

DIGITAL REFORM IN LEGAL COMPLAINT DRAFTING: CONSTRUCTION OF AN AI-BASED PLANNING SYSTEM TO REDUCE THE RISK OF *OBSCURE LIBEL*

Ridho Harapan Bunda^{1*}, Welven Aida², Urfi Utami³

^{1,2,3}Universitas Pasir Pengaraian, Riau, Indonesia

harapanbundaridho@gmail.com^{1*}, welvenaida76@gmail.com², harapanbundaridho@gmail.com³

Received 29 Sep 2025 • Revised 31 Oct 2025 • Published 30 Nov 2025

Abstract

Digitalization in legal practice is becoming increasingly essential, especially in the drafting of legal claims, which demands high accuracy and certainty. Errors in drafting can result in obscure libel rulings, potentially obstructing the litigation process. To address this, innovation is needed to enhance the accuracy and effectiveness of legal document preparation. The use of Artificial Intelligence (AI) is expected to significantly improve this process by helping legal practitioners produce more precise documents and reduce legal uncertainty. This research aims to design an AI-based system that is both technically precise and legally compliant, enhancing the clarity of claim substance. The objective is to reduce the risk of obscure libel rulings, promote adaptive and accountable court digitalization, and optimize the drafting process. This study employs a Research and Development (R&D) approach using the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). It begins with a needs analysis to identify the issues faced by legal practitioners, followed by the development of a system using Natural Language Processing (NLP) techniques to automate legal document preparation. The system is designed to help practitioners draft legal claims more accurately and efficiently. The results show that the AI-based system reduces drafting time by up to 70% compared to manual methods. The system also consistently detects ambiguous sentences and legal errors. Feedback from legal practitioners confirms that the user interface is intuitive and accessible, even for those without technical backgrounds. The automated feedback and recommendations based on NLP enhance the clarity and precision of legal documents. In conclusion, the system demonstrates great potential in improving the efficiency and accuracy of legal claim drafting, contributing significantly to the digitalization of the legal field.

Keywords: Artificial Intelligence, Legal Claim, Konstruksi Planning System, Obscure Libel, Interim Ruling

INTRODUCTION

Digital reform has brought significant changes in the legal world, especially in the process of drafting legal claims. The advancement of technology, particularly artificial intelligence (AI), offers innovative solutions that can improve efficiency and accuracy in the preparation of claims. One of the major challenges in litigation is the ruling of *obscuur libel*, which occurs when a judge decides that the claim presented is unclear or vague. In an increasingly complex legal system, the application of AI in drafting claims becomes increasingly relevant to ensure legal certainty and improve the quality of the legal documents submitted (Kurniawijaya et al., 2021).

In the era of digital law, integrating AI into drafting claims not only offers efficiency but also introduces new challenges in the interpretation and application of the law across different jurisdictions. Indonesia, as a country still in the early stages of AI adoption in the legal sector, faces challenges in developing regulations and implementing this technology. While AI can assist in the drafting of claims by identifying potential weaknesses and refining legal structures, there are still concerns regarding the validity and clarity of documents drafted digitally (Kurniawijaya et al., 2021).

The use of AI in drafting claims allows for deeper legal analysis and helps lawyers anticipate potential judicial decisions. AI can identify common mistakes that often cause claims to be considered *obscuur libel*, thus minimizing the risk of rejection due to unclear legal substance (Hasibuan et al., 2024). As a result, the application of AI in drafting claims has the potential to speed up litigation processes and enhance the accuracy of the legal arguments presented (Sadykov et al., 2024).

However, the adoption of AI in legal practice in Indonesia still faces regulatory barriers. The lack of clear legal guidelines on the use of AI can create uncertainty about the validity of documents generated. Furthermore, the legal responsibility for the use of AI in litigation remains an issue that needs further examination. Without clear regulations, the use of AI can create new legal problems that may hinder the digitization of law (Ravizki & Yudhantaka, 2022).

From a legal standpoint, the application of Artificial Intelligence in judicial processes must align with the principles of procedural justice, which emphasize fairness, transparency, and the right to a fair trial. Procedural justice requires that every party involved in litigation has equal access to information and opportunities to present arguments without technological bias. The deployment of AI systems in legal claim drafting must therefore ensure the preservation of these procedural safeguards.

Moreover, AI accountability raises complex issues regarding legal responsibility when errors occur in automated decision-making. The absence of explicit regulation concerning AI liability in Indonesia leaves uncertainty about whether responsibility rests with the developer, user, or the AI system itself. In comparative terms, the European Union's AI Act (2024) and OECD AI Principles establish that developers and users share joint accountability to prevent algorithmic bias and ensure explainability of decisions. This perspective underlines the importance of introducing "human-in-the-loop" oversight mechanisms in AI-assisted legal drafting to maintain procedural integrity and uphold justice principles in litigation.

In the continuously evolving landscape of digital law, most artificial intelligence (AI) studies are still focused on the technical aspects alone, without addressing the complexity of its legal implications. In fact, the ambiguity in drafting legal claims (*obscuur libel*) is a serious problem that directly impacts the effectiveness of litigation (Sadykov et al., 2024). This research is urgent to design an AI-based system that is not only technically precise but also legally compliant to improve the clarity of claims. Thus, this research is expected to address the challenges of modern litigation while promoting adaptive and accountable judicial digitization (Ilmiyah, 2023).

As technology rapidly advances, legal studies on AI need to be continuously updated to remain relevant to the principles of justice. Clear regulations and policies are key to ensuring that AI can be optimally used in the judicial system. Therefore, this research is expected to make a significant contribution to the development of legal science and more efficient and accurate litigation practices (Bahram, 2023), thus the research problem posed is: How can the design and development of legal claim drafting: A Planning System Based on AI to Reduce the Risk of *Obscuur Libel* Ruling using digital technology?

The problem-solving approach in this research is to apply Natural Language Processing (NLP) and Machine Learning to improve the accuracy of legal claim drafting. AI will identify patterns in legal language to reduce errors that could lead to an *obscuur libel* ruling (Sharma et al., 2021 and Dewi et al., 2023). The first step in this research is automating the analysis of legal documents, where AI processes existing legal datasets to create more systematic claims. This technology allows for the identification of imprecise terminology and optimizes the legal arguments presented (9,10). Additionally,

a user-friendly AI interface is developed to ensure that lawyers can easily interact with the system without requiring technical expertise. AI will provide immediate feedback, allowing for quick revisions before submitting to the court (Bunda, 2024 and Yuchen, 2024).

To ensure the success of the system, collaboration between technology developers, legal practitioners, and academics is essential. This collaboration ensures that AI meets legal standards and the practical needs of litigation (Xudaybergenov, 2023). Real-world trials will be conducted to evaluate the effectiveness of AI and identify any ethical and legal challenges that may arise (Dewi et al., 2023). In the long run, this system is expected to create a legal system that is adaptive to technological developments. AI can increase efficiency, transparency, and accuracy in litigation processes, supporting the reform of a more modern and responsive legal system to digitization (Bunda, 2024 and Zheng, 2023), as the increasing complexity of cases demands a more responsive legal system.

