The Impact of ChatGPT Technological Innovation on Civil Law Practices: Challenges, Opportunities, and Implications of Article 1338 of the Civil Code

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Abstract

In the continuously evolving digital era, technological innovation increasingly influences various aspects of human life, including civil law practices. One intriguing technological innovation is ChatGPT, an artificial intelligencebased language model capable of generating high-quality text closely resembling human capability. This research aims to provide a deeper understanding of the impact of ChatGPT technological innovation on civil law practices, considering the challenges, opportunities, and implications of Article 1338 of the Civil Code. This study is a literature review employing a qualitative approach and descriptive analysis. Data for this research were gathered from Google Scholar within the timeframe of 2019-2024. The study's findings indicate that the introduction of technological innovations such as ChatGPT has significantly transformed the landscape of civil law practices. Despite posing several challenges, such as technological skill availability, data security, and questions regarding legal validity, ChatGPT also presents substantial opportunities to enhance efficiency and accessibility in civil law practices. Considering the legal principles underpinning civil law practices, particularly within the context of Article 1338 of the Civil Code, is crucial in evaluating the impact and utilization of technologies like ChatGPT. The necessity for collaboration between legal experts and technologists to develop guidelines and standards that guide the ethical and effective use of technology is also highly imperative.

Keywords: Article 1338 of the Civil Code, ChatGPT, Civil Law

1. INTRODUCTION

In this continuously evolving digital era, technological innovation has played an increasingly crucial role in transforming the dynamics of human life, including within the realm of civil law. One primary focal point is ChatGPT, a language model based on artificial intelligence, which significantly broadens insights regarding the potential of technology in generating high-quality text that approaches human capabilities (Sudirjo, Ausat, et al., 2023). The presence of ChatGPT marks a paradigmatic shift in legal practices, where its ability to process information, analyze data, and generate legal arguments becomes a vital factor in expediting case resolution processes and enhancing the overall efficiency of the legal system (Darman, 2024).

In the continuously evolving context of civil law practices, technological innovation has become a significant variable that complicates and enriches the dynamics involved. Article 1338 of the Civil Code, as the legal basis governing fairness and customary practices in contract formation, indicates the necessity of adapting to the advancements of the times (Yuanitasari & Hazar Kusmayanti, 2020). The emergence of new technologies such as ChatGPT calls for careful reflection on how these technologies modify the landscape of civil law. The challenges arising, the opportunities presented, and their implications become important subjects of research for legal practitioners and academics to delve into deeply. The existence of ChatGPT introduces a new dimension to civil law analysis (Nurul Hafiza, 2023), requiring wise and informed responses from the legal community to ensure that fundamental principles are upheld in the face of the relentless technological revolution.

One of the main challenges that arise is the complexity surrounding the validity and credibility of texts generated by ChatGPT. Fundamental questions about whether such texts can be admissible as evidence in the context of agreements come to the forefront, demonstrating the need for careful examination of their legal status. Additionally, issues related to intellectual property rights protection also come into focus, given that ChatGPT operates with a learning model relying on data from various sources (Kretschmer et al., 2024; Wu et al., 2024). Efforts to address the legality and ethics surrounding

the use of ChatGPT in the context of civil law become increasingly important, requiring interdisciplinary collaboration and active involvement from stakeholders to achieve balanced and sustainable solutions.

However, on the flip side, the utilization of ChatGPT opens up significant new opportunities in civil law practice. Its presence presents the possibility of expediting the process of drafting legal documents through automated text generation, which can contribute substantially to time and resource efficiency (Wijonarko et al., 2023). Moreover, ChatGPT's ability to generate deeper and more comprehensive analyses can also become a valuable tool for civil law practitioners in understanding and evaluating various aspects of legal cases. Furthermore, in dispute resolution contexts, the application of ChatGPT is speculated to lead to a more efficient and targeted approach, facilitating more productive dialogue between involved parties and expediting the search for sustainable solutions.

