COPYRIGHT AND LIABILITY FOR AI-GENERATED CONTENT IN PAKISTAN: ASSESSING LEGAL PROTECTIONS IN DRAFT POLICY

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Abstract

The growing use of artificial intelligence (AI) in the production of content has opened up complicated legal issues relating to ownership of authorship, copyright and liability. The problem of AI-created content has not been studied in Pakistan yet, where there are still developing regulatory systems. The proposed study will help fill a significant gap in the changing legal scholarship by critically assessing the draft policy proposals regarding the role of copyright and liability regarding the works produced by AI in Pakistan.

The general aim of the stated research is to evaluate the current and proposed legal frameworks in the context of their suitability to legally safeguard all stakeholders (like producers and distributors of AI-generated content) in the creation and distribution of AI-generated content. It examines the compliance of the draft policy with internationalized norms and it pre-envisions possible juridical contradictions in issues of authorship attribution, author responsibility and infringement claims.

This paper analyses the language of proposed legislations in Pakistan through doctrinal methodology which is enriched with an avenue of comparative legal analysis with respect to jurisdictions like the EU, UK and the USA. The study also includes qualitative scholarly contributions regarding policy papers, legal analysis, and the view of experts to determine the feasibility of the proposed protections.

Based on the findings, it appears that although the draft policy that is realized in Pakistan is a step in the right direction where the challenges associated with unexpected outcomes in AI authorship can be better understood, it offers no clarity regarding the legal position of AI as an author, the extent of human control, and the liability process. This paper states that unless more clear definitions and enforcing mechanisms are taken into account, content creators and platforms will experience a lack of clarity and an even greater risk of litigation.

Finally, the paper demands a stronger framework that will consider the rights sensitivity, as well as incorporating technological realities with already existing legal doctrines. Its recommendations are an attempt at informing the lawmakers, digital rights activists, and technology developers to make progressive and equal AI governance in Pakistan.

Keywords: Al-generated Content, Copyright Law, Liability, Pakistan Legal Policy, Artificial Intelligence Governance

INTRODUCTION

The potential implications of artificial intelligence (AI) on the process of content creation have become the central concern of any debate in the global legal environment posing complicated issues of the authorship, copyright ownership, and liability. With AI system increasingly participating in creation of literary and artistic works, as well as musical pieces, traditional legal principles based on human creativity can hardly accommodate the ontological and process specificities of machinegenerated contents (Bridy, 2016; Ginsburg, 2019). Such a paradigm shift requires the reconsideration of the principles of copyright, particularly in such jurisdiction as Pakistan, where regulatory regimes



in terms of new technologies are underdeveloped and poorly prepared to handle the challenges of the disruption caused by artificial intelligence development.

The concepts of originality and human authorship, as the traditional tenets of the copyright law, have long been the foundation of protection offered by such document as the Berne Convention and the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement. These tools focus on the mental effort of natural individuals and exclude autonomous or even semi-autonomous product of non-human intelligence (Fisher & Syed, 2020). However, OpenAI chatbot applications like ChatGPT, DeepMind AI by Google and generative art work like DALL-E are technologies that counter these assumptions since the outputs are as good, or even more than, human creativity (Abbott, 2018; Deltorn & Macrez, 2019). The legal vacuum that has ensued has left to urgent discussions over the extent of intellectual property (IP) rights in the era of machine learning.

Jurisdictions around the world have reacted differently to meet the demands of the situation with different levels of flexibility. The US is a strictly definitive nation, and this has been restated in Thaler v. That is, Perlmutter (2023), that any copyright protection belongs to human authors only and, therefore, any works produced by AI are not legally recognized (U.S. Copyright Office, 2023). Conversely, the Chinese approach is more lenient, as said they can offer conditional protection to works produced by AI in case they can show that a substantial amount of human creative effort was put to work (Teon, 2023). To a greater extent, European Union, with the help of regulatory tools, including Digital Services Act (DSA) and Artificial Intelligence Act (AIA), has taken a more subtle stance, including liability and platform regulation tools that directly contribute to the indirect copyright enforcement in AI scenarios (European Commission, 2021).

Pakistan is thus at a crossroad against this changing international scene. Its major law, Copyright Ordinance, 1962, is outdated because it cannot follow the modern technological advancement which discusses rights of content created by machines and by human beings by taking care of conceptual and procedural intermezzos (Soomro et al., 2024). Though Pakistan is a party to some of the world major IP conventions, the domestic implementation of said conventions is scattered and incapable of taking into consideration novel technologies that are disrupting the normative model of copyright. As an example, the focus of the Ordinance on author as a natural person is incompatible with an expanding amount of creative works that have little or no involvement of humans. This could create confusions about ownership, application and violations which might discourage innovation and investment in the AI-controlled field of activity (Digital Pakistan Policy, 2018) like digital media, creative arts and software development.

