



## Systematic Literature Review of Adopting AI Robots in UAE Judicial System

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December 13, 2024

# *Systematic Literature Review of Adopting AI Robots in the UAE Judicial System*

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**Abstract**—This position paper explores the potential integration of Artificial Intelligence (AI) robots into the judicial system of the United Arab Emirates (UAE). It evaluates the opportunities and challenges associated with employing AI in legal services, particularly in areas such as reliability, security, confidentiality, and ethical considerations. The paper emphasizes the lack of existing regulations addressing the accountability of AI robots compared to human legal professionals. It proposes the need for a legal framework to support this transition. By conducting a systematic literature review, the study draws comparisons between global implementations of AI in judicial systems and identifies key gaps and limitations. The findings aim to guide policymakers and stakeholders in aligning AI advancements with the UAE's legal and ethical standards. Although the research is ongoing, this paper outlines critical hypotheses and raises questions about the trustworthiness of AI robots in providing unbiased legal advice and protecting sensitive client data. The study contributes to the vision of a zero-bureaucracy government and offers preliminary recommendations for integrating AI robots into the UAE's judicial framework.

**Keywords**— *Artificial Intelligence (AI), Robot, Lawyers, Legislation, Judicial System*

## I. INTRODUCTION

AI term stands for the ability to use computers to replicate human behaviors [3]. These kinds of smart devices have the ability to analyze images, understand speech at conferences, interact in natural ways, and make predictions using the data embedded into the robot. Currently, all human minds deal with any situation in their daily life by performing an action according to many previous experiences. This ability can be known as general intelligence. That's why many leading companies like Reliable Robot Rental or Resemble Systems in developed countries are trying to invent a model which has the capability of combining human with machine behaviors in various forms [17][18]. One of their targets is designing powerful robots to perform routine jobs on behalf of humans. Those smart iron objects can cause damage or lead to death based on the tasks given. Can humanoid robots eliminate or demolish human jobs in the future? Will AI robots replace human lawyers in the future? Will clients prefer interacting with robot lawyers over human lawyers? Will clients guarantee or believe a robot in defending and investigating their cases? These are examples of many questions raised by people after being impressed by the impact of AI in many fields. AI robots are intelligent machines that are embedded with AI, which enables these machines to process tasks by simulating human intelligence. Transforming lawyers into AI robots might change the perspectives of legal

attorneys or other general advisors. This may cause major challenges in adopting resilient devices or moving into the digital transformation process. The hypotheses dimension will address whether interested parties might follow the experiences of other countries in the new era of robotic commerce or others who prefer to operate in a traditional way. This paper provides a detailed comparison between six journals focusing mainly on the geographical region, comparing the adoption of AI in legal services from different perspectives. It will discuss the advantages and disadvantages, challenges, security aspects, and the reliability of AI machines versus humans as legal consultants. The research area will focus on the capabilities of AI robots not only in providing legal services but also in their reliability and safety for clients who compete with human lawyers. This study will consider how to ensure the confidentiality of clients' data if AI robots are introduced into legal services. Furthermore, this research will address the impact of introducing AI robots into the judicial system, focusing on the AI robots' accountability while providing legal consultations. The motivation behind conducting this research is to investigate the accountability, reliability, and safety of AI robots in providing legal services for clients, knowing that UAE's vision for 2031 is to be a global leader in the field of AI [16]. One of the main aspects behind conducting this research is to minimize the chances of tampering with evidence by lawyers who try to support their clients and neglect the truth. Also, it aims to study the capability of AI robots to give trustworthy legal advice as human lawyers. This qualitative research will contribute to the vision of HH Sheikh Mohammed Bin Rashid Al Maktoum, Dubai Ruler, towards having a zero-government bureaucracy by automating government services [14]. The UAE judicial system may benefit from this study in developing many internal processes and procedures as well as considering some new laws and regulations that might be introduced regarding the adoption of AI robots. Moreover, enhancing access to Law is affected by the new technologies as it combines modern ones with the law field, which will contribute in helping lawyers simplify their daily task performance in order to increase the levels of productivity and efficiency. By automating lawyers' tasks, such as creating documents and saving records of clients, we might achieve growth in terms of legal concerns. Nevertheless, this can cause an opposite reaction in ensuring justice. End users can download most of UAE laws from Apple store, which is available for free for public use and is called "UAE-Laws" [15]. Women's rights, labor, and employment issues are some of the most prominent areas of legal work that the public can be interested in. Experts believe that law includes some analysis skills, an understanding of basic definitions, plus logical