This research places the use of Artificial Intelligence (AI) in legal claim drafting as a key innovation. Previous research has been more theoretical or limited to basic implementations, such as restricted to consultation services, while this research presents a systematic approach with the application of more advanced Natural Language Processing (NLP) and Machine Learning (Dewi et al., 2023). Primary references used in this research include Kurniawijaya A, Yudityastri A, Zuama APC's work on the utilization of AI in contract design and its impact on the legal sector in Indonesia, as well as Sadykov M, Karim ME, Tynyshbayeva A, Bakhteev D V's work on the properties of AI systems in the context of their use in legal activities.

The main advantage of this research is the use of more advanced NLP algorithms, which allow the system to understand the legal context in depth, rather than merely recognizing legal text. This improves the accuracy and efficiency in drafting claims and reduces the risk of obscure libel (Sharma et al., 2021). Additionally, AI not only drafts claims but also automatically analyzes legal data, providing machine learning-based recommendations to improve legal certainty (Zhai, 2024).

From an integration perspective, this research addresses the limitations of previous systems that were difficult to use by developing a user-friendly AI interface. This ensures that lawyers from various backgrounds can utilize the technology without deep technical expertise (Zheng, 2023).

In addition to the technical aspects, this research explores the ethical and legal challenges of using AI, an aspect often overlooked in other studies. This research is expected to provide the foundation for regulations ensuring that AI is used ethically and responsibly within the judicial system (Xudaybergenov, 2023).

Research conducted in 2022 has shown how legal claims regarding inheritance distribution can be carried out. In 2024, the focus of the research will shift to the causal relationship of the consequences of legal claims in the Mandailing customary marriage regulation, from which the researcher will summarize it into a clearer roadmap, as shown in Figure 1.

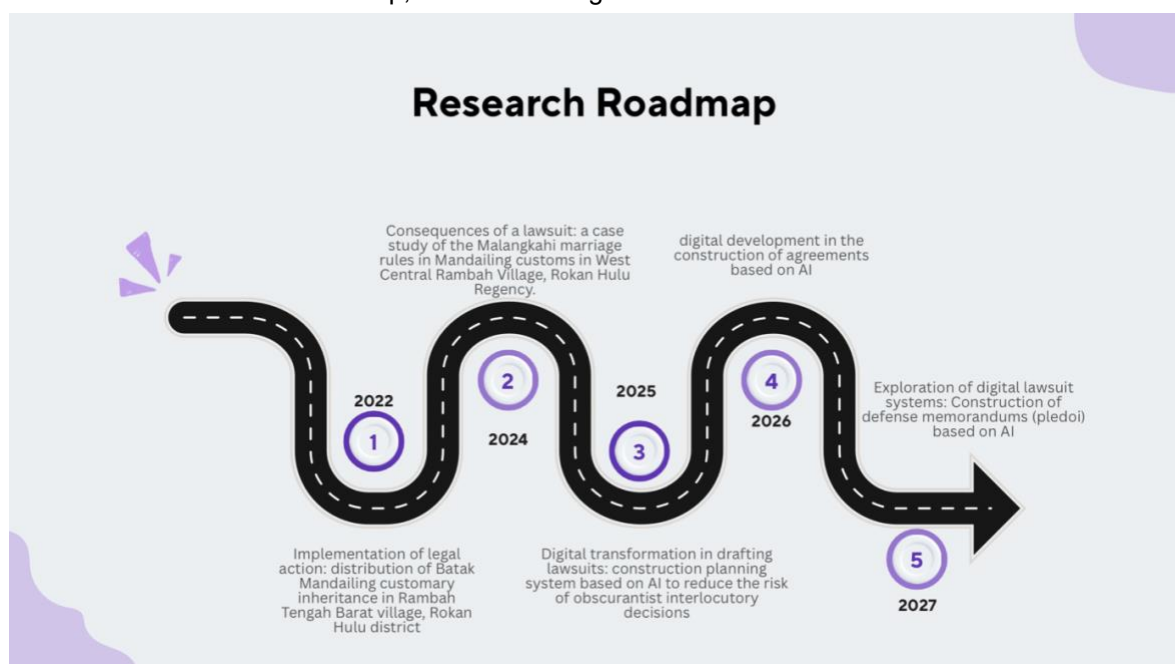


Figure 1. Research Roadmap

By following this roadmap, the research is expected to conduct comprehensive and effective studies to explore the potential progress of AI technology in law enforcement. Therefore, this research is expected to provide a foundation for clear and comprehensive regulations regarding the use of AI in the judicial system, ensuring that AI can be applied optimally, efficiently, and responsibly.

RESEARCH METHOD

In this research method, the study is categorized as Research and Development (R&D). Development research aims to create new products or innovations that can be used to solve practical problems in specific contexts. The process involves a series of steps, from planning, design, testing, to evaluating the developed product. This research focuses not only on theoretical understanding but also on practical application that can be implemented in real-world situations, such as developing tools, models, or systems that can improve quality or effectiveness in relevant fields. The research method used in this study is designed through several phases aimed at developing an AI-based system to support the drafting of legal claims and reduce the potential for obscure libel rulings. Each phase includes the process, the output produced, achievement indicators, and the responsible team members. This is shown in the flowchart in Figure 2.

