# MINING THE MIND: LEGAL AND ETHICAL DIMENSIONS OF SOCIAL MEDIA DATA MINING IN INDIA

**Manya Jaiswal*** **Raj Vardhan Vishwakarma***

## ABSTRACT

*The study investigates the moral and legal issues that arise from social media data extraction operations throughout India. Such data mining operations deliver economic value with dual benefits of enhanced social engagement and improved innovation, but create problems regarding personal data protection and surveillance activity, as well as legal adherence regulations. This research evaluates social media data extraction approaches, assesses the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 and the Digital Personal Data Protection Act 2023 for effectiveness, and explores both present ethical challenges and legal complexities and prospective reform needs. Qualitative analysis conducted through systematic evaluation of academic work, official notifications from government bodies, and judicial and well-documented case studies published by recognised platforms formed the methodology of this study. Restricting research sources to both secondary data and observed evidence produces complete insights into regulatory performance and limitations. The existing legal instruments have established core digital rights protection, but prove inadequate to tackle the complex issues around data storage practices alongside ensuring complete user privacy in modern digital environments. The inconsistent implementation of these regulations creates chances for misuse, which deteriorates user trust. As a final point, the study presents specific policy proposals that focus on enhancing user rights combined with improved transparency and better accountability measures. The establishment of these measures works to create an ethical digital space in India, which monitors technological progress while defending the fundamental rights of users.*

**Keywords:** Mining, Social Media, Ethics.

*BA LLB, FIRST YEAR, CITY LAW COLLEGE, JANKIPURAM.
*BA LLB, FIRST YEAR, CITY LAW COLLEGE, JANKIPURAM.

## INTRODUCTION

Modern society depends on social media platforms, which enable communication activities coupled with information sharing and business management functions. India maintains its position as one of the biggest social media markets because of its 600 million internet users, whose use of Facebook, Twitter, Instagram, and WhatsApp keeps rising at incredible speeds. The rapid growth of social media platforms has resulted in recorded personal data volumes that generate essential opportunities for both innovation and marketing strategies, and governmental policies. The massive collection of user information, along with its subsequent processing, generated vital ethical and legal challenges that mainly affect privacy rights and user consent, as well as information protection standards.

**The Rise of Social Media Data Mining:** Social media data mining uses user-generated content analysis to discover useful patterns alongside trends and understandings from the data. Organisations use this data to study how customers behave for preparing marketing strategies that deliver better user experiences. Governments, alongside organisations, employ this methodology to track public sentiment as they create policies and conduct surveillance activities. Social applications bring benefits to users, yet create major risks because they degrade user privacy and decrease personal autonomy levels.

**Ethical Concerns in Data Mining:** Social media data mining faces its major ethical concern when users lack knowledge about how their data will be used. Users typically remain clueless about how far their data extends in terms of collecting and analysing, and sharing. The illusion of informed consent arises when users agree to the terms of service without fully understanding the implications, leading to potential exploitation of their personal information.[1]

The fourth crucial issue centres on privacy invasion. Many user profiles emerge from combined database information, although users remain unaware that the profiles exist or did; they authorised their creation. The way data mining activities operate generates unintentional surveillance and identity theft as well as numerous kinds of personal damage. A serious problem with data mining arises from the shortage of transparency, which leads to questions about the responsible usage of information, along with difficulties in verifying accountability.

[1] Preethika Vijayakumar and Aishwarya Venkatesh, 'The Illusion of Informed Consent: Legal and Ethical Impact of Data Mining by Social Media Platforms in India' (2025) International Cybersecurity Law Review https://doi.org/10.1365/s43439-025-00142-8

## LEGAL FRAMEWORK GOVERNING DATA PROTECTION IN INDIA

Recognising the need for robust data protection mechanisms, India has introduced legislative measures to address these challenges.[2]

Social media intermediaries have to adhere to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, which require them to exercise due diligence for user privacy protection while regulating content. Platform operators must establish designated grievance officers for reporting violations, while they must track information source origins and eradicate unlawful content within specific deadlines.

The introduction of the Digital Personal Data Protection Act (DPDP Act) in August 2023 made history as the nation's first complete personal data protection legislation in India. The DPDP Act establishes a balance between the freedom of people to safeguard their data while acknowledging valid legal data processing needs. The legislation imposes duties upon data fiduciaries that perform data processing operations while establishing rights and responsibilities related to data principals who are individual data owners. Data protection compliance requirements have strict penalties stipulated in the Act because non-compliance remains illegal.