connections, and here lies the importance of AI in the judicial field. Many countries are seeking to have advantages from technologies to facilitate their procedures easily and enforce judgments. The role of technology is to provide ready-made tools and solutions that could speed up specific operations and reduce human errors. In our modern world, the Internet has become a big part of our daily life processes, so the legal sector has to depend completely on technology such as introducing humanoid robots in its operations. To reduce the required cost of conducting cases, lawyers need to verify the facts along with the evidence and start searching to establish the best connection between themselves and the judges in court halls [1]. Additionally, ensuring data integrity and privacy is one of the main essential aspects while exchanging secret information related to cases registered in the UAE's cases system program that might harm customers. This paper explores the opportunities and challenges of adopting AI robots in the UAE judicial system. Through a systematic review of existing literature and case studies from global implementations, it aims to bridge the gap between theoretical possibilities and practical applications. By doing so, this research provides a foundation for policymakers and stakeholders to develop strategies that align AI capabilities with legal, ethical, and societal needs, paving the way for a more efficient and equitable judicial system.

## II. RESEARCH STATEMENT & PURPOSE

Currently, the regulations of the Dubai Government Legal Affairs Department primarily regulate the registration of lawyers and legal consultants and their disciplinary accountability. However, these regulations do not address the accountability of machines or AI systems providing legal advice, which could potentially harm recipients in court proceedings if adopted. The integration of AI robots in legal services might pose a significant challenge because the existing regulations are designed for human lawyers. This challenge makes it difficult to ensure that legal advice from AI systems is reliable and safe for clients. Therefore, it is important to investigate how the current laws and regulations can be reshaped to accommodate the integration of AI in legal services. Since AI reliance is increasing in multiple sectors, it is crucial to explore how current regulations can adopt legal advice from AI robots and how trustworthy and accountable they are. Defining the problem statement is crucial, as it represents the backbone of the research, and selecting a strong and real problem is a key step in conducting useful and meaningful research. The purpose of conducting this systematic literature review is to identify the main methodologies and research techniques used in this field and to show the relationships between previous studies and theories. In addition, to identify main ideas, conclusions, and comparisons in terms of similarities and differences, as well as to identify gaps and limitations in the studies.

## III. OBJECTIVES

The research objectives will be used as a clear guide to ensure that the research focuses on the main aim and does not go beyond the scope. It ensures that the research goals establish clear boundaries for the areas that we need to explore and analyze more deeply. The research aims to explore AI robots in legal services and investigate their reliability, safety, and trustworthiness compared to human lawyers. The research aims to analyze whether AI robots are accountable for handling cases, interacting with humans, and providing trusted legal advice. Besides, investigate how the contribution of AI robots to the judicial system can reduce the chances of evidence tampering while ensuring ethical and legal standards are followed during court proceedings.

## IV. HYPOTHESES TO TEST

Based on the previous studies conducted in the scope of AI robots in law, we will focus on two main hypotheses in order to support our research study. These hypotheses will allow us to focus on the core problem of our research by stating its scope and boundaries to ensure that our assumptions are concise and relevant to the defined problem. The main hypotheses are stated below, covering the problem defined from different angles:

- Can AI robots be as capable as human lawyers in giving accurate and honest legal advice, and will it improve the ethical aspect of lawyer honesty?
- Can an AI robot ensure that clients' data are confidential and protected?

Breaking down the main hypotheses into sub-questions will help us simplify and remove unnecessary distractions. Addressing some of the sub-questions will support confirming the stated hypotheses without the need to prove specific theories or claims within the scope of the research. Some of these sub-questions are mentioned below, and each is designed to shed light on different aspects of the main hypotheses:

- Will clients trust and choose AI-based machine consultations over the traditional way?
- Should lawyers be emotional regarding their cases, whether they are made of machines or humans?