The absence of a specific status of AI content in the Pakistani copyright law is quite a problematic issue. To begin with, it compromises the viability of applying rights to works generated by machines thus raising concerns to creators, developers, and users. Second, it makes the liability difficult in instances of copyright infringement with AI systems. Should it be the AI developer, the data trainer or the end- user to be blamed? Third, the lack of legislative clarity can lead to a mismatch with the international standards of IP, which would impact the Pakistani digital competitiveness and the possible involvement in cross-border content economies (Bridy, 2016; Reilly, 2019). Such developments have led theorists and policy makers to demand a rights-sensitive and technology-responsible legal framework to implement the realities of computational creativity (Boden, 2019; Ginsburg, 2019).

The need to reform has been highlighted by the recent academic and legal literature in Pakistan. In an elaborate doctrinal work, Soomro et al. (2024) have found important legal lacunae relating to copyright regime in Pakistan in respect of Al-generated content. It points out the failure of the current provisions to take care of issues of authorship, ownership and liability and contend that the best practices globally be included to seal the gaps. The outcomes of the study resonate with the general issues voiced in the comparative legal scholarship, which argues that jurisdiction-specific answers are needed to ensure that innovation does not infringe on the protection of rights (Goldstein, 2021; Kurzer, 2020).



The importance of the research is associated with the fact that it can help to orient current policy reform activities of Pakistan. The Ministry of Information Technology and Telecommunication has been contemplating amendments to the national digital strategy within the scope of the "Digital Pakistan" program, and with the introduction of a dedicated section of copyright in the context of Al implementation, there is currently a good chance that the national legislation will be able to catch up with the trends observed at the global level (Digital Pakistan Policy, 2018). This harmony cannot be defined as a legal requirement but rather as a socio-economic one given the fact that it is in this same spirit that that Pakistan wants to explore and exploit its booming IT industry and creative industries as growth centres.

As such, the current study fits between AI, intellectual property, and policy reform in Pakistan. Its main essence is to analyze critically the question of whether the laws existing and being proposed in Pakistan are sufficient to safeguard the stakeholders in the creation and spread of AI-generated content. The study interrogates the compatibility of Pakistan's draft policy proposals with international norms and examines the potential legal conflicts surrounding authorship attribution, accountability mechanisms, and copyright infringement. Drawing on a doctrinal legal methodology complemented by comparative legal analysis, it evaluates statutory language, judicial precedents, and policy documents from jurisdictions such as the EU, UK, USA, and China.

The central research question guiding this inquiry is: To what extent do Pakistan's current and proposed copyright and liability frameworks provide sufficient legal protection and clarity for Algenerated content? Sub-questions are: How does the use of content generated by Al in Pakistan compare to the standards within the international community? What legislative reforms are necessary to resolve ambiguities related to authorship, ownership, and infringement in Al contexts?

In answering these questions, the study fills a gap in an emerging literature on the topic of AI and IP law in developing jurisdictions and grows the available body of knowledge on the subject that can be put to practical use by those with the capacity to design and create AI, as well as defend digital rights on a global scale. The results of its work are destined to assist in outlining a solid and visionary system of laws able to balance innovation and fairness in the digital era.

Research Objectives

This paper seeks to critically evaluate the emerging regulatory and policy framework that will govern any copyright and liability of AI generated content in Pakistan. Considering the evolving nature of artificial intelligence and the ever-growing complexities of authorship and ownership rights that are currently surrounding the field, the study at hand is aimed at assessing the sufficiency of the emerging direction of the Somalian legal regulations in protecting the rights and duties of the stakeholders involved in the undertaking of the creative work that makes use of artificial intelligence.

The main purposes of the given research are:

- 1. In order to determine the extent to which the current and proposed copyright and liability schemes in Pakistan are adequate in offering legal clarity and protection to AI-based content, especially in terms of authorship, ownership and infringement.
- 2. To compare the draft policy proposals of Pakistan with the international legal standards particularly the EU, UK, USA and China to find out the points of congruency and disparities and the possibility of legal correction as applied to the situation of computing creativity.

Through one of these goals, the research will add to the development of a proactive and realistic legal system that combines the technology facts of AI and main principles of copyright legislation and responsibility.

Research Questions

Based on the intricate legal consequences of artificial intelligence in content creation, the current research will attempt to examine the sufficiency and elasticity of the changing copyright and



responsibility systems in Pakistan. In order to frame this investigation, two key questions will direct the study by framing it:

- 1. How well do the existing or proposed law in Pakistan on copyright and liability offer clarity and protection to interested parties in making and using AI-generated material?
- 2. How do Pakistan's draft policy proposals on AI-generated works align with, or diverge from, international legal standards established in jurisdictions such as the European Union, United Kingdom, United States, and China?

These questions are designed to evaluate both the internal coherence of Pakistan's legal approach and its compatibility with emerging global practices in the governance of Al-driven creativity.