**Challenges in Enforcement and Compliance:** Social media platforms face continuous challenges in following legal compliance after new frameworks were created. Advanced technological elements tend to move beyond the pace of legislative progress, thus creating unregulated spaces. The international reach of several social media firms complicates jurisdictional enforcement because their data processing and storage systems exist throughout different nations.

The DPDP Act and IT Rules achieve their goals depending on how well their laws are defined and how strong their enforcement systems prove to be. The unclear definition of key terms alongside imprecise boundaries and implementation areas often creates a different understanding of the data protection system, which might threaten its core goals. For successful law enforcement, it remains essential to have regulatory bodies that effectively monitor compliance and properly handle violations. In conclusion, the opportunities of using social media data mining require immediate attention to privacy issues because protecting individual

[2] Bharat Dhiman, 'Ethical Issues and Challenges in Social Media: A Current Scenario' (2023) 21 Global Media Journal 62 https://doi.org/10.36648/1550-7521.21.62.368

privacy leads to maintaining trust in digital platforms. The digital transformation of India requires unified efforts from legislation, along with organisations and users, to manage data mining challenges effectively.

## SHORT STATEMENT OF THE PROBLEM

Extensive data mining methods occurred because of the widespread growth of social media platforms that now collect and analyse massive amounts of personal information in India. The adoption of social media platforms in India creates economic potential, but it prompts serious moral and legal complications involving privacy violations and a lack of user consent and protection of their data. The Digital Personal Data Protection Act (DPDPA) of 2023 remains insufficient for the proper protection of personal data between individuals. Users frequently lack knowledge about the full extent of data collection practices done on their information, thus exposing them to possible exploitation and privacy violations. The enforcement process for existing regulations offers inconsistent results due to ambiguities found within the legal framework laws, which create risks that could be misused. The situation demonstrates an urgent necessity for a complete and efficiently enforced legal structure that will resolve ethical and legal complications created by social media data mining operations within India.

## RESEARCH OBJECTIVES

1. This research *analyses* the present data mining operations of social networks in India regarding their effects on user permission, along with privacy protection.
2. To *evaluate* the power of existing legal regulation, consisting of the Information Technology Rules 2021 and the Digital Personal Data Protection Act 2023, when it comes to managing data mining operations on social media.
3. This research focuses on *identifying* the moral issues that emerge from social media data mining by assessing the aspects related to user consent and ownership rights alongside maintaining user independence.
4. We need to study how much knowledge Indian users of social media platforms have regarding the platform and third-party utilisation of their personal information.
5. The research *aims to develop* policy proposals regarding the improvement of transparency and accountability alongside user empowerment in Indian social media data mining activities.

## RESEARCH QUESTIONS

1. What ethical dilemmas arise from social media data mining practices in India?

*The research analyses significant ethical matters, including privacy violations combined with consent problems and data misuse related to social media investigations in the Indian technological landscape.*

2. What policy recommendations can be proposed to enhance transparency, accountability, and user empowerment in social media data mining?

*Research criteria should identify how to enhance data protection through legislative changes and technological methods without impeding experimental development.*

3. What are the challenges faced by victims of data breaches or unethical data mining practices on social media platforms in India?

*The research seeks to uncover the major impediments that people face, such as having insufficient recourse mechanisms and being vulnerable to exploitation.*

4. How do social media platforms in India implement and comply with ethical and legal standards for data mining, and what gaps exist in these practices?

*The investigation studies how social media operators conduct their business to evaluate their internal protective systems that maintain user privacy.*

## RESEARCH METHODOLOGY

The research combines doctrinal and empirical research methodologies through a mixed-methods approach.

**Doctrinal Research:** Involves a comprehensive analysis of legal statutes, case law, and regulatory frameworks pertinent to social media data mining in India. The researcher analyses the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 and the Digital Personal Data Protection Act 2023 to determine their effectiveness in resolving ethical and legal matters.

**Empirical Research:** Local data collection through interviews provides qualitative findings from important figures, including legal advisors and policymakers, and proactive social media

companies and digital rights advocates. The research includes surveying Indian people who use social media to understand how much they know about data mining procedures.

**Data Collection Methods -**

**Surveys:** The structured questionnaires distributed to various Indian social media users will evaluate their data mining knowledge, together with privacy worries, and their platform and regulatory body demands.