## V. RESEARCH METHOD

Based on the data required to conduct the research, it has been decided to follow the qualitative approach. This methodology will help conduct case studies based on the defined research questions and validate the research outcomes. This study consists of a detailed analysis of integrating AI robots in legal services. A comparison has been made on some of the previous studies on different countries comparing the AI systems in terms of their capabilities, benefits, challenges, and limitations in the legal field while current regulations are designed for human lawyers. In addition, it will study the emotional ability of AI robots to interact with litigants. The research will investigate the reliability of AI machines as legal consultants and examine their safety use for recipients in courts.

## VI. SEARCH STRATEGY

The authors started conducting this research in October 2024, focusing on articles published not more than ten years back. The search strategy used to collect the required articles depends on certain databases such as Google Scholar, Scopus, and ZU Scholar. We were able to find 23 articles using the keywords mentioned. However, the selection was narrowed down to 6 articles as per certain criteria, as mentioned in Fig 1. The comparison was made on articles published after the year 2018. Most of the articles considered were published in recent years, with a focus on the number of citations for each publication. Also, the process of selection was based on some of the keywords as mentioned below:

- "Robotic" AND "Lawyer"
- "AI" OR "Robots" AND "Law"
- "AI" OR "Robots" AND "Lawyers"
- "AI" OR "Robots" AND "Judicial Field"
- "AI" AND "Robots" AND "Lawyers" OR "Courts"

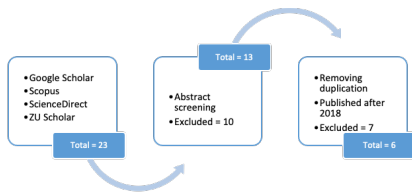


Fig. 1. Articles Selection Process

### A. Inclusion and Exclusion

TABLE I. ARTICLES INCLUSION JUSTIFICATION

Articles (Inclusion)	Justifications
Advocates Of The Future: Challenges And Opportunities Of Robot Lawyer In Indonesia [1]	The selected articles were included because they aligns with our main research idea where valuable information and solid evidence are provided. After analyzing all these papers, we liked the concept of thoughts based on different geographic sites as we were able to compare our paper to others in terms of geographical locations.
AI Adoption In Colombian Legal Practice: Challenges And Opportunities [2]	
Nigeria's Adoption Of Robotic Lawyers: Legal And Socio-Economic Challenges [3]	
AI And Administrative Justice: An Analysis Of Predictive Justice In France [4]	
The Ethical AI Lawyer: What Is Required Of Lawyers When They Use Automated Systems? [5]	
Human Or AI Robot? Who Is Fairer On The Service Organizational Frontline [6]	

TABLE II. ARTICLES EXCLUSION JUSTIFICATION

Articles (Exclusion)	Justifications
Robotics and law: Key legal and regulatory implications of the robotics age (Part I of II) [7]	While this article provide good insights regarding robotics in law, it was excluded due to its publication year, which is 2016.
Robot Lawyer In Indonesian Criminal Justice System: Problems And Challenges For Future Law Enforcement [8]	This paper focuses on Indonesian geographical region, which is similar to a previously selected article. Despite the fact that this paper is well organized and accepted in 2023, it was excluded to avoid duplication.
Digital Transformation, Robotics, AI, And Innovation [9]	This article is too short, consists of four versions and only one version has been cited 24 times. Their hypotheses aren't related to ours as it reflects on digital transformation and innovation outcomes.
Robots As Legal Metaphors [10]	Its context wasn't clear and consists of complex terminologies. This article clarifies mainly several critical claims about the metaphor robots' role. Their objective is slightly different than ours.
Can Robots Be Lawyers? Computers, Lawyers, And The Practice Of Law [11]	This article provide an analysis method of automation's effects on the legal profession and the percent of invoiced hours spend on various tasks. Thus, it doesn't support our objectives.
Adapting To The Digital Transformation [12]	The article covers too broad idea of AI challenges in the energy industry instead of robot-human concept. They include small brief of automations (vehicles) and robotics. Thus, it didn't address our aim.
The Robot and Human Futures: Visualising Autonomy in Law and Science Fiction [13]	This article focuses on the limitations of robots in legal discussion, thus doesn't support our vision.