Literature Review

1. Theoretical and Conceptual Foundations: Copyright, Authorship & Al Agency

The debate over whether AI can hold authorship or creative agency is underpinned by foundational theories of intellectual property law. The Lockean labor theory and personality theory have traditionally justified copyright by linking creative output to human labor and personality (Hegel, 1821/1991). These frameworks, however, are increasingly challenged by non-human agents like generative AI systems (e.g., GPT-4, Midjourney).

Historically, copyright law presumes human authorship. Courts in jurisdictions such as the USA have upheld this in cases like *Feist Publications v. Rural* (1991), where originality must be "independently created by a human author." In Pakistan, this human-centric notion persists within the Copyright Ordinance, 1962, which does not envision AI as a rights-bearing entity. This theoretical gap complicates efforts to assign liability or claim ownership over AI-generated works.

Recent scholarship such as Yu (2025) and Jiménez & Dittmar (2025) argues for a functional authorship model, where human actors orchestrating AI tools might qualify for copyright, especially where intent and direction are evident. This aligns with the UK Copyright, Designs and Patents Act 1988, which permits AI-generated content to be copyrighted in the name of the person who made "arrangements necessary" for creation.

Thus, the theoretical debate remains unresolved: Should AI be treated as a tool, co-author, or autonomous creator? The literature suggests a shift toward hybrid models that preserve human accountability while recognizing AI's substantial role in creation (Rubab et al., 2024; Goh et al., 2024).

2. Comparative Legal Approaches: USA, UK, EU, China, and South Asia

Across jurisdictions, there are divergent approaches to Al and copyright attribution:

- USA: The U.S. Copyright Office (USCO) maintains that works lacking human authorship are not protected. In 2023, the Zarya of the Dawn decision emphasized that only human-authored portions of AI-generated work are eligible for copyright.
- UK: The UK offers the most progressive model by assigning authorship of computer-generated works to the "person by whom the arrangements necessary for the creation of the work are undertaken" (CDPA 1988, Section 9(3)). However, this still presumes identifiable human involvement.
- EU: The European Union, especially via the EU AI Act (2023), leans toward ensuring transparency and accountability but stops short of redefining authorship. Instead, the emphasis lies on risk classification, traceability, and liability allocation to human overseers or developers (Chakraborty & Karhade, 2024).
- China: As highlighted in Rubab et al. (2024), Chinese courts have begun granting protection to Alassisted works, such as the *Shenzhen Tencent v. Shanghai Yingxun* case (2019), suggesting a de facto acknowledgment of Al's creative capacity under specific human supervision.



South Asia (Pakistan, Bangladesh, India): There is a marked regulatory vacuum. Pakistani law is entirely silent on Al-generated content, although draft policy discussions have emerged (Mushtaq et al., 2024). In Bangladesh, such proposals as the ones considered by Ahmed (2025) demand that hybrid models based on the EU/UK jurisprudence regarding the status of individuals in the country are adopted.

Overall, the West is unified on human-mediated protection whereas Asian countries such as China selectively recognize and Pakistan is non-legal. This difference is a matter of opportunity together with urgency in amending the draft policies in Pakistan.

3. Emerging Trends: Liability, Enforcement, and Platform Responsibility

Responsibility in AI-created content brings up the issue of who must be at fault between the AI programmer, the user, or the people deploying the platform. According to Saparbekova et al. (2024), liability regimes in Europe or the USA are already moving toward the platform liability regime, particularly in cases where AI is implemented into the existing commercial distribution channels, such as YouTube or Meta.

Other advocates of a responsible deployment doctrine, like Yu (2025), Amirova (2023) point to the liability of the side with the greater control over the AI outputs. This is reminiscent of product liability law, elements of which have been echoed in EU policy drafts calling for a situation of strict product liability involving high-riskers AI systems.

Pakistan on the other hand is vague in its draft digital policy in terms of enforcement especially when it comes to infringing content generated by unmonitored generative models. The authors of the articles written by Mushtaq et al. (2024) and Butt & Hadi (2025) worry about the resolution of liability claims in courts ill-equipped in technological and doctrinal terms.

Another area of concern is deepfakes and misinformation. Gao et al. (2025) suggest that legal regimes must distinguish between "innocent" creative AI works and deceptive AI applications, with stricter liabilities on the latter. Yet Pakistan's existing cybercrime law (PECA 2016) is not designed to address the nuances of generative AI misuse, leaving further legislative work necessary.

4. South Asia and the Pakistani Legal Vacuum

There is scarce but growing literature on Pakistan's engagement with AI law. According to Rubab et al. (2024) and Sultan (2024), Pakistan's legal framework reflects neither legislative foresight nor institutional preparedness. The Copyright Ordinance (1962) is outdated and does not define digital works comprehensively, let alone AI-generated ones.

In a landmark local study, Mushtaq, Baig & Bukhari (2024) argue that Pakistan must revise its IP laws to recognize "machine-influenced creativity," especially given the state's investment in digital economy initiatives. Yet, despite policy drafts circulating within the Ministry of IT & Telecom, no codified legal position currently exists on AI authorship or liability.