In addition to considering the challenges and opportunities that arise, examining the implications of Article 1338 of the Civil Code on the application of technologies such as ChatGPT is essential in the context of the evolution of civil law. Fundamental questions arise regarding how the principles of fairness and customary practices regulated by this article can be interpreted and applied in the context of utilizing advanced technologies like ChatGPT. Is there a need for adjustments or even revisions in legal regulations to accommodate these new and continually evolving technological advancements? Considerations like these are important in maintaining the relevance and effectiveness of civil law in coping with increasingly complex dynamics of the times.

Given the discussion above regarding the considerations of challenges, opportunities, and implications of Article 1338 of the Civil Code, this research aims to provide a deeper understanding of the impact of ChatGPT technological innovation on civil law practices and to provide a foundation for the development of regulations that align with the developments of the times.

2. RESEARCH METHOD

This study is a literature review employing a qualitative approach and descriptive analysis. The qualitative approach was chosen to gain an in-depth understanding of the impact of ChatGPT technological innovation on civil law practices. This research utilizes descriptive analysis to present detailed information regarding the findings from the selected articles. Data for this research were gathered from Google Scholar within the timeframe of 2019-2024. Firstly, a search was conducted using relevant keywords such as "ChatGPT," "civil law," and similar terms on Google Scholar. Subsequently, a rigorous selection process was carried out for articles relevant to the research topic. Selection criteria included relevance to the topic, quality, and significance. After selection, 23 articles were obtained, which were then used as the database for analysis. Descriptive analysis was conducted by identifying the main themes emerging from these articles and presenting detailed information regarding the findings of each article. This approach allows researchers to gain a comprehensive overview of the impact of ChatGPT technological innovation on civil law practices, as well as explore the challenges, opportunities, and implications arising from the use of this technology in the context of civil law.

STEP	ACTION
Conduct literature review	A. Use qualitative approach to understand
	ChatGPT's impact on civil law
	B. Utilize descriptive analysis to present detailed
	findings
Gather data from Google Scholar (2019-2024)	A. Search using relevant keywords
	B. Select articles based on quality and relevance
	(23 articles chosen)
Conduct descriptive analysis	A. Identify main themes
	B. Present findings
Gain overview of ChatGPT's impact on civil law	A. Explore challenges and opportunities

Table 1. Process Overview: ChatGPT's Impact on Civil Law Literature Review

3. RESULTS AND DISCUSSION

ChatGPT stands for Generative Pre-trained Transformer, an artificial intelligence model that utilizes machine learning techniques to generate text with human-like quality and nuance (Sudirjo, Diawati, et al., 2023). Built on the Transformer architecture, this model can understand and generate text in a more contextual and natural manner (Ausat, Azzaakiyyah, et al., 2023). Continuously updated with evolving technology, ChatGPT can be employed for various purposes, ranging from conversation assistance to creative content generation (Harahap, Ausat, et al., 2023). Through massive text data processing, ChatGPT learns to mimic human language patterns, making it a powerful tool in automatic text generation and natural language understanding (Basir et al., 2023; Fauzi et al., 2023).

Civil law refers to a branch of the legal system governing the relationships between individuals within society, particularly concerning rights, obligations, and civil relations between individuals, whether individually or in groups (Nurdiansyah & Damiri, 2023). It encompasses various aspects, including but not limited to contracts, ownership, inheritance, and civil responsibilities. Civil law endeavors to maintain balance and resolve disputes among the parties involved in these relationships by considering principles such as justice, freedom of contract, and protection of individual rights. In many jurisdictions, civil law is often regulated in written legal codes, such as civil codes or civil law statutes, but can also be formed through customs and court decisions (Christina Bagenda, 2023).

At its inception, the concept of civil law has been a strong foundation in regulating interactions between individuals and legal entities. However, as with many aspects of life, technological advancements have significantly impacted the practice of civil law. One prominent technological innovation in recent years is the development of sophisticated language models, such as ChatGPT (Harahap, Junianto, et al., 2023; Jusman et al., 2023). In this context, its impact on the practice of civil law becomes an intriguing subject for exploration and in-depth analysis, as the emergence of such technology raises new questions regarding the validity of electronic evidence, credibility of AI-generated testimony, and the moral and ethical implications associated with the use of this technology in legal processes.

