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International Journal of Human–Computer Interaction

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Submission ID	244613213
Article Type	Research Article
Keywords	
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Human-AI Collaboration in Legal Services: An Empirical Investigation of Generative AI Fit with Legal Tasks

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Ethics approval

This study protocol has been reviewed and approved by the Institutional Review Board (IRB) at Rider University and Ramapo College of New Jersey (IRB# 704).

Human-AI Collaboration in Legal Services: An Empirical Investigation of Generative AI Fit with Legal Tasks

Abstract

This study examines the fit between the tasks carried out by legal professionals and the capabilities of Generative AI (GenAI), and how this fit impacts their performance and use of the technology based on a survey of 279 legal practitioners. Using both quantitative and qualitative methods, we find a strong fit between the legal tasks and GenAI, which significantly enhances the performance of legal practitioners and increases their utilization of GenAI. Additionally, through post hoc analysis, we find that legal practitioners more familiar with GenAI can better leverage its capabilities to improve performance. However, familiarity does not moderate the relationship between Task-Technology Fit (TTF) and utilization, suggesting that legal practitioners are more selective in utilizing GenAI in their practices. The research results also reveal specific legal tasks more suitable for integration with GenAI, such as research and analysis, documentation, and drafting. Qualitative analysis reveals six themes, including efficiency and workflow improvement, skill necessity, data security concerns, quality of input and output, specific legal applications, and trust and user confidence, highlighting the opportunities and challenges associated with GenAI in legal practice. While concerns over data security and trust remain prevalent, overall, the sentiment analysis of the comments reveals that the majority of respondents have a positive sentiment toward using GenAI in legal practices. This research contributes significantly to the Information Systems (IS) literature by empirically examining the use of GenAI in the legal domain. The study emphasizes the alignment between GenAI capabilities and legal task requirements and offers a nuanced understanding of the practical benefits and potential risks associated with the technology. These findings provide actionable insights for policymakers in law firms, encouraging the development of training programs, professional development opportunities, and initiatives to promote responsible use of GenAI, increase user confidence, and address associated risks.

Keywords: Generative AI, Legal Practice, Task Technology Fit (TTF), Human-AI Interaction, Familiarity with AI, AI Adoption

1. Introduction

The emergence of Generative Artificial Intelligence (GenAI) marks a transformative phase in technological innovation, characterized by its unique capability to generate original content across various media, including text, images, and videos. Predominantly built on large language models and deep learning architectures, GenAI has rapidly expanded its capabilities, demonstrating substantial potential across diverse sectors (Chui et al., 2023), including healthcare (Dong & Wu, 2024; Lorenzini et al., 2023; Sauerbrei et al., 2023; Sezgin, 2023; Shaik et al., 2023), finance (B. Chen et al., 2023; X. Zhou, 2023), and education (Chiu, 2023; Foroughi et al., 2023; C. Wang et al., 2024). Consequently, researchers and professionals are keen to explore its potential in other industries. This research aims to address this growing interest by evaluating the use of GenAI technologies by professionals in the legal sector.

GenAI presents notable value in scenarios that demand complex information processing, pattern recognition, and creative problem-solving. For instance, in medical diagnosis, GenAI models have shown the ability to analyze extensive amounts of patient data and medical literature to suggest potential diagnoses and treatment plans (Koohi-Moghadam & Bae, 2023; Musalamadugu & Kannan, 2023). Likewise, these systems have been utilized in financial services for risk evaluation, fraud detection, predicting firms' risk-management capabilities and stock return performance, and providing tailored investment strategies (B. Chen et al., 2023; X. Zhou, 2023). The legal sector, characterized by its information-rich content and the need for a detailed understanding of complex texts, offers a compelling case for the application of GenAI. Therefore, evaluating the potential use of GenAI in the legal domain has drawn significant attention from researchers since the successful launch of ChatGPT in November 2022 (Anum Shahid et al., 2023; Iqbal, 2023; Kamalnath, 2024; Katz et al., 2023; Olubiyi et al., 2024).

Incorporating GenAI into legal practice has the potential for increased efficiency, better decision-making, and improved client satisfaction. Professionals in the legal field regularly undertake tasks like contract

analysis, legal research, and document drafting – all areas where GenAI has the potential to deliver substantial efficiency improvements and valuable insights (Anum Shahid et al., 2023; Macey-Dare, 2023; Rezaev & Tregubova, 2023). Furthermore, GenAI's capability to process and synthesize extensive legal precedents and statutes could enhance legal practitioners' abilities in case preparation and strategic decision-making (Macey-Dare, 2023). While the extant literature has primarily focused on the conceptual benefits and applications of GenAI in legal practice, there is limited empirical evidence on its practical use and impact (Ajevski et al., 2023; Anum Shahid et al., 2023; Contini, 2024; Iqbal, 2023; Kamalnath, 2024). In addition, the extent to which GenAI aligns with the specific tasks of legal practitioners—a critical factor for its effective integration—remains underexplored. Therefore, the main objective of this research is to offer a comprehensive understanding of the alignment between GenAI and tasks carried out by legal professionals and to explore how this alignment impacts their performance and the degree to which they incorporate the technology into their daily workflows. We draw upon the Task-Technology Fit (TTF) perspective to address our research inquiry. The TTF theory explains that technology is more likely to be adopted and used effectively when its functionalities align closely with users' task needs, leading to better performance outcomes (Goodhue & Thompson, 1995).

This study contributes to the growing body of literature on the adoption of emerging technologies in professional services by providing empirical insights into how GenAI can be effectively implemented in the legal sector. By examining the specific requirements and preferences of legal professionals, this research enhances our understanding of the significance and relevance of GenAI as well as its compatibility with legal tasks. Practically, the findings are valuable for developers in tailoring GenAI technologies to meet the unique needs and preferences of legal professionals. Moreover, these insights can guide the creation of targeted training programs and support systems that address the specific concerns of legal practitioners, ultimately enhancing their confidence and proficiency in using GenAI.

2. Related literature

2.1. Use of AI and GenAI in the Legal Domain

The legal profession, traditionally reliant on human expertise and manual processes, has increasingly incorporated AI to enhance efficiency, accuracy, and accessibility (Susskind & Susskind, 2022). The recent emergence of GenAI, with its ability to generate content, analyze complex textual information and diverse media formats such as images and videos, and interact in a human-like manner, represents a significant development in the legal domain (Contini, 2024). This section reviews recent literature on AI and GenAI applications in the legal field, exploring how these technologies are reshaping legal practice.

AI has been a transformative force in the legal industry, particularly in areas requiring the processing of large volumes of data. Legal research, e-discovery, contract review, and compliance monitoring have been prime areas for AI integration (Susskind & Susskind, 2022). AI systems, particularly those utilizing natural language processing (NLP) and machine learning, are increasingly employed to predict case outcomes, automate document analysis, and support decision-making processes (Surden, 2019, 2021). The extant literature underscores the growing effectiveness of AI in legal tasks. Surden (2021) emphasizes the impact of predictive analytics in the legal sector, where AI models are trained on vast datasets of legal precedents to forecast the outcomes of ongoing cases. Several researchers have focused on this application of AI in the legal domain to build judgment prediction models (Chalkidis et al., 2020; Gan et al., 2021; Niklaus et al., 2021; Shang, 2022; Sukanya & Priyadarshini, 2021; Yue et al., 2021). This capability aids legal professionals in strategizing their approach to litigation, offering a data-driven perspective that complements traditional legal reasoning.

In the context of contract analysis, AI tools have been shown to significantly reduce the time and costs associated with contract review. This technology can potentially streamline contract review processes and reduce human error. Chalkidis et al. (2017) presented a deep learning model for contract element

extraction that outperformed previous approaches in identifying key clauses and terms in legal documents (Chalkidis et al., 2017). A study by Medvedeva et al. (2020) examines the use of AI in identifying and analyzing contract clauses, highlighting how these tools can quickly assess risks and suggest modifications. These authors also note that while AI tools are highly effective at identifying patterns and anomalies, they still require human oversight to ensure the nuanced interpretation of legal language (Dale, 2019; Medvedeva et al., 2020).

GenAI has emerged as a powerful tool in the legal practice (Contini, 2024; Villasenor, 2023). It leverages advanced data processing capabilities to understand and produce contextualized, human-like content across various media formats. Chui et al. (2023) mention that GenAI has the potential to improve labor productivity in various sectors, such as business and legal professions. The existing literature discusses GenAI's applications in the legal domain, including analyzing contracts, conducting legal research, predicting case outcomes, preparing court submissions, drafting arguments, analyzing evidence, providing personalized legal advice, summarizing and categorizing procedural actions, as well as providing abstracts of judgments (Contini, 2024; Rodriguez, 2023; Villasenor, 2023). Conducting a comprehensive study on the performance of GPT-4 in various legal tasks, including contract analysis, legal research, and case outcome prediction, Katz et al. (2023) find that GPT-4 exhibits capabilities comparable to junior lawyers in many tasks, highlighting GenAI's potential to augment legal work (Katz et al., 2023, 2024). Another recent study examined GenAI’s ability to pass the Brazilian bar exam (Freitas & Gomes, 2023). The findings suggest that while GenAI performs well in the multiple-choice questions, responses to open-ended questions are underwhelming. Legal research and analysis are another area where GenAI can be highly valuable in legal practice. Legal professionals often face the challenge of navigating vast repositories of case law, statutes, and regulatory documents to inform their decision-making and strategy development (Surden, 2021). The ability of GenAI models to comprehend and synthesize large volumes of text can augment lawyers' research capabilities by rapidly identifying relevant precedents, extracting key insights,

and suggesting novel legal arguments (Iqbal, 2023; Macey-Dare, 2023; Terzidou, 2023). This could lead to considerable time and cost savings and improved legal analysis quality (Contini, 2024; Villasenor, 2023).

