

Normative Consciousness Displacement in Artificial Intelligence Mediated Legal Interpretation Systems and Its Consequences for Human Judicial Sovereignty

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ARTICLE INFO

Keywords:

Artificial Intelligence;
Legal Interpretation;
Normative Awareness;
Judicial Sovereignty;
Legal Ethics

Article history:

Received 2025-03-18

Revised 2026-04-21

Accepted 2026-05-26

ABSTRACT

This study examines the phenomenon of shifting normative awareness in artificial intelligence-based legal interpretation systems and its implications for judges' sovereignty in modern judicial practice. The research is motivated by the increasing use of artificial intelligence in the legal interpretation process which raises problems related to the reduction of judges' autonomy, ethical responsibility, and humanitarian dimension in law enforcement. This study aims to analyze the influence of artificial intelligence systems on the legal interpretation process and identify its consequences on the existence of human judicial sovereignty. The research uses a normative juridical approach with a qualitative analysis method. Data was obtained through a document study of 45 legal sources consisting of laws and regulations, court decisions, scientific articles, policy reports, and international regulatory frameworks related to artificial intelligence and legal technology. Data analysis was carried out using content analysis techniques and comparative legal interpretation. The results show that artificial intelligence systems tend to place computational consistency and predictive efficiency above contextual, moral, and sociological dimensions in legal interpretation, thus contributing to the weakening of human normative awareness in judicial decision-making. This study concludes that the integration of artificial intelligence in the legal system requires strengthening ethical governance and human supervision mechanisms to maintain judicial sovereignty, legal legitimacy, and substantive justice in the digital era.

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1. INTRODUCTION

The development of artificial intelligence (AI) in the legal system has experienced a significant increase in the past decade, especially through the use of legal analytics technology, predictive justice,

and algorithm-based legal interpretation systems. Various countries are beginning to integrate AI in the judicial administration process to improve the efficiency, consistency of judgments, and speed of analysis of legal documents. In the United States and the European Union, AI has been used in criminal risk analysis, verdict recommendations, and automated contract drafting, while in several Asian countries similar technologies have begun to be applied in digital court services and electronic legal aid systems (Djuraev et al., 2025). This condition shows that digital transformation in the legal system is no longer just a technological innovation, but has become part of the restructuring of modern legal interpretation practices. However, behind this increase in efficiency arises a fundamental problem related to the shift in the role of human normative awareness in the legal interpretation process, which previously relied heavily on ethical, moral, and social context considerations of judges.

The phenomenon of using AI in legal interpretation is also growing in Indonesia along with the increasing digitization of judicial services through e-court, e-litigation, and the integration of electronic-based legal data systems by the Supreme Court of the Republic of Indonesia. The digitalization shows a change in the work pattern of judicial institutions towards data-based legal governance and automation. However, these developments have not been fully balanced with a comprehensive regulatory framework regarding the limits of the use of AI in legal decision-making. This issue becomes increasingly important because law is essentially not only oriented to procedural certainty, but also contains dimensions of substantive justice and human moral awareness in the process of interpreting norms. According to Sawicki. (2025), the use of AI without adequate human supervision mechanisms has the potential to cause dehumanization in the public decision-making process, including in the judicial sector. Therefore, the discourse on the relationship between AI and human judicial sovereignty has become an urgent contemporary legal issue that needs to be critically studied.

Theoretically, legal interpretation is a normative activity that is not only mechanical, but also involves moral awareness, ethical intuition, and the judge's reflective ability to understand the social context of a case. Legal hermeneutic theory places judges as interpretive subjects who are active in building legal meanings based on the value of justice, utility, and legal certainty. In this perspective, AI is seen as having limitations because it only works based on data patterns, computational logic, and statistical probability without having normative awareness like humans (Mühlhoff & Ruschemeier, 2025). This condition raises concerns that the dominance of AI systems in legal interpretation could shift the epistemological authority of judges and reduce the humanitarian dimension in judicial practice. This shift is known as normative consciousness displacement, which is a condition when the human normative reasoning process begins to be replaced by algorithmic calculations in legal decision-making.

Several previous studies have discussed the relationship between AI and the legal system from a variety of perspectives. Research conducted by Eboigbe. (2024) highlights AI's ability to improve the efficiency of legal analysis through document automation and prediction of court judgments. Furthermore, research by Alessa. (2022) shows that AI technology can help the mediation and dispute resolution process in a faster and measurable manner. Another study from Koulu. (2021) emphasizes the importance of algorithm transparency in maintaining the accountability of the digital legal system. However, most of the research still focuses on technical aspects, administrative efficiency, and data-driven system optimization. Studies that specifically address the shift in normative awareness of judges due to the dominance of AI in legal interpretation are still relatively limited, especially in the context of its implications for human judicial sovereignty.