The first challenge in integrating innovations like ChatGPT into the practice of civil law is the availability and proficiency in understanding the technology. While systems like ChatGPT can assist in crafting legal arguments or providing relevant legal information, their use requires a deep understanding of how they work and their limitations. This demands legal practitioners to enhance their technological literacy to effectively leverage them. Alongside the increasing complexity of technology in legal professionals also need to consider ethical aspects associated with the use of technology in legal processes. Adequate training availability in this field is crucial so that legal practitioners can gain comprehensive understanding of the ethical, moral, and legal implications of using this technology in the realm of civil law (Johan & Manurung, 2023). This means that integrating ChatGPT and similar technologies into civil law practice is not merely a technical issue, but also requires profound consideration of ethical, legal, and technical competencies.

From the opposite perspective, the application of ChatGPT also opens doors to new opportunities in civil law practice. One prominent aspect is its ability to perform quick and efficient analysis of legal documents. With continuously updated algorithms and the ability to process human language naturally, ChatGPT can significantly contribute to contract drafting, legal research, and even predicting legal case outcomes. Through the use of such technology, legal practitioners can utilize time and resources more efficiently, allowing them to focus on more complex legal aspects requiring specialized expertise. Additionally, the speed and accuracy offered by ChatGPT in analyzing legal documents can also reduce the risk of errors or inaccuracies that may occur in manual processes. This condition indicates that integrating ChatGPT into civil law practice can be seen as a progressive step that not only enhances efficiency but also expands analytical and predictive capabilities in the legal context (Priowirjanto, 2023).

However, amidst the various opportunities that arise, the implementation of ChatGPT in civil law practice also invites attention to several implications that need to be considered, especially in the context of Article 1338 of the Civil Code which stipulates that "contracts validly formed shall be binding upon the parties thereto, and shall not be modified or revoked except by mutual consent or by causes

established by law" (Turangan, 2019). In the context of technological innovation like ChatGPT, questions arise regarding the validity and legality of agreements made with the assistance of such technology. Important aspects to consider include whether the parties using ChatGPT truly understand and take responsibility for the content of the agreements generated by the system, as well as the extent of reliability and integrity of the agreement-making process with such technology. Moreover, in determining the validity of agreements made with AI assistance, attention should also be paid to whether there is certainty regarding the identities of the parties involved and clarity regarding the intentions and agreements underlying such contracts.

Fundamental questions about the validity of an agreement drafted with the assistance of ChatGPT in the context of Article 1338 of the Civil Code illustrate the complexity of the relationship between technology and law currently faced. Although ChatGPT can generate text superficially similar to that composed by humans, the existence of algorithms controlling the process raises critical questions about the awareness and intentions of the parties utilizing it. Do ChatGPT users have adequate understanding of the legal implications of the agreements they draft, or is their involvement limited to technical skills in using the machine without the substantial understanding required in the legal agreement-making process? Additionally, it should be noted whether the roles and responsibilities of parties involved in the agreement-making process with the assistance of such technology have been clearly regulated within existing regulatory frameworks.

It should also be noted that technologies like ChatGPT are not entirely free from errors or biases, given that artificial intelligence can be influenced by the data used to train it, which in turn can create unintended biases in its outputs (Sudirjo, Diantoro, et al., 2023). This phenomenon raises deep questions about the reliability and legal accuracy of information generated by such technology. For example, if language models like ChatGPT are given limited access to certain types of data or data that is not representative overall, their outputs may tend to reinforce certain viewpoints or interpretations, which may not align with objective legal standards or be universally acceptable.