**Interviews:** Semi-structured interviews will be used to hear from legal experts, together with policymakers and social media company representatives, as well as digital rights activists, regarding the solutions and challenges concerning ethical and legal issues in social media data mining.

**Case Studies:** The research will explore specific data breaches and unethical mining practices of Indian social media companies through a detailed examination of relevant incidents to evaluate current ethical and legal standards in practice.

**Secondary Sources:** The research will explore those existing studies from secondary sources through academic journals, industry reports, and related articles to show how social media data mining relates to the general scholarly conversation.

**Scope and Limitations –**

**Scope:** Analysis concentrates on the ethical/legal ramifications of social media data mining procedures that occur in Indian territories. This research investigates current Indian legal systems while examining the understanding of social media users in this nation's environment.

**Limitation:** The research faces limitations due to restricted access to social media company data, as well as survey and interview self-reported bias, technology and legal regulatory changes that affect research validity.

## LITERATURE REVIEW

Many in India seek to study the legal boundaries and moral responsibilities of data collection from social media platforms. The research gathers essential academic works alongside legal analyses and government publications to show present understanding and define areas of

agreement and disagreement regarding the context and research gaps, and sets the proposed work within this framework.

**Academic and Legal Perspectives:** In their analysis, ***Vijayakumar and Venkatesh (2025)*** evaluate the concept of informed consent regarding social media data mining within Indian boundaries. The authors maintain that users accept complicated terms and conditions despite not understanding them, which creates both ethical consent issues along privacy risks.[3]

The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, represent a substantial change in how India controls digital platforms. Social media intermediaries must fulfil new obligations according to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, to maintain transparency and accountability standards.[4] Critics continue to make objections about the effectiveness of current laws and regulations. Research shows that current legal frameworks about the internet contain multiple pieces of legislation that are unclear, making them potentially susceptible to censorship and intervention.

**Ethical Considerations in Data Mining:** Social media data mining creates ethical dilemmas which reach past concerns about compliance with the law. Public concerns focus on user independence and ownership of personal data and the misuse of such information during data mining procedures. The lack of transparency in data collection practices and the commodification of user data without explicit consent raise significant ethical questions.

**Governmental and Institutional Reports:** The official position regarding social media regulation emerges from information released by public authorities. According to the Press Information Bureau IT Rules, 2021, establish targets that aim to enhance social media platform responsibility. SEBI expresses concern about unauthorised financial guidance on social media platforms while it seeks expanded social media record access to safeguard investors.[5]

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[3] Preethika Vijayakumar and Aishwarya Venkatesh, 'The illusion of informed consent: legal and ethical impact of data mining by social media platforms in India' (2025) International Cybersecurity Law Review https://link.springer.com/article/10.1365/s43439-025-00142-8 accessed 12 April 2025.

[4] Press Information Bureau, 'Government notifies Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021' (25 February 2021) https://pib.gov.in/PressReleasePage.aspx?PRID=1700749 accessed 12 April 2025.

[5] Ashwini Siwal, 'Social Media Platform Regulation in India – A Special Reference to The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021' in Judit Bayer and others (eds), Perspectives on Platform Regulation: Concepts and Models of Social Media Governance Across the Globe (Nomos 2021) 215 https://doi.org/10.5771/9783748929789-215 accessed 12 April 2025.

## IDENTIFIED GAPS IN EXISTING RESEARCH

The research on legal and ethical aspects of social media data mining demonstrates ample knowledge, but some knowledge gaps remain.

- Research about Indian users remains sparse because there is insufficient knowledge about their understanding of data mining methods, together with their opinions regarding privacy and consent.
- A complete review must happen because existing laws need assessment regarding their ability to protect user data while preserving privacy in practical settings.
- Data mining practices in India show little investigation into their unequal effects on marginalised population groups.

Contribution of the Present Study -

The study targets three main research areas to complete this knowledge gap.

- Empirical research should investigate how users think about and understand data mining operations performed on social media platforms.
- A study evaluates the functional capability of existing legal rules that protect user privacy.
- The research seeks to determine the effects that data mining methods have on populations throughout India.

A comprehensive analysis of ethical and legal issues related to social media data mining in India will be achieved through this investigation, which will generate effective policy recommendations.

**Data Representation:** Social media platforms in India currently generate the largest amount of user data at an unprecedented scale. This extensive information collection platform contains benefits, together with obstacles for data mining research. This section analyses Indian social media trends alongside the methods used in data mining operations and their effects.

