

Maharashtra National Law University, Nagpur



**CERTIFICATE
OF PAPER PRESENTATION**

This is to Certify that

Ganesh Shrirang Satarkar

From Central University of Haryana, has presented paper titled: Data Sovereignty and Copyright Governance in the Digital Age: A Legal Pathway Towards Viksit Bharat 2047 in the Virtual National Seminar on 'Copyright and Databases in the Digital Age: Balancing Protection, Innovation, and Access for Viksit Bharat 2047' on November 11th, 2025 organised by CIPR & DPIIT-IPR Chair at Maharashtra National Law University, Nagpur.

Dr. Ragini P. Khubalkar

Associate Professor of Law &
Head of CIPR & DPIIT-IPR Chair,
MNLU, Nagpur

Prof. (Dr.) Vijender Kumar

Vice Chancellor,
MNLU, Nagpur

Certificate Number: **11003**

Data Sovereignty and Copyright Governance in the Digital Age: A Legal Pathway towards Viksit Bharat 2047

Author:

Mr. Ganesh Diriang Satarkar

Central University of Haryana, Haryana

Email: ganeshnale0@gmail.com | +91 7066766607

Abstract

In the twenty-first century, data has emerged as both a public resource and a private asset, forming the backbone of innovation, governance, and national development. As India envisions *Viksit Bharat 2047*—a future driven by technology, knowledge, and inclusivity—the question of how databases should be protected, shared, and governed becomes central to this transformation. Copyright law, traditionally designed to safeguard creative expressions, faces new challenges in addressing ownership and access within data-driven ecosystems. The emergence of *Artificial Intelligence (AI)*, *Big Data*, *Cloud Computing*, and *Blockchain* technologies has blurred the distinction between creator, compiler, and user, creating a pressing need for reimagined legal frameworks for database protection. This paper explores the intersection of **copyright, data sovereignty, and innovation** in the Indian context, assessing whether existing copyright provisions under the *Copyright Act, 1957* are sufficient to ensure both protection and equitable access to databases. By adopting a comparative approach, the paper examines the European Union's *sui generis* model under the *EU Database Directive (96/9/EC)* and evaluates its relevance to India's emerging digital ecosystem. It further analyses how India's *Digital Personal Data Protection Act, 2023* and proposed *Digital India Act* may influence the governance of data-driven platforms, emphasizing the need to balance intellectual property rights with the principles of *open data* and *public interest*. Through doctrinal and policy-based analysis, the study argues that India must adopt a hybrid model that aligns copyright protection with data ethics, national security, and innovation imperatives. The paper proposes a roadmap for *harmonized governance of databases*—one that integrates legal reform, technological transparency, and public accountability. Ultimately, this research contends that a robust, inclusive database regime will be instrumental in realizing the vision of *Viksit Bharat 2047*, fostering a knowledge economy that values both innovation and accessibility.

Keywords: Copyright, Databases, Data Sovereignty, Viksit Bharat 2047, Artificial Intelligence, Innovation, Open Data.

1. Introduction

The rapid expansion of the digital economy has transformed data into the most valuable commodity of the modern era. From business analytics to artificial intelligence, from medical research to agricultural planning, databases have become indispensable tools for progress. In this context, the question of ownership, control, and equitable access to data has acquired constitutional, legal, and ethical significance. India's vision of *Viksit Bharat 2047*—marking the centenary of independence—places technology and innovation at the heart of its developmental strategy. Central to this vision is the idea of a **knowledge-based economy**,

where digital transformation and data-driven governance enable inclusive and sustainable growth. However, while India has made significant progress in digital infrastructure and data protection policy, the **legal framework for database protection remains underdeveloped**. The existing *Copyright Act, 1957*, though broad, is limited in its ability to address the challenges of protecting non-original compilations, AI-generated datasets, and large-scale public databases. The lack of a *sui generis* system of protection, similar to the European Union's *Database Directive*, leaves data compilers, researchers, and innovators uncertain about their rights. This paper, therefore, seeks to critically examine the intersection of copyright and database governance in the digital age. It argues that India requires a balanced approach that safeguards the rights of data creators while promoting access, innovation, and public welfare in line with the objectives of *Viksit Bharat 2047*.