In facing the challenges and opportunities arising from innovations like ChatGPT, civil law practitioners are confronted with an urgent call to carefully consider the implications of Article 1338 of the Civil Code and the fundamental principles of law underlying it. Additionally, there is an urgent need for collaboration between legal experts and technology experts to develop guidelines and standards that can provide clear guidance on the ethical and effective use of technology in civil law practice. Thus, technological innovations like ChatGPT have the potential to become highly beneficial tools in enhancing efficiency and accessibility in the civil legal system, while ensuring that principles of justice and legal validity are upheld and well-preserved. Therefore, the implementation of this technology should be based on a careful framework that considers ethical, legal, and practical considerations, with the primary goal of ensuring that human rights interests and principles of justice are not compromised in the journey towards technological efficiency and advancement.

In addition to considerations regarding legal validity and ethical principles, there are several additional aspects that need to be considered in addressing the impact of technological innovations like ChatGPT on civil law practice.

First and foremost, it is important to highlight that one of the predominant issues surrounding the use of technologies like ChatGPT is the matter of privacy and data security (Ausat, Suherlan, et al., 2023). Such technologies require the exchange of sensitive information, including legally and personally significant data. Therefore, it is imperative for legal practitioners to prioritize the security and confidentiality of their clients' data. Stringent protection measures, such as implementing comprehensive privacy policies and sophisticated data security systems, are crucial to prevent unauthorized access and safeguard the integrity and confidentiality of the involved information. With proactive efforts to ensure adequate data security, legal practitioners can ensure that the use of technologies like ChatGPT does not compromise their clients' privacy but instead contributes positively to providing more effective and reliable services.

Furthermore, it should be noted that apart from privacy and data security concerns, another prominent issue related to the use of technologies like ChatGPT is transparency and accountability (Ausat, Rachman, et al., 2023; Subagja et al., 2023). Although its ability to generate text quickly and

efficiently has been proven, the underlying process may not always be fully transparent to users. Therefore, legal practitioners are advised to gain a deep understanding of the mechanisms of algorithms and the logic governing the formation of the generated results. Additionally, it is important to establish mechanisms that enable users to raise questions or objections to the outcomes generated by such technology, thus maintaining its integrity and ensuring proper accountability in its use within legal and ethical contexts. Thus, greater transparency in the process and the existence of mechanisms allowing users to actively participate in the use of such technology can provide a stronger basis for ensuring that the use of ChatGPT is carried out responsibly and trustworthily.

As for the third concern that arises, the significance of fostering technological skills and literacy among legal practitioners cannot be overstated. With the continuous advancement of technology, it becomes increasingly imperative for legal practitioners to gain a deep understanding and adequate skills related to the technological tools they employ in their practice. This underscores the need for regular training and ongoing education regarding the use of specific technologies, such as ChatGPT, which can equip legal practitioners with the skills and knowledge necessary to optimize the full potential of such technology within the scope of legal practice. Thus, efforts to foster skills and technological literacy not only support the improvement of the quality of services provided by legal practitioners but also strengthen their position in facing the challenges posed by the continuously evolving digital era.

Another aspect that needs to be addressed is the potential inequality of access that may arise with the use of technologies like ChatGPT in legal practice. While the ability of this technology to enhance efficiency in the provision of legal services has been demonstrated, it should be recognized that there is a risk that its use may exacerbate disparities in access to the legal system. Therefore, legal practitioners are tasked with the important duty of ensuring that the utilization of technology does not worsen the access gap to legal services, especially among individuals who may lack sufficient access or skills in using technology. Necessary efforts include developing strategies to overcome access barriers that may arise, such as providing additional training for those in need or ensuring that alternative options are available for individuals who may not be comfortable with technology. Thus, awareness of the potential implications of the use of such technology in the context of access inequality becomes crucial in ensuring that access to legal services remains fair and equitable for all parties involved.

One final point that should not be overlooked is the urgency of continuously monitoring and proactively adjusting legal practices to the advancements in technology. The rapidly changing technological era demands that legal practitioners stay connected with the latest developments in the world of technology. Therefore, a firm commitment to continuous learning and adaptation to changes, as well as readiness to adjust legal practices in line with the ongoing technological dynamics, is required. This includes not only understanding specific technologies but also the ability to recognize the legal implications associated with emerging innovations. By paying attention to and promptly responding to technological developments, legal practitioners can ensure that they remain relevant and effective in providing quality legal services in the ever-evolving digital era.