Similarly, GenAI can be instrumental in contract drafting and review. The process of drafting and negotiating contracts is often time-consuming and prone to errors. It requires careful attention to detail and the ability to interpret complex legal language (Chalkidis et al., 2017). GenAI can assist in this process by automatically generating standardized contract templates, identifying relevant clauses, and highlighting potential issues or ambiguities (Pierce & Goutos, 2023). This can improve the effectiveness and uniformity of contract creation while reducing the risk of costly legal disputes. In litigation and dispute resolution, GenAI can assist lawyers in preparing court submissions, drafting arguments, and analyzing evidence (Villasenor, 2023). According to Contini (2024), GenAI can serve as a digital assistant for lawyers, offering efficient data and document analysis, information extraction, drafting persuasive written materials, anticipating counterarguments, developing compelling legal strategies, identifying critical clauses requiring special attention, and suggesting improvements to legal documents. It can also aid judges and court clerks by summarizing and categorizing procedural actions to simplify their work and by providing abstracts of judgments (Contini, 2024).

GenAI's potential extends to client-facing services, such as offering personalized legal advice and providing tailored legal solutions. By understanding clients' unique circumstances and needs, GenAI systems can provide customized guidance, fostering stronger client-lawyer relationships and enhancing the overall quality of services (Chen et al., 2022; Pierce & Goutos, 2023). GenAI has also been applied to improve access to justice and overcome the justice gap, making justice more accessible and less costly (Chien & Kim, 2024b, 2024a; Contini, 2024). Chien and Kim (2024) presented evidence that GenAI assistants, under human supervision, can potentially improve access to legal processes and information for low-income

consumers. Moreover, GenAI can provide the public with basic legal information and guidance and answer common legal queries, potentially reducing the workload on legal aid services (Chien & Kim, 2024a).

Despite the numerous opportunities, challenges persist in implementing GenAI in the legal field. A study by Contini (2024) identified several concerns regarding using ChatGPT in the legal domain, including issues related to privacy and data protection and the possibility of incorrect answers. The author emphasized the necessity of balancing output control with efficiency, highlighting that while GenAI has the potential to draft documents, conduct legal searches, and enhance the operational efficiency of legal professionals, it is crucial to maintain precise control over the system's outputs. Similarly, a study by Rodrigues (2023) pinpointed risks and concerns associated with using GenAI in legal practice, including discrimination due to potential bias in training data, issues with output reliability, and concerns about confidentiality and client data protection. Terzidou (2023) also acknowledges these concerns and proposes a risk-based approach that involves regular monitoring and mitigation measures, reinforcing the importance of human oversight as emphasized by other researchers.

2.2. Task Technology Fit Theory

In this research, we use the Task-Technology Fit Theory as our theoretical framework. The Task-Technology Fit Theory, introduced by Goodhue and Thompson in 1995, provides a nuanced understanding of how aligning a task with appropriate technology can lead to improved performance and outcomes. It specifically explains the relationship between Task Characteristics, Technology Characteristics, Individual Characteristics, Task-Technology Fit, Utilization, and Performance Impact.

Task Characteristics refer to the specific attributes of an individual's tasks (Muchenje & Seppänen, 2023; Parthiban & Adil, 2023). These characteristics influence how heavily a user relies on particular aspects of the technology. Examples include non-routineness (lack of analyzable patterns), interdependence (reliance on information from other organizational units), information load (requiring gathering,

processing, and synthesizing large amounts of information), complexity (involving multiple steps and requiring significant cognitive effort to complete), and criticality (importance and impact of a task). Technology Characteristics encompass the features and functionalities of the technology, such as hardware, software, data, and user support services to assist users in their tasks (Marikyan et al., 2021; Marikyan & Papagiannidis, 2023). Individual Characteristics refer to users' attributes, such as their training, experience with technology, and motivation. They can influence how well an individual utilizes technology and how easily they integrate it into their tasks (Goodhue & Thompson, 1995).

Task-Technology Fit (hereafter referred to as TTF) refers to the extent to which a technology can aid individuals in carrying out their tasks (Goodhue & Thompson, 1995; Muchenje & Seppänen, 2023). It indicates the alignment between task, individual, and technology characteristics. A high TTF suggests that the technology offers essential features well-matched with the tasks the user intends to complete. Performance Impact refers to the effect of technology on an individual's performance (Dishaw & Strong, 1999; Howard & Hair, 2023). It includes efficiency, effectiveness, and quality improvements of the tasks performed. The model posits that higher TTF leads to better performance impacts, regardless of the utilization level. Utilization implies individuals' actual use of technology in completing their tasks (Vendramin et al., 2021). It can be measured in terms of duration, frequency, or the extent to which the technology has been integrated into the user's work routine. The model proposes that TTF positively influences utilization, which in turn positively impacts performance.

Since its introduction, the Task-Technology Fit Theory has been widely used across various domains, including healthcare (Uymaz et al., 2024), education (Albeedan et al., 2023; Masrom et al., 2023; Rafique et al., 2023; W. T. Wang & Kartika Sari, 2024), and business (Al-Emran, 2021; Gupta et al., 2023; Marikyan et al., 2024; Tawira & Ivanov, 2023). Despite extensive research on Task-Technology Fit Theory, its valuable practical contributions make it a suitable choice for exploring its application in new contexts and

emerging technologies. To the best of our knowledge, no studies have yet examined the application of Task-Technology Fit Theory to GenAI in the legal domain. Therefore, this study offers a novel perspective on the theory's application, contributing to the growing body of literature in this area.

3. Material and Methods

3.1. Research Model and Hypotheses

This study aims to examine the fit between GenAI and the tasks performed by legal practitioners and to investigate how this fit influences their performance and utilization of the technology. Figure 1 outlines our research model based on the Task-Technology Fit Theory described in the previous section. As shown in Figure 1, our research model proposes that a better fit between the requirements of tasks carried out by legal practitioners and GenAI capabilities will directly lead to improved performance and higher utilization. The path from utilization to performance means the degree of using GenAI in performing legal tasks also positively influences performance.

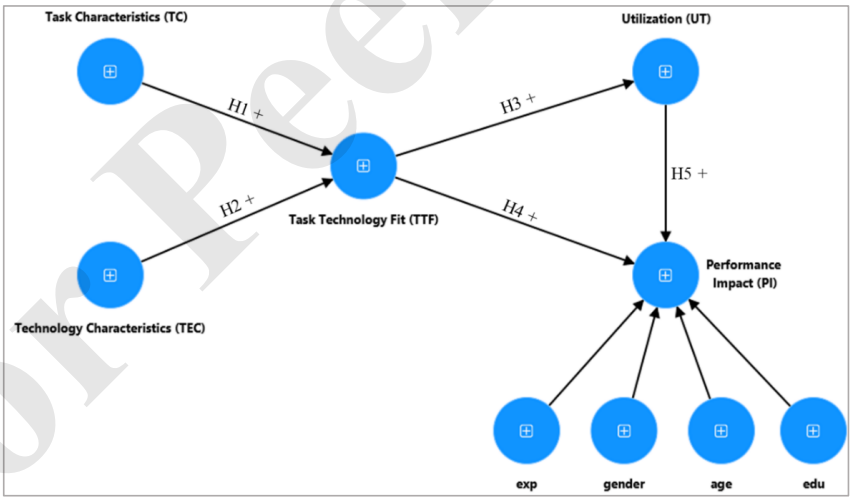


Figure 1- Research Model

Legal professionals handle complex tasks that require sophisticated analytical capabilities, as they must interpret and apply laws, regulations, and precedents to diverse situations (Surden, 2021). Additionally,

their work involves managing a vast amount of information, including case files, legal documents, and research materials, necessitating efficient organization and retrieval of data (Regalia, 2024). Accuracy and attention to detail are critical, as even minor errors can have significant legal consequences, making precision essential in all aspects of their work (Surden, 2019). Furthermore, staying updated with the latest legal regulations and changes in the law is crucial for ensuring compliance and providing accurate legal advice. The nature and demands of these tasks align well with GenAI's capabilities (Contini, 2024).

GenAI's advanced natural language processing allows for analyzing complex legal language and reasoning (Contini, 2024). Its ability to manage large volumes of unstructured data through data processing, organization, summarization, and extraction aligns with the information management needs of legal professionals (Regalia, 2024). Furthermore, GenAI's precision in language generation and ability to detect and correct errors support the high standards of accuracy required in legal tasks (Katz et al., 2024). Additionally, GenAI's ability to access real-time data updates and continuously learn from new information ensures that legal practitioners stay up-to-date with the latest legal developments. This strong alignment between the specific characteristics of legal tasks and the technological capabilities of GenAI suggests a better fit.

The relationship between task and technology characteristics and TTF has been well-documented in the literature. For instance, a recent study on using AI-based banking chatbots by Parthiban and Adil (2023) indicates that banking operations tasks and AI-based chatbot characteristics significantly influence perceived fit. Similarly, Tam and Oliveira (2016) showed that for mobile banking users, task and technology characteristics of m-banking positively affect the perceived fit. Muchenje and Seppsnen (2023), in their exploration of the business value of big data analytics, argue that the fit happens when tasks are structured to align with the functionality of technology. In the context of e-learning in higher education, Alyoussef (2023) provides evidence that perceived fit is positively influenced by technology

and task characteristics (Alyoussef, 2023). Therefore, in line with the literature, we propose the following hypotheses:

H1: *Task characteristics of legal practitioners positively influence TTF.*

H2: *The GenAI's technology characteristics positively influence TTF.*

When legal practitioners perceive a strong fit between GenAI's features and the demands of their work (e.g., document review, legal research, and case analysis), they are more inclined to utilize the technology. A better fit reduces the cognitive load and effort required to adapt the technology to their workflow, making it easier and more appealing to integrate GenAI into routine tasks. Therefore, as TTF increases, legal practitioners are more likely to incorporate GenAI into their day-to-day activities, resulting in higher utilization. Extant literature has indicated that TTF is crucial in using various technologies in different settings. For example, empirical findings have suggested that TTF positively influences the uptake of mobile banking (Tam & Oliveira, 2016a). Additionally, Howard and Rose (2019) have pointed out that a strong fit between task and technology promotes the utilization of electronic technologies. Similarly, TTF has been shown to have a positive impact on the use of AI-based chatbots (Parthiban & Adil, 2023).