## VII. DATA EXTRACTION STRATEGY

While conducting this literature review, an efficient way has been used to organize the data and escalate the process of conducting a well-structured literature review. After the final selection of articles to be compared together, a literature review matrix has been used to extract the required data from each article. The matrix covered a wide range of aspects, such as the advantages, capabilities, and disadvantages of AI robots use, tools and apps adopted, the challenges faced, and contribution. In addition, their methodologies, recommendations, future considerations, gaps and limitations, as well as the security aspects. In addition to the comparison between AI and humans in terms of lawyers and judges. While reading the articles, the matrix was filled with data based on the categories mentioned above. This way helped us categorize and store the collected data and analyze them to conduct the comparison process between the articles based on the countries.

## VIII. RESULT AND DISCUSSION

### A. Methodology and Approach

Some articles have similar methods, while others differ in their methodology. In contrast, the Nigerian article has a hybrid method that combines the doctrinal with a legal focus and the non-doctrinal with an empirical focus [3]. Colombian, French,

and human or AI robot articles, in addition to our research, have a common qualitative methodology. The qualitative methods used, such as case studies, interviews, or document reviews, to gather the data. These approaches will help explore the effects and impacts of adopting AI [2][4][6]. For data collection, semi-structured interviews and survey-based experiments utilizing the bootstrapping method to gather customer perception of fairness towards the services offered by humans versus the AI robots [6]. This offers the ethical AI lawyer journal a more detailed data view of customer responses [5]. Indonesia highlights that the target is the people who will be affected by the integration of AI into the judicial system, such as lawyers, judges, and policymakers [1]. Most of the articles use the same concept of databases and libraries in conducting their research, while others differ in the resources used to approach their outcomes. Some of the articles, such as Indonesian, Nigerian, and French, used the legal databases as a reference to their research as well as the country's laws and regulations [1][3][4]. Furthermore, other articles were dependent on previous academic articles available in scholarly literature, such as Colombia and Nigeria [2][3]. However, while Indonesia relies on a vast legal database, Nigeria trusts the laws and regulations of the related nation [1][3].

### B. AI Robots Advantages and Capabilities

The articles offered different perspectives on the potential benefits of integrating AI robots into the legal system. They highlight the ability of AI robots to smooth tasks, improve efficiency while handling cases, and reduce costs for litigants, which helps people with limited budgets access legal services. Indonesian and Colombian articles also discussed that AI could reduce the cost and time required by automating some of the routine tasks such as case tracking, drafting legal documents, and recommending laws [1][2]. Also, the simplification of case management will help in improving efficiency through enhancing the decision-making process [2][4]. In terms of access to justice, articles [1][2][4][5] agree that AI robots will enhance the access to justice and make legal services available to a wider range of people. With AI-driven systems, the legal information will be available for public access, enabling individuals to gain a basic understanding and assist them in preparing general legal documents and increasing their legal awareness of certain legal issues [1]. The ethical AI lawyer article mentioned that implementing online services and apps for legal services and making them available for public use will benefit the people who live in rural areas far from courts, thus improve access to justice [5]. The open data of court decisions in France led to the availability of predictive justice. The availability of this data will help AI learn and improve its algorithm to enhance the predictivity of the decisions [4]. Instead, Indonesian and French articles emphasize more about the fairness of legal services by reducing biases and following consistent legal standards [1][4]. In summary, these articles mentioned the benefits of adopting AI in judicial system, starting from improving efficiency to cost reduction and time-saving.

