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How Possible Is It to Apply Artificial Intelligence (AI) When Issuing Judicial Rulings in the Saudi Courts? An Analytical and Comparative Study That Showcases International Experiences

هل من الممكن استخدام الذكاء الاصطناعي في إصدار الأحكام القضائية في المحاكم السعودية، دراسة تحليلية مع مقارنة التجارب الدولية

Doctor

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Abstract:

the development of AI technologies is necessary for making and issuing judicial rulings and conducting related processes in the Saudi courts, especially when comparisons are drawn with the judicial systems of comparable countries that have previously benefited from AI technologies or adopted them into their judicial systems (for example, China, Canada, and the US). In addition, applying AI technologies to the Saudi judiciary could prove useful for strengthening the Kingdom's position as a centre of international trade and an attractive environment for foreign and domestic investment. This could be achieved by taking practical steps towards enhancing the quality and efficiency of judicial rulings.

As such, this study suggests that the Saudi courts have adopted AI because it is becoming increasingly clear that AI models enable courts and employees to deal with cases more efficiently and transparently. In addition, technological innovation in the provision of court services will contribute to the achievement of important goals. For example, AI helps to reduce the cost of filing claims and cases, making court services less expensive and more accessible to the public. In turn, these improvements enhance the reputation of the Saudi courts and the entire Saudi judiciary. The adoption of AI

could therefore be an important turning point for the Kingdom's judiciary, especially with regard to the competition with parallel international commercial courts and alternative commercial and international dispute settlement centres (for example, arbitration and mediation centres).

Keywords: Artificial Intelligence (Ai) In The Saudi Courts, Key Principles Of Artificial Intelligence (Ai) And How It Supports Decision-Making In The Judiciary, The Globally Recognised Core Principles Of Artificial Intelligence (Ai), Artificial Intelligence (Ai) And The Right To A Fair Trial.

هل من الممكن استخدام الذكاء الاصطناعي في إصدار الأحكام القضائية في المحاكم السعودية، دراسة تحليلية مع مقارنة التجارب الدولية

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ملخص البحث:

أن تطوير تقنيات الذكاء الاصطناعي في عملية إصدار الأحكام القضائية وفي العمليات المرتبطة بها في المحاكم السعودية أمر ضروري، ولاسيما عند المقارنة مع الأنظمة القضائية في بعض الدول المشابهة لسياق المملكة، والتي استفادت مسبقًا من تقنيات الذكاء الاصطناعي وجعلتها ضمن أنظمتها القضائية مثل الصين وكندا والولايات المتحدة الأمريكية. كما أن استخدام تقنيات الذكاء الاصطناعي في القضاء السعودي قد يفيد في تعزيز مكانة المملكة بوصفها مركزًا للتجارة الدولية وبيئة جاذبة للاستثمارات الأجنبية والمحلية، وذلك من خلال البدء في اتخاذ خطوات عملية لتعزيز الجودة والكفاءة في الأحكام القضائية. وبالتالي تقترح هذه الدراسة أن تتبنى المحاكم السعودية الذكاء الاصطناعي؛ إذ يتضح من ذلك أنّ هذه النماذج تُمكّن المحاكم والعاملين فيها من التعامل مع القضايا بكفاءة وشفافية أكبر. بالإضافة إلى ذلك، يسهم الابتكار التقني فيما يرتبط بتقديم خدمات المحاكم في تحقيق أهداف مهمة، إذ يساعد على تقليل تكاليف تقديم المطالبات ورفع القضايا، ويجعل خدمات المحكمة أقل تكلفة وأكثر سهولة لأفراد المجتمع، ويعزز سمعة العدالة في المحاكم والنظام القضائي السعودي. وربما يكون تبني الذكاء الاصطناعي نقطة تحول مهمة

للقضاء في المملكة، ولاسيما فيما يخص المنافسة مع المحاكم التجارية الدولية الموازية والمراكز البديلة لتسوية المنازعات التجارية والدولية مثل مراكز التحكيم والوساطة.