When the features of GenAI are well-aligned with the legal tasks (e.g., processing large volumes of data, identifying relevant case laws, or drafting legal documents), practitioners can perform their duties more efficiently and with fewer errors. The better the fit between GenAI's capabilities and the specific needs of legal practitioners, the more likely the technology will enhance productivity, reduce the time spent on routine tasks, and improve overall decision-making quality. Thus, a strong TTF leads to a significant positive impact on performance. Goodhue and Thompson (1995) found that a strong TTF contributes to enhanced performance outcomes, especially in professional settings with high task complexity and significant performance stakes. Research indicates that the business value of big data analytics is maximized when there is alignment between tasks and the technology being utilized (Muchenje &

Seppänen, 2023). Similarly, empirical evidence supports the idea that TTF positively influences the use of smartwatches (El-Masri et al., 2023). A case study on a blockchain project suggests that the match between tasks and technological properties significantly affects performance and the adoption of blockchain technology (Roth et al., 2023). As such, in line with these studies, the following hypotheses are posited:

H3: *TTF positively influences the utilization of GenAI.*

H4: *TTF positively influences performance impact.*

As legal practitioners use GenAI more frequently, they become increasingly proficient in leveraging its advanced features. Over time, repeated exposure leads to a deeper understanding, better customization, and more effective use of the technology's full range of functionalities. This growing proficiency enhances performance, as practitioners can more effectively apply GenAI to solve complex legal problems and streamline workflows. Moreover, with greater utilization, GenAI can be applied to a broader range of legal tasks, further contributing to improved performance. As practitioners adapt GenAI to specific needs and challenges, this continuous refinement of workflows and decision-making processes enables them to handle complex cases more efficiently. The relationship between technology utilization and performance impact is well-documented in the literature (Franque et al., 2023; Marikyan et al., 2021; McGill & Klobas, 2009; Tam & Oliveira, 2016; T. Zhou et al., 2010). Research conducted by Venkatesh et al. (2003) indicates enhanced technological utilization is associated with improved performance results, especially when the technology is well-matched to the specific tasks. Moreover, Alyoussef's (2023) empirical evidence supports the idea that using e-learning systems is significantly and positively associated with e-learning benefits. Similarly, studies show that using smart technologies in smart homes positively impacts meeting residents' needs (Marikyan et al., 2021). An empirical study of Australian police using mobile technologies

demonstrates a strong link between improved performance and technology usage (Singh, 2017). Therefore, in line with prior research, we propose the following hypothesis:

H5: *The utilization of GenAI positively affects performance impacts.*

Extant literature suggests that demographic factors can affect the adoption and effective use of new technologies, as these factors often shape individuals' attitudes, skills, and access to resources (Venkatesh et al., 2000, 2003; Venkatesh & Morris, 2000). As such, demographic factors like gender, age, education, and years of experience are included as control variables in our study, allowing for a more accurate assessment of the relationships between the key variables and the dependent outcomes of interest.

3.2. Methodology

This study employed a mixed-methods research design, integrating quantitative and qualitative approaches. The quantitative component provides robust statistical evidence regarding the relationships in the research model. The qualitative analysis captures participants' nuanced experiences, perceptions, and concerns, revealing deeper insights into the contextual factors. This combination of methods allows for a more holistic understanding of the phenomenon, where the quantitative data offers generalizability and rigor, while the qualitative data provides depth and context (Creswell & Plano Clark, 2018; Venkatesh et al., 2013). A mixed-methods approach is particularly suitable for this study as it enables the exploration of GenAI's measurable impacts on legal practice as well as its users' subjective experiences, thereby offering a more complete and nuanced understanding of its adoption and effectiveness in real-world settings.

Data collection

Data was collected through the SurveyMonkey online platform. The survey consisted of three main sections. The first section collected demographic information, including age, gender, education, years of

legal experience, type of practice, and legal specialization. In addition, we asked participants about (1) their general familiarity with GenAI and (2) how suitable GenAI is in handling various tasks performed by legal practitioners based on their experiences. The second section measures the constructs in the research model. The measurement items were adapted from relevant literature (Alyoussef, 2023; Howard & Rose, 2019; McGill & Klobas, 2009; Thompson et al., 1991) to ensure content validity and tailored to the study's specific context. Task Characteristics and Technology Characteristics were built based on Alyoussef (2023), TTF was adapted from Howard & Rose (2019), Utilization was built based on Thompson et al. (1991) conceptualization of frequency, intensity, and diversity of use, and Performance Impact was built based on McGill & Klobas (2009). All items were measured using a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The third section of the survey comprised an open-ended question intended to gather qualitative data about the respondents' experiences with GenAI technologies in their legal practice. This question encouraged participants to share any additional comments or experiences regarding using GenAI to fulfill their tasks, providing us with rich qualitative data.

The target population comprised legal practitioners across the United States. The survey was distributed to legal practitioners across various roles and organizations. Through a screening question, only participants who had worked with GenAI in their legal practice or job-related tasks were included in the study. Before the main data collection, a pilot study was conducted to evaluate the clarity and length of survey items. It provided valuable insights and led to minor adjustments for enhanced clarity and efficiency. A total of 279 completed responses were obtained. Table 1 provides detailed demographic information of respondents.

Table 1- Participants demography

Characteristics	Relative Frequency %
Experience	
Less than 1 year	6%
1-5 years	34%
6-10 years	37%
More than 10 years	23%
Age	
18-24	5%
25-34	23%
35-44	53%
45-54	13%
55-64	4%
65+	2%
Gender	
Male	48%
Female	52%
Education	
Some college	3%
2-years college degree	18%
Bachelor's degree	24%
Graduate degree	25%
Doctorate (JD, PhD)	29%
Specialization	
Corporate Law	11%
Criminal Law	11%
Civil Rights Law	11%
Family Law	10%
Intellectual Property Law	11%
Environmental Law	3%
Tax Law	9%
Real Estate Law	9%
Immigration Law	7%
Employment/Labor Law	12%
Personal Injury Law	4%
Litigation	4%
Type of Practice	
Solo practitioner	4%
Small firm	14%
Medium firm	37%
Large firm	24%
In-house counsel	11%
Government	6%
Non-profit/NGO	2%
Academic/Educational institution	2%
Other	1%

Data analysis

To assess the research model, we utilized Structural Equation Modeling (SEM) using PLS (Partial Least Squares) (SmartPLS v.4.1.0.3). PLS, a component-based SEM technique, is favored over covariance-based

techniques like AMOS or LISREL due to its minimal requirements regarding sample size, data distribution, and residual distribution (Chin, 1998). We followed the Hair et al. (2022) recommendations for analyzing PLS-SEM results, starting with the measurement model's assessment and then the structural model's evaluation.

The qualitative data were analyzed using thematic analysis and sentiment analysis to better understand the respondents' experiences and perceptions. Thematic analysis was conducted following the guidelines established by Braun and Clarke (2006). Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data. It was chosen for its flexibility and capacity to provide a detailed, nuanced account of complex qualitative data (Braun & Clarke, 2006). In addition to thematic analysis, a sentiment analysis was performed to assess the emotional tone of the responses. Sentiment analysis was conducted using the TextBlob library, which provides a polarity score for each comment, categorizing them as positive, negative, or neutral (Loria, 2018). This analysis helped quantify respondents' overall sentiment toward GenAI technologies in legal practice and provided additional context for the thematic analysis. The sentiment analysis was integrated into the thematic analysis by mapping the sentiment scores onto the identified themes, allowing for an exploration of how sentiment varied across different aspects of GenAI use.

4. Results

4.1 Descriptive Statistics

The dataset was carefully reviewed for any missing data and anomalies. Although the PLS analysis method does not require normal distribution, the non-normality of data regarding skewness and kurtosis is not a severe issue. The skewness measurements for the variables were found to be within the acceptable range of -1 to +1. Table 2 shows the results of descriptive statistics for all measurement items. Figure 2 shows the GenAI suitability scores across various tasks performed by legal practitioners.

Table 2- Descriptive statistics results

Item	Mean	SD	Minimum	Maximum
tc1	4.44	1.55	1	7
tc2	4.74	1.74	1	7
tc3	4.91	1.68	1	7
tc4	4.63	1.70	1	7
tc5	4.75	1.68	1	7
tech1	4.63	1.38	1	7
tech2	4.77	1.43	1	7
tech3	4.58	1.52	1	7
tech4	4.58	1.46	1	7
ttf1	4.47	1.42	1	7
ttf2	4.54	1.55	1	7
ttf3	4.68	1.53	1	7
ttf4	4.57	1.56	1	7
ut1	4.34	1.53	1	7
ut2	4.35	1.71	1	7
ut3	4.42	1.67	1	7
ut4	4.53	1.61	1	7
pi1	4.49	1.51	1	7
pi2	4.63	1.61	1	7
pi3	4.68	1.49	1	7
pi4	4.66	1.44	1	7
familiarity	2.57	0.86	1	6