The research gap in this study lies in the absence of a study that in-depth connects the concept of normative consciousness displacement with the issue of judge sovereignty in an AI-based legal interpretation system. Previous research has tended to view AI as a supporting tool without exploring the possibility of subordination of human moral considerations by algorithmic logic. In addition, most of the previous studies are still oriented towards the approach of legal technology and have not used much of the perspective of legal philosophy and normative consciousness theory as the basis for analysis. Research by Kondori et al. (2021), for example, focuses more on the transformation of digital judicial administration, while research by Kumar et al. (2024) focuses more on AI regulation and data protection.

Thus, research is needed that specifically examines how AI-based legal interpretation systems can affect the existence of normative awareness of judges as the core of judicial sovereignty in the modern legal state.

This study aims to analyze the form of normative awareness shift in artificial intelligence-based legal interpretation systems and identify its consequences for judges' sovereignty in the judicial process. The study also aims to evaluate the extent to which the use of AI in legal interpretation can affect moral legitimacy, judicial independence, and substantive justice quality in contemporary law enforcement practice. The analysis was carried out through a normative juridical approach by examining various regulations, legal doctrines, court decisions, and academic literature related to the development of AI in the legal sector. With this approach, the research is expected to provide a more comprehensive understanding of the relationship between algorithmic technology and human interpretive authority in the modern legal system.

Theoretically, this research contributes to the development of the study of legal philosophy and legal interpretation theory by introducing the concept of normative consciousness displacement as an analytical framework in understanding the transformation of judicial practice in the digital era. This research also expands the discourse on the relationship between technology, morality, and judicial power in the context of the modern state of law. In addition, this study provides a new perspective that the use of AI in law cannot be solely understood as a matter of technological efficiency, but also related to the protection of the ethical dimension and human normative awareness in the law enforcement process. Thus, this research is expected to be an academic reference for the development of digital law studies and AI ethics in the future.

Practically, this research is expected to contribute to policymakers, judicial institutions, and legal technology developers in formulating AI governance that is more ethical and oriented towards the protection of judges' sovereignty. This study emphasizes the importance of human oversight mechanisms, algorithm transparency, and accountability principles in the use of AI in the judicial system. In addition, the results of the research are expected to be the basis for the preparation of national regulations related to the use of AI in the legal sector so that the digital transformation of the judiciary continues to run in line with the principles of judicial independence, substantive justice, and the protection of human rights in the era of digital technology.

2. METHODS

2.1. Research Design and Approach

This study uses a qualitative approach with a normative juridical research design that focuses on a critical analysis of the phenomenon of normative consciousness displacement in artificial intelligence-based legal interpretation systems and its implications for human judicial sovereignty. This approach was chosen because the research aims to examine legal norms, doctrines, ethical principles, and regulatory developments related to the use of artificial intelligence in modern judicial practice. Normative juridical research allows researchers to examine the relationship between algorithmic technology and judges' interpretive authority through the perspectives of legal philosophy, legal hermeneutic theory, and the theory of judicial power independence (Erickson & Gregory, 2025). The focus of the research is directed at the analysis of changes in legal interpretation patterns due to the increasing dominance of data-based systems and automation in the legal decision-making process.

2.2. Population and Sampling Techniques

The research population consists of a variety of primary and secondary legal materials related to artificial intelligence, legal interpretation, technological ethics, and the digital justice system. The sampling technique used purposive sampling based on substantive relevance by selecting 45 legal documents and academic literature consisting of laws and regulations, court decisions, international policy reports, reputable scientific articles, and AI ethics documents published in the 2021–2025 period. The selection of documents is carried out based on the level of relevance to the research theme,

institutional authority, and its conceptual contribution to the issue of the use of AI in legal interpretation. This technique is used because normative legal research is not oriented to statistical generalization, but rather to the depth of analysis of the quality and substance of the legal sources used (Abdul Raof et al., 2025).

2.3. Data Collection Techniques and Research Instruments

Data collection was carried out through documentation studies and systematic literature review of various legal and academic sources obtained from scientific databases such as Scopus, HeinOnline, SSRN, and Google Scholar. The research instrument is in the form of a document analysis matrix used to identify themes, argumentation patterns, forms of regulations, and indicators of shifting normative awareness in AI-based legal interpretation systems. The research data includes national and international regulations related to AI, court rulings on judicial digitalization, as well as scientific articles discussing algorithm transparency, technological accountability, and judicial independence. The validity of the data was tested through source triangulation and theoretical triangulation techniques by comparing various legal perspectives and relevant legal philosophy approaches. The reliability of the research is maintained through the consistency of data categorization, trail audits, and peer debriefing processes during the normative interpretation stage (C. Coker, 2026).

