model because the final output may result from multiple contributions.

The first contribution may come from the developer of the AI model. The second may come from the user who writes prompts. The third may arise from the model's internal

computational processes. The fourth may come from a human who selects, edits, and arranges the outputs.

Determining which contribution is legally significant is therefore difficult.

In Solberg's case, the AI system generated the initial visual material, but the final images involved substantial human selection and editing.

6.3 The Platform's Terms

Artifex's terms of service stated that users could commercially exploit generated outputs subject to certain restrictions. However, the terms also stated that Artifex retained rights necessary to improve its services and operate its technology.

Solberg argued that this provision was unclear because it potentially allowed the company to use commercially sensitive client designs for model development.

Artifex maintained that training and system improvement were necessary to maintain service quality.

The dispute consequently extended beyond ownership into the broader question of how AI companies may use user-generated content.

6.4 Competing Interests

Three competing interests were identifiable.

First, Solberg had an interest in receiving recognition and control over her creative contribution.

Second, the architectural company had an interest in obtaining commercially usable designs.

Third, Artifex had an interest in improving its AI system and protecting its technical infrastructure.

There was also a fourth, broader public interest: maintaining an environment in which AI-assisted creativity could develop without undermining established principles concerning human creative labour.

6.5 Resolution

The parties entered into a fictional settlement based on contribution rather than exclusive technological ownership.

Solberg received contractual recognition as the creative designer of the final collection and retained rights in her independently created modifications. The architectural company received a broad commercial licence for the completed designs. Artifex retained rights in its software and underlying model but agreed not to use the specific final designs for model training without additional consent.

The parties also adopted a disclosure statement indicating that the works had been created using AI-assisted tools.

6.6 Analysis

The Solberg case illustrates the possibility of moving beyond the simplistic question of whether "AI owns the work."

The more useful inquiry is to examine the nature and degree of human contribution. Where a person merely presses a button and receives an unpredictable output, the basis for recognising conventional authorship may be comparatively weak. Where a person develops a detailed artistic concept, selects among numerous outputs, modifies the material substantially, and exercises creative judgment over the final work, the human contribution may be more significant.

This contribution-based approach does not necessarily resolve every legal question, but it offers a practical framework for distinguishing different forms of AI-assisted creation.

The case also highlights the importance of contractual transparency. Users should understand whether platform operators may use uploaded material or generated outputs for training, system improvement, commercial purposes, or other activities.

7. COMPARATIVE ANALYSIS OF THE THREE CASES

The three fictional cases differ substantially in their subject matter, yet several common patterns emerge.

The first is the increasing importance of **platform architecture**. In each case, the platform did more than simply connect parties. ReadSphere influenced content visibility; GlobalCode established contractual and technical infrastructure for software development; and Artifex provided the technological environment in which creative works were generated.

The second common feature is **fragmented ownership**. Intellectual property was rarely attributable to one actor alone. Multiple individuals and organisations contributed to the creation, distribution, or exploitation of the relevant assets.

The third is the growing significance of **contractual governance**. Each case involved contractual terms attempting to allocate rights. Yet each also demonstrated the limitations of contracts that are vague, overly broad, or difficult for users to understand.

The fourth is the need for **procedural mechanisms**. Rights are useful only if disputes can be resolved effectively. Automated removal mechanisms may protect rights holders but can also produce false positives. Conversely, slow enforcement may permit extensive infringement.

The cases can therefore be understood through five interconnected dimensions.

Ownership: Ownership remains fundamental, but it is increasingly difficult to determine. Digital production commonly involves multiple contributors, pre-existing components, platform infrastructure, and third-party materials.

Control: Ownership and control are not identical. A creator may technically own copyright but have limited practical control over distribution. A platform may not own a work but nevertheless possess substantial practical control through its algorithms and infrastructure.

Contract: Contracts remain essential because intellectual property law often provides default rules that parties can modify through agreement. However, contractual freedom must be balanced against information asymmetry and unequal bargaining power.

Technology: Technology can both create and solve intellectual property problems. Digital tools enable rapid infringement, but the same tools can facilitate rights identification, provenance tracking, automated detection, and licensing management.

Public Interest: Intellectual property rights exist within a broader social framework. Excessive enforcement can inhibit education, research, competition, creativity, and technological development. Insufficient enforcement, however, may reduce incentives to create and invest.

8. INTELLECTUAL PROPERTY ENFORCEMENT AND PROPORTIONALITY

A recurring issue across all three cases is proportionality.

Intellectual property enforcement should be sufficiently effective to deter unlawful exploitation but should not impose unnecessary restrictions on legitimate activity.