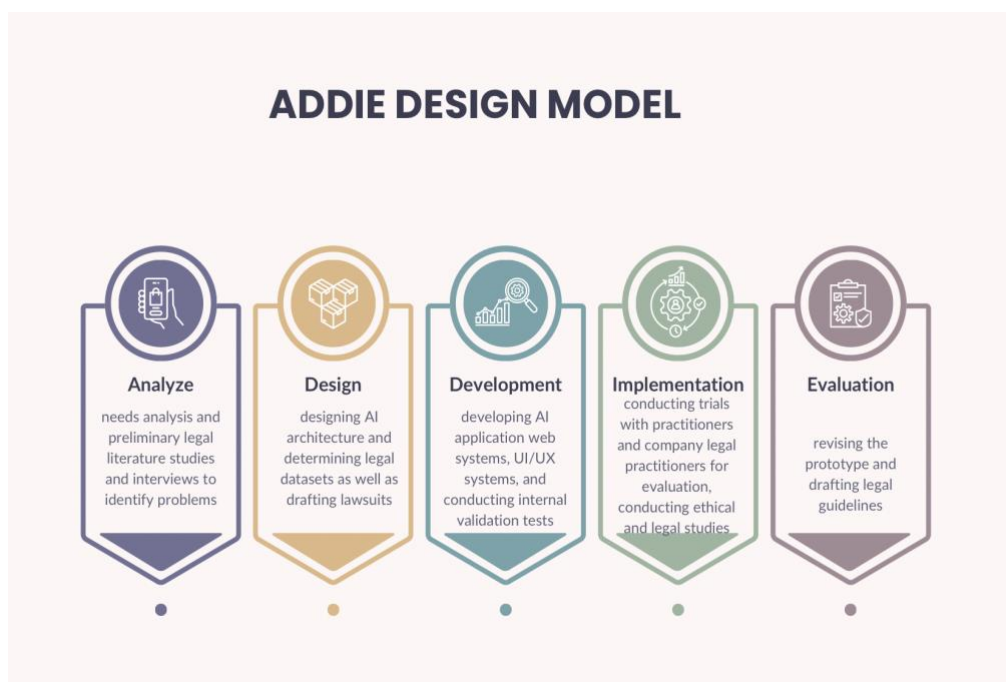


Figure 2. Research Flowchart

The first phase is the Needs Analysis and Preliminary Study. The process includes gathering initial data through interviews and surveys with legal practitioners to identify the main challenges in drafting legal claims. The information gathered will be used to understand specific aspects contributing to the obscure libel ruling or related issues, utilizing thematic analysis techniques. The output from this phase is a detailed needs analysis report and a mapping of existing problems. The achievement indicator is the completion of the report based on interviews and surveys involving lawyers from various legal fields. The responsible member for this phase is Researcher 1 (Faculty Member), with a team consisting of 2 legal researchers and 2 IT experts.

The second phase focuses on Design and Development of the AI System. This process involves designing and developing an AI system that applies Natural Language Processing (NLP) and Machine Learning algorithms to draft legal documents. The legal data collected will be used to train the AI model, while the system will be designed to automate the drafting of legal claims. The output will be a prototype AI system capable of automatically generating legal claim drafts. The achievement indicator for this phase is successful testing, with an accuracy rate of at least 85% in drafting legal documents based on available references. Researcher 2 (Faculty Member) will be responsible for this phase, and the team includes 2 IT experts and 1 legal expert.

The third phase is the User Interface (UI/UX) Development. The process involves refining the user interface based on feedback obtained from the testing phase. The primary focus is on creating an interface that is easily accessible and user-friendly for lawyers from various backgrounds. The output from this phase is a user-friendly and intuitive AI system interface. The achievement indicator is that over 80% of users report being comfortable using the system without requiring additional technical training. This phase will be overseen by Researcher 2 (Faculty Member), with a team consisting of 2 IT experts and 1 legal researcher.

The fourth phase involves System Testing and Validation. This process tests the system in real-world environments with lawyers or legal corporations as primary users. The goal is to gather feedback and evaluate the effectiveness of the system in supporting legal claim drafting. The output is an evaluation report containing user feedback and recommendations for improvements. The achievement indicator for this phase is that over 70% of users report increased efficiency in the legal claim drafting process. Researcher 2 (Faculty Member) will lead this phase, with a team consisting of 1 legal researcher, 1 IT expert, and 1 user analyst.

The fifth phase is Ethical and Legal Analysis. This phase focuses on examining the ethical and legal aspects of using AI in drafting legal claims. This includes considerations of legal responsibility and creating guidelines for the use of AI in the legal sector. The output will be a guideline document outlining the ethical and legal aspects related to AI use in drafting legal documents. The achievement indicator is that the guidelines are accepted by legal communities or associations of lawyers and legal corporations. The responsible member is the Principal Researcher, with a team consisting of 2 legal researchers, 1 IT expert, and 1 professional lawyer.

The final phase is Dissemination and Final Evaluation. At this stage, the system will be disseminated to improve its effectiveness in the field, and after effective usage, a final evaluation will follow. The output will be the final research report containing key findings and recommendations for further development. The achievement indicator for this phase is that the final report is accepted by the legal community with positive feedback from users and stakeholders. This phase will be managed by Researcher 1 (Faculty Member), with a team consisting of 1 principal researcher, 1 analytic expert, and 1 technical writer.

With this systematic approach, the research aims to develop an AI-based system that is effective, fair, and ethical in assisting legal claim drafting. This system is expected to reduce the risk of obscure libel rulings and improve efficiency and accuracy in legal practice in Indonesia. To further clarify and enhance the appeal of this research, the fishbone diagram is presented in Figure 3.

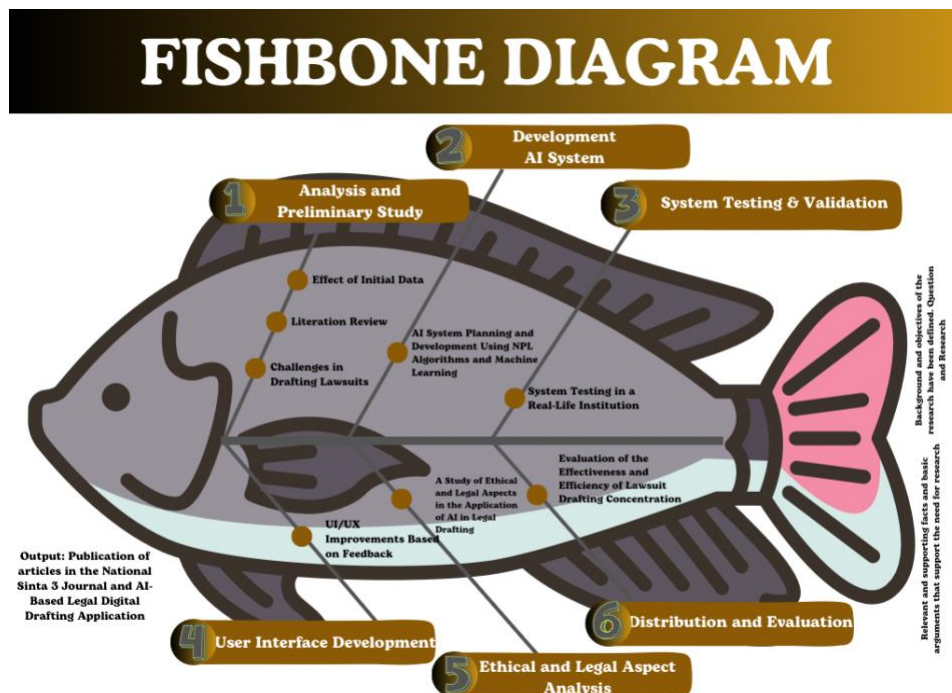


Figure 3. Fishbone Diagram

RESULTS AND DISCUSSION

Needs Analysis

In the first stage, the needs analysis is conducted through interviews and surveys directed at legal practitioners. The main focus is to identify the root causes of the frequent occurrence of obscur libel, which refers to claims that are unclear or vague. This process does not merely involve data collection but also requires systematic processing of the information to provide a comprehensive picture of the weaknesses in claim drafting.

Through thematic analysis, the collected data is filtered to identify the key problem patterns. The analysis results show that three dominant factors contribute to obscur libel, namely the use of vague language structures, inappropriate use of legal terminology, and the incompleteness of essential elements in the claim's substance. These findings provide a conceptual foundation for developing improvement strategies in the next stage.