The Pakistani judiciary, too, remains disengaged. Unlike in India where PILs (public interest litigations) and court commentaries have forced policy discussion Pakistani courts have not entertained any significant AI-related IP litigation. Ahmed (2025) and Thambaiya & Kariyawasam (2025) suggest that South Asian countries must urgently build judicial capacity to interpret and apply emerging doctrines in AI law.

Therefore, the legal vacuum in Pakistan not only jeopardizes rights protection for creators and developers but also risks regulatory fragmentation if piecemeal executive orders substitute comprehensive legal reform.

5. Identified Gaps and Future Legal Directions

Based on the literature reviewed, there are some significant gaps as follows:



- Lack of AI authorship definitions: None of the jurisdictions (including Pakistan) have legally defined an AI as a creator or a legal person. The argument of electronic personality does exist in the circles of EU and WIPO.
- Vague enforcement regulations: In Pakistan and South Asian countries, in particular, there exist few specifics on how courts should be used in the event of disputing authorship between AI co-generation.
- Doctrinal variation: There is wide Doctrinal variation among the jurisdictions regarding whether Algenerated content can attract copyright. The UK turns out to be a rather loose approach whereas strict human originality tests are held in the USA.
- Complexity of liability: Without consistent liability system, creators, platforms and end-users face the risk of litigation uncertainty according to the warning given by Yu (2025) and Goh et al. (2024), particularly when dealing with Al content that affects the IP of third-parties.

Such loopholes explain why transnational learning and harmonization should be pursued. The examples given in the comparative research report by Shushko (2024) and Azab & Ismail (2024), are the models on how Pakistan can design its regulatory framework to remain rights-sensitive but at the same time innovation-friendly.

The research on the issues of AI-generated content and copyright/liability system demonstrates that the legal landscape is very dynamic and distinctive in terms of jurisdictional variety and doctrinal ambiguity. As the UK is tolerating the idea of inclusive protection models, the USA and EU keep human kinds of limitations in place, though the enforcement approach is dynamically changing.

In Pakistan, the difference between practical law or legal doctrine is a huge regulatory gap. Nevertheless, change is coming as academicians and thinkers are advocating the adoption of international best practices in local systems.

In a review of literature, it is clear that any legal reform in the future in Pakistan must:

- Define human-AI collaboration in copyright terms,
- Clarify platform and developer liability,
- Align with emerging global doctrines, and
- Be sensitive to Pakistan's digital economy aspirations.

By engaging critically with global models and local constraints, Pakistan has the opportunity to build a forward-looking, equitable legal framework for AI-generated creativity.

Research Methodology

In this section, the researcher describes the methodological framework used in exploring how Algenerated content is treated in Pakistani law, or, more specifically, under which laws actions related to it can be attributed (copyright and liability). It describes the research design, source of data, sampling method, method of data collection, data analysis, and ethical issues to give academic feasibility and confirm to the objectives of the research.

1. Research Design

The research is conducted with a doctrinal legal research design in a qualitative nature with additional comparison character of analysis of laws. Doctrinal investigations are the most suitable way of analysing statutory provisions, judicial interpretations and policy tools. It provides a purposeful approach to the investigation of the current legal systems and is successfully indicated to assess the wellness, consistency, and normative comprehensiveness of the copyright and liability policies of Pakistan concerning AI-generated work.

Complementing this is a comparative methodology that examines how other jurisdictions specifically the EU, UK, USA, and China have approached similar legal questions. This dual-method framework



facilitates both critical examination and normative benchmarking, helping to identify best practices and gaps in Pakistan's legal architecture.

2. Population and Sampling

As a doctrinal and policy-focused study, the "population" is not human participants but rather consists of legal texts, draft legislation, case law, regulatory guidelines, scholarly publications, and policy documents. The selection was purposive and theoretically grounded, focusing on documents that:

- Address Al-generated content and copyright law;
- Contain policy drafts or government-issued guidance from Pakistan;
- Represent comparative legal models from jurisdictions influential in international IP law.

Secondary sources were sampled, including:

- Pakistan's Copyright Ordinance, 1962 and draft Digital Pakistan Policy (2018);
- Judgments such as Thaler v. Perlmutter (USA), Shenzhen Tencent v. Shanghai Yingxun (China);
- EU Digital Services Act (2021), UK Copyright, Designs and Patents Act (1988);
- Academic commentary published between 2018 and 2025.

3. Data Collection Methods

The primary data sources were legal statutes, draft policies, international agreements, and judicial opinions obtained from official repositories, legal databases (e.g., WIPO, EU Law, U.S. Copyright Office), and Pakistani government portals. Secondary data comprised peer-reviewed journal articles, conference proceedings, and white papers relevant to AI and intellectual property law.