By thoroughly considering all related aspects, legal practitioners have the opportunity to address the impacts of technological innovations like ChatGPT with an approach that is not only responsible but also effective. Thus, technology is not merely viewed as an auxiliary tool but as a powerful ally in improving efficiency and accessibility in civil law practice. For example, ChatGPT can assist in automating routine tasks, allowing legal practitioners to focus on more complex aspects requiring human judgment. However, it is important to ensure that in using such technology, fundamental legal principles are not overlooked or compromised. Therefore, legal practitioners must retain control over the use of such technology, ensuring that its implementation and utilization remain in accordance with the ethical and legal values firmly held within the applicable legal system. With such a careful and considered approach, technology can become a beneficial tool in supporting fair and effective legal enforcement.

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Authors		v of ChatGPT Rel Year	Results
Sudirjo, Diawati, et al.	2023		ChatGPT stands for Generative
			Pre-trained Transformer, an
			artificial intelligence model that
			utilizes machine learning
			techniques to generate text with
A / A 11 1 / 1	2022		human-like quality and nuance.
Ausat, Azzaakiyyah, et al.	2023		Built on the Transformer
			architecture, this model can
			understand and generate text in a more contextual and natural
			more contextual and natural manner.
Harahap, Ausat, et al.	2023		Continuously updated with
Thuranap, Thusan, et al.	2025		evolving technology, ChatGPT can
			be employed for various purposes,
			ranging from conversation
			assistance to creative content
			generation.
Basir et al.	2023		Through massive text data
			processing, ChatGPT learns to
			mimic human language patterns,
			making it a powerful tool in
			automatic text generation and
			natural language understanding.
Nurdiansyah & Damiri	2023		Civil law refers to a branch of the
			legal system governing the
			relationships between individuals
			within society, particularly concerning rights, obligations, and
			civil relations between individuals,
			whether individually or in groups.
Harahap, Junianto, et al.	2023		Technological advancements,
······································	2020		including the development of
			sophisticated language models like
			ChatGPT, impact the practice of
			civil law.
Priowirjanto	2023		ChatGPT's ability to perform quick
			and efficient analysis of legal
			documents contributes
			significantly to contract drafting,
			legal research, and predicting legal
T	2010		case outcomes.
Turangan	2019		Questions arise regarding the
			validity and legality of agreements made with the assistance of
			technology like ChatGPT,
			particularly in the context of
			Article 1338 of the Civil Code,
			which governs the validity of
			contracts.
Sudirjo, Diantoro, et al.	2023		Technologies like ChatGPT are not
	-		entirely free from errors or biases,
			raising questions about the
			reliability and legal accuracy of
			information generated by such
			technology.

Table 2. Summary of ChatGPT Related Research

Table 3. Challenges, Opportunities, Implications of Article 1338 of the Civil Code, and Additional

protection

requiring

information.

stringent measures to safeguard sensitive

Aspects				
Challenge	Opportunities	Implications of Article 1338		
		of the Civil Code		
1. Technology Skills and	1. Legal Document Analysis.	1. Validity of Agreement.		
Understanding.				
2. Validity of Agreements.				
3. Error and Bias.	2. Efficiency in Legal Practice	2. Equality of Access.		
4. Data Privacy and Security				
Additional Aspects to Consider				
1. Data Privacy and Security.				
2. Transparency and Accountability.				
3. Skills Development and Technological Literacy.				
4. Adjustment to Technological Developments				