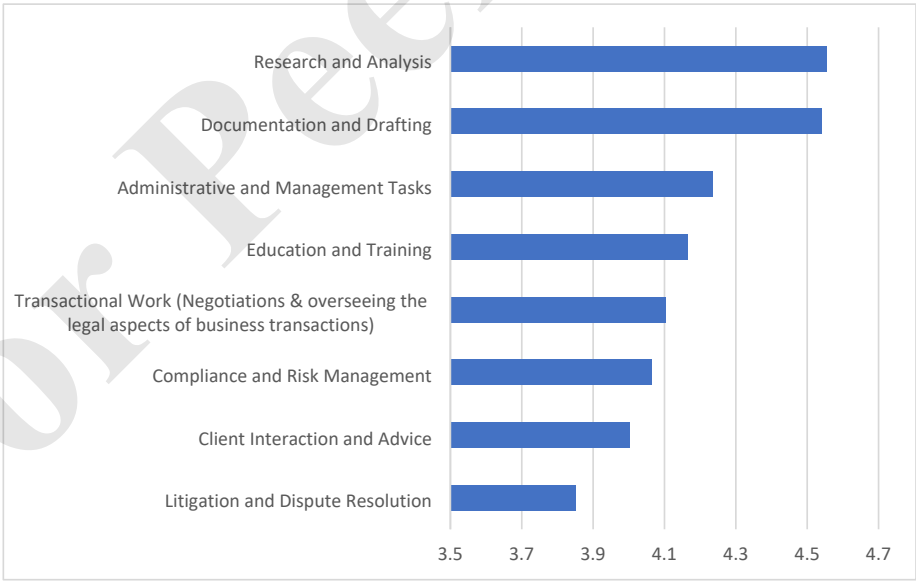


Figure 2- GenAI suitability in handling various legal tasks

4.2. Evaluation of measurement tool

The measurement model was assessed following Hair et al. (2022) guidelines by assessing convergent validity, internal consistency reliability, and discriminant validity. Table 3 shows the measurement tool evaluation results. The internal consistency reliability was assessed using Cronbach's alpha and composite reliability. All items surpassed the threshold of 0.7 for both Cronbach's alpha and composite reliability, as outlined by Hair et al. (2022). Convergent validity was evaluated based on outer loadings, indicator reliability, and the average variance extracted (AVE). All items met the criteria of 0.7 for outer loading and 0.5 for indicator reliability and AVE, as suggested by Hair et al. (2022), except for item tc-2, which had outer loadings of 0.678 and an indicator reliability of 0.460. Despite not meeting the outer loading benchmarks, tc-2 was retained since the corresponding construct (TC) met the recommended thresholds for AVE and internal consistency reliability, as per the guidelines outlined by Hair et al. (2022). The discriminant validity assessment included cross-loadings, the Fornell-Larcker criterion, and the heterotrait-monotrait (HTMT) correlations ratio. The indicators showed higher loadings on their respective constructs than on other constructs, meeting the cross-loadings criterion. The Fornell-Larcker criterion was also satisfied as the square root of AVE for each construct was higher than its largest correlation with any other construct. In addition, all Heterotrait-Monotrait ratios of correlations (HTMT) values were below the recommended threshold of 0.9, as shown in Table 4 (Gold et al., 2001; Henseler et al., 2015).

Table 3- Evaluation of the measurement tool

Latent Variable	Indicators	Convergent Validity			Internal Consistency Reliability	
		Outer Loadings	Indicator Reliability	AVE	Cronbach's alpha	Composite reliability
		> 0.7	> 0.5	> 0.5	> 0.7	> 0.7
PI	pi-1	0.829	0.687	0.634	0.808	0.874
	pi-2	0.787	0.619			
	pi-3	0.765	0.585			
	pi-4	0.804	0.646			
TC	tc-1	0.711	0.506	0.539	0.713	0.823
	tc-2	0.678	0.460			
	tc-3	0.762	0.581			
	tc-4	0.780	0.608			
TEC	tech-1	0.776	0.602	0.588	0.766	0.851
	tech-2	0.751	0.564			
	tech-3	0.791	0.626			
	tech-4	0.748	0.560			
TTF	ttf-1	0.836	0.699	0.660	0.828	0.886
	ttf-2	0.824	0.679			
	ttf-3	0.787	0.619			
	ttf-4	0.803	0.645			
UT	ut-1	0.807	0.651	0.613	0.790	0.863
	ut-2	0.723	0.523			
	ut-3	0.791	0.626			
	ut-4	0.808	0.653			

Table 4- Discriminant validity results (HTMT)

	PI	TC	TEC	TTF	UT
PI					
TC	0.516				
TEC	0.813	0.684			
TTF	0.819	0.581	0.789		
UT	0.892	0.357	0.752	0.873	

4.3. Evaluation of the structural model

In assessing the structural model, we evaluated collinearity issues, R^2 values, coefficient magnitudes, and the significance of the paths. All Variance Inflation Factor (VIF) values are below the threshold of 5 (Hair et al., 2022), suggesting no critical issue of collinearity among the predictor constructs in the model. The result of the structural model evaluation is presented in Figure 3. The bootstrapping procedure was

employed to determine the significance of the path coefficients using 10,000 samples. The path coefficients and significance levels are presented in Table 5.

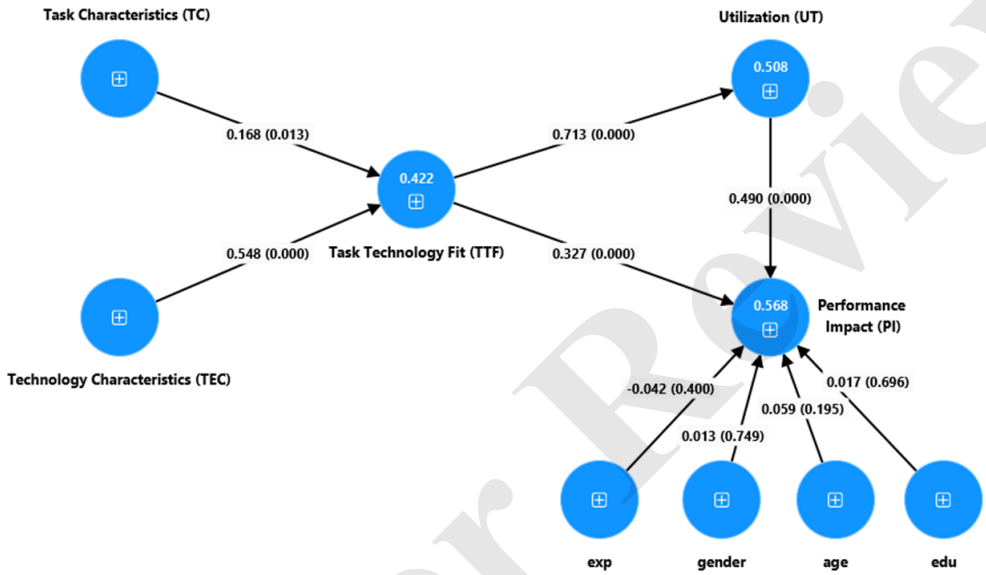


Figure 3- Structural model evaluation results

As shown in Table 5, Task Characteristics significantly impacts TTF (p = 0.013) with a moderate effect size of 0.168 (H1 supported). Technology Characteristics significantly exerts a relatively large and significant influence on TTF (p = 0.000) with an effect size of 0.548 (H2 supported). TTF positively affects Utilization (p = 0.000) with a large effect size of 0.713 (H3 supported). TTF significantly impacts Performance Impact (p=0.000) with a moderate size of 0.327 (H4 supported). Utilization significantly predicts Performance Impact (p=0.000) with a large size of 0.490 (H5 supported). The control variables—age, gender, education, and years of experience—have no significant impact on Performance Impact.

The R^2 values for Performance Impact (PI) and Utilization (UT) were 0.568 and 0.508, respectively, indicating a moderate level of explained variance (Hair et al., 2019). This suggests that the model

moderately explains the variation in performance impacts and Utilization of GenAI among legal practitioners, highlighting the importance of Task-Technology Fit and technology utilization in driving positive outcomes.

Table 5- Path coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
TC -> TTF	0.168	0.173	0.067	2.489	0.013
TEC -> TTF	0.548	0.547	0.057	9.539	0.000
TTF -> PI	0.327	0.325	0.075	4.35	0.000
TTF -> UT	0.713	0.678	0.036	18.722	0.000
UT -> PI	0.490	0.476	0.069	6.894	0.000
age -> PI	0.059	0.054	0.045	1.203	0.229
edu -> PI	0.017	0.01	0.043	0.243	0.696
exp -> PI	-0.042	-0.039	0.049	0.804	0.421
gender -> PI	0.013	0.009	0.041	0.233	0.816

4.4. Qualitative analysis of open-ended questions

The qualitative analysis of participants' responses to the open-ended question revealed significant insights into the opportunities and challenges associated with the technology. From the 279 participants of the study, 203 qualitative comments were collected. Six primary themes emerged from the thematic analysis of these qualitative responses: Efficiency and Workflow Improvement, Skill Necessity, Data Security, Quality of Input and Output, Specific Legal Applications, and Trust and User Confidence. Table 6 summarizes the result of the thematic analysis and provides a few sample quotes for each of them. The frequency and sentiment of each theme are provided in Figure 4.

1. Efficiency and Workflow Improvement

The most frequently mentioned theme was "efficiency and workflow improvement," highlighting this as a key benefit of GenAI. Respondents emphasized GenAI's ability to handle complex and tedious tasks, such as document processing, legal research, and evidence analysis, significantly reducing their workload

and improving productivity. The overall sentiment within this theme was predominantly positive, with respondents expressing enthusiasm about the potential of GenAI to streamline their tasks, allowing them to focus on more strategic aspects of their work.

Table 6- Thematic analysis summary

Theme	*Description*	*Example Quotes*
Efficiency and Workflow Improvement	GenAI is frequently mentioned as a tool that improves efficiency, particularly in handling complex or tedious tasks such as document processing.	• *"Artificial intelligence can flexibly handle various complex and tedious legal documents to help reduce my workflow and improve efficiency."* • *"Artificial intelligence can help me process more files quickly."* • *"Generative AI can greatly help our work needs in terms of efficiency, but we cannot rely too much on generative AI. Work in the legal industry is best done by a combination of human power and generative AI."*
Skill Necessity	There's a recognition that proficiency in GenAI is becoming an essential skill for legal practitioners, with implications for those who do not adopt it.	• *"Artificial intelligence has now become a skill that almost everyone needs to have, and if you don't have it, the job will be much more complicated."*
Quality of Input and Output	Users note that the quality of GenAI's responses is closely tied to the quality of the inputs provided, suggesting that effective use of GenAI requires careful question formulation.	• *"During use, I always enter the questions in detail, so that I can get answers that are more appropriate to the questions."* • *"When asking questions to artificial intelligence, I must ensure that the questions and responses are of high quality. This will allow me to get more information and ideas."* • *"Artificial intelligence should have security, protect data privacy and pay attention to quality."* • *"The data it gives will be slightly biased, so don't rely too much on it to avoid unnecessary trouble."*
Specific Legal Applications	GenAI is used for tasks such as generating clerical indictments, assessing contractual risks, processing files, and analyzing evidence.	• *"Generate clerical indictments and assess contractual risks."* • *"Use AI to analyze large amounts of evidence and help me find key clues."* • *"With the advent of artificial intelligence, drafting contracts has become much simpler, and much of the content can be used directly."*
Trust and User Confidence	Building trust in GenAI systems among end-users is seen as crucial, with some comments mentioning the responsibility of professionals to ensure this trust.	• *"Guaranteeing end users is the key, and gaining the trust of users is the responsibility of every professional."* • *"Artificial intelligence cannot guarantee the accuracy of data, and sometimes human intervention is needed to verify the source of the data."* • *"It does not yet work well enough for me to trust any outputs. It gets the basics correct most of the time, but it has very clearly misinterpreted law or given incorrect information. My work is too important for these kinds of mistakes."*
Data Security	Some respondents emphasize the importance of data security when using GenAI, highlighting concerns about the technology's ability to protect sensitive information.	• *"When using AI, one should pay attention to their data security because AI still has some shortcomings in this area. Therefore, users should encrypt and protect important data information." "The use of artificial intelligence technology in legal practice can assess potential legal security risks."* • *"Artificial intelligence should have security, protect data privacy and pay attention to quality."*

2. Skill Necessity

"Skill Necessity" was another frequently discussed theme, reflecting the growing recognition that proficiency in GenAI is becoming essential for legal professionals. Respondents acknowledged that GenAI literacy is quickly turning into a vital skill in the legal field. The sentiment in this category was largely positive, indicating an acceptance of GenAI as an integral part of the legal profession's future. However, some comments reflected concerns about the learning curve associated with mastering these new technologies.