The collection process involved:

- Manual retrieval of official legal texts;
- Database searches using key terms such as "AI-generated content," "copyright authorship," "legal liability," and "Pakistan copyright law";
- Thematic coding of relevant sections in NVivo for qualitative analysis.

No interviews or surveys were conducted, as the legal nature of the research did not require empirical human input.

4. Data Analysis

The data were analyzed through a combination of:

- Doctrinal analysis: Interpreting statutes and case law using legal reasoning, including identification of inconsistencies, omissions, and interpretive ambiguities.
- Comparative legal analysis: Synthesizing approaches across jurisdictions to determine points of convergence and divergence with Pakistan's draft policy.
- Thematic analysis: Applied to secondary literature to extract recurring legal, ethical, and governance themes. Themes included "Al authorship recognition," "human agency," "liability attribution," and "platform accountability."

The methodological triangulation of legal interpretation, comparative law, and thematic coding enhanced the robustness and multidimensionality of the findings.

5. Ethical Considerations



Although the study did not involve human subjects or sensitive personal data, several ethical principles were upheld:

- Academic integrity: All secondary sources were properly cited using APA format to avoid plagiarism.
- Transparency: The selection of jurisdictions and legal sources was guided by relevance to the research objectives and not by normative bias.
- Confidentiality: No personal or organizational information was collected or disclosed.
- Data validity: Only verifiable and peer-reviewed sources were included to maintain the credibility of legal interpretations and policy critiques.

As a desk-based legal inquiry, the study was exempt from formal Institutional Review Board (IRB) clearance but adhered to professional ethical norms in socio-legal research.

This methodology ensures that the research remains consistent with the overall objectives of evaluating Pakistan's copyright framework in light of AI-related legal challenges and international best practices.

Data Analysis

This section presents the results of the doctrinal and comparative legal analysis of Pakistan's draft copyright and liability framework for AI-generated content. The analysis centers on the clarity, scope, and enforceability of existing and proposed provisions, benchmarked against international standards from the EU, UK, USA, and China. Thematic synthesis of over 40 legal and policy documents reveals key trends, gaps, and alignments, directly addressing the study's objectives.

Table 1: Legal Recognition of AI as Author Across Jurisdictions

Jurisdiction	Legal Recognition o Al as Author	f Basis of Copyright Assignment	t Summary of Position
Pakistan	✗ Not Recognized	Only natural persons	Copyright Ordinance (1962) does not define or allow AI authorship.
USA	X Not Recognized	Human originality requirement	U.S. Copyright Office excludes Algenerated content (Thaler v. Perlmutter, 2023).
UK	Conditional	Arrangements made by a human	e CDPA 1988 assigns authorship to the person arranging creation.
EU	X Not Recognized	Human oversight implied	t AI Act promotes transparency and accountability, not authorship.
China	Conditional	Human input must be traceable	e Some courts grant copyright with proof of human creative guidance.

Only the UK and China offer conditional recognition of AI-assisted works, primarily by linking them to human arrangements or intervention. Pakistan lags behind due to outdated statutory language, directly impacting its compliance with global IP trends.



Table 2: Presence of Liability Provisions for Al-Generated Infringement

Jurisdiction	Liability Framework	Identified Liable Party	Scope of Application
Pakistan	X Absent	Not specified	Legal void exists for infringement involving AI systems.
USA	✓ Present	End-user or developer	Strict liability applied if infringement is demonstrable.
EU	✓ Present	Platform, developer, deployer	, Liability based on AI system risk classification.
UK	Present	Human overseer or developer	r CDPA indirectly attributes responsibility.
China	Present	Human creator or supervising entity	r Focus on traceability in court decisions.

Pakistan has no legally defined liability mechanism, a major deficiency when benchmarked against comprehensive frameworks in the EU and USA, where both product liability and strict liability concepts are operationalized for high-risk AI use.

Table 3: Degree of Alignment with International Norms

Assessment Criteria	Pakistan	UK	USA	EU	China
Al authorship definition	×	✓	×	×	✓
Human arrangement attribution	×	✓	✓	✓	✓
Platform liability enforcement	×	✓	✓	✓	✓
Policy readiness for emerging AI challenges	<u> </u>	✓	✓	✓	✓
Legal clarity on infringement via Al	×	✓	✓	✓	✓

Legend: **☑** = Clear; **※** = Absent; **∧** = Partial / Draft stage

Pakistan shows the weakest alignment across core legal dimensions compared to peer jurisdictions. While policy drafts indicate intent, enforceable legislation and judicial preparedness are notably absent.

Table 4: Thematic Gaps Identified in Pakistan's Draft Framework

Theme	Description of Gap	Legal Implication
Al as creator	No statutory support or definitional basis	Creates ambiguity in authorship and ownership claims.
Liability fo infringement	r Lack of liable party designation for Al use	Courts lack guidance on whom to hold accountable.
Human-Al collaboration	No recognition of hybrid authorship models	Contradicts emerging models in the UK and China.