### C. AI Robots Disadvantages

The articles share some similarities in terms of the disadvantages of AI robots in the legal field. The Indonesian article states that the excessive use of AI in performing some judicial tasks might diminish the legal skills of legal practitioners, such as critical reasoning and legal analysis [1]. In Colombia, due to the poor internet access in some areas, judges and litigants may face difficulties in benefiting from this technology [2]. The ethical AI lawyer and the human or AI robot articles mentioned that AI robots might lack emotions, empathy, and flexibility compared to humans, which might result in customer dissatisfaction [5][6].

#### D. Challenges

The integration of new technology into any system could face many challenges. The comparison below highlights the challenges faced by different countries in the integration of AI in the judicial system, stating the similarities and differences between these different articles. Starting with the similarities, it has been found that Indonesia, Colombia, France, and Nigeria face challenges in terms of data privacy and security concerns, but each has slightly different challenges [1][2][3][4]. In France, the use of the predictive justice rules raises concerns regarding data and privacy violations, while in Nigeria the main concerns are related to the clients' confidential data exposed by robotic lawyers [3][4]. Some rural areas, as mentioned in the Colombian article, lack solid infrastructure that supports the Internet and AI tools. French, Nigerian, Indonesian, and the ethical AI lawyer journals discuss how financial limitations and unemployment can affect the accessibility to AI, which prevents people with lower income from accessing it. However, each article has its unique challenges regarding the integration of AI robots in the judicial field. Indonesia points to the current limitations of the legal framework, particularly the advocate law, which doesn't support the validity of using AI in the courts. The ethical AI lawyer article insists on the need for regulations that maintain the ethical considerations of the judicial system while using AI [5]. Nigerian article emphasizes the need to amend some of the regulations that don't consider AI robots as legal humans capable of practicing law [3].

#### E. Security Aspect

From the security aspect, some countries have raised common concerns regarding the use of AI robots in legal systems, such as cyber threats and the privacy of sensitive data. One of the controversial issues in the legal system is data privacy and security, particularly when talking about the integration of AI technologies and court decisions digitization. These challenges are found in various countries such as Indonesia, Colombia, Nigeria, and France [1][2][3][4]. Regarding these concerns, legal practitioners deal with sensitive information related to confidential case details, which require high-security standards that consist of advanced encryption methods, strict access policies, and cyber security protocols, as noted in the Indonesian article [1]. Start by stating the similarities between the articles; Indonesia uses advanced encryption technologies and enforces strict policies to protect confidential data from unauthorized access. Therefore, legal practitioners in Indonesia are often careful when dealing with confidential and personal data [1]. AI system may pose significant security breaches in compromising data integrity, thus they could be vulnerable to viruses and malwares. Making algorithms transparent by publishing the source code used in legal settings considered as one of cyber-attack risks and computer security issues. Accordingly, this threat increases the potential harm of intruders like hackers who might benefit from public data and cause tremendous damage as discussed in the Nigerian and French articles [3][4]. In this case, it is crucial to protect personal information in court records or databases which include sensitive personal details such as names, addresses, or case details. This protection ensure that data of parties and judges is not misused or manipulated. To summarize, all countries except [5] and [6] articles identify that legal practitioners must protect personal data and case details in terms of handling sensitive information. They highlight the need of security measures to protect information against unauthorized access like strong methods including encryption and access control. As they mentioned that special protections needed against court decisions that are publicly available whether consist of public or private personal information. In regards to specific legal contexts, the French article informs the demand for algorithm transparency, which could expose the source codes and lead to security risks and

hacking threats [4]. On the other hand, the Nigerian journal indicates the need for a stronger cybersecurity to discover the weaknesses in AI systems that can be attacked by the use of malicious viruses [3]. In a similar manner, the mentioned articles are concerned about the privacy and protection of confidential data either through encryption [1], privacy protection [2][4], or through safeguarding from malware [3].

