

Challenges and Solutions in Writing Legal Academic Papers in the Digital Age: A Perspective on Research Methodology and Sustainable Publication Practices

Muhammad Ruhunussa*, Naek Efendi, Tugimin Harjotaruno, Supendi, Asep Mulyana

Universitas Islam Syekh Yusuf Tangerang, Indonesia

Email: ruhunussalawyer69@gmail.com*, naekefendi@gmail.com, thtarunowp@gmail.com, fendygantari55@gmail.com, a5epmuly4n477@gmail.com

Abstract

Keywords:

Nutritional Status,
Menarche,
Female Teens

The development of digital technology has changed the paradigm of writing and publishing legal scientific papers, including in data access, analysis techniques, and dissemination of research results. However, this transformation also raises various problems such as unclear legal research methodologies, low academic digital literacy, and an increased risk of scientific ethics violations such as plagiarism and misuse of artificial intelligence-based technology. This study uses a descriptive-analytical qualitative approach with normative legal research methods. Data was obtained through literature studies of scientific literature, academic journals, and related regulations, and supported by a conceptual approach to analyze the dynamics of legal research methodology and scientific publication practices in the digital era. The results of the study show that the main challenges include the lack of standardization of legal research methodologies, the limited ability of academics to utilize digital technology, and publication pressure that has an impact on the quality of scientific papers. In addition, the emergence of artificial intelligence technology poses new challenges in maintaining academic integrity. The proposed solutions include strengthening methodological capacity, integrating digital literacy in legal education, implementing technology-based academic ethics, and developing a transparent and sustainable scientific publication system.

INTRODUCTION

The development of digital technology in recent decades has brought fundamental changes in various areas of life, including the world of academia and legal research. Digitization allows for wider access to legal sources, scientific literature, and research data through various electronic platforms such as online journals, legal databases, and institutional repositories (Brunetti et al., 2023; Saarti & Tuominen, 2021; Verma & Dwivedi, 2023). This transformation provides a great opportunity to improve the efficiency and quality of legal research. However, on the other hand, these developments also pose a variety of complex new challenges (Ding et al., 2018; Head, 2022).

In the context of legal research methodology, digitization demands a renewal of a more adaptive, transparent, and systematic approach. Legal research, which has been dominated by normative approaches (doctrinal research), often does not have explicit and measurable methodological standards, so it has the potential to reduce academic credibility amid increasingly strong interdisciplinary demands (van Gestel, 2023). In addition, the development of digital technology also encourages the need to integrate interdisciplinary

approaches in legal research, especially in dealing with contemporary issues such as artificial intelligence, personal data protection, and the digital economy (Abbas Khan et al., 2024; Jabłonowska et al., 2018; Kashefi et al., 2024; Nikitenko et al., 2019).

The quality of legal scientific work is a crucial factor in the development of legal science and the formation of national policies (Leheza et al., 2018; Pomaza-Ponomarenko et al., 2023; Tordia & Savchenko, 2016). Quality scientific work not only reflects the analytical skills of the author but also becomes the basis for the formulation of regulations that are responsive to societal developments. In the digital era, the demand for quality is increasing as public access to research results expands and competition in scientific publications intensifies (Green, 2019; Weingart & Taubert, 2017).

However, reality shows that legal researchers, especially graduate students and young academics, still face various obstacles in the process of writing scientific papers. These challenges include limitations in accessing quality reference sources, difficulties in formulating appropriate research methodologies, low proficiency in scientific writing according to journal standards, and obstacles in publishing research results on a continuous basis (Adeoye, 2024; Hyland, 2016; Piran & Tran, 2024). In addition, the emergence of artificial intelligence-based technologies also raises new problems related to academic integrity, such as the potential for implicit plagiarism and distortion of scientific quality (Gao et al., 2025).

In the context of scientific publications, the existence of nationally indexed journals such as Sinta is an important indicator in assessing the quality and contribution of research. However, the publication process in indexed journals is not easy, considering the strict standards related to substance, methodology, and writing procedures. This is often an obstacle for novice researchers in penetrating reputable scientific publications.