ولكن يجب مراعاة أن استخدام تقنيات الذكاء الاصطناعي في عملية إصدار الأحكام القضائية

الكلمات المفتاحية: استخدام الذكاء الاصطناعي في المحاكم السعودية، المبادئ الأساسية المعترف بها عالمياً للذكاء الاصطناعي، هل يمكن للذكاء الاصطناعي أن يجعل تطبيق القانون أكثر فاعلية.

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Introduction

In recent years, the Kingdom of Saudi Arabia (KSA) has taken serious and extensive steps to optimise technologies across various practices, especially following the launch of Saudi Vision 2030 (on 25 April 2016). One key goal of Saudi Vision 2030 is to develop the necessary digital infrastructure, create a favourable and enabling environment for the public, private, and non-profit sectors, and further support digital transformation. Driven and inspired by such well-tailored goals, the use of artificial intelligence (AI) technology is a strategic option, in addition to the Kingdom's ambition to occupy a prominent position in the international rankings for digital transformation and technology application.

Artificial intelligence is often used to describe computer systems, which make logical inferences that are associated with the human mind and can perform tasks that require human intelligence. Today, many legal systems are being developed by AI technologies.[1] In this present study, the potential for using AI technologies to issue judicial rulings in the Saudi courts is explored, also discussing whether AI technologies could partially or fully replace human resources in the Saudi courts. Through this discussion, it will be noted that the judicial system of any country forms and shapes legitimacy, representing the authority that grants individuals their rights and ensuring fair judicial procedures,

1 Andrew Caplen, 'Access to Justice: The View from the Law Society', in E Palmer, T Cornford, Y Marique, and A Guinchard, eds, *Access to Justice: Beyond the Policies and Politics of Austerity* (Bloomsbury Publishing 2016), 27-40.

with transparency and respect for the rights of the parties concerned.[1] Thus, some important questions may be raised about the independence of an arbitrator based on AI technology, especially given that such an arbitrator will have no material or physical reference. Moreover, to what extent can the decisions made and issued by AI programs be recognised and respected?

In this study, the most important lessons learned from the use of AI technologies in several international legal systems and fields will be examined and discussed, where some of the common challenges and shortcomings have already been flagged, for example, delays in adjudicating cases and the ambiguity that can affect some judicial procedures.[2] These leading experiences will be drawn upon in this study, so that the potential challenges ahead of the judiciary in KSA may be anticipated.

Based on the foregoing, this study will examine potential areas where AI technologies could be used, and the possibility of AI addressing some of the main challenges and shortcomings that are encountered in Saudi court procedures. For example, delays and ambiguity can cause litigants to resort to a judicial system other than the Saudi judiciary. The reason why this occurs is because these other judiciaries might

1 Ibid; see also, J McIntyre, 'Evaluating Judicial Performance Evaluation: A Conceptual Analysis' [Online] (2014) 4(5) Oñati Socio-legal Series 898 <http://ssrn.com/abstract=2533854> [Accessed: 6 January 2023].

2 According to human rights conventions, judicial bodies and courts are supposed to have some basic values, such as fairness, speed of completion, impartiality, and independence. See Convention for the Protection of Human Rights and Fundamental Freedoms as amended by Protocol Nos. 11 and 14, supplemented by Protocol Nos. 1, 4, 6, 7, 12, 13 and 16, Rome, 4 XI 1950.

depend on well-developed and well-established rules and principles, driven by extensive and in-depth legal knowledge and judicial precedents,[1] which might not be available to the Saudi judiciary.

This study will also discuss the lack of a specific codified system or laws in KSA, and whether AI technologies will therefore present problems for the Saudi courts. The Saudi courts are known to operate in accordance with the general principles of Islamic Sharia, which represents the bedrock of all systems in the Kingdom. This includes substantive and procedural laws, for example, the Law of Evidence and Law of Procedure. However, will this be a further obstacle to using AI technologies in the Saudi judiciary?