## SOCIAL MEDIA USAGE STATISTICS IN INDIA

By early 2024, India counted 462 million social media users, which made up 32.2% of its total population. The population data shows that social media has substantially penetrated Indian

society. The gender breakdown shows that out of social media users in India, 65.5% are men versus 34.5% women. Users from the 18-34 age group represent the biggest demographic on Indian social media platforms, thus demonstrating social media's youth focus in the country.[6]

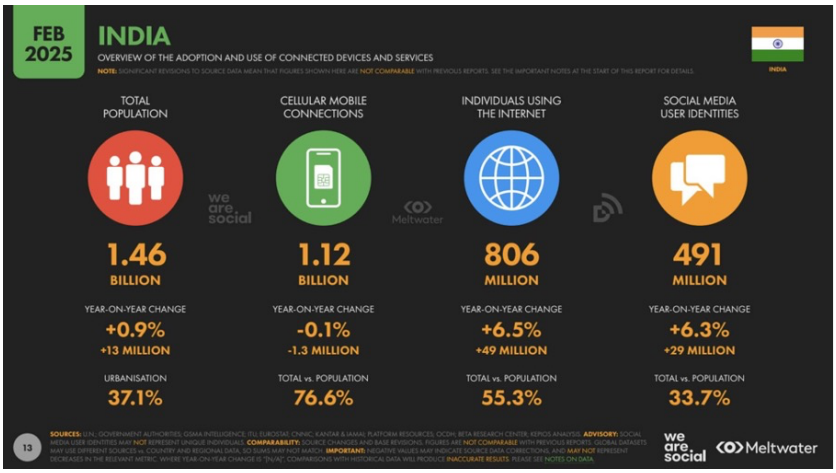
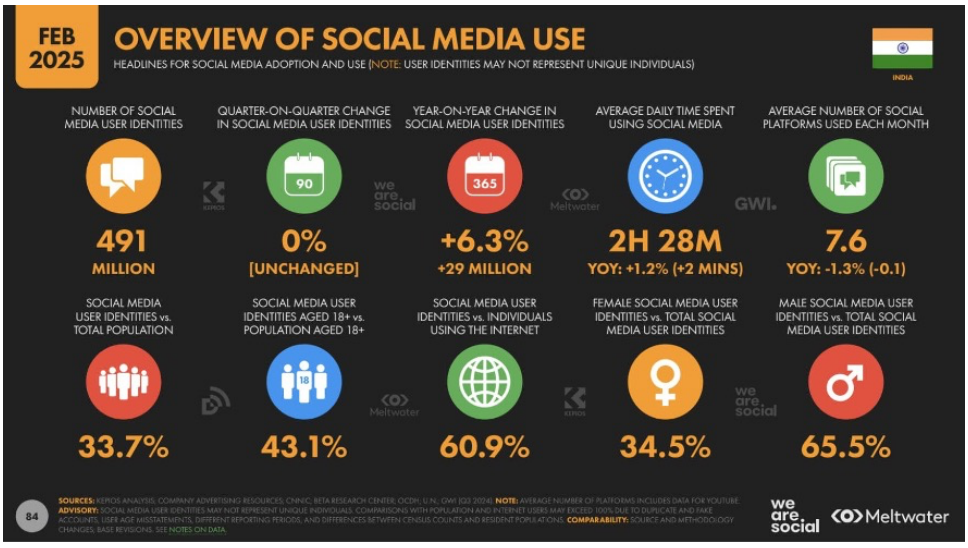



Figure 1

**Social Media Analytics Market in India:** Social media usage expansions have triggered an expansion phase for the Indian social media analytics market. Industry projections show that the revenue from this market will reach USD 4,287.2 million in 2030 as it demonstrates a compound annual growth rate of 42% over the period 2024 to 2030. Social media interaction data analytics has become essential to society because the market continues to show rapid growth.




[6] Sue Howe, 'Social Media Statistics for India [Updated 2025]' (Meltwater, 14 March 2025) https://www.meltwater.com/en/blog/social-media-statistics-india accessed 12 April 2025.

Figure 2

**Time Spent on Social Media:** Users in India spend about 2 hours and 28 minutes each day dedicated to social media access, according to user behaviour, which demonstrates its central role within everyday life.