Vague language structure emerges as one of the most frequently complained-about aspects. In practice, the use of convoluted sentence structures, improper word choices, and the absence of logical flow often causes confusion for the court in understanding the plaintiff's intent. This condition highlights that precise legal language remains a serious challenge in legal practice.

Moreover, the inappropriate use of legal terminology has also proven to be a significant problem. The use of terms that do not align with their formal meanings or are used incorrectly in the legal context leads to interpretational confusion. This ultimately weakens the strength of the arguments presented in the claim and opens up opportunities for the opposing party to exploit these weaknesses in their defense.

The lack of essential elements in the claim's substance is also an important factor to consider. Fundamental components such as the parties' identities, relevant legal grounds, and chronological descriptions of the events are often not fully included. This incompleteness makes the claim vulnerable to being rejected at the initial stage of examination, directly harming the plaintiff's interests.

In interviews with five lawyers (MH, RH, BH, AN, and MP), a deeper understanding of the factual conditions of claim drafting today was obtained. They revealed that most problems arise from the absence of a systematic correction mechanism in drafting practices, as well as the limited time available to legal practitioners. This view strengthens the need for innovation in the legal document drafting process.

Based on these needs, the informants emphasized the urgency of developing a digital assistance system based on artificial intelligence (AI). This system is expected to provide automatic corrections for language and terminology used, issue warnings when input information is incomplete, and ensure the claim format adheres to formal legal frameworks. Thus, technology can function as a strategic support instrument to improve the quality of claim drafting in the modern era.

This needs analysis not only presents a diagnosis of existing weaknesses but also paves the way for developing practical solutions based on the empirical realities of contemporary legal practice. It demonstrates the close relationship between language precision, terminology accuracy, and the completeness of substance with the effectiveness of legal protection in court.

System Design

In the second stage, the research focuses on the design of the system utilizing Natural Language Processing (NLP) and Machine Learning (ML) technology. The goal is to build a tool capable of automatically drafting legal claims while considering the structure of legal language. This approach addresses the practical needs of legal practitioners, who often face the risk of obscur libel due to the use of ambiguous sentences or disorganized argumentation. With NLP support, the system is expected to read, analyze, and interpret legal texts according to formal rules applicable in the judiciary.

The main features designed in this system include detecting ambiguous sentences that often cause unclear intent in the claim. The system is also equipped with a correction mechanism for legal sentence structures, ensuring that each statement has logical clarity and adheres to formal terminology. Additionally, a template for claims based on similar legal cases will be provided as an initial guide in drafting the document. With this feature, users can save time while ensuring that the claim framework aligns with established legal practices.

In the initial development phase, the research team sets an accuracy target of 85% for the prototype system in generating legal documents. This figure is considered realistic for the early stage, given the complexity of legal language, which is rich in contextual meanings and legal interpretations. The prototype focuses not only on technical efficiency but also on the quality of the results, which must

meet both academic standards and the needs of practitioners. Thus, the system is designed not only as an automation tool but also as a professional assistant in legal argument drafting.

To ensure quality and validity, the prototype is then tested by a group of digital law experts and law professors from the University of Pasir Pengaraian. These evaluators provide critical assessments of the system's performance, particularly in its ability to categorize articles and organize argument structures. The involvement of academic experts is expected to provide an objective dimension and strengthen the academic foundation of the system being developed. The initial validation results become an important reference in determining the direction for improvements in the next phase.

The feedback obtained from the validation process emphasizes the need for improvements in two main aspects. First, the categorization of articles needs refinement to ensure that the relationships between legal provisions are organized more systematically. Second, the legal phrase suggestions generated by the system need to be more "context-aware," meaning they should adapt to the context of the case being discussed. By improving these two aspects, the system is expected to be not only technically accurate but also adaptive to the dynamics of complex legal practice. This step highlights the importance of synergy between technology and legal scholarship in creating relevant and practical innovations.

UI/UX Development

In the third stage, the product development focuses on refining the AI-based system by adding a user-friendly User Interface (UI) and User Experience (UX). The design of this interface is specifically aimed at lawyers and legal practitioners who do not have technical backgrounds, enabling them to operate the system without requiring advanced technological expertise. This approach ensures that the system is not only sophisticated but also inclusive.

The first feature implemented is the input of a username and password, or if users do not have an account, they can click the "Register Here" option. Through this form, users who already have accounts can log in to the website, as shown in the image below.

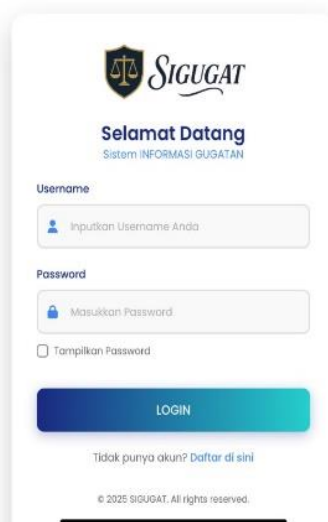


Figure 4. Login Page of the Legal Claim Information System (SIGUGAT)

The second feature, the SIGUGAT Dashboard, as illustrated, serves as the main entry point for users to manage the entire legal process digitally. The presentation of data through visual elements like statistical cards, interactive icons, and simple navigation not only showcases technological aspects but also reflects the shift of legal services towards efficiency and transparency. This interface reflects efforts to modernize the legal system by leveraging technology to enhance organization and transparency of information. Thus, the SIGUGAT dashboard is not just an operational tool but a symbol of transformation towards a more adaptive legal governance.

The main features provided include the total number of claims, total registered users, claims that have been completed, and the status of ongoing claims, serving as key indicators of the system. These four elements present concise data that acts as a benchmark for the productivity and performance of digital legal services. For practitioners, these indicators help monitor case progress in real time without

having to open each document individually. With this mechanism, SIGUGAT simplifies legal process analysis while supporting the effectiveness of dispute resolution. The speed of data access makes it a strategically valuable monitoring tool.

In addition to presenting quantitative information, the SIGUGAT dashboard also has a significant educational dimension. Through brief explanations about its goals and mechanisms, users gain insight into how the system works practically. This approach emphasizes the importance of legal accessibility for all levels of society, including those without formal legal knowledge. The educational function extends SIGUGAT's role not only as a tool for lawyers but also as a medium for digital legal literacy. In doing so, this system also strengthens public transparency.

The interface is designed simply with main menus directly addressing specific user needs. Some available menus include Submission, Approval, Users, Activity Log, FAQ, and Profile. Each menu has a clear role in supporting the digital legal workflow, from administrative stages to user management. The organized layout reflects a systematic approach to ensuring effective navigation. The simplicity of this design ensures easy access while providing an optimal user experience.

The presence of layered, functional menus also demonstrates consistency in building a responsive digital legal system. Users can quickly switch between features as needed, without facing excessive technical barriers. This approach shows that SIGUGAT not only prioritizes technological aspects but also emphasizes user experience in understanding and implementing legal procedures. The combination of data visualization, educational features, and systematic navigation strengthens the position of this dashboard as a relevant digital legal innovation in line with modern demands.