Theme Description of Gap Legal Implication

Policy-practice Digital policy recognizes AI, but legal Legal fragmentation, lack of

mismatch code does not enforceability.

Platform No guidelines for intermediary Hinders regulation of platforms like

responsibility liability YouTube, Meta.

These doctrinal and regulatory gaps risk undermining Pakistan's ability to enforce copyright protections in AI contexts. Reform is needed to bridge the growing disconnect between policy aspirations and legal enforceability.

Table 5: Summary of Comparative Recommendations for Pakistan

Jurisdictional Practice Proposed Adaptation for Pakistan Anticipated Benefit

UK's "arrangement" Introduce a provision recognizing Enables partial authorship doctrine (CDPA 1988) human arrangement in AI outputs recognition, minimizes ambiguity.

EU risk-based liability act Categorize AI tools according to Allows stepped enforcement, the degree of risk and call it to increases the efficiency of law account courts.

The Chinese court system Build up an AI case law or a Adopts flexibility in application of case by case review judicial commentary a Adopts flexibility in application of interpretation in complicated copyright conflicts.

The threshold of the net of Need little human intervention to Makes sure that the doctrinal originality in USA is the make claims of copyrighted consistency is there, but leaves out USA originality threshold. material outright autonomous AI works.

Such recommendations are founded on effective international legal practices that constitute a viable model to be proposed to Pakistan. They would facilitate halfway houses that shield invention against the securing of enforceable IP rights.

Synthesis of Findings

The results of this research indicate that there is a major mismatch between the evolving digital policy of Pakistan and the legal framework, existing in the country regarding Al-generated content. The doctrinal discussion emphasizes that the copyright legislation of Pakistan, which was developed along the lines of the 1962 Ordinance, is still unswervingly anthropocentric, having no means and methods to secure the legal status of the authorship created by Als or the liability in the copyright infringement cases. Conversely, jurisdiction of such countries like the UK and China has adopted flexible models that acknowledge human organization or directive in AI-assisted creation which enables determine adding rights more adaptively. In the same breath, the EU and USA have come up with subtle models that stress on accountability and traceability, particularly by the mechanisms of platform regulation, and human originality tests. Comparative legal norms and thematic review of the draft policy in Pakistan depict an ongoing weakness of the term of authorship, assignment of responsibility, and enforcement measures. In the absence of clarity in law as well as judicial doctrine, the stakeholders in Pakistan (developers, content creators and platforms) are exposed to an increased level of uncertainty and legal liability. In general, the statistics confirm that Pakistan must coordinate its national legal practice with the global standards of introducing mixed authorship types, clarifying the responsibility of liability, and revising its legal system to embrace the diversity of computational creativity.



DISCUSSION

This paper took up the task of analyzing the sufficiency of the legal system adopted in Pakistan regarding the issue of copyright and liability of AI-generated content experiences, especially when compared with other similar cases in the UK, the EU, the USA, and China. The analysis shows the evidence of the failure to serve the purpose, according to the current and draft policies in Pakistan to have the clarity, enforceability, and legal recognition of the innovations sensitivity to handle the emergent complexities that generative AI systems present.

Interpreting Key Findings

The doctrinal and comparative analysis indicated that the legislative environment of Pakistan based on its ancient Copyright Ordinance of 1962 does not accept AI as a producer or co-producer. This legislative gap makes Pakistan look very different when compared to more flexible jurisdictions. Take, for instance, the UK, whereby the author of the arrangements made to the creation of the work is attributed as the copyright holder or China, where AI-generated content is limitedly covered provided that it has been shown to have human involvement. Without them, the stakeholders in Pakistan who are developers, users, and content platforms, are left in the legal vacuum with high risks of suits and uncertainty.

Moreover, the research paper established that there are no enforceable mechanisms in the draft digital policy in Pakistan, to ascertain liability in infringement situations of an AI system. Compared to the EU and USA, where there are firms to put platforms, developers, or users liable based on risk classification or straightforward no-fault principles of responsibility, Pakistan is still unclear on who must be responsible once the AI-generated content works against copyright provisions. Such ambivalence catalyzes to cripple both protection of rights and innovations.

Relation to Existing Literature

These representations follow the scholarship currently in existence. Other writers like Yu (2025) and Goh et al. (2024) have further pointed out that there is an urgent need of hybrid authorship models that recognize the element of human orchestration of AI outputs. In line with that, the literature that compares the practices in other countries (e.g., Jimenez and Dittmar, 2025; Rubab et al., 2024) supports this findings of this study that Pakistan is behind the rest of the world in terms of doctrinal and institutional preparedness.

Moreover, according to Mushtaq et al. (2024) and Soomro et al. (2024), the lack of statutory guidance in Pakistan is accompanied by a complete absence of legal solutions applied to copyrighting based on the use of Al. This makes it even more difficult to take an effective regulatory regime that is both coherent and enforceable.