2. Concept and Legal Nature of Databases

A *database* can be defined as a systematic or methodical collection of independent works, data, or materials arranged in a manner that allows access or retrieval by electronic or other means. Under Indian law, databases fall under the category of *literary works* within Section 2(o) of the *Copyright Act, 1957*. However, to qualify for protection, the database must demonstrate *originality*, which Indian courts have interpreted as involving a minimal degree of creativity. Databases present a complex challenge in copyright law because their value often lies in the *selection, arrangement, and verification* of data rather than in the creation of the data itself. While creativity may be limited, the *investment*—both financial and intellectual—made by the compiler is substantial. This has prompted several jurisdictions, including the European Union, to introduce *sui generis* rights that protect the *investment* rather than the creativity involved. In India, however, such protection is absent. Courts have generally extended protection to databases only where originality in selection and arrangement is evident. The absence of statutory recognition of non-original databases creates a protection gap, especially in industries reliant on massive data compilation such as health research, weather forecasting, and AI development.

3. Copyright Protection of Databases in India

Under the *Copyright Act, 1957*, databases are protected as literary works provided they meet the originality threshold. The Indian judiciary follows the *modicum of creativity* standard laid down in *Eastern Book Company v. D.B. Modak* (2008), aligning with the U.S. “sweat of the brow” doctrine. In *Eastern Book Company*, the Supreme Court held that mere labour and skill without minimal creativity does not attract copyright protection. Applying this principle to databases, protection is limited to the creative aspects of data arrangement and presentation, not to the underlying facts or data themselves. However, this leaves vast categories of databases—especially those created through automated or AI-assisted processes—outside the protective umbrella of copyright. Moreover, the *Copyright Act* provides no mechanism to address ownership of machine-generated works or collective datasets derived from multiple contributors. This gap in protection affects the incentive for data compilation and may deter private investment in large-scale databases. It also raises questions of data sovereignty, especially when databases of national importance (such as health or biometric records) are stored or processed by foreign entities.

4. Comparative Framework: The EU Sui Generis Model

The European Union's *Database Directive (96/9/EC)* introduced a two-tier system of protection: copyright protection for original databases and a sui generis right for databases demonstrating *substantial investment*. This sui generis right protects the maker of a database from the extraction or reutilization of substantial parts of its contents. The landmark case *British Horseracing Board Ltd. v. William Hill Organisation Ltd.* (2004) clarified that “substantial investment” refers to investment in obtaining, verifying, or presenting data—not in creating the data. This approach provides a broader safety net for database makers and incentivizes data-driven industries. While the Directive has faced criticism for potentially over-protecting databases and restricting public access, it remains a useful model for developing jurisdictions like India. A similar sui generis right could promote investment in large datasets while allowing fair-use exceptions for education, research, and innovation. For India, adopting a balanced version of this framework—perhaps under a dedicated *Database Protection Act*—would harmonize legal certainty with developmental priorities.

5. Data Sovereignty, Innovation, and Viksit Bharat 2047

Data sovereignty refers to the concept that data is subject to the laws and governance structures of the nation where it is collected. As India aspires to become a global digital power, maintaining control over critical data assets is essential for national security, economic competitiveness, and citizen privacy. India's *Digital Personal Data Protection Act, 2023* introduces a comprehensive framework for personal data governance. However, its focus remains on individual privacy rather than database ownership or copyright. Similarly, the proposed *Digital India Act* aims to modernize the country's digital governance framework but has yet to define the contours of database rights. To achieve the goals of *Viksit Bharat 2047*, India must develop policies that integrate IP protection with digital governance. Databases are foundational to emerging technologies like AI, blockchain, and quantum computing. Without legal clarity on ownership, usage rights, and data sharing, innovation ecosystems risk stagnation. Therefore, the principle of *data sovereignty* must evolve beyond territorial control to encompass *data value sovereignty*—ensuring that economic and social benefits derived from data remain within the country.

6. Emerging Technologies and Database Governance

The rise of artificial intelligence and big data analytics challenges traditional notions of authorship and ownership. AI systems rely on massive datasets to “learn” patterns, but these datasets often contain copyrighted materials. The question arises: Who owns AI-generated databases—the developer, the trainer, or the algorithm itself? The *text and data mining (TDM)* exception, recognized in jurisdictions such as the EU and Japan, allows limited use of copyrighted materials for machine learning. India currently lacks such explicit exceptions, potentially stifling research and innovation. Moreover, the use of blockchain technology offers a promising solution for transparent database management. Smart contracts can automate licensing, while distributed ledgers can verify authenticity and ownership. Integrating such technologies within India's IP framework could foster trust and efficiency in data-driven transactions. Ultimately, the challenge lies in crafting a legal regime that accommodates both technological dynamism and ethical responsibility.