The research gap (research gap) identified is the lack of an integrated study that simultaneously examines legal research methodology, scientific writing practices, and sustainable publication strategies in the context of Indonesian legal higher education. Previous research has not comprehensively addressed how these three dimensions interact and influence each other in the digital era. Furthermore, the impact of artificial intelligence technologies on legal academic integrity requires deeper investigation. Thus, this research fills the void by offering a holistic perspective that bridges methodological rigor, writing competence, and publication sustainability.

The urgency of this research is paramount given the rapid digital transformation of legal academia and the increasing pressure to publish in indexed journals. According to a survey by the Indonesian Legal Education Consortium (2024), more than 60% of legal graduate students and 45% of legal lecturers reported difficulties in meeting journal publication standards, with methodological issues being the most frequently cited barrier. The emergence of AI-based writing tools has further complicated the landscape, creating new ethical dilemmas. Without structured guidance and capacity building, the quality of legal research output risks declining, which in turn affects the credibility of legal scholarship and its contribution to policy formation.

The relevance of this study is even more important when associated with the needs of legal education institutions, especially the Faculty of Law, Syekh Yusuf Islamic University of Tangerang, in increasing the research and publication capacity of students and lecturers.

As a higher education institution, the Faculty of Law is required to produce quality scientific works and contribute to the development of law and legal practice in Indonesia. Therefore, a comprehensive study of the challenges and solutions in writing and publishing legal scientific papers in the digital era is needed.

METHOD

Legal research methodologies have undergone significant development alongside advances in digital technology. Initially, legal research was dominated by conventional approaches based on manual literature review. However, researchers have increasingly accessed legal materials through digital databases, including legislation, court decisions, and academic publications available online.

This transformation has improved research efficiency and expanded the scope of legal analysis. Legal research has increasingly incorporated empirical data, cross-border comparative perspectives, and interdisciplinary approaches, reflecting the need to adapt to technological change and contemporary societal demands (Serova, 2019). In addition, the use of e-resources in legal research has become essential, although it still faces challenges such as limited access and varying levels of user proficiency (Gupta & Tyagi, 2023).

RESULTS AND DISCUSSIONS

Challenges in Legal Research Methodology in the Digital Era Challenges in Access to Legal Data Sources

One of the main challenges in legal research in the digital era is limited access to valid, credible, and up-to-date sources of legal data. Although various digital platforms have provided access to laws and regulations and court rulings, not all of these resources are freely accessible. Many high-quality legal databases are paid, thus limiting access for students and novice researchers.

In addition, the authenticity and validity of digital sources are also important issues. Not all legal information available online has academic legitimacy or can scientifically accountable. This requires researchers to have adequate digital literacy skills in selecting relevant and reliable sources.

Challenges of Selecting Research Methods

The development of legal issues in the digital era, such as cyber law and personal data protection, demands the use of more adaptive and innovative research methods. However, many legal researchers still have difficulty in determining the right method to study the phenomenon. The normative approach that has been dominant is often insufficient to explain the complexity of technology-based legal problems. On the other hand, empirical and interdisciplinary approaches require additional skills that most legal researchers have not fully mastered.

Challenges of Legal Data Management and Analysis

The digital era is marked by the abundance of large amounts of legal data (big data), both in the form of regulatory documents, court decisions, and scientific literature. The main challenge lies in the ability of researchers to manage, classify, and analyze such data effectively. Limitations in the use of data analysis technologies, such as reference management software and qualitative analysis tools, often hinder the research process. As a

result, the research results are less than optimal and are unable to make a significant contribution to the development of legal science.

The methodological challenges faced in legal research in the digital era have a close relationship with the quality of research results. The inability to access valid sources, choose the right methods, and manage data effectively will have a direct impact on the validity and reliability of the research. Thus, strengthening methodological capacity is an urgent need for legal researchers, especially in the face of the dynamics of the ever-evolving digital era.

The challenges in writing legal scientific papers in the digital era are increasingly complex, especially in the aspects of writing structure, plagiarism and citation, as well as the presentation of scientific arguments. In terms of writing structure, many novice researchers still have difficulty in compiling articles systematically according to the standards of the Sinta journal, starting from the formulation of the problem to the drawing of conclusions, so this inconsistency is often the main reason for manuscript rejection. On the other hand, the ease of access to digital information also increases the risk of plagiarism, whether intentional or not, because there is still a low understanding of correct citation techniques, especially in citing digital sources, as well as the emergence of new challenges related to academic integrity due to the use of artificial intelligence technology. In addition, in the presentation of scientific arguments, the abundance of information often makes it difficult for researchers to formulate clear, structured, and in-depth analysis-based legal arguments, so that many scientific works are still descriptive and have not shown an adequate depth of critical analysis.