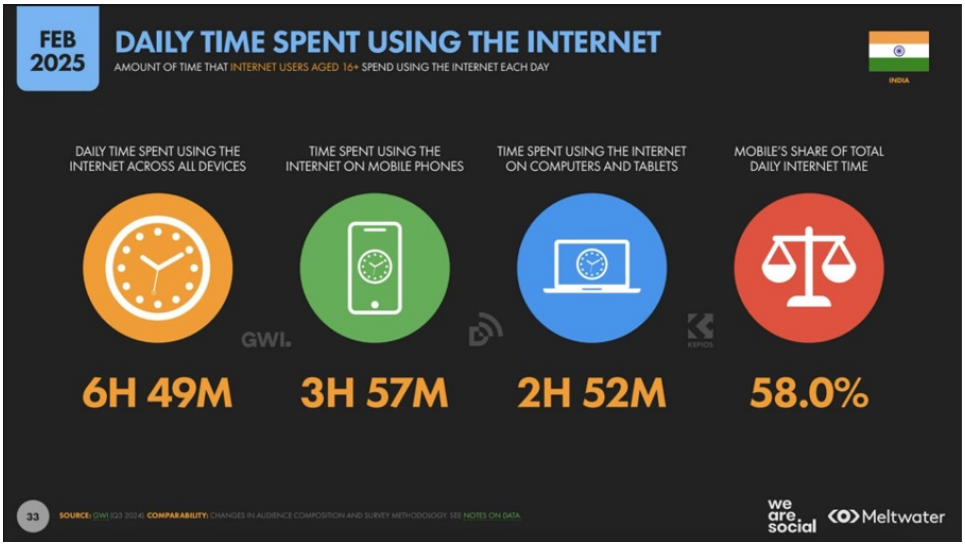



Figure 3

## APPLICATIONS FOR SOCIAL MEDIA DATA MINING

Social media data mining serves numerous purposes throughout different sectors in India.

- The data stream from Twitter and Facebook provides real-time information that helps create flood inundation maps for efficient disaster management procedures.
- Businesses utilise social media analytics to obtain consumer behaviour patterns and identity preferences, and sentiments, thus they develop targeted marketing strategies.
- Social media analysis enables the tracking of public health challenges by monitoring trends, which include disease spread and public health advisory reactions.[7]

**Ethical and Privacy Concerns:** The deep analytical processing of social media data generates multiple ethical problems as well as privacy issues. People have three main privacy concerns about user consent and personal data misuse, and insufficient transparency in data collection

[7] We Are Social and Meltwater, 'Digital 2024: India' (*Data Reportal*, 2024) https://datareportal.com/reports/digital-2024-india accessed 12 April 2025.

methods. Data protection regulations and ethical standards should be made stringent because these problems threaten user privacy.[8]

## REGULATORY FRAMEWORK

The regulatory system in India continues to develop its strategies to fight the problems created by social media data mining operations. Social media intermediaries must fulfil several obligations after the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, were introduced. Data principals stand to benefit from the proposed Personal Data Protection Bill, which creates a complete data protection system that defines fiduciary obligations and foundational rights. The evidence shows that social media has a wide-ranging influence on Indians, thus demonstrating the necessity of ethical data mining operations. The digital transformation requires maintaining both data analytics benefits together with the privacy-protected autonomy of users.

**Data Analysis:** Social media usage in India created massive user-generated data collections while giving rise to dual benefits and complications in data mining practice. The evaluation connects the current data to research inquiries to find important patterns and detect significant trends, along with statistical relationships.

## DEMOGRAPHIC TRENDS AND PLATFORM PREFERENCES

The user population of Indian social media reached 491 million people in January 2025, accounting for 33.7% of the total population. Most users logged into social platforms belong to the age categories between 18-34, which demonstrates a major proportion of active participants. The biggest platform preference belongs to Instagram because 74.7% of internet users choose it, while Facebook occupies second place with 71.2%, and X (formerly Twitter) takes third position with 42.9% user penetration. The specific areas and extent of social media data mining operations must be based on precise demographic insights and information about user platform choices.[9]

[8] Karmegam D, Ramamoorthy S and Mappillairaju B, 'Near real time flood inundation mapping using social media data as an information source: a case study of 2015 Chennai flood' (2021) 8 Geoenvironmental Disasters 25 https://geoenvironmental-disasters.springeropen.com/articles/10.1186/s40677-021-00195-x accessed 12 April 2025.

[9] The Global Statistics, 'India Social Media Statistics 2025 | Most Used Popular Top Platforms' (16 April 2025) https://www.theglobalstatistics.com/india-social-media-statistics/ accessed 16 April 2025.

