

Artificial Intelligence-Based System Tools and Their Impact on The Lawyers' Practice

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Abstract

This study focuses on artificial intelligence (AI)-based system tools and their impacts on the lawyer's practice. With the emergence of technology and its rapid development in the field of sciences, progress can be seen in the different sectors, including the legal profession. Traditionally, only licensed lawyers practice law, but that traditional notion has begun to change with the coming of technology. AI-based system tools were changing how lawyers practice law is being done. Legal information can now be analyzed through network analysis and machine learning (ML) systems. The study adopted an empirical type of research, using a qualitative and quantitative methodological approach to gather and analyze its data. Primary data was collected directly from the targeted respondents, while the secondary data were collected from relevant literature in libraries such as journals, books, newspapers, articles, and online publications. The data collected was analyzed using a frequency distribution table, pie chart, and simple percentage. The study highlighted that 58% agreed that AI was changing and impacting how lawyers practice law. The result showed that 50.9% were aware of the AI-based system tools to automate or assist lawyers in law practice.

Keywords: Artificial Intelligence; Lawyers; Legal Profession; Practice of law; Technology

1. Introduction

The history of the ages in this world has taught us that the only constant thing in life on earth is change. Changes in laws, society, and generations are happening and will continue to happen. The undisputed fact is that the key driver to all these changes has been one thing called 'technology.' Haenlein and Kaplan (2019) stated that it has become common for humans to become afraid anytime technology evolves to disrupt the old ways. Human fear is the question of what to do next and what to do that usually comes to their mind. According to Simpson (2016), the legal profession being admonished to be obtuse with innovation as a result of its several ethics, immunities, and the relish for exorbitant fees, has been considered for the "moneyed class," therefore establishing the fact that it is for the rich and obscure for the poor. Some technological advancements are disputing the ethical originality of human lawyer expertness.

Biresaw and Saste (2022) have argued that various jobs requiring human effort have been computerized to cut costs and save time, which is an excellent sign that legal practice is not exempted from AI. As a result, AI will be the basis for disrupting legal practice, among others (Liu et al., 2020). Some researchers have offered their views on the legal profession being exempted from the impact of AI, which is not the same thing as the practice of law not accepting technological advancement. That is, it has to do with

which tasks will be replaced by AI because it cannot be automated by the nature of professional work (Simpson, 2016).

Professor John McCarthy, one of the founding fathers of AI, defines AI as “the science and engineering of making intelligent machines, especially intelligent computer programs. It has to do with computers understanding human intelligence, but AI is not restricted to biologically observable ways” Kurzweil (1985). These intelligence involve mechanisms that AI has discovered how to carry out some of these tasks impressively. Paschen, Kietzmann, and Kietzmann (2019) defined intelligence in a general way as “the ability to recognize and process data, transform data into information and fundamental knowledge, and use this knowledge towards goal-directed behavior.”

The critical problem of the legal profession has been its reliance on precedents, which often reflect the past and restrict technological and globalization changes because lawyers are traditionally the ones who are legally allowed to practice law. They have resistance to technological changes threatening their enabling jobs. Due to this, the legal profession has been termed to be “slow to change.” However, AI is now having a significant impact on the legal profession and lawyers' new reality. AI can automate many tasks that lawyers currently do, such as legal research, document review, and legal analysis. It will free up lawyers to focus on more complex tasks and provide better client services. Lawyers need to see AI as a tool that helps them do their job better and not as a threat to their jobs. By embracing AI, lawyers can stay ahead of the crew and continue to provide valuable services to their clients.

AI-based system tools can potentially automate many of the routine tasks that lawyers currently perform. This situation could lead to significant changes in the legal profession, including increased productivity and efficiency. AI-based system tools can help lawyers perform their tasks more quickly and accurately, freeing up their time to focus on more complex tasks. AI-based system tools help reduce costs, making it more affordable than traditional legal services and access to justice more affordable. AI-based system tools can enable lawyers to develop new products and services that meet client's needs in a changing world. Despite these potential benefits, some lawyers are concerned that AI-based systems could lead to job losses and a decline in the quality of legal services. However, it is important to note that AI-based system tools aid the work of lawyers and not replace them. Lawyers will still be needed to provide strategic advice, represent clients in court, and negotiate contract deals. Overall, the impact of AI-based system tools on the legal profession is likely to be positive. The study will explore the impacts of AI-based system tools on lawyers' practice of law and discuss whether AI can entirely replace the job of lawyers.