For example, consider an automated copyright detection system. If the system removes every document containing potentially protected material, legitimate quotation, criticism, educational use, and transformative activity may be suppressed. Conversely, if the system takes no action until a court issues a final decision, infringement may continue for months or years.

A proportional enforcement model could therefore use graduated responses.

The first stage could involve automated identification. The second could involve human verification. The third could involve temporary restrictions in cases presenting credible evidence of infringement. The fourth could provide a formal dispute mechanism.

Such an approach would recognise that not every intellectual property dispute requires the same response.

Proportionality is also important in relation to remedies. Permanent removal of an entire account may be excessive where the alleged infringement concerns a single work. Similarly, a platform should not necessarily be required to disclose all proprietary technical information merely because a rights holder requests evidence.

9. THE ROLE OF CONTRACTUAL GOVERNANCE

The cases strongly support the proposition that platform terms should become more transparent.

Three categories of intellectual property clauses deserve particular attention.

First, **ownership clauses** should identify who owns newly created material and distinguish that material from pre-existing intellectual property.

Second, **licensing clauses** should specify the scope, duration, territory, and commercial purpose of licences. A user should be able to understand whether the platform can use uploaded material for advertising, system improvement, artificial intelligence training, or other purposes.

Third, **enforcement clauses** should explain how intellectual property complaints are processed and what procedural rights users possess.

The principle of informed contractual consent is particularly important in digital environments. Users often encounter lengthy standard terms presented on a take-it-or-leave-it basis. Formal acceptance does not necessarily mean that the user has meaningfully understood the consequences.

Platforms should therefore consider presenting intellectual property provisions in accessible language, supplemented by concise explanations.

10. ARTIFICIAL INTELLIGENCE AND THE FUTURE OF AUTHORSHIP

The AI case raises perhaps the most difficult question considered in this article: whether existing concepts of authorship are capable of accommodating machine-assisted creativity.

One possible approach is to maintain a strict human-authorship requirement. Under such an approach, AI-generated output would not receive conventional copyright protection unless sufficient human creative contribution existed.

A second approach would recognise the platform operator as a rights holder. This could provide commercial certainty but may create excessive concentration of rights in technology companies.

A third approach would recognise the user as the rights holder whenever the user initiates generation. This approach is attractive from a commercial perspective but could potentially grant protection to outputs involving little or no human creativity.

A fourth approach, which this article favours for analytical purposes, is a **graduated human-contribution model**.

Under this model, the legal significance of human involvement would depend upon factors including:

1. the originality of the human concept;
2. the specificity of instructions supplied to the system;
3. the degree of human selection among outputs;
4. the extent of human modification;
5. the arrangement of individual elements;
6. the creative judgment exercised in producing the final work; and
7. the extent to which the final work reflects identifiable human creative choices.

This approach recognises that AI-assisted creation exists on a spectrum rather than as a binary category.

11. INTELLECTUAL PROPERTY AND COMPETITION

Intellectual property rights can encourage innovation, but excessive control can also restrict competition.

This issue is particularly relevant to digital platforms because dominant platforms may accumulate large portfolios of intellectual property and control significant technical infrastructure.

Suppose a platform requires developers to grant broad licences over all software created through its system. The platform may gradually acquire extensive control over code generated by thousands of developers. Although each individual licence may appear commercially reasonable, the cumulative effect could create significant competitive advantages.

Similarly, an AI company that obtains broad rights over user-generated content may accumulate an enormous dataset of creative material. This could increase the company's technological advantage while reducing creators' bargaining power.

Competition policy should therefore remain part of the intellectual property discussion.

The objective should not be to weaken intellectual property rights generally. Rather, policymakers should examine whether contractual and technological practices result in unreasonable concentration of control.

12. PROPOSED PLATFORM-SENSITIVE IP GOVERNANCE MODEL

Based on the three cases, this article proposes a five-part platform-sensitive governance model.

Transparent Ownership: Platforms should clearly identify ownership rules for user-generated and platform-assisted material. Pre-existing intellectual property should be distinguished from newly created works.

Traceable Provenance: Digital systems should facilitate records concerning the origin and development of intellectual property. In software, this may involve component inventories. In creative works, metadata and version histories may be relevant. In AI-assisted creation, records of prompts, revisions, and human modifications may provide evidence of contribution.

Proportionate Enforcement: Enforcement mechanisms should distinguish between credible infringement and uncertain allegations. Automated systems should be complemented by human review where removal could significantly affect legitimate activity.

Procedural Fairness: Users accused of infringement should receive sufficient information concerning the allegation and, where appropriate, an opportunity to respond.

Public-Interest Safeguards: Intellectual property enforcement should account for legitimate research, education, criticism, competition, interoperability, and transformative creativity.