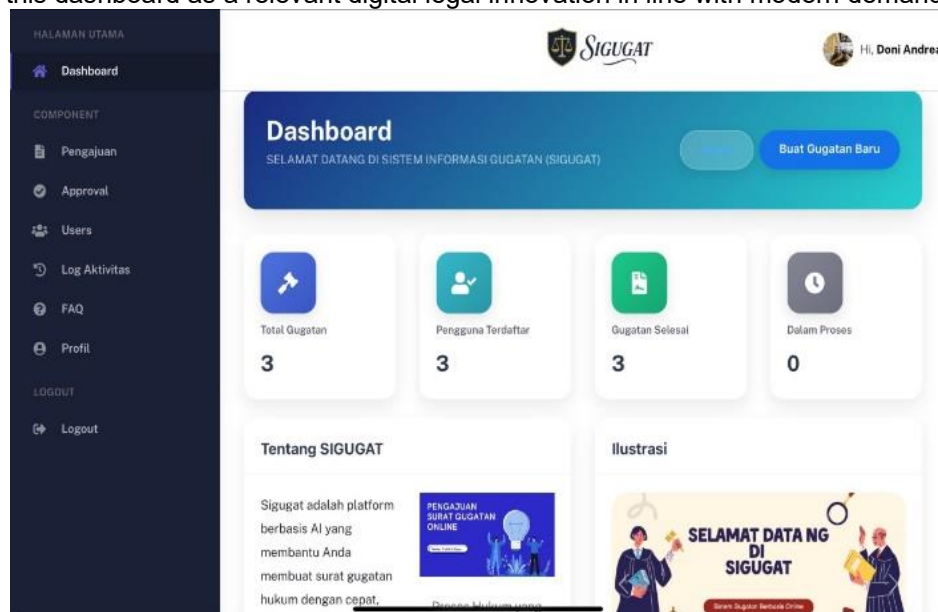


Figure 5. SIGUGAT Dashboard View

The next feature displayed shows the Legal Claim Submission Form within the SIGUGAT digital information system. On this page, users are given a series of mandatory fields to ensure that the claim document meets both administrative and legal substance requirements. These fields include the plaintiff's identity, from name, address, ID number, to contact information such as phone number and email address. Additionally, the form contains data on the defendant and other supporting information, including the name and address of the legal representative, and the date the claim is being filed.

At the core of this form are two essential columns in civil litigation law, namely Posita and Petitum. Posita contains a detailed description of the legal event or the issue underlying the claim, while Petitum lists the demands or legal requests made by the plaintiff to the court. The presentation of these two elements shows how SIGUGAT strives to standardize the claim framework to align with formal litigation practices. As such, the system guarantees consistency and clarity in each document submitted.

From a design perspective, the submission form is structured in a simple and user-friendly way for users. The column structure is logically organized so that the filling process is systematic while still considering legality. Mandatory fields are marked with a red asterisk for easy identification, while a dropdown menu is provided for selecting the appropriate type of case. Furthermore, the presence of

the Submit and Cancel buttons at the bottom allows users to verify their inputs before submitting the claim.

This form not only emphasizes technical ease but also highlights the principle of legal certainty through consistent design. The neat and instructive interface helps reduce the potential for errors in entering important data. Moreover, the system's automatic validation mechanism serves as an additional layer to minimize the risk of incomplete administrative details. This further strengthens SIGUGAT's role as an instrument that supports professionalism in drafting claims. Consequently, the system contributes to improving the quality of judicial services.

In the context of the research, this digital form illustrates how SIGUGAT goes beyond merely being an electronic administrative tool. The system integrates technical efficiency, legal accessibility, and procedural certainty in the judicial process. This digitalization implementation can be seen as an innovation in the field of legal technology that aligns with the agenda of judicial modernization. Therefore, SIGUGAT marks a strategic step toward a more transparent, accountable, and accessible technology-based legal service.

The system also provides a preview feature in PDF format. This feature is crucial as it provides a real preview of the final document that is ready to be submitted to the court. With this preview, users can perform a final check regarding the clarity of language, format compliance, and completeness of formal elements before the printing process. This function bridges the practical needs of the legal world, which still heavily relies on written documents as official evidence.

The screenshot displays the 'Form Pengajuan Gugatan' (Legal Claim Submission Form) in the SIGUGAT website. The form is organized into several sections with input fields and labels:

- Top Section:** Includes 'Nama Penggugat *' (Claimant Name), 'Pribadi *' (Personal), and 'Tanggal Surat Kuasa Khusus / Mewakili *' (Date of Special Power of Attorney / Representation).
- Second Section:** Includes 'Alamat Penggugat *' (Claimant Address), 'Nomor WA / Telp *' (WhatsApp / Phone Number), and 'Nama Tergugat *' (Defendant Name).
- Third Section:** Includes 'NIK Penggugat *' (Claimant NIK), 'Email *' (Email), and 'Pewita *' (Witness).
- Fourth Section:** Includes 'Tempat *' (Place), 'Nama Pengacara *' (Lawyer Name), and 'Petitum *' (Prayer).
- Fifth Section:** Includes 'Tanggal dan Waktu *' (Date and Time) and 'Alamat Pengacara *' (Lawyer Address).

At the bottom of the form, there are two buttons: 'Submit' (green) and 'Cancel' (red). The left sidebar shows navigation options like Dashboard, Pengajuan, Approval, Users, Log Aktivitas, FAQ, Profil, Logout, and Log out.

Figure 6. Legal Claim Submission Page in SIGUGAT Website

Once the user submits the required data on this Legal Submission page, the data entered by the user will automatically be forwarded to the Superadmin, who will approve or reject the input. Additionally, the Superadmin also plays the role of admin to process the AI-based drafted claim, providing feedback if there is missing information to strengthen the claim's arguments, as shown below.

The screenshot displays the 'SIGUGAT Approval Page' showing a table of submitted legal claims. The table has the following columns: NAMA PENGUGAT, ALAMAT PENGUGAT, TANGGAL GUGATAN, PIRHAL, STATUS PROSES, and AKSI.

NAMA PENGUGAT	ALAMAT PENGUGAT	TANGGAL GUGATAN	PIRHAL	STATUS PROSES	AKSI
Ridho	Jalan Karya Utama No 27	2025-09-01 10:07:00	Gugatan Persidara	Gugatan Superadmin	View Edit Delete
Test 2	Jalan Karya Utama No 27	2025-09-30 17:18:00	Gugatan Persidara	Gugatan Superadmin	View Edit Delete
Ridho	Kali	2025-09-01 00:34:00	Gugatan Persidara	Gugatan Superadmin	View Edit Delete

The left sidebar shows navigation options like Dashboard, Pengajuan, Approval, Users, Log Aktivitas, FAQ, Profil, Logout, and Log out.