2. Research Methods

This study used an empirical research method (Bell, 2016). Empirical research is based on a collection of data that leads to the generation of new ideas, observations, and experiments, or scientific instruments that can be used to conclude concrete empirical evidence and verifiable evidence (Pawar, 2020). The study's data were collected from primary and secondary sources (Nassaji, 2015). The primary data of this study were collected directly from the respondents via an online questionnaire because it is one of

the primary sources of data used to collect qualitative information. An online questionnaire with 12 questions was applied with "Yes or No" answers, multiple choice answers, and opinion-based answers. The questionnaire was answered digitally and anonymously by 56 lawyers licensed to practice law and willing to participate voluntarily. The secondary data were collected from relevant literature in libraries, such as journals, books, newspapers, articles, and online publications. The results of the data gathered were analyzed qualitatively and quantitatively using tabulation, frequency count, percentages, and pie charts to indicate the impact of AI on lawyers' practice.

3. Results and Discussion

3.1 How does AI as a technology impact the lawyers' practice?

To answer research question one, quantitative and qualitative analysis were used to analyze the data primarily collected because Table 1-4 contains statistical data and responses from the respondents. The impact analysis aimed to bring out the positive outcomes of AI, specifically for lawyers practicing law. The analysis intends to use the two sets of questions combined with the respondents' responses to compute the impact of AI as a technology in lawyers' practice. Also, the analysis included descriptive statistics, which provided more detailed information about the responses to the questions.

Based on the analysis, the study finds that AI has impacted and still impacts lawyers' practice. This technology is expected to have greater legal transparency, be more efficient, improve access to justice in the short run, and improve the legal profession (Alarie et al., 2018; Soukupová, 2021). Figure 1 indicates that AI has impacted 58% of the respondents as a technology using AI-based system tools in their various tasks. As AI as a technology evolves, more changes and impacts in the legal process will be in the lawyers' practice (Simpson, 2016). Furthermore, AI technology will make legal practitioners more competitive since it is possible to serve their clients better (Frolova & Ermakova, 2022).

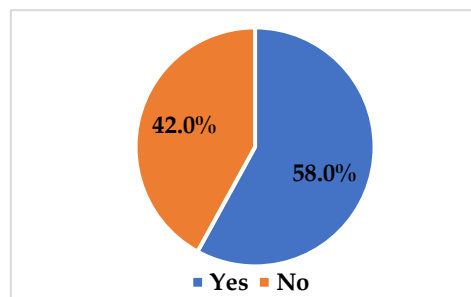


Figure 1. The respondents were asked whether the AI-based system tools have been impactful (50 responses)

Table 1. Data on which country the respondents practice

Country	Frequency	Percentage (%)
Nigeria	46	83.7
Indonesia	6	10.9
The Republic of Gambia	2	3.6
Egypt	1	1.8

Table 1 shows that the respondents were asked about their country of law practice, to which 55 responded. Most respondents practice in Nigeria, 83.7%, 10.9% in Indonesia, 3.6% in the Republic of Gambia, and 1.8% in Egypt.

Table 2 shows that 53 respondents responded to the question as to the type of office they work or practice law. It is observed that 41.8% of the respondents work in a law firm, 26.6% of the respondents are in private practice, 13.3% of the respondents work in a litigation office, 7.6% of the respondents work in a government/public office, 5.7% of the respondents work in a corporate office, 1.9% of the respondents work in information technology office, 1.9% of the respondents work in the paralegal office, and 1.9% of the respondents work in the sports organization.