The proposed model does not require identical rules across all platforms. Instead, it provides principles capable of adaptation according to the platform's business model and technological characteristics.

13. DISCUSSION

The cases demonstrate that the fundamental challenge facing contemporary intellectual property law is not necessarily the disappearance of traditional rights. Copyright, trademarks, patents, and trade secrets remain economically and legally significant. The challenge lies in applying those rights within environments characterised by rapid technological change and distributed production.

The traditional model assumes relatively clear relationships: an author creates a work, a publisher distributes it, and a consumer purchases it. Digital platforms introduce multiple intermediaries between these stages.

The creator may use an online tool. The platform may store the content. An algorithm may recommend it. Another platform may reproduce it. A consumer may modify it. An AI system may incorporate it into a new output. The resulting chain of activity makes it difficult to identify where ownership ends and new creation begins.

Consequently, intellectual property governance should become more attentive to processes rather than merely outcomes.

Instead of asking only, "Who owns this work?", regulators, courts, and contracting parties may also need to ask:

Who created the underlying material?

Who contributed to the final output?

Who controls distribution?

Who possesses the relevant technical information?

What contractual rights were granted?

What technological systems influenced the creation or dissemination?

What interests would be affected by enforcement?

Such questions provide a more complete picture of modern intellectual property disputes.

14. POLICY IMPLICATIONS

Several policy implications follow from the analysis.

First, policymakers should encourage clearer digital intellectual property contracts. Standard terms should identify ownership, licensing, data usage, and enforcement provisions in accessible language.

Second, regulators should encourage platforms to establish transparent intellectual property complaint mechanisms. Procedural fairness should become a central component of digital rights enforcement.

Third, governments and industry bodies should support provenance technologies. Reliable records of creation and modification can reduce disputes concerning ownership.

Fourth, AI governance should distinguish between the underlying technology and individual creative outputs. A platform's ownership of its model should not automatically determine ownership of every output generated through the model.

Fifth, intellectual property policy should remain attentive to competition. Broad contractual rights can create substantial commercial advantages for dominant platforms even when each individual transaction appears voluntary.

Finally, legal education should increasingly integrate technology. Lawyers advising digital businesses must understand software architecture, AI systems, platform economics, and data governance alongside conventional intellectual property doctrine.

15. LIMITATIONS

This study has several limitations.

First, the cases are fictional and therefore cannot establish empirical conclusions about actual judicial behaviour or market outcomes. Their purpose is analytical and pedagogical.

Second, the article adopts a cross-jurisdictional perspective without applying the detailed statutory framework of any one legal system. Actual disputes would require jurisdiction-specific analysis.

Third, the rapidly changing nature of artificial intelligence means that the legal and technological assumptions underlying the third case may evolve considerably.

Fourth, the study focuses primarily on copyright, software-related intellectual property, trade secrets, and platform governance. Patent law, trademark law, geographical indications, and design protection are discussed only where relevant.

Future empirical research could examine actual litigation and arbitration involving digital platforms and compare judicial approaches across jurisdictions.

16. CONCLUSION

Digital platforms are transforming intellectual property from a relatively linear system of creation and ownership into a complex ecosystem involving creators, users, intermediaries, algorithms, developers, and technology providers.

The three fictional cases examined in this article demonstrate different manifestations of this transformation. The ReadSphere dispute illustrates the difficulty of allocating responsibility for unauthorised digital reproduction. The NordCode dispute demonstrates the challenges of determining ownership in collaborative software development. The Artifex dispute highlights emerging questions concerning AI-assisted creativity and human authorship.

Despite their differences, the cases reveal a common principle: intellectual property governance cannot rely exclusively upon ownership rules. Effective governance must also address control, contractual transparency, technological infrastructure, enforcement procedures, and public interest.

The most appropriate approach is therefore neither unrestricted enforcement nor unrestricted access. Rather, intellectual property systems should seek to preserve incentives for creation and investment while preventing unnecessary barriers to innovation, competition, and legitimate use.

A platform-sensitive model based on transparent ownership, traceable provenance, proportionate enforcement, procedural fairness, and public-interest safeguards can contribute to this balance.

The future of intellectual property law will depend increasingly upon its capacity to accommodate technological change without abandoning the fundamental objectives of the intellectual property system. The law must protect creativity without monopolising creativity, facilitate innovation without permitting exploitation, and provide enforceable rights without losing sight of the public purposes that justify those rights.

Ultimately, the central question is not whether digital platforms should be subject to intellectual property law. They inevitably are. The more important question is how intellectual property law should evolve so that it remains effective, proportionate, and legitimate in a world where creation, distribution, and innovation increasingly occur through digital infrastructures.

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