Therefore, this research study highlights international experiences of AI use in the judiciary, as well as exploring the use of AI technologies in the Saudi courts to enhance communication and decide judicial cases. In turn, this raises deeper questions about the nature of justice itself, and the extent to which innovative mechanisms can expand access to justice and improve efficiency and fairness in the judiciary. In this context, it is necessary to consider the legitimate diversity of justice models in the world's legal systems. However, it also stands to reason that the methods of using AI that are adopted elsewhere cannot be transferred as they are without localising them to align with the Saudi courts (there is no one-size-fits-all approach). This is regardless

1 Sir William Blair, 'The New Litigation Landscape: International Commercial Courts and Procedural Innovations' (2019) 2 International Journal of Procedural Law 212, 225 <The-New-Litigation-Landscape-International-Commercial-Courts-and-Procedural-Innovations.pdf (sifocc.org)> [Accessed: 6 January 2023].

of the quality and proficiency of these methods, because what must also be considered is that the Saudi courts operate in accordance with the general principles of Islamic Sharia, which underpins life in the Kingdom.[1]

Hence, a legal analytical approach is adopted in this research to compare the use of AI technologies in KSA with those of other judiciaries worldwide. First, the author will seek to determine how far the basic principles of AI technologies support decision-making in the judiciaries of a number of selected countries (the US, the UK, Canada, China), and the rates of efficiency and practicality vis-à-vis the corresponding cultural, ideological, and legal climates. Equally, this study will explore the extent to which the application of AI technologies contributes to effective and dynamic law enforcement, while at the same time protecting the general concept of a fair trial.

To achieve the research objectives, this study is divided into four main Sections: Section One introduces the concept of AI, provides an overview of the Saudi judiciary, and outlines the use of AI technologies in the Saudi courts. Section Two examines the main principles of AI and how the technology supports the decision-making process in judiciaries. This Section then proposes the core principles that should

1 Basic Law of Governance Royal Decree No A/90 March 2, 1992, art ٤6: "The Judiciary is an independent authority. The decisions of judges shall not be subject to any authority other than the authority of the Islamic Sharia"; art ٤8: "The Courts shall apply rules of the Islamic Sharia in cases that are brought before them, according to the Holy Qur'an and the Sunna, and according to laws which are decreed by the ruler in agreement with the Holy Qur'an and the Sunna..." <https://laws.boe.gov.sa/BoeLaws/Laws/LawDetails/16b97fcb-4833-4f66-8531-a9a700f161b6/1> [Accessed: 6 January 2023].

be adopted and drawn upon in the Saudi judiciary. Section Three focuses more precisely on the use of AI technologies in the Saudi courts, discussing the potential advantages of AI in this context and how it could improve court procedures. Section Three also discusses the reasons for using AI technologies in the Saudi courts, the challenges that may arise, and some feasible solutions. It concludes with an overview of the international experience of using AI technologies in litigation processes. Finally, Section Four discusses the extent to which using AI technologies could contribute to the effectiveness and productivity of law enforcement in the Saudi courts.

Section One: Artificial Intelligence (AI)

Artificial intelligence is a general but comprehensive term, which is difficult to define precisely, because such a definition will depend on different perceptions and multiple opinions.[1] Moreover, AI is difficult to explain in succinct terms because of its various connotations and denotations. Thus, it cannot be defined as easily as might be expected.[2] While it has been used synonymously with computer science since the 1950s, AI is still a broad term that encompasses many sub-fields of computer science, including machine learning, computer vision, natural language processing (NLP), speech recognition, robotics, expert systems, planning, and optimisation. [3] Equally, AI is generally

1 Blair (n4).
2 Nils J Nilsson, *The Quest for Artificial Intelligence: A History of Ideas and Achievements* (CUP 2009), 13.
3 Julian Webb and others, 'The Effective and Ethical Development of Artificial Intelligence: An Opportunity to Improve Our Wellbeing' (*ACOLA*, July 2019), 14.

characterised as being able to develop itself through learning[1] and intelligent processing.[2]

The Organisation for Economic Co-operation and Development (OECD) defines AI as a technology that relies on machines to make predictions, recommendations, and decisions affecting real or virtual environments, according to a set of goals that are identified by humans.[3] In particular, AI is defined in the 2018 European Commission Fact Sheet on Artificial Intelligence as a system that can monitor its environment and independently perform various activities to achieve predetermined goals.[4] Meanwhile, Nils Nilsson, a senior AI expert at Stanford University, defines AI as "an activity dedicated to making machines intelligent, and intelligence means the quality that enables an

1 By 'learning', we mean that the performance of the system improves as it acquires more information or experiences. In machine learning, the parameters of the model are determined by an algorithm that computes relevant data or past experience. Machine learning (ML) has become an important part of systems and software, which solve problems that are too complex for 'first generation' AI systems or human decision makers. See also Stuart Russell and Peter Norvig, *Artificial Intelligence: A Modern Approach* (3rd edn, Pearson 2014), 1039; Daniel L Chen, 'Machine Learning and the Rule of Law', in M Livermore and D Rockmore, eds, *Law as Data* (Santa Fe Institute Press 2019).