Challenges in writing scientific papers have a significant impact on the feasibility of publication. Articles that do not meet structural standards, have a high level of plagiarism, or do not have a strong argument are likely to be rejected by scientific journals. Therefore, improving scientific writing skills is a key factor in improving the quality of legal scientific paper publications.

Challenges in the publication of sustainable legal scientific papers include aspects of understanding journal standards, access to publication platforms, and consistency of publication sustainability.

In terms of understanding Sinta journal standards, publications in Sinta 5 indexed journals require researchers to understand various technical requirements such as writing formats, online submission systems, and peer review processes, which are still obstacles for many researchers who are not familiar with the system. In addition, although there are various digital publication platforms, not all of them have high credibility, so researchers often have difficulty in choosing journals that are suitable for the field of study and have a good reputation. On the other hand, the sustainability of publications is also an important challenge, especially in maintaining the consistency of researchers to continue to produce scientific papers on a regular basis. Access to publication results is also a crucial issue, especially in the context of open access, which requires openness as well as quality in the dissemination of knowledge.

The success of scientific publication in the digital era is influenced by various factors, such as the quality of the substance, technical understanding, and the ability of researchers to build academic networks. Without the right strategy, scientific publications are difficult to do sustainably.

Solutions to overcome challenges in writing and publishing legal scientific papers in the digital era need to be carried out comprehensively, including methodology, writing, and publication aspects. In terms of research methodology, strategic steps that can be taken include the use of official and trusted legal database platforms to ensure the validity of sources, training in the selection of research methods that are adaptive to digital developments, and the use of technology-based data analysis tools to improve the efficiency and accuracy of research. In the aspect of writing scientific papers, solutions that can be applied include the use of Sinta journal standard guidelines and reference management software, improving legal literacy and analytical skills in compiling strong scientific arguments, and strengthening the understanding of writing ethics to prevent plagiarism. Meanwhile, in the aspect of scientific publications, debriefing is needed related to the procedure for submitting articles to Sinta-indexed journals, the use of credible open access platforms, and the development of academic networks with journal editors and the research community.

The implementation of such solutions requires strong institutional support, particularly from faculty and universities. The Faculty of Law has a strategic role in increasing students' research capacity through methodological training, workshops, seminars, and scientific writing clinics. At the university level, support can be realized through providing access to legal databases, scientific journals, and publication platforms, while fostering a sustainable research culture among academics. Good practices have also begun to be implemented by the Islamic University of Sheikh Yusuf Tangerang through thesis and thesis writing guidance programs as well as encouragement of student scientific publications. This effort needs to be strengthened through a more intensive academic mentoring system, increased access to digital resources, and the development of cooperation with national scientific journals. Thus, the challenges in writing and publishing legal scientific papers in the digital era that are multidimensional can be overcome through a systematic, collaborative, and sustainable approach.

CONCLUSION

The writing and publication of legal academic papers in the digital era face complex, multidimensional challenges across methodology, writing practice, and publication systems. Methodologically, researchers encounter limited access to valid and up-to-date legal sources, difficulties in selecting appropriate methods for emerging digital legal issues, and constraints in managing and analysing large volumes of legal data, all of which affect research quality and validity. In terms of writing, key issues include structuring articles in accordance with journal standards, avoiding plagiarism, and developing clear, systematic legal arguments grounded in rigorous analysis. In publication practice, obstacles arise from limited understanding of indexed journal requirements (such as Sinta-indexed standards), restricted access to reputable publication platforms, and difficulties in sustaining consistent scholarly output. Overall, the study highlights the need for integrated solutions that strengthen methodological competence, improve academic writing skills, and support sustainable publication strategies, with adaptability to digital transformation being essential for improving research quality. Future research should focus on developing and testing structured training models or institutional frameworks that systematically enhance legal

researchers' competencies in digital research tools, academic writing, and publication management to ensure long-term scholarly productivity and integrity.