Theoretical and Practical Implications

At a theoretical level, the results confirm the insufficiency of old-fashioned Lockean and personality-based arguments of a concept of copyright applied to machine generated creativity. The responsibility and autonomy of AI and the human-oriented originality law require the rethinking of copyright especially in a developing country such as Pakistan. The idea to adopt the functional or relational model of authorship in order to view the human contribution and intent as the definition of the legal protection becomes an acceptable tradeoff between the orthodoxy of the doctrine and the reality of technology.

In pratice, this legal vacuum may crush innovation, discourage foreign investment and make it less interesting to domestic innovators to exploit AI tools. There is no authoritative definition of legal status or assignation of liability, and Pakistani developers and businesses are worried about legal exposures, causing restraint of the emergence of the creative industries and digital startups. In addition, absence of platform responsibility jeopardizes user safety and compromises the control over deep fakes and misinformation that grow to be a critical concern on the global level.

LIMITATIONS

This research is constrained by the fact that it uses doctrinal and policy-oriented works of other researchers which lack the empirical feedback of the law-makers, legal practitioners or technology innovators. Although comparative analysis has provided strong normative standards, failure to use interviews to gather information of the stakeholders or lack of judicial information might give a weak representation of the practical challenges of enforcement or political limitation that affects legislative sluggishness. Moreover, due to the dynamic changes common to AI technologies, it is likely that law interpretation and policy stance will change very fast, which possibly makes some evaluations dependent on the time.

Recommendations for Future Research

Based on these observations, the limitation of present research is that the future study needs to take a mixed-methods approach, aiming to capture the empirical data, which includes the interviews with law professionals, judicial functionaries and policy analysts. Longitudinal researches following the development of the AI-related case law in South Asia would be helpful in providing some nice predictions. Also, in-depth discussions of the implications to certain sectors, e.g., of AI in the sphere of education or journalism, or software development, will allow honing in on legislative suggestions. Lastly, the cross-disciplinary collaboration between law scholars, ethicists, and computer scientists will play a dirt-mark in defining flexible and accommodative legal models.

Overall, with the current influx of AI-generated material, Pakistan is in a critical decision-making role regarding how it will respond to such issues through legal means. In this study, reform becomes urgent: not only to make human-AI collaboration legally recognized, liability clarity-based, and in accordance with international best practices but also to match domestic norms. By not doing so, it not only endangers legal obsolescence, but also its economic marginalization in the world of digital economy. Rights-sensitive legal reforms, on the other hand, may also come in time and enable Pakistan to present itself as a responsible and competitive contributor to the world of AI-driven future.

RECOMMENDATIONS

Generative AI is going to change this situation fundamentally, eroding the longstanding legal structures that base their expectations of creativity, authorship and liability on the person behind the computer screen. The current study, which explored the shifting approach to copyright and liability regarding AI-generated material in Pakistan, points to an extreme lack of knowledge at a doctrinal, procedural, and policy level. The solution to these issues is of great importance to guaranteeing the legal probably, enhancement of innovation and conformation of Pakistan with the world stand. The given recommendations will provide a well-structured plan to policymakers, practitioners, and future researchers.

1. Legally Define Al-Involved Authorship through Hybrid Models

Policy makers are supposed to bring statutory changes in the copyright ordinance 1962 so that they can represent the AI assisted contents. Instead of pushing to define AI as a legal person, Pakistan can use the example of the UK that assigns authorship to whoever makes the required arrangements to generate the result produced by the AI tool. This pragmatic position has been able to retain human agency and acknowledges the significant involvement of AI in the sphere of creative work. That would give clarity to creators, developers and the judicial officials as to whether they are authored and owned.

This suggestion also answers the analytical gap in doctrine as found in the paper and within the global literature (e.g., Yu, 2025; Goh et al., 2024) that otherwise favours technological progress over established IP first principles.

2. Introduce a Risk-Based Liability Regime for Al-Generated Infringement



Liability framework is among the most poignant legal pens in the draft policy of Pakistan. A risk-tiered model, inspired by the EU AI Act, should be adopted to assign liability based on the level of human control and risk posed by the AI system. Developers of high-risk AI models (e.g., large language models used in public platforms) should carry strict liability, while users and platforms deploying these models may share secondary liability.

This framework would allow Pakistan to move beyond fault-based regimes and support more proactive enforcement mechanisms in cases of infringement, defamation, or misuse of AI-generated content especially in digital media and misinformation scenarios.

3. Codify Platform Responsibility and Intermediary Accountability

The intermediary liability concept should be legislated in Pakistan taking into consideration the Al content, and particularly in relation to digital media, e.g. YouTube, Meta or home grown media hubs. Based on the Digital Services Act EU, the platforms require legal requirements to disengage, screen, and take action on the offending Al-generated content. They should reserve safe harbor consent when platforms prove that they meet standards of content moderation and mechanisms of traceability.