**Behavioural Patterns and Usage Duration:** Social media usage takes up an average of 2 hours and 30 minutes each day throughout the time spent by typical Indian users. Such extensive interaction signals that strong opportunities exist for data collection efforts. The two main reasons behind social media utilisation are maintaining friendship bonds with relatives (50.5%) while simultaneously acquiring information (52.2%). The observed behavioural patterns reveal crucial information about how users interact and which content they prefer, thus making them beneficial for data mining purposes.

## APPLICATIONS AND IMPLICATIONS FOR DATA MINING

**Indian social media data mining develops multiple execution modes regarding the following uses:**

- Emergency response receives assistance through the utilisation of real-time Twitter data that enables flood inundation mapping during disaster management efforts.
- Companies use analytical marketing strategies based on consumer behaviour patterns for targeted advertising.
- Public Health Monitoring: Tracking public sentiment and responses to health advisories, especially during pandemics.

The technological applications of data mining prove their usefulness for solving different societal requirements.

**Ethical and Privacy Considerations:** User data collection practices combined with analysis operations have generated substantial ethical as well as privacy-related dilemmas. User data privacy is adversely affected by existing problems, which include unacceptable access to consent and insufficient data protection measures, and abusive information handling practices. A comprehensive data protection law in India remains absent, which intensifies privacy-related issues, thus requiring powerful regulatory structures for personal data security.

## REGULATORY LANDSCAPE AND INSTITUTIONAL FRAMEWORK

The regulatory landscape in India continues to transform due to the introduction of the Digital Personal Data Protection Act (DPDP Act), which seeks to build an elaborate data protection system. The proposed Act establishes the Data Protection Board of India as the authority to manage both data compliance reviews and consumer complaints. These measures can achieve

optimal results only when properly executed and enforced. The General Data Protection Regulation (GDPR) from the European Union demonstrates examples that help India enhance its data protection system.

Research data indicates that the process of mining social media data in India depends on population statistics and user behaviour patterns, and digital platform selections. The various sectors experience substantial data mining advantages, yet these opportunities create fundamental ethical problems beyond privacy. The establishment of dependable laws and oversight institutions is essential to create proper data mining operations that protect user privacy and rights.

**Key Findings:** This section brings together research outcomes from various studies that match the research objectives and questions to show their significance in policy-making and ethical considerations.

## PERVASIVE SOCIAL MEDIA USAGE AND DATA GENERATION

- The number of active social media users exceeded 491 million in India during January 2025 at a population proportion of 33.7%.
- The primary users belong to the young demographic, as the 18-34 age segment displays the most engagement with social media.
- People dedicate 2 hours and 30 minutes each day to interacting on social media platforms.

**Implication:** Social media data mining activities thrive in India because of its substantial user base that continually generates substantial amounts of information.

## DIVERSE APPLICATIONS OF DATA MINING

- The analysis of social media data serves different sectors when used for disaster management, while also assisting in marketing strategies and monitoring public health.
- Emergency response receives assistance through flood inundation mapping when Twitter provides real-time data to researchers.

**Implication:** The useful applications show how data mining helps solve community needs, thus proving its worth with proper guidance.

## ETHICAL AND PRIVACY CONCERNS

- Strategic user data collection for extensive analysis causes substantial ethical problems to individual privacy, together with concerns about consent, security of data, and personal information misuse.
- The lack of comprehensive data protection legislation in India exacerbates these concerns.

**Implication:** The present situation requires strong protective data regulations to achieve privacy safeguards, together with moral data mining standards.

## EVOLVING REGULATORY LANDSCAPE

- The Digital Personal Data Protection Act (DPDP Act) of India plans to develop extensive data privacy regulations through the establishment of the Data Protection Board of India, which both enforces compliance and hears complaints from users.
- Executive performance of these measures largely determines their actual effectiveness.

**Implication:** The success of current legislative movements depends on both proper implementation and established directives that enforcement agencies must carry out.

## COMPARATIVE ANALYSIS WITH INTERNATIONAL REGULATIONS

- The DPDP Act maintains common elements with the GDPR of the European Union while presenting exclusive provisions.
- The DPDP Act protects digital personal data, but the GDPR safeguards all types of personal data.

**Implication:** The insight into these distinctions between the DPDP Act and foreign data protection laws helps India build standards-compliant data protection while achieving full coverage.

## IMPACT ON DEMOCRATIC PROCESSES

- Social media serves as a channel to distribute political material through misleading content and anti-social expression, especially when elections are underway.