Table 2. Data on the type of office the respondents practice

Office	Frequency	Percentage (%)
Law Firm	22	41.8
Private Office	14	26.6
Litigation Office	7	13.3
Government/Public Office	4	7.6
Corporate Office	3	5.7
Information Technology	1	1.9
Paralegal	1	1.9
Sport Organization	1	1.9

Table 3 illustrates that the respondents with five years of experience in law practice were more than other respondents with years of law practice which comprised 22.2%, followed by respondents with three years of law practice which comprised 18.5%; then respondents with four years of law practice which comprised of 14.8%; respondents with six years of law practice comprised of 9.3%; respondents with 7 and 2 years of law practice comprised of 7.4% each; respondents with 14 years, ten years and 1 year of law practice comprised of 3.7% each, and respondents with 17, 13, 11, 9 and 8 years of law practice comprised of 1.9% each.

Table 3. Data on the respondents' years of law practice

Years	Frequency	Percentage (%)	Years	Frequency	Percentage (%)
Seventeen	1	1.9	Eight	1	1.9
Sixteen	0	0	Seven	4	7.4
Fifteen	0	0	Six	5	9.3
Fourteen	2	3.7	Five	12	22.2
Thirteen	1	1.9	Four	8	14.8
Twelve	0	0	Three	10	18.5
Eleven	1	1.9	Two	4	7.4
Ten	2	3.7	One	2	3.7
Nine	1	1.9			

Figure 1 shows how impactful AI-based system tools have been to their tasks. It is observed that 58% of the respondents, forming the majority of the respondents, have been impacted by AI-based system tools, while 42% of the respondents responded in the negative form.

3.2 Is using AI-based system tools in the lawyers' practice effective?

A quantitative analysis was used to analyze the data in Figure 2-5 to answer research question two because it represents a given reality in terms of numeric value for

performance evaluation. The study finds that AI-based system tools in the lawyers' law practice have been effective. 91.1% of the respondents believed that AI-based system tools are effective in lawyers' practice. Figures 4 and 5 effectively show that the respondents have used various AI-based system tools in automating or assisting their lawyerly tasks, varying from legal research, contract review and due diligence, automation of documents, case prediction, and legal decision-making. The previous research supports that AI capacity significantly improved operational efficiency, precision, and availability of legal services (Burt, 2021; Ejjami, 2024).

Moreover, AI also increases efficiency since it has the potential to analyze legal information and make legal predictions from the legal data set (Sil, Roy, Bhushan, & Mazumdar, 2019). Research in Colombia found that AI helps to optimize case management, and it improves the efficiency and effectiveness of the Colombian legal system (Carrasquilla-Díaz, De Luque-Pisciotti, & Lagos-González, 2024). AI can also be used as a force multiplier to work with limited resources (Campbell, 2020).

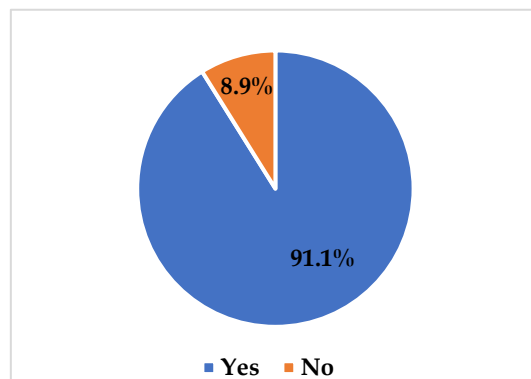


Figure 2. The respondents were asked to give their opinions on how AI is changing many aspects of how lawyers practice law, and their views are represented accordingly.

Figure 2 shows that 91.1% of the respondents thought that AI-based system tools were changing many aspects of lawyers' practice. Neal supports this condition, stating that AI potentially changes the legal profession and why lawyers aid their clients (Neal, 2024). In comparison, 8.9% of the respondents responded negatively, to which 91.1% of respondents comprised the majority of the 56 responses.