3. Data Security

"Data Security" emerged as a significant theme, expressing concerns about protecting sensitive information when using GenAI. This theme carried the most negative sentiment, with fears that GenAI systems might be vulnerable to breaches, potentially compromising confidential client information. The negative sentiment within this theme underscores the critical need for robust security measures to be in place if GenAI is to be widely adopted in legal practice.

4. Quality of Input and Output

The theme of "Quality of Input and Output" was also noted by respondents who emphasized the importance of providing high-quality inputs to GenAI systems to receive accurate and useful outputs. Comments reflect a pragmatic understanding of GenAI's capabilities. This theme carried a neutral to positive sentiment, with most respondents acknowledging the importance of careful question formulation to maximize GenAI's effectiveness.

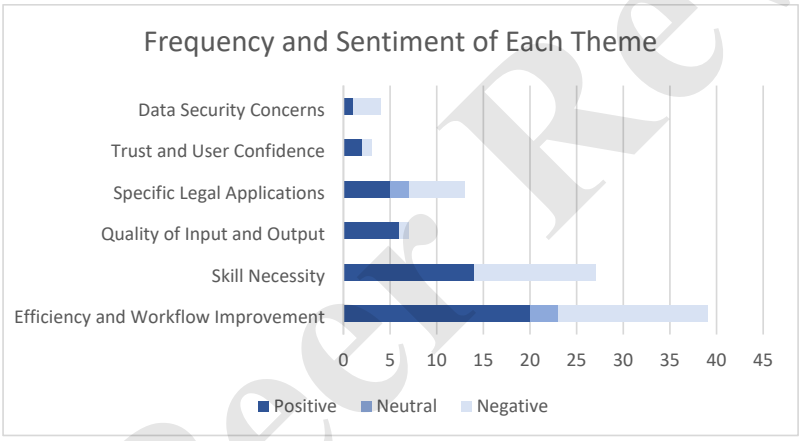
5. Specific Legal Applications

"Specific Legal Applications" was mentioned by respondents who described various ways they have integrated GenAI into their legal practices. These applications include generating clerical indictments, assessing contractual risks, and analyzing large volumes of evidence. The sentiment within this theme was

overwhelmingly positive, as respondents appreciated the tangible benefits GenAI brought to specific aspects of their practice.

6. Trust and User Confidence

"Trust and User Confidence" was among the least frequently mentioned themes. Respondents expressed concerns about whether GenAI systems could be trusted to perform reliably and without error. The sentiment on this theme was mixed, with some respondents trusting the technology while others were more skeptical.



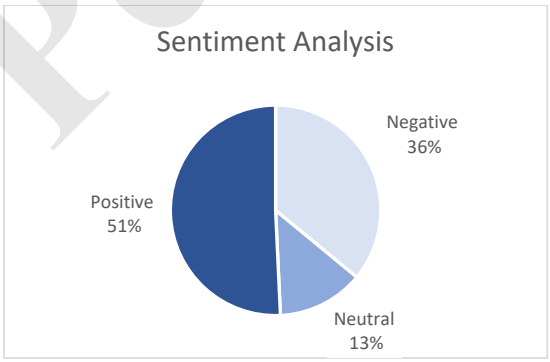


Figure 4- Frequency and sentiment of participants' comments

The overall sentiment analysis of the comments revealed that the majority of respondents have a positive sentiment toward using GenAI in legal practices. Of the 203 responses, 51% conveyed a positive sentiment, particularly within themes like Efficiency and Workflow Improvement and Specific Legal Applications. These respondents frequently highlighted GenAI's advantages in increasing productivity and streamlining complex tasks. On the other hand, 36% of responses expressed negative sentiments, primarily concentrated in themes like Data Security Concerns and Trust and User Confidence. These negative responses were often linked to fears of data breaches, the reliability of GenAI, and the potential consequences of errors made by GenAI systems. The remaining 13% of the responses were neutral, typically involving observations about GenAI's functionality without strong positive or negative emotions attached.

4.5. Common Method Bias

To evaluate the potential impact of common method bias in this study, we followed the procedure outlined by Kock (2015). This process involved calculating the variance inflation factors (VIFs) for all latent variables in the model. Since all VIF values were below the recommended threshold of 3.3, it suggests that common method bias did not influence the results of this investigation.

5. Post hoc Analysis

We investigated the moderating role of familiarity with GenAI on the relationship between TTF and Performance Impact and between TTF and Utilization. We measured familiarity with one item by asking respondents the extent to which they are familiar with the technology. Prior research has shown that user familiarity with technology moderates the effects of TTF on performance (Strong et al., 2006), highlighting the importance of training and experience in maximizing the benefits of technology adoption. According to Venkatesh & Davis (2000), individuals who are more familiar with technology will likely have a deeper

understanding of how to apply the technology to complex tasks, leading to a more substantial impact. Familiarity with technology can enhance users' confidence in applying it to critical tasks, thereby improving the perceived fit and, ultimately, the effectiveness of the technology in critical functions (Thong et al., 2002). In this study, legal practitioners more familiar with GenAI may perceive a stronger alignment between the technology and their tasks as they better understand how to leverage GenAI's capabilities. This could amplify the positive impact of TTF on performance. Furthermore, practitioners with greater familiarity may identify additional areas where GenAI aligns with their tasks, leading to increased utilization of the technology.

Figures 5 and 6 show the slope plots for the moderating effect of familiarity on the relationship between TTF and Performance Impact and TTF and Utilization, respectively. As shown in Figure 5, a high level of familiarity (+1 SD) has a steeper slope compared to a low level, indicating that practitioners with greater familiarity with GenAI experience the most significant performance improvement as TTF increases. However, as shown in Figure 6, the slope of the relationship between TTF and Utilization is the same across all levels of familiarity, suggesting that while TTF impacts Utilization, familiarity does not change the strength of this relationship. Therefore, there is no interaction between familiarity and TTF on Utilization. Figure 6 also reveals that, interestingly, individuals with higher familiarity are associated with lower utilization, suggesting that practitioners with high familiarity may be more conservative or selective in their use of the technology as they might have a deeper understanding of the technology's strengths and limitations. Following the Hair et al. (2022) guideline, we performed a bootstrapping analysis with 10000 samples to assess whether the interaction terms are significant. The results indicate that the interaction effect between familiarity and TTF on Performance Impact is significant ($p = 0.038$), whereas the interaction effect on Utilization is not significant ($p = 0.874$).

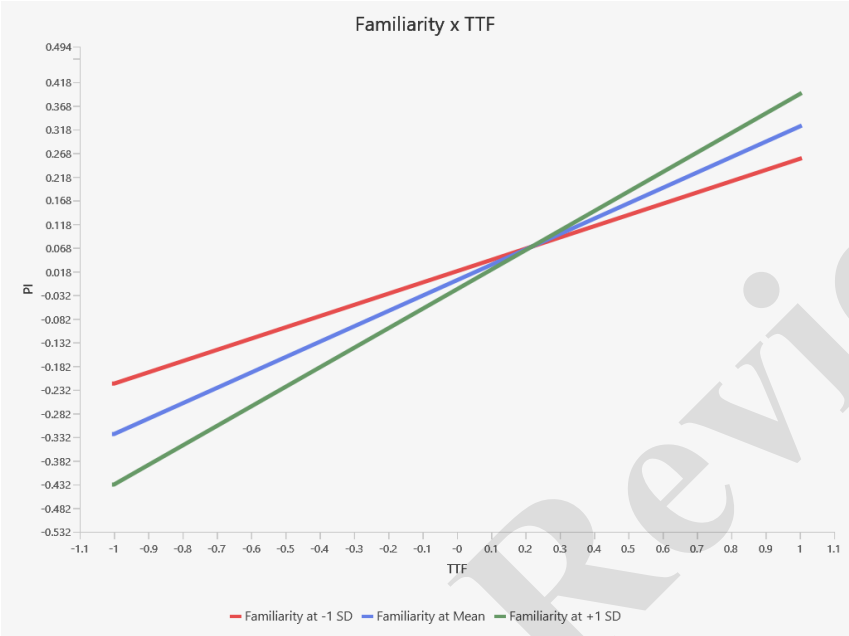


Figure 5- The moderating effect of familiarity on the relationship between TTF and Performance Impact