#### F. Systems and Tools

Similarly, Colombian and Nigerian articles demonstrate the term AI as an area of computer science that focuses on developing systems to perform specific tasks that require human intelligence [2][3]. A key similarity between all articles, except the Colombian and the ethical AI lawyer article, explains AI mechanisms that work by using powerful computers and smart computer programs like algorithms [1][3][4][6]. AI Chatbots support business decisions as per the Colombian article [2], however the ethical AI lawyer article indicates how machine learning helps lawyers in writing and reviewing critical documents [5]. This can absolutely guarantee that humans and AI complement each other in parallel as a team. Besides, the Colombian article describes AI Chatbots as making business intelligence easier in terms of access and use [2]. DoNotPay app is mentioned as an important AI tool in the legal field in both the Indonesian and Nigerian articles. As legal assistance, they both underscore how it may help defendants by delivering instant legal advice. Furthermore, this kind of tool can support customers during legal processes [1][3]. In comparison to articles [2] and [5], the French article stated that algorithms are mainly used in legal tools, especially when administrative judges use the Skipper software [4]. Expect the Colombian and the ethical AI lawyer articles, the remaining articles highlight how AI tools benefit from legal processes efficiently either by providing instant advice while using DoNotPay or even by managing and sorting cases in the Skipper software [1][3][4][6]. According to the previous app, these features can also offer legal help in advising and providing easy accessibility to everyone. That is similar to the French journal in utilizing digital tools that aim to simplify administrative processes [4]. The French article presents tools employed by their administrative staff, but the Nigerian journal discusses DoNotPay app as an innovative tool that is used in court halls [3][4]. DoNotPay app acts like a direct helper in court, according to the Indonesian and Nigerian articles, while the digital tools and software of the French article determine case management instead of direct legal advice [1][3][4].

#### G. AI Robots vs. Human Lawyers and Judges

After analyzing each article, there are notable similarities that speak about human lawyers and human judges performing their professions in the traditional way. All journals assure that AI serves as an enhancement tool in building powerful robotic lawyers or even judges. In this case, it relies on machine learning and sophisticated algorithms to automate several routine tasks. AI will not only organize documents but also aid in researching some existing laws or checking for errors. Nowadays, lawyers are able to sense the feelings of their clients, whether they are sad or worried. Hence, lawyers and judges are responsible for their actions and they should as well follow the legal and ethical standards in the legal realm. Consequently, they have to guide AI to make sure that it aligns correctly and fair enough in order to perform perfectly. Although many human lawyers still prefer the traditional way of providing emotional support, some of them believe that AI will play a vital role in reshaping the law firm profession. Notably, AI judge concept is found in the French article versus human judge. This

journal emphasizes that decisions made with the existence of algorithms without demolishing human interaction in court halls [4]. To end with, it's true that automated systems can support lawyers in performing their tasks faster, but at the same time humans have the ability to recognize each case based on its unique details in making a final judgment. In regards to achieving fairness in both legal and non-legal contexts, general attorneys must establish a balanced framework between using AI power and human judgment while maintaining ethical considerations and empathy. Overall, articles reveal that it's crucial to engage both human professionals and AI to achieve future vision in legal and service industries.

#### IX. GAP AND LIMITATIONS

Several gaps and limitations were identified among three articles, excluding Indonesian, Colombian, and Nigerian journals, as their authors didn't specify them clearly. In the focus on systems and their implications, all three articles specify how AI can affect various circumstances. However, the French article demonstrates how AI will have the ability to use its predictive analysis like changes in social behaviors or the economy. Further, it highlights important problems in terms of relying on technologies in making decisions, the accuracy of its predictions, plus potential biases of processing massive data. Accordingly, these predictions can affect the lives of people related to privacy concerns [4]. In contrast, the human or AI robot article specifically talks about matters such as job replacement, the service quality which is provided by AI, and the major effect on future implementation in many service sectors [6]. To end with, all of the above articles display the power of AI in different fields. Together, they examine the impact of AI on profession replacement in society, focusing on issues like service quality, biases, and ethical concerns.