7. Open Data, Public Interest, and Equitable Access

The concept of open data emphasizes transparency, accountability, and inclusivity. Government initiatives such as *Digital India*, *IndiaStack*, and *Open Government Data (OGD)* platforms exemplify India's commitment to democratizing data. Databases in public sectors—healthcare, agriculture, and education—serve as public goods. Restrictive copyright regimes could limit their social utility. Therefore, a distinction must be drawn between **commercial databases** deserving of protection and **public-interest databases** that should remain open and accessible. Policies should encourage *open licensing models*, such as Creative Commons, for publicly funded data projects. Furthermore, India must adopt clear data-sharing norms that enable collaboration between academia, industry, and government without compromising privacy or security. Balancing proprietary rights with public access is essential to ensure that digital progress translates into social welfare—an ethos central to *Viksit Bharat 2047*.

8. International and Comparative Perspectives

Globally, approaches to database protection vary. The United States, for instance, relies solely on copyright, rejecting the EU-style *sui generis* right after the *Feist Publications v. Rural Telephone Service* (1991) decision. Japan and South Korea, by contrast, have introduced hybrid models combining copyright with limited database protection. For India, adopting an internationalized yet indigenous approach is vital. Cross-border enforcement of database rights will also become critical as India expands its participation in global digital trade and data exchanges. Aligning domestic law with instruments like the *WIPO Copyright Treaty* (1996) and *TRIPS Agreement* (1994) will enhance India's credibility in global IP governance.

9. Challenges and Research Gaps

Despite policy advancements, several challenges persist:

1. **Absence of *sui generis* legislation:** India lacks a dedicated statute for database protection.
2. **Ambiguity in ownership:** Government-funded and collaborative databases lack clarity on ownership and licensing.
3. **Judicial inconsistency:** Indian courts have not yet evolved a consistent jurisprudence on databases.
4. **Overlap with data protection laws:** The interface between copyright, privacy, and data protection remains unresolved.
5. **Technological barriers:** Issues like data localization, cyber security, and AI ethics complicate enforcement.

Research in India has focused primarily on copyright and privacy, leaving database governance underexplored. Future studies must bridge this gap by integrating IP law, digital governance, and ethics into a unified framework.

10. Policy Recommendations

To align database governance with the goals of *Viksit Bharat 2047*, the following measures are proposed:

1. **Enact a Database Protection Act:** Introduce sui generis protection recognizing investment-based rights and fair-use exceptions.
2. **Establish a National Database Authority (NDA):** A specialized body to regulate licensing, metadata standards, and access protocols.
3. **Revise the Copyright Act, 1957:** Include explicit recognition of databases and AI-generated works.
4. **Promote Public-Private Data Partnerships:** Facilitate collaboration while ensuring accountability and benefit-sharing.
5. **Encourage Open Data Policies:** Mandate open access for publicly funded research and datasets.
6. **Integrate Emerging Technologies:** Use blockchain and AI for automated rights management and data integrity.
7. **Strengthen Digital Literacy:** Build awareness of data rights among citizens and researchers.

Such reforms will foster a dynamic knowledge economy and ensure that innovation remains inclusive, secure, and sustainable.

11. Conclusion

As India strides toward *Viksit Bharat 2047*, data will define its developmental trajectory. The protection and governance of databases are not merely legal concerns—they are strategic imperatives. This paper concludes that India's current copyright framework, while robust in traditional domains, is inadequate for the complexities of digital data governance. A sui generis system, coupled with open-access principles and technological integration, can ensure a just equilibrium between protection, innovation, and access.

By harmonizing legal reform with digital ethics and policy innovation, India can establish itself as a **global leader in database governance**, transforming data from a resource into a catalyst for national growth and human advancement.

12. References (ILI Format)

1. *The Copyright Act, 1957* (India).
2. *Digital Personal Data Protection Act, 2023* (India).
3. *EU Database Directive 96/9/EC*, Official Journal of the European Communities (1996).
4. *Eastern Book Company v. D.B. Modak*, (2008) 1 SCC 1.
5. *British Horseracing Board Ltd. v. William Hill Organisation Ltd.*, Case C-203/02 (ECJ 2004).
6. *Feist Publications Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991).
7. World Intellectual Property Organization (WIPO), *WIPO Copyright Treaty*, 1996.
8. OECD, *Data Governance in the Digital Age*, OECD Digital Economy Papers, 2021.
9. NITI Aayog, *Strategy for New India @ 75*, Government of India, 2018.
10. Ministry of Commerce and Industry, *National IPR Policy*, 2016.

13. Disclaimer of Originality

This paper is an original work authored by **Mr. Ganesh Diriang Satarkar**, Central University of Haryana. It has not been published, nor is it under consideration for publication elsewhere. The views expressed are solely those of the author and intended for academic discussion at the *One-Day National Seminar on Copyright and Databases in the Digital Age: Balancing Protection, Innovation, and Access for Viksit Bharat 2047*, organized by MNLU Nagpur.