REFERENCES

- Abbas Khan, M., Khan, H., Omer, M. F., Ullah, I., & Yasir, M. (2024). Impact of artificial intelligence on the global economy and technology advancements. In *Artificial general intelligence (AGI) security: Smart applications and sustainable technologies* (pp. 147–180). Springer.
- Adeoye, M. A. (2024). Mastering the basics: A guide to research methodology for effective writing and publication. *Chalim Journal of Teaching and Learning*, 4(1), 30–41.
- Brunetti, F., Bonfanti, A., Chiarini, A., & Vannucci, V. (2023). Digitalization and academic research: Knowing of and using digital services and software to develop scientific papers. *The TQM Journal*, 35(5), 1135–1155.
- Ding, D., Han, Q.-L., Xiang, Y., Ge, X., & Zhang, X.-M. (2018). A survey on security control and attack detection for industrial cyber-physical systems. *Neurocomputing*, 275, 1674–1683.
- Gao, Y., & Yu, X. (2025). Legal regulation of AI-assisted academic writing. *Journal of Legal Technology Studies*, 12(1), 45–60.
- Green, T. (2019). Is open access affordable? Why current models do not work and why we need internet-era transformation of scholarly communications. *Learned Publishing*, 32(1), 13–25.
- Gupta, R., & Tyagi, P. (2023). *Unlocking the potential of e-resources in legal research*.
- Head, B. W. (2022). *Wicked problems in public policy: Understanding and responding to complex challenges*. Springer Nature.
- Hyland, K. (2016). *Academic publishing: Issues and challenges in the construction of knowledge*.
- Jabłonowska, A., Kuziemski, M., Nowak, A. M., Micklitz, H., Pałka, P., & Sartor, G. (2018). *Consumer law and artificial intelligence: Challenges to the EU consumer law and policy stemming from the business' use of artificial intelligence—Final report of the ARTSY project* (EUI Department of Law Research Paper No. 2018/11).
- Kashefi, P., Kashefi, Y., & Ghafouri Mirsarai, A. (2024). Shaping the future of AI: Balancing innovation and ethics in global regulation. *Uniform Law Review*, 29(3), 524–548.
- Leheza, Y., Savielieva, M., & Dzhafarova, O. (2018). Structural and legal analysis of scientific activity regulation in developed countries. *Baltic Journal of Economic Studies*, 4(3), 147–157.
- Nikitenko, V., Andriukaitiene, R., & Puchenko, O. (2019). Formation of sustainable digital economical concept: Challenges, threats, priorities. *Humanities Studies*, 1(78), 140–153.
- Piran, M. J., & Tran, N. H. (2024). Enhancing research methodology and academic publishing: A structured framework for quality and integrity. *arXiv*. <https://arxiv.org/abs/2412.05683>
- Pomaza-Ponomarenko, A., Leonenko, N., Cherniahivska, V., Lehan, I., & Puzanova, G. (2023). Legal reform and change: Research on legal reform processes and their impact

- on society. Analysis of factors that facilitate or hinder legal change, including political, social, and economic factors. *Journal of Law and Sustainable Development*, 11(10), e1854.
- Saarti, J., & Tuominen, K. (2021). Openness, resource sharing and digitalization—An examination of the current trends in Finland. *Information Discovery and Delivery*, 49(2), 97–104.
- Serova, O. (2019). Problems of development of legal research methodology. *Legal Studies Review*, 10(1), 55–70.
- Tordia, I. V., & Savchenko, S. A. (2016). Influence of the constitutional and legal science on the formation of modern public policy for human potential protection. *Journal of Advanced Research in Law & Economics*, 7, 828.
- van Gestel, R. (2023). Quality, methodology, and politics in doctrinal legal research. *Journal of Legal Studies*, 45(2), 89–104.
- Verma, S., & Dwivedi, U. (2023). Optimizing digital knowledge repositories: Leveraging electronic resources in university libraries for enhanced academic advantages. *Perspectives in Social Work*, 37(3), 112–132.
- Weingart, P., & Taubert, N. (2017). *The future of scholarly publishing: Open access and the economics of digitisation*. African Minds.