4. CONCLUSIONS

In conclusion, the introduction of technological innovations like ChatGPT has significantly transformed the landscape of civil law practices. Despite posing several challenges, such as technological skill availability, data security, and questions regarding legal validity, ChatGPT also presents substantial opportunities to enhance efficiency and accessibility in civil law practices. Considering the legal principles underpinning civil law practices, particularly within the context of Article 1338 of the Civil Code, is crucial in evaluating the impact and utilization of technologies like ChatGPT. The necessity for collaboration between legal experts and technologists to develop guidelines and standards that guide the ethical and effective use of technology is also highly imperative. Additionally, other aspects that need to be considered include data privacy and security, transparency and accountability, technology skill development, and attention to unequal access in the application of this technology in legal practice. By considering all these aspects holistically, legal practitioners can harness the potential of technologies like ChatGPT in a responsible and effective manner, while ensuring that principles of justice and legal validity are upheld. Thus, technology can become a powerful tool in bringing about positive changes in civil law practices, enhancing efficiency, accessibility, and overall quality of legal services.

REFERENCES

- Ausat, A. M. A., Azzaakiyyah, H. K., Permana, R. M., Riady, Y., & Suherlan, S. (2023). The Role of ChatGPT in Enabling MSMEs to Compete in the Digital Age. Innovative: Journal Of Social Science Research, 3(2), 622–631. https://doi.org/https://doi.org/10.31004/innovative.v3i2.346
- Ausat, A. M. A., Rachman, A., Rijal, S., Suherlan, S., & Azzaakiyyah, H. K. (2023). Application of ChatGPT in Improving Operational Efficiency in the Context of Entrepreneurship. Jurnal Minfo Polgan, 12(1), 1220-1228. https://doi.org/https://doi.org/10.33395/jmp.v12i1.12667
- Ausat, A. M. A., Suherlan, S., & Azzaakiyyah, H. K. (2023). Is ChatGPT Dangerous for Lecturer Profession? An In-depth Analysis. Jurnal Pendidikan Dan Konseling (JPDK), 5(2), 3226-3229. http://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/13878