#### X. RECOMMENDATIONS

The Indonesian article calls for updating their laws as well as policies in introducing AI into the legal practices without eliminating the need for protecting the public [1]. Many regulations need to be reviewed by the advocate laws in order to address related AI issues in terms of ethical considerations. Adding to the previous point, the Colombian article suggests that clear rules need to be generated for tackling problems like bias in algorithms plus protecting customers' privacy while using AI. Providing training for judges and legal staff in dealing with smart technologies is one of the important aspects in legal sectors [2]. Almost all articles, including our research empathize the need for training lawyers by giving advice on how they can deal with these technologies. By using predictive tools, judges can remain in charge of controlling their decisions, as per the French article [4]. To maintain access to justice to legal services, all articles assure that interested parties need to work together to understand the challenges of introducing AI in law among legal practitioners, experts, tech professionals, and policymakers. In order to adapt with any technological changes, all articles address the matter of training and educating lawyers and judges, keeping in mind the ethical implications of using AI in the judicial system. All articles except Nigerian and human or AI robot focus on maintaining the accountability in AI applications besides ethical considerations [3][6]. On the other hand, it has been recommended by the French article that AI tools can help in supporting decision-making rather than replacing human judgements [4]. In addition, the Indonesian journal discusses the demand for balancing between using such technologies and preserving the traditional method of legal skills [1]. With the limited access to the Internet, the Indonesian and Colombian journals believe that government authorities need to improve their access, especially in rural areas where most people lack resources. They should create easy or friendly software so that

clients can use AI and benefit from these legal tools [1][2]. To conclude, the combined efforts of different groups across regions are essential for integrating AI into legal practices, addressing issues such as rules, regulations, ethics, infrastructures, and education. Many recommendations need to be followed, such as making sure that robots are designed and programmed to perform specific tasks and orders and be able to adapt to the changes based on their inputs. If the outcomes aren't trustworthy, programmers or management will endure full responsibility while errors occur. Also, legal researchers and advisors need to follow the development changes in the field of robotics and AI. This contribution can benefit in creating certain controls in the judicial system.

#### XI. FUTURE CONSIDERATIONS

There are shared considerations from future perspectives excluding French and the ethical AI lawyer articles as certain legal guidelines and procedures, all of them agreed on the necessity of updating laws and regulations or else creating new ones to govern the use of AI. This is so important to ensure system fairness and compliance towards legal authorities. Specifically, each article states that learning about AI factors such as the processing time needed, case outcomes, and fairness is crucial in enhancing legal services. Cooperation among diverse groups, including tech professionals, developers, and legal experts who have the ability to analyze and study more principles of ethical concerns or any interested parties is required. All of them shared an interest in exploring how AI may cause an impact on multi-level platforms in relation to the judicial system. In the legal world, there are potential legal services related to individuals by utilizing AI tools to meet the needs of specific groups as people of determination based on the Indonesian article [1]. Further studies must consider whether it can improve outcomes or introduce biases [2]. By changing existing laws to introduce robotic lawyers, the Nigerian article highlights the process of regulating these new technologies [3]. In regards to addressing the feelings of customers towards fairness, the human or AI robot article shows the differences in how people observe AI compared to human workers [6]. In summary, there is a need to govern AI by updating laws and policies, as all articles mentioned earlier.

#### XII. RESEARCH CONTRIBUTION

Emphasizing our hypothesis, which questions the ability of AI to provide accurate and honest legal advice, France has mentioned that even if AI systems are capable of processing legal information and supporting legal professionals, they still have some limitations [4]. Thus, AI-driven systems are not capable of replacing human lawyers and judges fully. In addition, the ethical AI lawyer article highlights that, unlike human lawyers who might be biased due to their emotions which may affect their ethics, AI could offer more accurate legal advice due to a lower chance of being biased [5]. Thus, the ability of AI to provide accurate and cost-effective advice could improve the ethical aspect in courts and threaten the traditional way of lawyers. Similarly, the human or robot article found that AI machines lack emotions, so these machines could be viewed as more honest than human lawyers because it's not influenced by emotions, which results in enhancing the ethical aspects of the judicial system [6]. In the Indonesian article, a shared point arises about how AI may provide fairness or follow professional ethics [1]. Linked to that idea, our hypotheses explore the same thought of "can AI robots be as good as human lawyers at giving accurate and honest legal advice? Will they help improve the honesty of lawyers?" Our research suggests that the integration of AI robots into UAE's judicial systems could positively impact the ethical aspect of providing honest and unbiased legal advice. One of the critical challenges outlined by the French article is maintaining the confidentiality of the litigants' data while using