- The process of targeting voters through personal information creates doubts about democratic processes being tampered with.

**Implication:** Democratic institutions require urgent laws that control the usage of social media information during political campaigns to safeguard electoral integrity.

## RESEARCH ANALYSIS

Social media platforms in India have resulted in the massive growth of user-generated data. An evaluation explores the Indian consequences of mining social media data by linking experimental research with established theories and research while measuring extensive effects and assessing positive and negative performance outcomes of existing approaches.

## INFORMED CONSENT AND USER AWARENESS

The essential matter in social media data mining is to ensure users understand what they consent to. The 18–25 age population demonstrates low understanding of terms and conditions while agreeing to them for their data. The poor understanding of user agreements by social media users creates ethical problems regarding valid consent as well as possible exploitation of their data.

**Implications:** Clear user awareness about data mining practices becomes essential for ensuring ethical data mining because users need appropriate opt-in methods and proper training on the data handling process.[10]

## POLITICAL MANIPULATION AND DEMOCRATIC INTEGRITY

Social media platforms have become powerful tools for political communication and mobilisation in India. However, they have also been used to disseminate misinformation and manipulate public opinion. For instance, during elections, political parties have leveraged social media to spread targeted messages, sometimes involving misinformation, to influence voter behaviour.

[10] Preethika Vijayakumar and Aishwarya Venkatesh, 'The illusion of informed consent: legal and ethical impact of data mining by social media platforms in India' (2025) International Cybersecurity Law Review https://link.springer.com/article/10.1365/s43439-025-00142-8 accessed 16 April 2025.

**Implications:** The use of social media for political manipulation poses a threat to democratic processes, highlighting the need for regulations that ensure transparency and accountability in political communication.

## REGULATORY FRAMEWORK AND ENFORCEMENT CHALLENGES

The Digital Personal Data Protection Act (DPDP Act) became India's latest addition to the regulatory structure, which targets data privacy concerns. The legislation sets forth a complete data protection system through its establishment of the Data Protection Board to monitor compliance. These measures work best when proper execution and valid enforcement happen simultaneously.

**Implications:** While legislative efforts are underway, their success hinges on effective execution, clear guidelines, and robust enforcement mechanisms to protect user privacy and data rights.

## ETHICAL CONSIDERATIONS AND CORPORATE RESPONSIBILITY

Social media data mining generates additional ethical problems that reach beyond consent boundaries because they involve safeguarding data confidentiality, together with protecting user choices and company accountability. Organisations need to maintain both insight discovery efforts and their duty to safeguard privacy and uphold ethical conduct with users.

**Implications:** Organisations that lead by ethical data practices gain better user trust while minimising their legal and reputation-related challenges.

## STRENGTHS AND WEAKNESSES OF CURRENT PRACTICES

**Strengths:**

**Data-Driven Insights:** Using mined social media data enables organisations to extract user patterns and view preference movements, and analyse market trends, which helps decision-making in multiple business industries.

**Real-Time Monitoring:** Data monitoring occurs in real-time, which enables quick event responses because of disaster management and public health surveillance.

**Weaknesses:**

- The analysis and collection of personal data should include proper protection because it creates major privacy issues.
- Social media platforms become less trustworthy because users experience insufficient knowledge about data procedures as well as untransparent data handling methods.
- The protection of the public's rights by data protection measures becomes less effective because there is inconsistent regulatory enforcement and gaps in the framework of rules which regulate privacy standards.

The analysis reveals that while social media data mining in India offers substantial benefits in terms of insights and responsiveness, it also presents significant ethical, privacy, and regulatory challenges. Addressing these issues requires a multifaceted approach, including robust legal frameworks, ethical corporate practices, and increased user awareness to ensure that data mining practices respect individual rights and uphold democratic values.

## RECOMMENDATIONS

The results from studying Indian social media data mining practice enable the creation of these recommendations, which simultaneously address key challenges and encourage responsible data administration.

**To Strengthen Legal Frameworks and Enforcement Mechanisms:**

**Implement the Digital Personal Data Protection Act (DPDPA) Effectively:** The DPDPA needs immediate action to launch it properly, with specific rules about how users give consent and what data fiduciaries need to be responsible for.

**Establish the Data Protection Board of India:** The Data Protection Board of India must become operational as an independent authority that oversees compliance through grievance handling, together with administrative penalties for security breaches and compliance violations.