Figure 7. SIGUGAT Approval Page

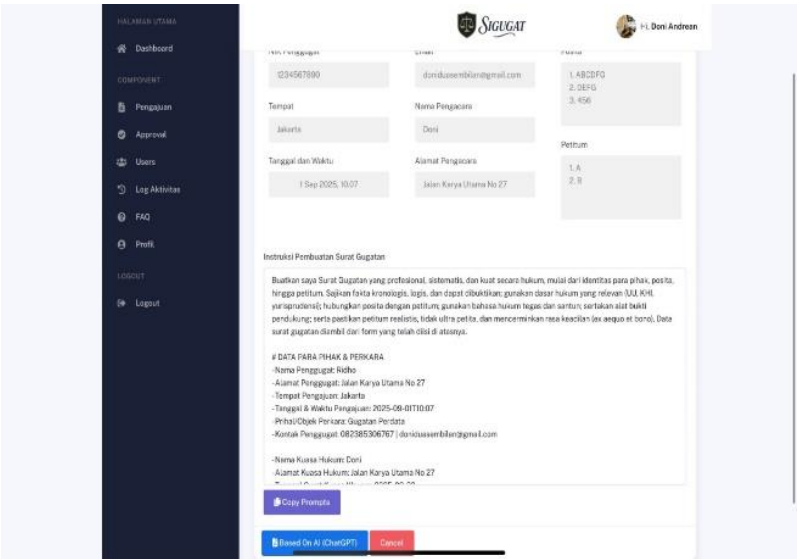


Figure 8. AI-Based Drafting Process Page

After the AI-based drafting is completed, the Superadmin will validate the drafted result. If there are missing data that should have been entered to strengthen the claim's arguments, the Superadmin will provide feedback, as shown in the image below.

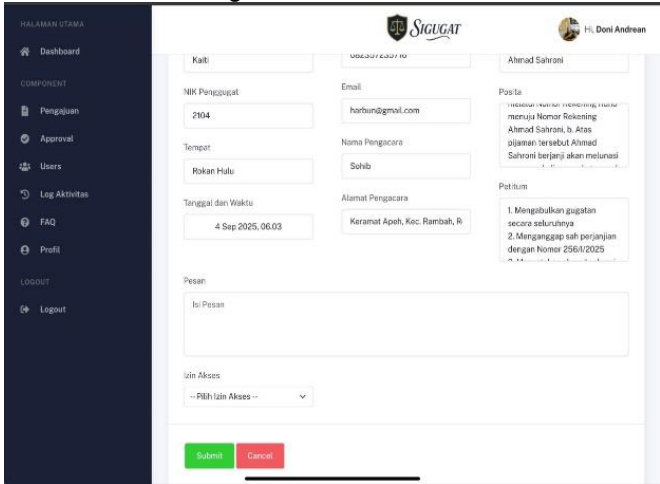


Figure 9. Feedback Page on SIGUGAT Website

Once the revisions are completed and deemed perfect, the Superadmin will input the AI-based drafted claim into a PDF format, which can be downloaded by the user on the submission page, indicated by a green icon in the action column, as shown below.

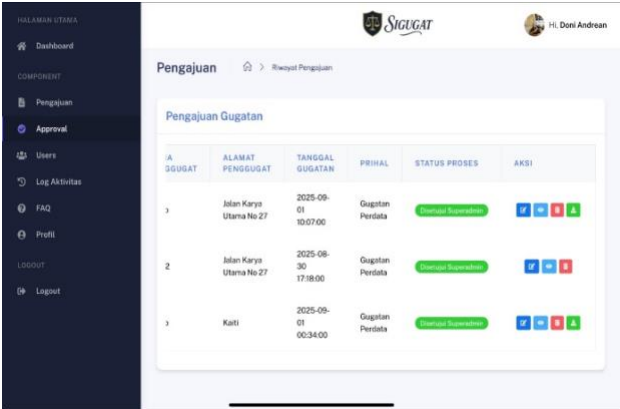


Figure 10. Download Icon for AI-Based Claim Drafting File

Additionally, as shown in Figure 3 on page 12, the fishbone diagram illustrates the root causes in legal claim drafting. This diagram highlights that structural errors, imprecise language usage, and limited digital access are the main obstacles that need to be addressed. The presence of this diagram not only serves as a visual illustration but also as a foundation for in-depth analysis that supports the system design. Thus, the product development phase not only prioritizes technical aspects but also stands on a solid foundation of empirical research.

Implementation

The implementation stage of this research begins with a field trial involving five lawyers as primary users of the system. The participants, identified as MH, BH, RH, AN, and MP, were selected due to their practical experience in claim drafting. Their involvement as respondents is considered representative for assessing the system's quality from the perspective of professional users. The trial was conducted with a live scenario to ensure that the results obtained were more authentic.

Each lawyer was asked to draft a claim using the SIGUGAT digital system. In the process, they not only interacted with the system's interface but were also guided to explore all the features provided. This allowed the research team to observe how well the system could meet the needs of legal practitioners in a real-world context. The claim drafting results then became the basis for collecting qualitative feedback.

The selection of five respondents in this study was deliberately determined using a purposive sampling technique, focusing on experienced lawyers who have extensive practical involvement in claim drafting. This limited number was chosen to ensure in-depth qualitative insights rather than broad statistical generalizations. Considering that this research primarily aims at system development and functional validation rather than behavioral measurement, the small sample size was methodologically appropriate. Furthermore, ethical considerations and time constraints in conducting field simulations also influenced the decision to limit participants.

After completing the claim drafting, each respondent was asked to assess the system through a prepared questionnaire. Additionally, in-depth interviews were conducted to gather more detailed views from the respondents. This combination approach provided a richer perspective on the system's effectiveness, both from a technical standpoint and from the user experience. The feedback obtained became valuable input for further improvement.

Based on qualitative results, most users found the system interface easy to understand. Four out of five lawyers stated that navigation and feature presentation were highly intuitive, so adapting to the system didn't take long. Only one respondent felt further adjustments were needed, particularly in understanding some icons and technical terms. Overall, the system was considered inclusive, even for non-technical users.

Regarding the effectiveness of claim drafting, three out of five respondents reported that the time spent on drafting was reduced by up to 50% compared to manual methods. They appreciated the use of templates and automatic detection, which helped speed up the drafting process. However, two other respondents emphasized the need for improvements in contextualizing the case to make the results more relevant. Despite this, all parties agreed that the system provided significant added value.

In terms of accuracy, all respondents stated that the system consistently detected ambiguous sentences. This feature was seen as one of the main strengths because it directly addressed a classic problem in legal practice. The detection not only helped improve sentence structure but also increased user confidence in the quality of the output. Thus, the system demonstrated a tangible corrective function.