2 Arnold Lodder and Ernest Thiessen, 'The Role of Artificial Intelligence in Online Dispute Resolution' [2003] <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.97.9137&rep=rep1&type=pdf> [Accessed: 12 January 2023].

3 OECD, Recommendation of the Council on Artificial Intelligence (*OECD Legal Instruments,* 2019) <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449> [Accessed: 6 January 2023].

4 European Commission, Factsheet: Artificial Intelligence for Europe <https://digital-strategy.ec.europa.eu/en/library/factsheet-artificial-intelligence-europe>.

entity or person to act in its environment appropriately, with intelligence, and in preparation for the future".[1]

It is therefore clear from the above that there is no one specific definition of AI, although simply put, it is a term that is commonly applied to computer systems that can acquire knowledge through observation and experimentation, in order to solve complex problems.[2] Although this definition seems appropriate at this stage, the unique nature of AI is one that remains in a constant state of evolution.[3] Therefore, any sharply defined description of AI could change rapidly within just a few years.

Overview of the Saudi Judiciary

In general, a judiciary may fall into either one of two types: unified or dual. The unified judiciary, alternatively known as the 'Anglo-Saxon' judiciary, is one that relies on the notion of equality, applying the same standard to administrative authorities and individuals alike, wherein administrative cases do not enjoy any special privileges. In other words, the ordinary courts adjudicate administrative disputes, as well as disputes between individuals and the administration.[4] Among the

1 Nilsson (n7).
2 *Datatilsynet: Norwegian Data Protection Authority, Artificial intelligence and Privacy* (2018) <https://www.datatilsy(net.no/globalassets/global/english/ai-and-privacy.pdf> [Accessed: 6 January 2023].
3 Russell and Norvig (n9), 1039.
4 Bryan A Garner, *A Dictionary of Modern Legal Usage* (2nd edn, New York: OUP 2001), 177: "…with the development of equity and equitable rights and remedies, common law and equitable courts, procedure, rights, and remedies, etc., are frequently contrasted, and in this sense common law is distinguished from equity."

countries that operate a unified judiciary are the UK, US, New Zealand, and Australia.[1]

In contrast, the dual judiciary, alternatively known as the 'Latin' judiciary, does not depend on the notion of equality between the administrative authority and individuals. Therefore, there is an administrative judiciary (the Administrative Court or so-called Board of Grievances in Saudi Arabia), which is mandated and entrusted with adjudicating disputes between individuals and the corresponding administrative authority (as a public authority), in accordance with the legal rules of the administrative judiciary. The general judiciary is responsible for adjudicating disputes between individuals under provisions of the law. France is one example of a country that operates a dual judiciary and is a leading administrative judiciary country at this current time. Many European Union (EU) countries have likewise adopted a dual system, as have Arab and Gulf Cooperative Council (GCC) countries, including Saudi Arabia[2]

The dual judiciary in Saudi Arabia can undertake multiple types of litigation, both in the administrative and general sphere. Each judiciary operates two types of court: courts of first instance and courts of appeal.[3] The courts of first instance decide cases on the basis of facts and law, while courts of appeal (second instance) consider cases that

1 Ibid.
2 Ekramy Bassiouni, Bassiouni E, 'The Reality of Doubleness in the Saudi Judicial System: A Comparative Study' [Online] (2017) 3 Qatar University International Review of Law 24 <http://dx.doi.org/10.5339/irl.2017.24> [Accessed: 02 January 2023].
3 Metwally Al-Mursi, Al-Mursi M, *Al-Wajeez in the Saudi Legal Procedure System* (2nd edn, Dar Al-Ajadah Publishing House 2023), 40.