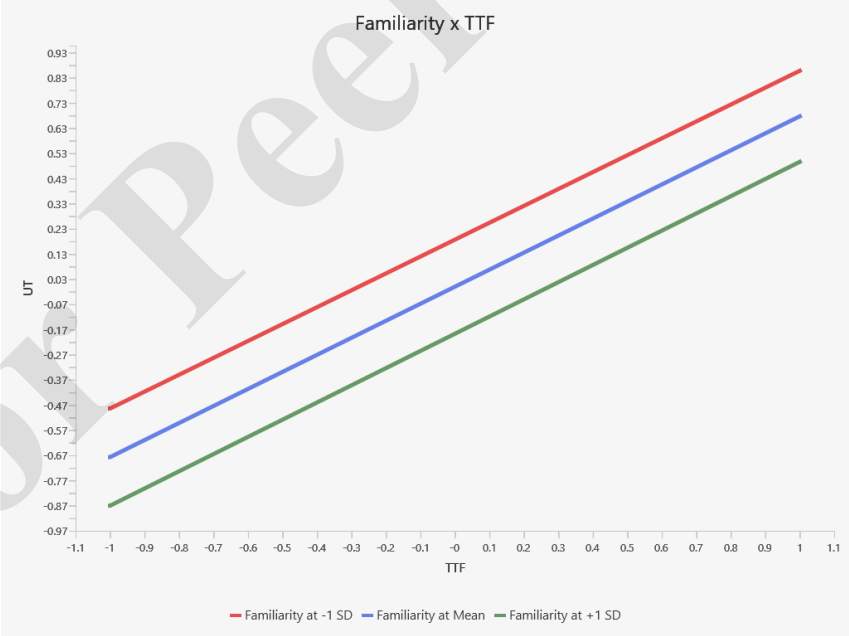


Figure 6- The moderating effect of familiarity on the relationship between TTF and Utilization

6. Discussion

The main focus of this study is to examine the fit between GenAI and tasks performed by legal practitioners and to understand how this fit impacts their performance and utilization of the technology. The study reveals several key insights based on the survey of 279 legal practitioners across the USA.

The quantitative analysis confirms the significant positive relationship between Task Characteristics and TTF and between Technology Characteristics and TTF, underscoring the fit between GenAI capabilities and some tasks performed by legal practitioners. This fit arises largely because legal tasks require sophisticated analytical skills, managing vast amounts of information, precision, attention to detail, and staying updated with changing legal regulations. GenAI effectively addresses these needs through its advanced natural language processing, capacity to handle large volumes of unstructured data, accuracy in language generation and error detection, and ability to access real-time data updates while continuously learning from new information. This finding is consistent with the Task-Technology Fit theory, which posits that the effectiveness of technology is contingent upon its ability to meet task requirements (Goodhue & Thompson, 1995).

Our participants identified specific types of tasks as more suitable for GenAI in the legal domain. The highest suitability scores were observed for tasks related to "Research and Analysis" and "Documentation and Drafting." These tasks likely benefit from GenAI's capabilities in processing large volumes of data, generating text, and synthesizing information efficiently. Conversely, tasks such as "Client Interaction and Advice," "Litigation and Dispute Resolution," and "Transactional Work" received lower suitability scores, suggesting that participants perceive GenAI as less effective for tasks requiring complex human judgment, interpersonal skills, or nuanced negotiations. This indicates that while GenAI is highly valued for tasks involving information processing and documentation, its applicability is perceived to be limited in areas requiring high levels of personal interaction and bespoke legal reasoning. The significant influence of

Technology Characteristics on TTF is also consistent with the literature on technology adoption. Research has consistently shown that perceived characteristics of a technology, including its ease of use, reliability, and functionality, significantly affect user perceptions of fit (Dishaw & Strong, 1999). Our findings extend this understanding to the legal domain, demonstrating that GenAI's ability to process vast amounts of legal data and generate contextually appropriate outputs aligns well with the needs of legal practitioners, thereby enhancing perceived TTF.

Our study also finds a significant positive relationship between TTF and Utilization and TTF and Performance Impact, which aligns with prior studies that link perceived fit to technology usage and performance outcomes. Venkatesh et al. (2003) emphasize that when users perceive a strong fit between technology and their tasks, they are more likely to adopt and utilize the technology, leading to better performance outcomes. Our study's findings support this theory, particularly within the context of GenAI in legal practice, where the fit between task requirements and GenAI capabilities is crucial for the effective adoption and utilization of GenAI. The significant positive relationship between Utilization and Performance Impact also indicates that as legal practitioners increase their use of GenAI, they perceive improved performance outcomes.

The post hoc analysis confirms the significant moderating role of familiarity in the relationship between TTF and Performance Impact. This indicates that legal practitioners who are more familiar with GenAI can better leverage its capabilities to improve their performance. In essence, they possess the know-how to use the technology effectively. This is consistent with Venkatesh et al. (2012), who argued that greater familiarity with technology leads to more effective usage, as users are more comfortable and proficient in utilizing advanced features and functionalities. This finding suggests that investment in training and professional development that increases familiarity with GenAI could yield significant performance benefits, particularly in complex, knowledge-intensive environments such as legal practice. However, the

lack of a significant moderating effect of familiarity on the relationship between TTF and Utilization presents a more complex picture. While familiarity with GenAI enhances its performance impact, it does not significantly influence the extent to which practitioners utilize the technology more. This finding contrasts with the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003), which suggests that familiarity and user experience are key drivers of technology utilization. One possible explanation for this finding could be that practitioners might not necessarily need to increase their utilization if the technology is only applied to specific tasks or scenarios within their legal practice. Additionally, the nature of legal work often requires careful, case-by-case application of technology, and thus, practitioners may use GenAI selectively, even if they are highly familiar with it. This selective use could be driven by the complexity of legal tasks, ethical considerations, or the fact that not all legal work is well-suited for GenAI, which may dampen the influence of familiarity on overall utilization despite the positive effect on performance outcomes.

Interestingly, we also found that individuals with higher familiarity are associated with lower utilization, suggesting that practitioners with high familiarity with GenAI may be more conservative or selective in their use of the technology as they might have a deeper understanding of its strengths and limitations. It also suggests that legal practitioners may be willing to adopt new technologies like GenAI if they perceive a direct benefit to their work, even if they are not entirely familiar with the technology. This could reflect a practical, results-oriented approach within the legal field, where tangible improvements in task performance outweigh the need for extensive familiarity with the technology.

The qualitative analysis reveals six themes, including efficiency and Workflow Improvement, Skill Necessity, Data Security Concerns, Quality of Input and Output, Specific Legal Applications, and Trust and User Confidence, highlighting the opportunities and challenges associated with GenAI in legal practice. The prominence of efficiency and workflow Improvement in participant responses mirrors findings in the

literature that highlight GenAI's potential to enhance productivity and streamline complex tasks (Chui et al., 2023; Contini, 2024; Villasenor, 2023). This is consistent with the quantitative findings that positively link TTF and Utilization to Performance Impact. The theme of Skill Necessity aligns with the growing body of literature suggesting that integrating GenAI in professional fields requires new skill sets and competencies (Chui et al., 2022, 2023; Villasenor, 2023). Conversely, the concerns around data security and trust, while less frequently mentioned, are consistent with ongoing debates in the literature about the risks associated with GenAI adoption (Contini, 2024; Rodriguez, 2023; Villasenor, 2023). These concerns underscore the need for robust data governance frameworks and strategies to build user confidence in GenAI systems, particularly in sensitive contexts such as law.

The mixed sentiment observed in the qualitative responses, with a majority expressing positive views but a significant minority voicing concerns, reflects a broader contradiction in the literature about GenAI's role in professional practice. While the potential benefits of GenAI are widely recognized, issues related to trust, security, and reliability remain a significant concern (Contini, 2024; Dwivedi et al., 2021; Rodriguez, 2023). Robust data protection measures and compliance with ethical standards are essential to safeguard client confidentiality in the legal domain. Additionally, continuous monitoring and auditing of GenAI systems are necessary to mitigate risks and ensure fairness. Moreover, human oversight remains crucial to validate GenAI outputs and maintain the integrity of legal decisions, as some participants mentioned. Addressing these concerns is critical to fostering trust and maximizing the benefits of GenAI in legal services.

7. Research Contributions

This study can be of interest and benefit to Information Systems scholars and practitioners as well as policymakers working in the legal domain. From a theoretical perspective, this research contributes to the existing literature on task-technology fit, technology adoption, and GenAI use in professional settings,

particularly in the legal domain. It extends the existing literature on the Task-Technology Fit Theory by applying it to the context of GenAI in legal practice, which, to the best of our knowledge, has not been done before. Additionally, the study provides a nuanced understanding of the role of familiarity with GenAI in improving the performance of legal practitioners and their utilization of the technology. Unlike prior research that often treats familiarity as a straightforward predictor of technology use, this study explores its moderating effects on the relationships between TTF and performance impact as well as utilization.

Moreover, by combining quantitative analysis with qualitative insights, this study enriches the literature on GenAI adoption by providing a holistic view of the factors influencing its use in legal practice. Specifically, the identification of key themes—such as efficiency and workflow improvements, skill requirements, data security concerns, and trust and user confidence—through qualitative analysis allows for a deeper exploration of both the drivers and barriers to GenAI adoption, offering a more nuanced understanding of practitioner attitudes and experiences. It also addresses the call in the literature for more integrated studies that capture the complexities of technology adoption in real-world settings (Dwivedi et al., 2021).

From a practical perspective, this study, by identifying specific legal tasks more suitable for integration with GenAI, such as research and analysis, documentation, and drafting, offers valuable insights for policymakers in law firms on where to focus GenAI adoption efforts to maximize impact. In addition, the differential effects of familiarity on performance impact and utilization have important implications for both practice and policy in the legal domain. To encourage broader and more effective adoption of GenAI, law firms and legal organizations should consider strategies that not only enhance basic training of GenAI features to increase familiarity with the technology—shown to improve performance—but also go further to foster deeper proficiency with GenAI, enabling exploration of its full potential for utilization. This could

involve advanced training programs, ongoing professional development opportunities, and creating communities of practice where legal professionals can share insights and experiences related to GenAI use. Additionally, initiatives aimed at increasing user confidence, addressing risks associated with using GenAI, and promoting an environment that encourages innovation with new technologies could further support adoption.