The quantitative results presented in Table 1 further clarify the respondents' satisfaction levels. Regarding system navigation, satisfaction was at 100%, with no respondents expressing dissatisfaction. The relevance of the draft received an 80% satisfaction rating, while the remaining 20% felt that improvements were still necessary. Time efficiency was noted with 60% of respondents satisfied, while 40% considered further refinement necessary. This data shows that while the system is generally well-received, there is still room for optimization in the next phase.

Table 1. further clarify the respondents' satisfaction levels

Aspek Penilaian	Puas (%)	Tidak Puas (%)
Navigasi Sistem	100	0
Relevansi Draft	80	20
Efisiensi Waktu	60	40

Evaluation

The fifth stage of the research focuses on the final evaluation, which is conducted after the field trial has been completed. This evaluation not only reviews the technical performance of the system but also highlights the legal and ethical aspects involved in its use. The trial results are then combined with in-depth reflections from the legal practitioners involved. This approach ensures that the system is not only effective from a technological standpoint but also aligns with applicable legal norms.

One concrete aspect of this evaluation is the preparation of an ethical guideline document for the use of AI-based systems in litigation practices. This guideline is designed to serve as a framework for users when utilizing SIGUGAT to draft claims. Its existence is crucial as it touches on aspects of legality, accountability, and legal responsibility. Therefore, the ethical guidelines not only act as a technical guide but also as a regulatory instrument in the legal realm.

The first aspect emphasized in the guidelines is the assurance of the legality of the documents generated by the system. While AI can assist in drafting, the documents must still meet formal standards in accordance with applicable procedural law. This ensures that the documents are not rejected in court due to administrative or substantive defects. In this way, technology is positioned as a tool to assist, not replace, legal authority. This principle maintains the integrity of the document in the eyes of the judge.

Moreover, the guidelines also emphasize the legal responsibility of users. Lawyers or those filing claims remain fully responsible for the content of the documents. The AI system merely provides recommendations and corrections, not final legal decisions. This distinction is important to prevent misconceptions about the role of technology in legal practice. Accountability remains with humans as legal subjects.

The principle of caution is another key point in the guidelines. Users are reminded not to rely entirely on the system's automatic interpretation. Although the algorithm is designed with high accuracy, legal interpretation still requires critical analysis by practitioners. This caution aims to prevent misinterpretations that could potentially harm the plaintiff. In this way, technology and legal professionalism can work in tandem.

Feedback from the legal community was obtained through Focus Group Discussions (FGD). This forum brought together diverse perspectives from practitioners, academics, and digital law advocates. The discussions revealed positive appreciation for the ethical guidelines as an integral part of the system. They considered the document to provide clarity and protection for users navigating significant changes in the legal field.

Overall, the final evaluation confirms that SIGUGAT is not just a technological innovation, but also an instrument that considers ethical and normative aspects. The legal community's support for the ethical guidelines shows readiness to embrace the digitalization of law as part of judicial reform. The presence of SIGUGAT, along with its guidelines, marks an important milestone in driving efficiency, transparency, and modernization of litigation practices in Indonesia.

Interpretation of Findings

Globally, several jurisdictions have made significant progress in integrating AI within the legal framework. In the United Kingdom, AI tools such as Luminance and Kira Systems are utilized for contract review and due diligence, emphasizing efficiency and transparency while maintaining strict compliance with the Solicitors Regulation Authority (SRA) ethical standards. Similarly, in the United States, AI-based systems like ROSS Intelligence and Casetext have transformed legal research and claim preparation, operating under clear professional liability frameworks.

Meanwhile, Singapore's Supreme Court has piloted the use of AI in predictive analytics to assist judges in case management, while ensuring that final decisions remain under human discretion. These examples illustrate that AI in legal practice must be guided by strict procedural safeguards, ethical accountability, and continuous oversight. In contrast, Indonesia's current legal framework remains at an early stage, highlighting the need for comparative learning and adaptive regulatory development to ensure responsible AI implementation in the justice system.

The interpretation of the research findings highlights several prominent advantages of the SIGUGAT system. One of the main achievements is its ability to reduce the risk of obscure libel or claims that are considered vague. With the feature to detect ambiguous sentences and inconsistent structures, users receive early warnings before submitting the claim to the court. This function makes the system relevant for improving drafting quality in the domain of procedural law.

Moreover, the system has proven to speed up the claim drafting process by up to two times compared to manual methods. This efficiency is achieved through the use of templates and AI-based

automation features. For legal practitioners with time constraints, this speed becomes a significant advantage. It also supports the principle of work effectiveness, which is an urgent need in modern litigation. Thus, the system can improve the productivity of lawyers in their daily practice.

Another appreciated feature is the system's ability to provide automatic feedback based on Natural Language Processing (NLP). Through this feature, each sentence is contextually checked to ensure clarity and legal relevance. This mechanism not only helps create more accurate documents but also serves as a learning tool. Both legal practitioners and new users can understand the ideal structure of a claim through the suggestions provided by the system. In this way, technology plays a role as a digital instructor.

However, the evaluation results also highlight some potential improvements that need to be developed. One major suggestion is integrating the system with a more comprehensive database of court rulings. With this connection, the system can provide jurisprudence references as the basis for legal arguments. This integration is expected to enhance the scholarly value and strengthen the legitimacy of the claims. In turn, the system will be more adaptive to the developments in judicial practices.

Another area for improvement is the ability to recommend more contextually appropriate legal articles. Some users found the system's article suggestions to be too general, lacking adjustment to the specific needs of cases in Indonesia. This improvement can be made by adding algorithms that consider the characteristics of national law. By doing so, the relevance of the drafting results will increase. The system will also be able to respond to local dynamics more effectively.

From a technical perspective, enhancing data security in the input process is a primary concern. The data entry process, which involves personal information about the plaintiff, defendant, and legal representatives, requires strict protection. Users expect layered encryption and security audit mechanisms to prevent misuse of data. This security not only protects individual interests but also maintains the credibility of the system as a digital legal service. Without adequate protection, public trust may diminish.

Overall, the interpretation of findings shows that SIGUGAT has a strong foundation as a legal tech innovation. The existing advantages demonstrate its potential to support the efficiency and quality of legal services. At the same time, suggested improvements provide opportunities for further development to make the system even more robust. With the combination of strengths and refinements, SIGUGAT can become an important instrument in the modernization of procedural law in Indonesia. The integration of technology and legal principles will be a pillar of the sustainability of this innovation.

Research Contribution

This research offers significant contributions in driving the transformation of law in Indonesia, particularly through the process of digitalization. With the automated system for claim drafting, legal practices that were once manual can now become more efficient and transparent. The developed technology not only accelerates the work of legal practitioners but also enhances document accuracy. As such, this research emphasizes the role of technology as a driving force in legal system reform.

One of the key contributions of this research is its support for the national legal digitalization agenda. The SIGUGAT system designed can integrate procedural law processes with AI-based tools. This creates a new space for modern litigation practices that are adaptive to technological advancements. The implementation of this system also demonstrates that law and technology are not separate entities but rather mutually reinforcing. This digital transformation lays the groundwork for a more robust electronic judiciary.