have previously been heard in the courts of first instance. Thus, cases may be brought before the courts of appeal that are higher in authority than the courts of first instance. The purpose of this is to review and reconsider rulings issued in courts of first instance, either confirming their decisions or issuing new rulings. In KSA, the judiciary operates the Administrative Supreme Court for administrative issues and the General Supreme Court for the general judiciary. The Supreme Court is deemed to be a court of law and not a substantive court, given that it is limited to ensuring the correct application and interpretation of legal rules, as well as determining the procedures followed at trial.[1]

Artificial Intelligence (AI) in the Saudi Courts

In 2022, the Saudi Ministry of Justice launched the Scientific Judicial Portal, which is an interactive digital platform and a judicial and legal database, characterised by accuracy and objective classification. The Scientific Judicial Portal serves as a digital portal that is accessible to all, including the parties to a judicial process, for example, attorneys and the interested community. As such, the Portal enables rulings issued by the courts of first instance, courts of appeal, and Supreme Court in Saudi Arabia to be reviewed. It also offers easy access to judicial documents and flexible interactive tools.

Overall, the Scientific Judicial Portal aims to promote the values of justice and transparency, provide a unified and standardised digital platform for judicial information, enhance the specialist knowledge of the judicial and academic community, and enrich the judicial culture of

1 Ibrahim Al-Mojan, *Explanation of the Legal Procedure System According to the Latest Amendments*, Vols 1 and 2 (Dar Al-Zaman for Publishing 2019), 7-13.

Saudi society. Hence, the Portal enables judges, attorneys, and legal researchers to obtain law-related cases and precedents more easily. In particular, it provides scientific services directly to the justice community, and offers an accurate and efficient information platform for researchers and research centres. Therefore, it could be argued that the use of AI in the Saudi courts is not a new phenomenon.[1] However, the question that arises is whether it is possible to resort to AI when issuing judicial rulings in the Saudi courts. Moreover, is it possible for AI to replace human resources either wholly or partially in the Saudi judiciary community by performing tasks that were previously undertaken by human judges? This is especially pertinent since, in many cases, AI appears to be more efficient than humans.[2]

Consequently, it is believed in some quarters that AI will eventually contribute to the work of judges and attorneys and may even completely replace these professions in some instances. Moreover the reputation of any judiciary will be linked to the AI in which it is used.[3] So far, AI has been able to classify laws and judicial rulings in legal

1 *Saudi Press Agency*, [Online], 16 August 2021 <https://www.spa.gov.sa/2274424> [Accessed: 12 March 2023].

2 Margaret Beazley, 'Law in the Age of the Algorithm' [Speech] (New South Wales Young Lawyers, 21 September 2017), 9-10; Richard Susskind, 'The Future of Courts' [Online] (Center on the Legal Profession, Harvard Law School, July-August 2020), 6:5 Remote Courts <https://clp.law.harvard.edu/knowledge-hub/magazine/issues/remote-courts/the-future-of-courts/> [Accessed: 23 June 2023].

3 Jesse Beatson, 'AI-Supported Adjudicators: Should Artificial Intelligence Have a Role in Tribunal Adjudication?' (2018) 31(3) Canadian Journal of Administrative Law & Practice 307; Cary Coglianese and David Lehr, 'Regulating by Robot: Administrative Decision Making in the Machine-Learning Era' (2017) 105 Georgetown Law Journal 1147, 1148.

research.[1] Equally, it has been able to predict the results of arbitration, mediation, and litigation by analysing similar cases and the arguments of the parties, before determining the probability of an arbitrator or judge deciding in favour of one of the parties in a matter.[2]

However, the use of AI in the courts raises several questions concerning judges, arbitrators, attorneys, and interested parties, because it is impossible to be completely certain at this present time of how to enhance the efficiency of AI in the judiciary, or of the requirements for increasing and enhancing the use of AI in legal systems overall. It is also uncertain whether the experiences and practice of applying AI successfully in other countries will produce the same results when applied in the Kingdom. It should be mentioned in this regard that the application of AI in the courts indicates that dispute settlement, the grant of rights, and the imposition of penalties in individual cases will take place through digital judges. In sum, this means that digital judges could adjudicate disputes, settle claims, and limit liability, thereby replacing human judges in a non-material and non-physical way. However, proponents of the use of AI in the Saudi judiciary completely ignore the religious, social, and cultural context. This represents a serious challenge, especially to the systems derived from Islamic Sharia and regarding the permissibility of the judgements, rulings, and

1 Susan Neyelow Mart, 'The Algorithm as a Human Artifact: Implications for Legal Research' (2017) 'The Algorithm as a Human Artifact: Implications for Legal Research' (2017) 109 Law Library Journal 387, 407-408.