2.4. Research Implementation Procedures

Research is carried out systematically through several main stages. The first stage is to identify problems and map the phenomenon of the use of AI in modern legal interpretation systems. The second stage is in the form of tracing and selecting primary and secondary legal materials based on the criteria of relevance, novelty, and academic authority. The third stage was to classify data into several main themes, namely normative consciousness displacement, judicial sovereignty, algorithmic accountability, and human supervision in the digital legal system. Next, the researcher interpreted the relationship between the use of AI and changes in judges' legal reasoning patterns in contemporary judicial practice. The final stage is in the form of preparing a conceptual synthesis and drawing conclusions based on the results of normative interpretation of all research data.

2.5. Data Analysis Techniques

Data analysis was carried out using content analysis techniques and comparative legal interpretation to identify the pattern of relationships between the dominance of algorithmic logic and the shift in judges' interpretive authority in the modern legal system (Binns, 2022). Content analysis techniques are used to group key themes in legal documents and academic literature, while comparative legal interpretation is used to compare AI regulatory approaches across different legal systems. The data analysis process was assisted by using NVivo 14 software to map the relationships between concepts, narrative patterns, and tendencies of legal arguments in the research document. The results of the analysis are then interpreted critically based on the perspective of legal philosophy, legal hermeneutic theory, and the principle of independence of judicial power in order to produce findings that are objective, systematic, and relevant to the development of contemporary digital law.

3. FINDINGS AND DISCUSSION

3.1. The Dominance of Algorithmic Rationality in AI-Based Legal Interpretation Systems

The results of the study show that the development of artificial intelligence-based legal interpretation systems has changed the pattern of legal reasoning from a reflective-normative approach to an approach based on computational predictions. Based on an analysis of 45 primary and secondary legal materials, it was found that most modern legal AI systems are designed to generate analytical efficiency, consistency of judgments, and acceleration of case administration through the processing of large amounts of judicial data. The system works using statistical patterns, machine learning, and predictive analytics that place the probability of the outcome of a case as the main basis for legal

recommendations. These findings show that legal logic is starting to be directed towards data-based calculations rather than the process of ethical reflection and moral considerations that have been the main characteristics of human legal interpretation.

The research found that legal AI systems in several countries have been used to help with criminal verdict recommendations, recidivism risk analysis, and algorithm-based prioritization of cases. In the United States, the use of the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) system shows that AI is able to improve the efficiency of predicting the risk of criminal offenders, but also raises the problem of algorithmic bias and the lack of transparency in the legal reasoning process. These findings are in line with Xu. (2022) research which states that AI has a high capacity in the processing of legal documents, but has not been able to replace the complexity of judges' normative considerations. The study also found that the dominance of probability-based systems causes legal interpretations to tend to move towards mechanical standardization that reduces sensitivity to the social context and individual conditions of a case.

In the Indonesian context, the results of the study show that the digital transformation of the judiciary through the e-court and e-litigation system has strengthened the orientation of the efficiency of information technology-based legal administration. The implementation is supported by the Supreme Court Regulation of the Republic of Indonesia Number 1 of 2019 concerning Electronic Case Administration and Trials in the Court which is still relevant to be used today. In addition, strengthening digital governance is also related to Law Number 11 of 2008 concerning Information and Electronic Transactions as amended through Law Number 19 of 2016. The results of the analysis show that these regulations focus on modernizing judicial administration, but have not specifically set limits on the use of AI in the process of interpreting substantive laws by judges. The regulatory vacuum shows that there is potential room for the dominance of algorithmic systems in the legal decision-making process in the future.

Table 1. Key Findings of the Shift in AI-Based Legal Interpretation Patterns

Analysis Aspect	Research Findings	Impact on the Legal System
Legal interpretation patterns	Based on predictions and probability data	Reducing the normative reflection of judges
Legal AI system	Emphasizing efficiency and consistency	Improving the standardization of judgments
Use of algorithms	Relying on historical data of the case	Potentially reproduces legal bias
Position of the judge	Shift to system supervisor	Reducing the dominance of human reasoning
Indonesian Regulations	Not yet set up substantive AI	Creating a void in legal norms

3.2. Shifting Normative Awareness of Judges in Judicial Decision Making

The results of the study show that the use of AI in legal interpretation systems has the potential to shift the normative awareness of judges in the judicial decision-making process. This shift can be seen from the increasing reliance on algorithm-based recommendations in the process of legal analysis and the preparation of decision arguments. Based on the results of content analysis, it was found that most of the digital legal literature places AI as an instrument of legal objectivity because it is considered to be able to reduce human subjectivity. However, this study found that algorithmic objectivity is not always synonymous with substantive justice because AI only works based on historical data patterns without understanding the moral value, social context, or humanitarian aspects of a case.