- Basir, A., Puspitasari, E. D., Aristarini, C. C., Sulastri, P. D., & Ausat, A. M. A. (2023). Ethical Use of ChatGPT in the Context of Leadership and Strategic Decisions. *Jurnal Minfo Polgan*, *12*(1), 1239–1246. https://doi.org/https://doi.org/10.33395/jmp.v12i1.12693
- Christina Bagenda. (2023). *Hukum Perdata* (1st ed.). WIDINA BHAKTI PERSADA BANDUNG (Grup CV. Widina Media Utama).
- Darman, R. (2024). Peran ChatGPT Sebagai Artificial Intelligence Dalam Menyelesaikan Masalah Pertanahan dengan Metode Studi Kasus dan Black Box Testing. *Tunas Agraria*, 7(1), 18–46. https://doi.org/10.31292/jta.v7i1.256
- Fauzi, F., Tuhuteru, L., Sampe, F., Ausat, A. M. A., & Hatta, H. R. (2023). Analysing the Role of ChatGPT in Improving Student Productivity in Higher Education. *Journal on Education*, 5(4), 14886–14891. https://doi.org/10.31004/joe.v5i4.2563
- Harahap, M. A. K., Ausat, A. M. A., Rachman, A., Riady, Y., & Azzaakiyyah, H. K. (2023). Overview of ChatGPT Technology and its Potential in Improving Tourism Information Services. *Jurnal Mininfo Polgan*, 12(2), 424–431. https://doi.org/10.33395/jmp.v12i2.12416
- Harahap, M. A. K., Junianto, P., Astutik, W. S., Risdwiyanto, A., & Ausat, A. M. A. (2023). Use of ChatGPT in Building Personalisation in Business Services. *Jurnal Minfo Polgan*, 12(1), 1212– 1219. https://doi.org/https://doi.org/10.33395/jmp.v12i1.12666
- Johan, S., & Manurung, S. P. E. (2023). pelatihan etika bisnis dan hukum kepada mahasiswa bisnis di universitas presiden. *JURNAL ABDI*, 9(1), 10–14.
- Jusman, I. A., Ausat, A. M. A., & Sumarna, A. (2023). Application of ChatGPT in Business Management and Strategic Decision Making. *Jurnal Minfo Polgan*, *12*(2), 1688–1697. https://doi.org/https://doi.org/10.33395/jmp.v12i2.12956
- Kretschmer, M., Margoni, T., & Oruç, P. (2024). Copyright Law and the Lifecycle of Machine Learning Models. *IIC - International Review of Intellectual Property and Competition Law*, 55(1), 110–138. https://doi.org/10.1007/s40319-023-01419-3
- Nurdiansyah, R., & Damiri, M. A. (2023). Hukum Tentang Orang (Perbandingan Antara KUH Perdata Indonesia, Inggris Dan Amerika). *Eksekusi: Jurnal Ilmu Hukum Dan Administrasi Negara*, 1(4), 26–43.
- Nurul Hafiza. (2023). Peluang Penggunaan Teknologi ChatGPT dalam Dunia Hukum Perdata Nasional. *Proceeding of Conference on Law and Social Studies*, 1–7.
- Priowirjanto, E. S. (2023). sosialisasi mengenai aspek hukum dari penggunaan ChatGPT dalam dunia pendidikan di SMK Al-Wafa Kabupaten Bandung. *Kabuyutan: Jurnal Kajian Ilmu Sosial Dan Humaniora Berbasis Kearifan Lokal*, 2(2), 92–99.
- Subagja, A. D., Ausat, A. M. A., Sari, A. R., Wanof, M. I., & Suherlan, S. (2023). Improving Customer Service Quality in MSMEs through the Use of ChatGPT. *Jurnal Minfo Polgan*, 12(2), 380–386. https://doi.org/10.33395/jmp.v12i2.12407
- Sudirjo, F., Ausat, A. M. A., Rijal, S., Riady, Y., & Suherlan, S. (2023). ChatGPT: Improving Communication Efficiency and Business Management of MSMEs in the Digital Age. *Innovative: Journal Of Social Science Research*, *3*(2), 643–652. https://doi.org/10.31004/innovative.v3i2.347
- Sudirjo, F., Diantoro, K., Al-Gasawneh, J. A., Azzaakiyyah, H. K., & Ausat, A. M. A. (2023). Application of ChatGPT in Improving Customer Sentiment Analysis for Businesses. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 5(3), 283–288. https://doi.org/https://doi.org/10.47233/jteksis.v5i3.871
- Sudirjo, F., Diawati, P., Riady, Y., Ausat, A. M. A., & Suherlan, S. (2023). The Role of ChatGPT in Enhancing the Information Search and Decision-Making Process of Travellers. *Jurnal Minfo Polgan*, 12(2), 500–507. https://doi.org/https://doi.org/10.33395/jmp.v12i2.12443
- Turangan, A. F. (2019). pelaksanaan perjanjian dengan itikad baik menurut pasal 1338 KUHPerdata. *Lex Privatum*, *VII*(1), 46–51.

- Wijonarko, P., Wagiman, W., Khana, R., Tundo, T., Salam, A., James, B., & Tampubolon, P. (2023). Penerapan dan Kontribusi Kecerdasan Buatan ChatGPT Untuk Menafsir Teks Hukum (Studi Kasus Penafsiran Pasal 10, Pasal 13, Permenkes No.889 Tahun 2011). Jurnal Kajian Teknik Elektro, 8(2), 37–44. https://doi.org/10.52447/jkte.v8i2.7061
- Wu, X., Duan, R., & Ni, J. (2024). Unveiling security, privacy, and ethical concerns of ChatGPT. *Journal of Information and Intelligence*, 2(2), 102–115. https://doi.org/10.1016/j.jiixd.2023.10.007
- Yuanitasari, D., & Hazar Kusmayanti. (2020). pengembangan hukum perjanjian dalam pelaksanaan asas itikad baik pada tahap pra kontraktual. *ACTA DIURNAL Jurnal Ilmu Hukum Kenotariatan Fakultas Hukum Unpad*, *3*(2), 292–304

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