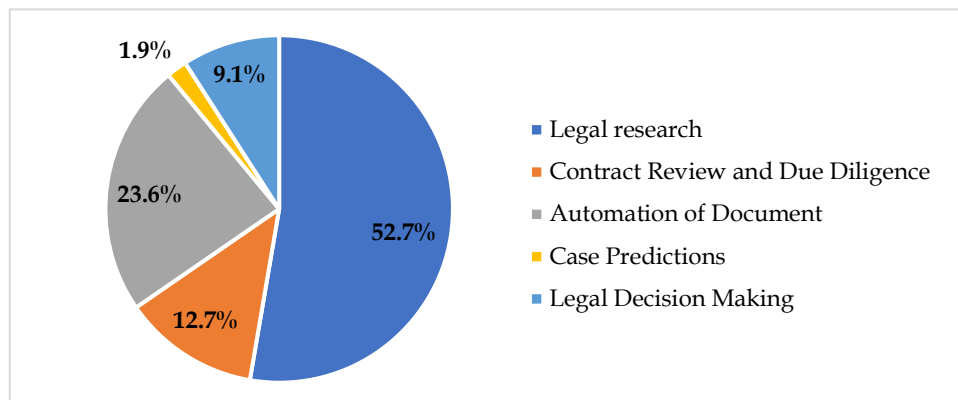


Figure 3. The respondents were asked about the aspect of law practice AI changing the most, and 55 responded.

Following Figure 2 above, Figure 3 indicates the aspect of lawyers' practice that AI-based system tools are changing the most. Fifty-five (55) responses were obtained from the respondents. Legal research, comprising 52.7%, is the most changing aspect of lawyers' practice, followed by automation of documents comprising 23.6%. Contract review and due diligence comprised 12.7%, Legal decision-making 9.1%, and case predictions 1.9%.

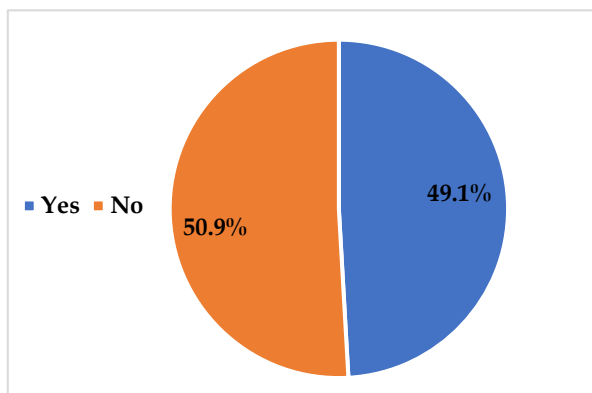


Figure 4. The respondents were asked if they were aware of any AI-based system tools aimed at automating or assisting in lawyerly tasks and decision-making, to which 55 responded.

Figure 4 indicates the awareness level of AI-based system tools among lawyers, with 55 responses collected from the respondents. It is observed that 50.9% of the respondents are aware of the AI-based system tools, while 49.1% are unaware of AI-based system tools in the lawyers' practice. Table 4 presents the types of AI-based system tools used by this research respondent.

Table 4. Data on the type of AI-based System Tools used by the respondents

AI-Based System Tools	Frequency	Percentage
E-Court System	2	7.4
Google/Internet	2	7.4
Kira	1	3.7
Law Pavilion	15	55.6
Legal Research	2	7.4
Lewis Nexis	1	3.7
ROSS	1	3.7
Smart Contract Development Program	2	7.4
Text Predictor in Email Application	1	3.7

3.3 Are AI-based system tools replacing the jobs of lawyers in the practice?

To answer research question three, qualitative and quantitative analyses were used to analyze the results using Figure 5 below. Both methods were used because Figure 5 below contains statistical data, while questions 11 and 12 in the questionnaire were opinion-based responses from the respondents. The study finds that 89.1% of the respondents, as indicated in Figure 5, believe AI will not replace lawyers' law practice. AI, as a technology using machine learning and natural language processing, has stepped in to transform the lawyers' practice of law by making legal practice more efficient and effective, increasing their workflow time saving, offering greater accuracy and precision in solving a multitude of legal tasks, and not to replace the job of lawyers. Furthermore, the significant obstacles include underdeveloped technology

infrastructure and the risk of algorithmic challenges (Carrasquilla-Díaz et al., 2024; Simshaw, 2018), so AI cannot replace lawyers' practices. Human lawyers have the vital role of producing reciprocity with the client (Xu & Wang, 2021).