8. Limitations and Future Research Direction

While this study offers valuable insights into using GenAI in the legal domain, certain limitations should be considered. The sample includes legal practitioners from the United States, which may limit the generalizability of the findings across different legal contexts. Additionally, the reliance on self-reported data through surveys and open-ended responses, while providing valuable perspectives, may introduce biases related to individual perceptions. Moreover, the study focuses on current users of GenAI, potentially overlooking the views of non-adopters. Lastly, given the rapid advancements in GenAI technology, the findings may evolve as new capabilities are developed.

For researchers, the study highlights the need for further exploration of the factors influencing technology adoption in professional contexts, particularly the roles of familiarity, trust, and data security. Future studies could explore these dynamics in greater depth, examining how specific features of GenAI technologies interact with professional practices and user perceptions to shape adoption outcomes. The role of familiarity with technology in influencing performance impact and utilization also opens new avenues for future research.

9. Conclusion

Drawing upon the Task-Technology Fit Theory, this research aims to examine the alignment between GenAI and the tasks performed by legal practitioners and to understand how this alignment impacts their performance and utilization of the technology. By integrating quantitative data from a survey of 279 legal

practitioners with qualitative insights from open-ended responses, the study highlights a strong alignment between the tasks performed by legal practitioners and the capabilities of GenAI. The study also finds that TTF significantly enhances the performance of legal practitioners and increases their utilization of GenAI. Additionally, the study sheds light on the moderating role of familiarity with GenAI in the relationship between TTF and both Performance Impact and Utilization. The research results also reveal specific legal tasks more suitable for integration with GenAI, such as research and analysis, documentation, and drafting. The qualitative analysis added depth to these findings by identifying six themes: Efficiency and Workflow Improvement, Skill Necessity, Data Security, Quality of Input and Output, Specific Legal Applications, and Trust and User Confidence. These insights reveal both the perceived benefits and challenges of integrating GenAI into legal workflows, with a general sentiment leaning towards optimism about the technology's potential to enhance productivity while highlighting areas of concern, particularly regarding data security and trust.

10. References

Ajevski, M., Barker, K., Gilbert, A., Hardie, L., & Ryan, F. (2023). ChatGPT and the future of legal education and practice. *Law Teacher*, *57*(3). https://doi.org/10.1080/03069400.2023.2207426

Albeedan, M., Kolivand, H., & Hammady, R. (2023). Evaluating the Use of Mixed Reality in CSI Training Through the Integration of the Task-Technology Fit and Technology Acceptance Model. *IEEE Access*, *11*. https://doi.org/10.1109/ACCESS.2023.3323949

Al-Emran, M. (2021). Evaluating the Use of Smartwatches for Learning Purposes through the Integration of the Technology Acceptance Model and Task-Technology Fit. *International Journal of Human–Computer Interaction*, *37*(19), 1874–1882. https://doi.org/10.1080/10447318.2021.1921481

Alyoussef, I. Y. (2023). Acceptance of e-learning in higher education: The role of task-technology fit with the information systems success model. *Heliyon*, *9*(3). https://doi.org/10.1016/j.heliyon.2023.e13751

Anum Shahid, Gohar Masood Qureshi, & Faiza Chaudhary. (2023). Transforming Legal Practice: The Role of AI in Modern Law. *Journal of Strategic Policy and Global Affairs*, *04*(01). https://doi.org/10.58669/jspga.v04.i01.04

Braun, V., & Clarke, V. (2006). Qualitative Research in Psychology Using thematic analysis in psychology Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2).

Chalkidis, I., Androutsopoulos, I., & Aletras, N. (2020). Neural legal judgment prediction in English. *ACL 2019 - 57th Annual Meeting of the Association for Computational Linguistics, Proceedings of the Conference*. https://doi.org/10.18653/v1/p19-1424

Chalkidis, I., Androutsopoulos, I., & Michos, A. (2017). Extracting contract elements. *Proceedings of the International Conference on Artificial Intelligence and Law*, 19–28. https://doi.org/10.1145/3086512.3086515

Chen, B., Wu, Z., & Zhao, R. (2023). From fiction to fact: the growing role of generative AI in business and finance. *Journal of Chinese Economic and Business Studies*, *21*(4), 471–496. https://doi.org/10.1080/14765284.2023.2245279

Chen, H., Pieptea, L. F., & Ding, J. (2022). Construction and Evaluation of a High-Quality Corpus for Legal Intelligence Using Semiautomated Approaches. *IEEE Transactions on Reliability*, *71*(2). https://doi.org/10.1109/TR.2022.3156126

Chien, C., & Kim, M. (2024a). Generative AI and Legal Aid: Results from a Field Study and 100 Use Cases to Bridge the Access to Justice Gap. *Loyola of Los Angeles Law Review, Forthcoming*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4733061

Chien, C., & Kim, M. (2024b). How Generative AI Can Help Address the Access to Justice Gap Through the Courts. *Loyola of Los Angeles Law Review, Forthcoming*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4683309

Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. In *Modern methods for business research* (pp. 295(2), 295–336).

Chiu, T. K. F. (2023). The impact of Generative AI (GenAI) on practices, policies and research direction in education: a case of ChatGPT and Midjourney. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2023.2253861

Chui, M., Hall, B., Mayhew, H., & Singla, A. (2022). The state of AI in 2022 — and a half decade in review Five years in review : AI adoption , impact , and spend. *Quantum Black, AI by McKinsey*, *December*.

Chui, M., Hazan, E., Roberts, R., Singla, A., Smaje, K., Sukharevsky, A., Yee, L., & Zemmel, R. (2023). *The Economic Potential of Generative AI: The Next productivity Frontier* (Issue June).

Contini, F. (2024). Unboxing Generative AI for the Legal Professions: Functions, Impacts and Governance. *International Journal for Court Administration*, *15*(2). https://doi.org/DOI: 10.36745/ijca.604

Creswell, J. W., & Plano Clark, V. L. (2018). Designing and Conducting Mixed Methods Research. In *Organizational Research Methods* (Vol. 12, Issue 4).

Dale, R. (2019). Law and word order: NLP in legal tech. *Natural Language Engineering*, *25*(1). https://doi.org/10.1017/S1351324918000475

Dishaw, M. T., & Strong, D. M. (1999). Extending the technology acceptance model with task-technology fit constructs. *Information and Management*, *36*(1). https://doi.org/10.1016/S0378-7206(98)00101-3

Dong, Y., & Wu, Y. (2024). Interacting with Healthcare Chatbot: Effects of Status Cues and Message Contingency on AI Credibility Assessment. *International Journal of Human–Computer Interaction*, 1–13. https://doi.org/10.1080/10447318.2024.2387396

Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., … Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, *57*. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Foroughi, B., Senali, M. G., Iranmanesh, M., Khanfar, A., Ghobakhloo, M., Annamalai, N., & Naghmeh-Abbaspour, B. (2023). Determinants of Intention to Use ChatGPT for Educational Purposes: Findings

from PLS-SEM and fsQCA. *International Journal of Human-Computer Interaction*. https://doi.org/10.1080/10447318.2023.2226495

Franque, F. B., Oliveira, T., & Tam, C. (2023). Continuance Intention of Mobile Payment: TTF Model with Trust in an African Context. *Information Systems Frontiers*, *25*(2). https://doi.org/10.1007/s10796-022-10263-8

Freitas, P. M., & Gomes, L. M. (2023). Does ChatGPT Pass the Brazilian Bar Exam? *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *14116 LNAI*. https://doi.org/10.1007/978-3-031-49011-8_11

Gan, L., Kuang, K., Yang, Y., & Wu, F. (2021). Judgment Prediction via Injecting Legal Knowledge into Neural Networks. *35th AAAI Conference on Artificial Intelligence, AAAI 2021*, *14B*. https://doi.org/10.1609/aaai.v35i14.17522

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems*, *18*(1), 185–214. https://doi.org/10.1080/07421222.2001.11045669

Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS Quarterly: Management Information Systems*, *19*(2). https://doi.org/10.2307/249689

Gupta, S., Dhingra, S., Tanwar, S., & Aggarwal, R. (2023). What Explains the Adoption of Mobile Wallets? A Study from Merchants' Perspectives. *International Journal of Human-Computer Interaction*, *39*(19). https://doi.org/10.1080/10447318.2022.2104408

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203/FULL/XML

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/S11747-014-0403-8/FIGURES/8

Howard, M. C., & Hair, J. F. (2023). Integrating the Expanded Task-technology Fit Theory and the Technology Acceptance Model: A Multi-wave Empirical Analysis. *AIS Transactions on Human-Computer Interaction*, *15*(1), 83–110. https://doi.org/10.17705/1thci.00184

Howard, M. C., & Rose, J. C. (2019). Refining and extending task–technology fit theory: Creation of two task–technology fit scales and empirical clarification of the construct. *Information and Management*, *56*(6), 0–1. https://doi.org/10.1016/j.im.2018.12.002

Iqbal, U. (2023). From Knowledge Management to Intelligence Engineering - A practical approach to building AI inside the law-firm using open-source Large Language Models. *CEUR Workshop Proceedings*, *3423*.

Kamalnath, A. (2024). The future of corporate insolvency law: A review of technology and AI-powered changes. *International Insolvency Review*, *33*(1). https://doi.org/10.1002/iir.1512

Katz, D. M., Bommarito, M. J., Gao, S., & Arredondo, P. (2023). GPT-4 Passes the Bar Exam. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4389233

Katz, D. M., Bommarito, M. J., Gao, S., & Arredondo, P. (2024). GPT-4 passes the bar exam. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, *382*(2270). https://doi.org/10.1098/rsta.2023.0254

Koohi-Moghadam, M., & Bae, K. T. (2023). Generative AI in Medical Imaging: Applications, Challenges, and Ethics. In *Journal of Medical Systems* (Vol. 47, Issue 1). https://doi.org/10.1007/s10916-023-01987-4

Lorenzini, G., Arbelaez Ossa, L., Shaw, D. M., & Elger, B. S. (2023). Artificial intelligence and the doctor–patient relationship expanding the paradigm of shared decision making. *Bioethics*, *37*(5). https://doi.org/10.1111/bioe.13158

Loria, S. (2018). *TextBlob: Simplified Text Processing*. https://textblob.readthedocs.io/en/dev/

Macey-Dare, R. (2023). How ChatGPT and Generative AI Systems will Revolutionize Legal Services and the Legal Profession. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4366749

Marikyan, D., & Papagiannidis, S. (2023). Task-technology fit: a review. In *TheoryHub Book*.