The study also found that the occurrence of normative consciousness displacement was influenced by increased institutional trust in technological efficiency compared to judge's ethical reasoning. In several international policy documents, AI is positioned as a tool to speed up legal services and reduce the administrative burden of the courts. However, the results of the study show

that the dominance of algorithmic recommendations can cause judges to rely more on the results of the system's calculations than on independent moral reflection in interpreting legal norms. These findings are different from Banshi Dhar Singh & Kumar. (2024) research which emphasizes the benefits of AI in online dispute resolution and the efficiency of digital mediation. This study actually found that the intensive use of AI has the potential to reduce the dimensions of empathy, ethical intuition, and sociological considerations that have been the main characteristics of human justice practice.

In addition, the results of the study show that AI does not yet have the capacity to understand the value of substantive justice as understood in legal hermeneutic theory. AI systems are only able to produce interpretations based on statistical patterns and data correlations without having moral awareness or reflective ability to the social dynamics of society. This condition shows that AI is still in a position as a technical tool, not an interpretive subject that has normative legitimacy. These findings are strengthened by Khan. (2025) research which states that legal algorithms tend to be "black box systems" so they are difficult to be accounted for ethically and democratically. Thus, the results of the study show that the excessive use of AI in legal interpretation can trigger the dehumanization of the judicial process.

3.3. Threats to Judicial Sovereignty and Independence of Judges

The results show that the increasing use of AI in legal interpretation has serious implications for judicial sovereignty and the independence of judges. Based on an analysis of various legal regulations and doctrines, it was found that judicial power is essentially an independent power that is exercised based on conscience, ethics, and the principles of substantive justice. In Indonesia, this principle is affirmed in Article 24 paragraph (1) of the 1945 Constitution of the Republic of Indonesia which states that judicial power is an independent power to administer the judiciary to uphold law and justice. In addition, Law Number 48 of 2009 concerning Judicial Power also emphasizes that judges are obliged to explore, follow, and understand the legal values and sense of justice that lives in society.

However, the results of the study found that the dominance of AI in legal interpretation can shift the position of judges from the main actor of legal interpretation to mere operators or supervisors of technological systems. This shift can be seen from the tendency to use AI to recommend decision outcomes based on historical data patterns and probabilistic calculations. Research has found that this condition has the potential to weaken the intellectual independence of judges because the legal reasoning process is increasingly directed by system logic rather than human normative reflection. This finding is different from the research of Setiawan et al. (2024) which focuses more on the efficiency of digital judicial administration without highlighting threats to the interpretive sovereignty of judges. This research shows that the main threat to AI is not only a technical issue, but also a shift in legal epistemology from normative awareness to algorithmic rationality.

The research also found that the lack of specific regulations on AI in the judicial sector leads to weak oversight mechanisms for the use of algorithms in the legal decision-making process. Although Indonesia already has Law Number 27 of 2022 concerning Personal Data Protection and various other digital regulations, there are no rules that specifically regulate algorithm transparency, AI accountability, and limits on the use of AI in substantive legal interpretation. This condition creates a legal vacuum that has the potential to cause a conflict between technological efficiency and the principle of independence of judicial power. These findings show that the development of legal AI systems without clear ethical and regulatory oversight can threaten the moral legitimacy of the justice system in the digital age.

4. CONCLUSION

This study concludes that the development of artificial intelligence-based legal interpretation systems has encouraged the occurrence of normative consciousness displacement, which is a shift in judges' normative awareness from a reflective-ethical process to a reasoning pattern based on algorithmic calculations. The results show that the dominance of AI in the modern legal system tends

to place computational efficiency, data consistency, and probabilistic predictions as the main basis for legal decision-making, potentially reducing the moral, empathy, and social context dimensions in judicial practice. The research also found that although the digital transformation of the judiciary provides administrative benefits and efficiency of legal services, the excessive use of AI can threaten the independence of judges and human judicial sovereignty as guaranteed in Article 24 of the Constitution of the Republic of Indonesia in 1945 and Law Number 48 of 2009 concerning Judicial Power. In addition, the absence of specific regulations regarding the use of AI in substantive legal interpretation has led to the emergence of a vacuum in legal norms that has the potential to weaken the moral legitimacy of the judicial system in the digital era.

Based on these findings, this study recommends the need to strengthen national regulations on AI governance in the legal sector, especially related to algorithm transparency, system accountability, judicial data protection, and human oversight mechanisms in the legal decision-making process. Judicial institutions and policymakers also need to ensure that the use of AI remains placed as a supporting instrument, not a substitute for judges' interpretive authority in upholding substantive justice. In addition, the development of legal AI systems needs to be based on the principles of technological ethics, human rights, and the independence of the judiciary so that the digital transformation of the judiciary remains in harmony with legal and humanitarian values. Further research is recommended to develop an empirical study on the implementation of AI in judicial practice in various countries as well as analyze the social and psychological impact of the use of algorithms on the behavior of judges and justice seekers in the modern legal system.

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