Figure 5 above indicates that 89.1% of the respondents said AI is not replacing lawyers' jobs. In comparison, 9.1% of the respondents opined that it is replacing the lawyers' job, and 1.8% of the respondents are neutral.

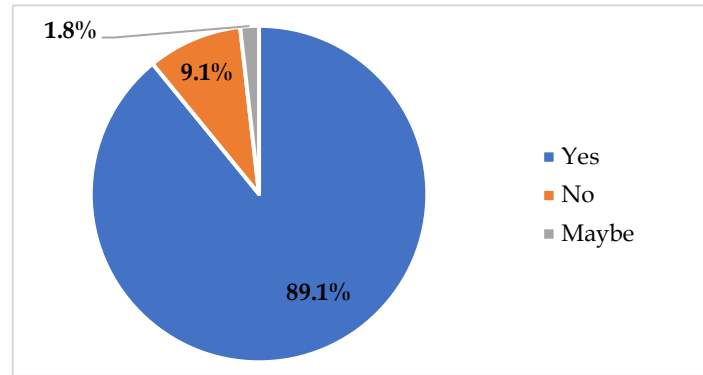


Figure 5. The respondents were asked to give their opinions on whether AI is replacing lawyers' jobs, and their views are shown.

3.4 Research Findings

The objective of the study was to discuss and analyze AI-based system tools and their impacts on lawyer's practice. An online questionnaire consisting of 12 questions was applied, with Yes or No and multiple-choice answers. The questionnaire was answered digitally and anonymously by lawyers licensed to practice law and willing to participate voluntarily. From the various questions asked, the study sought to identify the demographic information of the respondents, the impact of AI-based system tools on the lawyers' practice of law, and whether the use of AI-based system tools in lawyers' practice of law will replace the lawyers' jobs. The questionnaire was constructed in line with the statement problem. In analyzing the research results, the analysis was divided into three (3) sections: Part A: Demographic Information of Respondents-it provides the background information of the respondents comprising their country of law practice, their type of office and their years of law practice; Part B: Impact of AI-based System Tools on the Lawyers' Practice- this section determines aspect which lawyers' practice of law AI is changing, the level of awareness of AI-based system tools, how effective and impactful it has been on the practice of law; Part C: Are AI-based system tools replacing the jobs of lawyers in the practice-provides the views of the respondents on AI replacing the lawyers' job.

From the findings, most respondents were from Nigeria, practicing law in a law firm, and had been practicing for five years. Most respondents believed that AI-based system tools changed lawyers' practice, with legal research being the most changing aspect. The results show that 50.9% of the respondents are aware of AI-based system tools that aim at automating or assisting lawyerly tasks and decision-making with Law Pavilion, a Nigerian legal tech company, as the used AI-based system tool. It was also discovered that 58% of the respondents agreed that AI impacts the lawyers' practice. The

traditional notion that views lawyers' practice of law as irreducibly human is changing how law is practiced.

Finally, the data on the response from 56 respondents to the online questionnaire, which contained some missing answers to the questions, assesses AI-based system tools and their impact on lawyers' practice. What is clear from the study's findings is that AI significantly impacts lawyers' practice of law, and lawyers are not handicapped by the activeness or stopped due to the possibility of AI-based system tools. Also, the study reveals that the transformative power of technology is taking place substantially in the practice of law. However, an increase in awareness of the AI-based system tools among lawyers is still needed to change the legacies of conservatism and the traditional notion that only lawyers can practice law.

4. Conclusions

The study found that these AI-based system tools have successfully impacted the lawyer's practice of law, and adopting AI-based system tools completely into the legal profession can help promote growth and foster a culture of excellence in the legal profession.

At the end of the data analysis, the study concludes that AI as a technology has significantly impacted lawyers' practice, and this is bound to continue as technology leads the way. Secondly, AI-based system tools in the lawyers' law practice have been effective and efficient due to their commitment to improving operational efficiency and consistency. Thirdly, the use of AI-based system tools will not replace the work of lawyers; instead, it will help improve the effectiveness of the lawyers and make them more productive in their service delivery.

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