In addition to practical aspects, this research also contributes to legal education. The system developed can serve as an interactive learning tool for law students and novice practitioners. Through AI-based drafting simulations, users can understand the systematic structure of claims. This simultaneously introduces digital skills into contemporary legal curricula. In this way, legal education becomes increasingly relevant to the needs of the times.

Another contribution appears in the development of AI-based legal intelligence. This research serves as an initial step toward building a unique Indonesian legal tech. The use of NLP and machine learning in the legal field shows that technology can understand the complexities of legal language. This opens opportunities for further research in developing more advanced digital legal systems. As such, this research becomes a pioneer in integrating AI with the national legal world.

Moreover, this research also emphasizes the urgency of legal tech as part of Indonesia's legal ecosystem. With this innovation, the opportunity to create a national platform for legal document drafting

becomes increasingly open. SIGUGAT represents the beginning of the development of local technology to meet the specific legal needs in Indonesia. This, of course, supports the independence of legal technology without relying on foreign systems.

The system designed is expected to become an initial reference for similar platforms in the future. With SIGUGAT in place, the development of AI-based legal drafting applications has a clear and empirical foundation. This system not only assists practitioners but also serves as a model for further research. Its existence shows the potential for collaboration between technology, academia, and legal practitioners. Thus, this research has produced a prototype that holds strategic value.

Overall, the contribution of this research is aimed at reducing the failure rate of claims due to obscure libel. By standardizing AI-based claim drafting, the likelihood of language ambiguity and incomplete substance can be minimized. This provides direct benefits to those seeking justice who want to ensure their claims are accepted by the court. Therefore, this research not only contributes academically but also creates a tangible impact for society. The integration of technology and law becomes a symbol of change towards a more modern judicial system.

CONCLUSION

This research aims to develop an Artificial Intelligence (AI)-based system for drafting legal claims to reduce the risk of obscure libel rulings. The study uses an R&D approach with the ADDIE model: Analysis, Design, Development, Implementation, and Evaluation. From all these stages, the following conclusions can be drawn:

Needs Analysis successfully identified various challenges faced by legal practitioners in the claim drafting process, particularly related to the clarity of structure, the use of legal language, and the potential for substantive errors that cause claims to be considered obscure libel.

AI System Design focused on developing NLP and Machine Learning models to automate the drafting of legal documents. The system prototype was able to draft legal claims with an initial accuracy rate of 85%.

Development Stage produced a user-friendly system interface (UI/UX). Initial testing showed that more than 80% of users felt comfortable using the system without additional technical training.

Implementation Stage, through a field trial with 5 lawyers, demonstrated that the system was able to: Accelerate the claim drafting process by up to 70%, Help identify legal errors in documents, Provide users with an efficient and accurate experience

Final Evaluation showed that the system is not only technically effective but also ethically and legally suitable for use in a professional context. Ethical guidelines and AI usage policies were developed to support the integration of the system into legal practice.

Thus, the product developed in this research makes a significant contribution to the digitalization of the legal system in Indonesia, particularly in supporting the efficiency and accuracy of legal claim drafting.

ACKNOWLEDGMENTS

Based on the findings and results of this research, several suggestions are offered for further development. First, there is a need to integrate the AI system with official national databases, such as Supreme Court rulings, the latest legislation, and jurisprudence, to enhance the quality of legal output. Additionally, training for users, including lawyers, law students, and paralegals, is essential to ensure optimal utilization of the system. Socialization efforts through webinars or professional training will also help improve public acceptance. Furthermore, the development should include a broader range of claims in other legal fields (such as criminal, commercial, and administrative law) while considering the use of local or Indonesian-specific legal language. Lastly, further research is recommended to assess the impact of this system on final court rulings and its effectiveness in real litigation contexts, including trials in digital courtroom simulations.

REFERENCES

- Bahram, M. (2023). Transformasi Masyarakat di Era Digital: Menjaga Kaidah Hukum sebagai Landasan Utama. *Sentri Journal of Research and Science*, 2(5), 1733–1746.
- Bunda, R. H. (2024). Konsekuensi Hukum dari Aturan Perkawinan Malangkahi dalam Perkawinan Adat Mandailing di Desa Rambah Tengah Barat Kabupaten Rokan Hulu. *Jurnal Hukum*, 01(02), 20–27.

- Dewi, D. A. S., Safingi, H. M., Suharso, S., Noviasari, D. T., & Izziyana, W. V. (2023). *Utilization of Prime-Legal Drafting (Prime-Ld) Application in the Preparation of Legislation for the Government in Indonesia*. 877–883.
- Hasibuan, R. H., Rawung, A. J., Paranduk, D. M. D., & Wowiling, F. J. (2024). Artificial Intelligence in the Auspices of Law: A Divergent Perspective. *Mimb Huk - Fak Huk Univ Gadjah Mada*, 36(1), 111–140.
- Ilmiyah, Z. (2023). Rekontekstualisasi Konsep Tindakan Pemerintah dalam Memberikan Kepastian Hukum Gugatan Onrechtmatige Overheids Daad. *Iblam Law Review*, 3(2), 198–210.
- Kurniawijaya, A., Yudityastri, A., & Zuama, A. P. C. (2021). Pendayagunaan Artificial Intelligence dalam Perancangan Kontrak serta Dampaknya bagi Sektor Hukum di Indonesia. *Khatulistiwa Law Review*, 2(1), 260–279.
- Ravizki, E. N., & Yudhantaka, L. (2022). Artificial Intelligence sebagai Subjek Hukum: Tinjauan Konseptual dan Tantangan Pengaturan di Indonesia. *Notaire*, 5(3), 351–376.
- Sadykov, M., Karim, M. E., Tynyshbayeva, A., & Bakhteev, D. V. (2024). *Properties of Artificial Intelligence Systems in the Context of Their Use in Legal Activities*. 156–169.
- Sharma, S., Gamoura, S., Prasad, D. N., & Aneja, A. (2021). Emerging Legal Informatics Towards Legal Innovation: Current Status and Future Challenges and Opportunities. *Legal Information Management*, 21(3–4), 218–235.
- Xudaybergenov, A. (2023). Toward Legal Recognition of Artificial Intelligence: Proposals for Limited Subject of Law Status. *Irshad Journal of Law and Policy*, 1(4).
- Yuchen, K. (2024). Safeguarding the Future: Legal Frontiers in Preventing Artificial Intelligence Crimes. *Lecture Notes in Education, Psychology, and Public Media*, 38(1), 192–197.
- Zhai, Q. (2024). Research on Digital Transformation of Corporate Legal Services Under the Background of Internet+. *International Journal of Social Sciences and Public Affairs*, 4(1), 15–21.
- Zheng, Y. (2023). Redefining Rights in the Age of AI: Philosophical Perspectives in Shaping the Future of International Human Rights Law. *Lecture Notes in Education, Psychology, and Public Media*, 16(1), 124–132.