**Update the Information Technology Act, 2000:** The Information Technology Act of 2000 requires an update to incorporate modern laws that address how social media extracts user data while protecting privacy for IT users.

## PROMOTE PUBLIC AWARENESS AND DIGITAL LITERACY

**Launch Nationwide Awareness Campaigns:** The organisation should start nationwide publicity campaigns that teach citizens about their data privacy rights, combined with practical data sharing effects and essential digital safety principles.

**Integrate Digital Literacy into Educational Curricula:** Educational systems should adopt mandatory classes about data safety and cybersecurity alongside proper internet conduct guidelines for students and university students.

**Support Community-Based Initiatives:** Telangana's "Cyber Ambassadors" should receive backing from the community to train citizens, especially youth, through locally developed digital safety programs.[11]

## ENHANCE TRANSPARENCY AND ACCOUNTABILITY OF SOCIAL MEDIA PLATFORMS

**Mandate Transparency Reports:** All social media platforms must provide transparent reports periodically about their data-related operations and their methods to protect user privacy, and their practices of sharing user data with third parties.

**Implement User-Friendly Privacy Controls:** Smooth and simple choices to manage data sharing must be available through privacy settings that users can easily access on all platforms.

**Conduct Regular Audits:** Appointment of evaluation teams must inspect platforms regarding data safety compliance at scheduled times, as platform evaluation results need to be delivered to the public domain.

## FOSTER INTERNATIONAL COLLABORATION AND STANDARDISATION

**Align with Global Data Protection Standards:** India should adopt international data protection frameworks, including the General Data Protection Regulation (GDPR), to enable international data mobility and cooperation.

[11] Varsha Bansal, 'In the Fight Against Scams, 'Cyber Ambassadors" Enter the Chat' (13 January 2023) *WIRED* https://www.wired.com/story/cyber-ambassadors-india/ accessed 16 April 2025.

**Participate in Global Forums:** The authorities should join international forums that discuss transnational data privacy challenges while exchanging best practices for protection.

## ENCOURAGE ETHICAL DATA PRACTICES IN THE PRIVATE SECTOR

**Develop Industry Codes of Conduct:** Joint efforts between industry stakeholders should result in creating ethical standards for collecting and processing, and sharing data.

**Incentivise Privacy-Enhancing Technologies:** The implementation of incentives for Privacy-Enhancing Technologies (PET) should become the focus to promote data minimisation measures and user anonymity practices through methods such as differential privacy and data minimisation.

**Recognise Responsible Data Stewardship:** The introduction of certifications or awards should identify organisations that provide exceptional data protection, so they can become role models for others to emulate.

Successful implementation of the recommendations demands joint work between Indian government bodies and private sector entities, and civil society organisations, together with the public. India can turn the complexities of social media data mining into a system that protects individual rights and builds digital ecosystem trust when it strengthens legal frameworks, runs platform accountability programs, enhances international standards, and promotes ethical practices.

## CONCLUSION

The study investigated how social media data mining affects morality and legal systems in India when evaluating user privacy practices, consent standards, and regulatory requirements. It also investigated stakeholder activities regarding personal data acquisition and processing and evaluated current laws protecting digital rights.

**Summary of Major Findings:** Social media platforms in India gather extensive amounts of user data through unapproved consent processes. Users often lack knowledge about how extensively their data is collected, as organisers use this data to create targeted ads and political campaign strategies.

The Digital Personal Data Protection Act (DPDPA) exists in India but faces difficulties with proper execution and enforcement practices. The implementation of the Digital Personal Data Protection Act has become less effective because the bill lacks a specific data protection authority and a defined framework.

Proper consent is lacking in data collection processes, thereby creating substantial ethical problems. Instructive ethical requirements and accountable processes should be developed to protect against data misuse, especially when it involves surveillance and manipulation.

**Contribution of Research:** The research makes an essential addition to social media data mining studies in India by revealing critical weaknesses within its present legal system, together with ethical guidelines. Data protection laws should be implemented promptly to defend users' rights, and these laws mandate that users understand and agree to data collection practices. The study presents specific guidance for governing data through recommendations made to policymakers, together with legal practitioners, as well as social media companies, to safeguard individual rights.

**Closing Insight:** Social media data mining in India faces critical ethical and legal hurdles, as we now consider data to be the contemporary equivalent of petroleum resources. Public trust and democratic values demand both privacy protection of users along informed consent to maintain their integrity. The rights of people need to stay protected through evolving ethical and legal systems during the technological developments of the digital era.