AI, pointing to the need for adopting strict security protocols and standards [4]. While there are no specific laws regarding the use of AI in legal services, the UAE Personal Data Protection Law No.45 of 2021 emphasizes that organizations should follow the highest standards while maintaining customers' data. Thus, if the judicial systems in the UAE are willing to integrate AI robots within their system, they must be configured with multiple layers of protection that align with the country's regulations. With the help of Dubai Electronic Security Center, UAE should establish regulations to protect client sensitive information which addresses our following hypothesis "Can an AI robot ensure that clients' data are confidential and protected?"

As mentioned in the French article, AI systems rely on consistent algorithms that enable them to be neutral and transparent and have the potential to enhance the level of ethical standards despite the risk of posed bias [4]. Adopting AI robots in the UAE judicial field with the right supervision and enhancement in terms of bias will improve our system's ethical and legal standards. The human or AI robot article discusses that litigants split into two groups: one prefers and trusts the fairness of AI. The other group may be concerned about the lack of emotional intelligence in machines and the inability to interact with litigants, leading to customers' dissatisfaction [6]. In contrast, the ethical AI lawyer article mentioned that AI systems can be adopted in cases where emotional intelligence and empathy are not required, such as criminal and robbery cases [5]. This area requires further investigation because it has not been clearly determined whether AI robots can be trusted in sensitive and family-related litigations, where the gap between efficiency and emotion creates complexity in adopting AI in legal advice. By incorporating best practices and lessons learned from countries such as Indonesia, Colombia and Nigeria, UAE can benefit from previous approaches in legal systems. Where definitely can enhance legal framework in terms of amending certain laws or regulations and analyzing AI role in the judicial system operations. As being stated in the Indonesian article, the traditional legal services can cost more whereas AI has the ability to improve access to justice. This idea can be aligned with one of our hypotheses as these smart systems will close the gap, particularly for those who can't pay for traditional legal fees. Moreover, UAE is providing free Wi-Fi-access to all its citizens in public areas where they can deal with any case requirements anytime. In terms of fairness, accuracy, and ethics, all mentioned countries are concerned that AI is able to maintain fairness towards legal services and adhere to professional ethics. In this case, UAE government legal authorities have to establish ethical guidelines for AI lawyers, plus a well-structured regulatory framework. Related to our hypothesis, which informs about whether AI robots can ensure client confidentiality and data protection, the Nigerian article calls for the need for a strong regulatory framework concentrating on data protection and confidentiality [3]. Based on training legal professional matters while using AI, all articles show interest of providing training depend on profession area. Therefore, UAE has to start designing a training development plan by addressing certain case concerns mainly for lawyers and judges to introduce and implement AI in legal practices. To reach the target of customers' happiness KPI, UAE has to adopt one of the future advancements such as virtual court proceedings and tele-justice approaches as per the Nigerian article [3].

### XIII. CONCLUSION

Integrating Artificial Intelligence (AI) robots into the UAE judicial system holds immense potential to enhance efficiency, reduce bureaucracy, and align with the nation's vision for a digitally advanced future. However, this advancement is not without challenges. Issues such as ethical considerations,

accountability, data security, and public trust require meticulous attention to ensure the adoption of AI upholds justice and fairness. This paper has identified both the opportunities and risks associated with deploying AI in judicial processes through a comprehensive analysis of existing literature and case studies. This research underscores the need for a robust legal framework to govern the use of AI robots, addressing regulation gaps and establishing clear implementation guidelines. Furthermore, stakeholder collaboration will be essential to align technological capabilities with societal values and ethical standards. Although the research is ongoing, this paper aims to initiate discussions among policymakers, legal experts, and technologists, laying the groundwork for future studies further to explore the implications of AI adoption in the judiciary. By leveraging AI effectively, the UAE can set a global precedent for innovation in legal systems while ensuring that technological progress serves the broader goal of equitable justice.

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