Marikyan, D., Papagiannidis, S., & Alamanos, E. (2021). "Smart Home Sweet Smart Home": An Examination of Smart Home Acceptance. *International Journal of E-Business Research*, *17*(2). https://doi.org/10.4018/IJEBR.2021040101

Marikyan, D., Papagiannidis, S., F. Rana, O., & Ranjan, R. (2024). Working in a smart home environment: examining the impact on productivity, well-being and future use intention. *Internet Research*, *34*(2). https://doi.org/10.1108/INTR-12-2021-0931

Masrom, S., Rahman, R. A., Baharun, N., Rohani, S. R. S., & Rahman, A. S. A. (2023). Machine learning with task-technology fit theory factors for predicting students' adoption in video-based learning. *Bulletin of Electrical Engineering and Informatics*, *12*(3), 1666–1673. https://doi.org/10.11591/eei.v12i3.5037

McGill, T. J., & Klobas, J. E. (2009). A task-technology fit view of learning management system impact. *Computers and Education*, *52*(2). https://doi.org/10.1016/j.compedu.2008.10.002

Medvedeva, M., Vols, M., & Wieling, M. (2020). Using machine learning to predict decisions of the European Court of Human Rights. *Artificial Intelligence and Law*, *28*(2). https://doi.org/10.1007/s10506-019-09255-y

Muchenje, G., & Seppänen, M. (2023). Unpacking task-technology fit to explore the business value of big data analytics. *International Journal of Information Management*, *69*. https://doi.org/10.1016/J.IJINFOMGT.2022.102619

Musalamadugu, T. S., & Kannan, H. (2023). Generative AI for medical imaging analysis and applications. *Future Medicine AI*. https://doi.org/10.2217/fmai-2023-0004

Niklaus, J., Chalkidis, I., & Stürmer, M. (2021). Swiss-Judgment-Prediction: A Multilingual Legal Judgment Prediction Benchmark. *Natural Legal Language Processing, NLLP 2021 - Proceedings of the 2021 Workshop*. https://doi.org/10.18653/v1/2021.nllp-1.3

Olubiyi, I. A., Oyedeji-Oduyale, R., & Adeniyi, D. M. (2024). ARTIFICIAL INTELLIGENCE AND THE LAW: AN OVERVIEW. *ABUAD Law Journal*, *12*(1). https://doi.org/10.53982/alj.2024.1201.01-j

Parthiban, E. S., & Adil, M. (2023). Examining the Adoption of AI based Banking Chatbots: A Task Technology Fit and Network Externalities Perspective. *Asia Pacific Journal of Information Systems*, *33*(3), 652–676. https://doi.org/10.14329/apjis.2023.33.3.652

Pierce, N., & Goutos, S. (2023). Why Law Firms Must Responsibly Embrace Generative AI. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4477704

Rafique, H., Ul Islam, Z., & Shamim, A. (2023). Acceptance of e-learning technology by government school teachers: application of extended technology acceptance model. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2022.2164783

Regalia, J. (2024). From Briefs to Bytes: How Generative AI is Transforming Legal Writing and Practice. *Tulsa L. Rev*, *59*, 193.

Rezaev, A. V., & Tregubova, N. D. (2023). The Possibility and Necessity of the Human-Centered AI in Legal Theory and Practice. *Journal of Digital Technologies and Law*, *1*(2). https://doi.org/10.21202/jdtl.2023.24

Rodriguez, X. (2023). Artificial Intelligence (AI) and the Practice of Law. *The Sedona Conference Journal*, *24*, 783.

Roth, T., Stohr, A., Amend, J., Fridgen, G., & Rieger, A. (2023). Blockchain as a driving force for federalism: A theory of cross-organizational task-technology fit. *International Journal of Information Management*, *68*. https://doi.org/10.1016/j.ijinfomgt.2022.102476

Sauerbrei, A., Kerasidou, A., Lucivero, F., & Hallowell, N. (2023). The impact of artificial intelligence on the person-centred, doctor-patient relationship: some problems and solutions. In *BMC Medical Informatics and Decision Making* (Vol. 23, Issue 1). https://doi.org/10.1186/s12911-023-02162-y

Sezgin, E. (2023). Artificial intelligence in healthcare: Complementing, not replacing, doctors and healthcare providers. In *Digital Health* (Vol. 9). https://doi.org/10.1177/20552076231186520

Shaik, T., Tao, X., Higgins, N., Li, L., Gururajan, R., Zhou, X., & Acharya, U. R. (2023). Remote patient monitoring using artificial intelligence: Current state, applications, and challenges. In *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery* (Vol. 13, Issue 2). https://doi.org/10.1002/widm.1485

Shang, X. (2022). A Computational Intelligence Model for Legal Prediction and Decision Support. *Computational Intelligence and Neuroscience*, *2022*. https://doi.org/10.1155/2022/5795189

Singh, M. (2017). Mobile technologies for police tasks: An Australian study. *Journal of Organizational Computing and Electronic Commerce*, *27*(1). https://doi.org/10.1080/10919392.2016.1263114

Strong, D. M., Dishaw, M. T., & Brent Bandy, D. (2006). Extending Task Technology Fit with Computer Self-Efficacy. *Data Base for Advances in Information Systems*, *37*. https://doi.org/10.1145/1161345.1161358

Sukanya, G., & Priyadarshini, J. (2021). A Meta Analysis of Attention Models on Legal Judgment Prediction System. *International Journal of Advanced Computer Science and Applications*, *12*(2). https://doi.org/10.14569/IJACSA.2021.0120266

Surden, H. (2019). Artificial intelligence and law: An overview. *Georgia State University Law Review*, *35*(4), 1305–1337. https://gsulawreview.org/article/15109.pdf

Surden, H. (2021). Machine learning and law: An overview. In *Research Handbook on Big Data Law* (pp. 171–184). https://www.elgaronline.com/abstract/edcoll/9781788972819/9781788972819.00014.xml

Susskind, R. E. ., & Susskind, Daniel. (2022). *The future of the professions : how technology will transform the work of human experts*. https://global.oup.com/academic/product/the-future-of-the-professions-9780198841890

Tam, C., & Oliveira, T. (2016). Performance impact of mobile banking: using the task-technology fit (TTF) approach. *International Journal of Bank Marketing*, *34*(4). https://doi.org/10.1108/IJBM-11-2014-0169

Tawira, L., & Ivanov, A. (2023). Leveraging personalization and customization affordances of virtual try-on apps for a new model in apparel m-shopping. *Asia Pacific Journal of Marketing and Logistics*, *35*(2). https://doi.org/10.1108/APJML-09-2021-0652

Terzidou, K. (2023). Generative AI for the legal profession: Facing the implications of the use of ChatGPT through an intradisciplinary approach. In *MediaLaws*. https://orbilu.uni.lu/bitstream/10993/58939/1/Generative AI for the Legal Profession%3A Facing the Implications of the Use of ChatGPT through an Intradisciplinary Approach.pdf

Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). Personal computing: Toward a conceptual model of utilization. *MIS Quarterly: Management Information Systems*, *15*(1), 125–142. https://doi.org/10.2307/249443

Thong, J. Y. L., Hong, W., & Tam, K. Y. (2002). Understanding user acceptance of digital libraries: What are the roles of interface characteristics, organizational context, and individual differences? *International Journal of Human Computer Studies*, *57*(3). https://doi.org/10.1016/S1071-5819(02)91024-4

Uymaz, A. O., Uymaz, P., & Akgül, Y. (2024). The shift from disease-centric to patient-centric healthcare: Assessing physicians' intention to use AI doctors. *Environment and Social Psychology*, *9*(4). https://doi.org/10.54517/esp.v9i4.2308

Vendramin, N., Nardelli, G., & Ipsen, C. (2021). Task-Technology Fit Theory: An Approach For Mitigating Technostress. In *A Handbook of Theories on Designing Alignment Between People and the Office Environment* (pp. 39–53). https://doi.org/10.1201/9781003128830-4

Venkatesh, V., Brown, S., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed-methods research in information systems. *Management Information Systems Quarterly*, *37*(1), 21–54.

Venkatesh, V., & Morris, M. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*.

Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Qarterly*, *27*(3), 425–478.

Venkatesh, V., Morris, M. G., & Ackerman, P. L. (2000). A Longitudinal Field Investigation of Gender Differences in Individual Technology Adoption Decision-Making Processes. *Organizational Behavior and Human Decision Processes*, *83*(1). https://doi.org/10.1006/obhd.2000.2896

Villasenor, J. (2023). Generative Artificial Intelligence and the Practice of Law: Impact, Opportunities, and Risks. *Minn. JL Sci. & Tech.*, *25*.

Wang, C., Wang, H., Li, Y., Dai, J., Gu, X., & Yu, T. (2024). Factors Influencing University Students' Behavioral Intention to Use Generative Artificial Intelligence: Integrating the Theory of Planned Behavior and AI Literacy. *International Journal of Human-Computer Interaction*. https://doi.org/10.1080/10447318.2024.2383033

Wang, W. T., & Kartika Sari, M. (2024). Examining the Effect of the Task-Technology Fit of Game Mechanisms on Learning Outcomes in Online Gamification Platforms. *Journal of Educational Computing Research*, *61*(8). https://doi.org/10.1177/07356331231187285

Yue, L., Liu, Q., Jin, B., Wu, H., Zhang, K., An, Y., Cheng, M., Yin, B., & Wu, D. (2021). NeurJudge: A Circumstance-aware Neural Framework for Legal Judgment Prediction. *SIGIR 2021 - Proceedings of the 44th International ACM SIGIR Conference on Research and Development in Information Retrieval*. https://doi.org/10.1145/3404835.3462826

Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior*, *26*(4). https://doi.org/10.1016/j.chb.2010.01.013

Zhou, X. (2023). Challenges and Countermeasures of Artificial Intelligence Technology in the Application of Financial Industry. *Advances in Economics, Management and Political Sciences*, *63*(1). https://doi.org/10.54254/2754-1169/63/20231382