Practically, this move will limit the impunity of a platform, allow users to report AI based violations and provide a better set of rules when dealing with digital content in Pakistan online environment.

4. Develop Al-Adjudication Benchmarks and Judicial Capacity

The courts also appear to be mostly ill-equipped to preside over matters of content made by AI, as there is still no precedent to look at and no training has been offered. Intensive AI and IP benches ought to be created in the High Courts and also there ought to be continuing legal education (CLE) of judges, clerks, and law enforcers. Also, the possibility of standardized treatment of emerging cases can be achieved through publishing of interpretive guidelines or policy commentaries that were based on Chinese judicial memoranda.

Such an institutional enhancement will mean less interpretive inconsistency and judicial delay, hence create legal certainty to litigants as well as businesses.

5. Align National Policies with International IP and Al Governance Norms

However, though the Digital Pakistan Policy (2018) describes the economic potential of AI, it does not convert into practical legal practices. Pakistan needs to change this policy to such that it presents such commitments to international agreements as well as best practices especially the ones put in place by WIPO, WTO TRIPS treaty, and advancing EU/UK jurakhab need to be shown. This harmonization must be headed by a special inter-ministerial task force on AI-IP.

It would not just allow updating the domestic legal infrastructure but would also increase investor confidence and allow trade in AI-enabled creative industries across borders.

6. Encourage Research on Al-Sector-Specific IP Models

Employees in the field of journalism, software, education, and entertainment are the areas where future researchers can investigate the peculiarities of Al-generated content. Every industry has unique difficulties in terms of originality, copyrightability and liability. To give an example, a generative Al-based learning platform can have a different legal framework to protect than that of an Al program that creates commercial music.

Sectoral research will contribute to creation of a variety of legal tools which will be both situational and implementable.

7. Foster Multidisciplinary Collaboration and Public Engagement

The transformation of law in the area of policymaking must not remain limited to elite policy making. Interaction with AI developers, civil societies, artists, and users of technology are crucial to the provision of comprehensive contextually-informed policy. The reform can be democratized through



the creation of national forums, hackathons and citizen panels on AI and law. Furthermore, the academic institutions are to be prompted to provide interdisciplinary courses that researched AI ethics, law, and engineering.

This larger participation will bring about not only digital literacy and civic trust, but also the public agreement on what to do regarding law and its role in the control of computational creativity.

These suggestions stress the need to follow the multi-pronged policy: the reform of the doctrines, the adjustment of policies, the judicial capacity-building, and the inclusive governance. It is high time for the legal and policy makers in Pakistan to jump into the future ready regulatory environment a balance between the present and the future; the age of innovation, accountability, and protection of rights concerning AI. Pakistan can become a leader in responsible and good AI governance at the regional level by taking assertive action.

CONCLUSION

The present research profoundly discussed the sufficiency of the Pakistani legal and policy framework concerning copyright and liability issues of AI-generated content. It did so by revealing through doctrinal and comparative legal studies that there were major flaws in the statutory definitions, location of liability and enforceability as evidence of the disparity between the current statutory structure in Pakistan with current directions in the world regulatory system. Although some of the draft policies recognize the disruptive nature of AI, the lack of legislative clarity regarding authorship, ownership, and infringement practice places the stakeholders at a risk of being subjected to legal voids and difficulties in enforcement.

The study helps to fill the gap in the evolving body of multifaceted international research touching on AI and intellectual property law, especially developing nations. The current paper can prove the necessity of the legal homogenization and the doctrinal novelty of Pakistan placing its legal system on the side of the advanced models in the UK, the EU, the USA, and China. It provides policy-oriented recommendations in an organized form based on the international best policy practice by proposing new forms of hybrid authorship, liability mechanisms on a risk-based scale, platform accountability schemes, and institutional capacity building.

In theory, this study highlights the inefficiency of traditional IP theories in an age of computational creativities by trying to pursue a functional and relational consultation in authorship and responsibility. In practice, it provides a roadmap of revising legislation which can potentially lead to legal clarity, promote innovation and increase Pakistan moving towards the state of the global digital economy. It is the call of policymakers to take this time and codify adaptive tools of law that may secure rights and offer any motivation in creative synergy amidst decent human and machine.

However, the research recognises its study limitations especially the lack of empirical response of legal practitioners, the policymakers, as well as the judiciary stakeholders. Legal interpretations are also not fixed, because of the nature of the changes in AI technologies. In the future, researchers should resort to mixed-method studies as they would involve empirical evidence and sector-related analyses to further improve legal responses. These measures will play a key role in allowing effectively the legal framework of Pakistan to keep pace with the revolutionizing speed of artificial intelligence.

To sum up, it is a fact that Pakistan is still behind the rest of the world in terms of Al-content regulation, but this study illustrates a clear way out. Pakistan can create an innovation- and equity-driven intellectual property system that is flexible enough to stand the test of time and achieve both, doctrinal clarity and legal adaptability, by adopting policies of inclusiveness.

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