2 Kate Beioley, 'Robots and AI Threaten to Mediate Disputes Better than Lawyers' (*Financial Times,* 2019), 13 April

decisions issued by digital judges.[1] Thus, it is necessary to reflect in depth on these points and evaluate the implications of applying AI in a judicial context, given that judicial decisions often require discretion, consideration, and diligence – which might be incompatible with using AI. The other question that arises is whether it is possible for the Saudi judiciary to deploy AI to assist judges in ruling on and adjudicating cases, while also retaining the central role of the human judge. Hence, AI could play an auxiliary role in the judicial process.[2]

Nevertheless, the application of AI models and exemplary technologies to help judges rule on and adjudicate matters is not necessarily controversial or debatable because information is provided routinely in some cases, as in a summary ruling or decision over the invalidity of a complaint or evidence. Such information is straightforward to process and manage and does not require consideration of the social and cultural context. It may be argued that only a small proportion of the cases considered by the world's judiciaries require careful and in-depth consideration[3] This small percentage of cases usually relate to important and sensitive issues, highlighting the benefits offered by AI in helping to address complex matters. Consequently, an efficient and transparent[4] judicial process

1 The question of whether AI can make law enforcement more effective in the Saudi Courts.

2 See section three, REASONS FOR APPLYING ARTIFICIAL INTELLIGENCE (AI) IN THE SAUDI COURTS. 26

3 Dory A Reiling, *Technology for Justice – How Information Technology Can Support Judicial Reform* (Leiden University Press 2009), 111-122.

4 IT systems contain the components that deal with or manipulate information, while information is the "thing that gets manipulated" or dealt with. See Thomas Davenport, *Process Innovation, Reengineering Work through Information*

could be facilitated by AI, which would assist with the general management of a high volume of rich information.[1]

Section Two: Key Principles of Artificial Intelligence (AI) and How It Supports Decision-making in the Judiciary

The implications of applying AI in the judicial decision-making process will not be clear without a sound understanding of the main principles of AI and how it can serve all areas of human activity.[2] Therefore, the basic principles of AI that are recognised globally are presented in this section. Also analysed are the core principles of AI that are adopted in international institutions, for example, the OECD,[3] the European Commission for the Efficiency of Justice (CEPEJ), and Google, as supporting examples. These principles are the key standards for AI adoption worldwide and serve as solid ground on which an appropriate AI policy could be developed for the Saudi judiciary.

Technology (Boston, Massachusetts: Harvard Business School Press 1993), 71: Information can be differentiated from data; data are "letters and numbers without meaning independent and isolated measurements, numeric letters and symbols." For example, people turn data into information by organising it into a unit of analysis. See Peter Gottschalk, *Knowledge Management Information Systems in Law and Enforcement* (Hershey, Penn: Idea Group Publishing 2007), 28.

1 Andrew McAfee, 'Mastering the Three Worlds of Information Technology' (2006) Harvard Business Review 141, 141-149.

2 Deborah Rhode, 'Access to Justice: Connecting Principles to Practice' (2004) 17 Georgetown Journal of Legal Ethics 369, 371; A Raymond and S Shackelford, 'Technology, Ethics and Access to Justice: Should an Algorithm Be Deciding Your Case?' (2014) 35 Michigan Journal of International Law 485, 517.

3 The OECD AI Principles (adopted May 2019) call for the development and deployment of AI that is both safe and ethical and upholds basic democratic principles and individual rights. These guidelines are realistic and adaptable enough to last for years to come. For more information, see OECD (n11).

The Globally Recognised Core Principles of Artificial Intelligence (AI)

The Organization for Economic Co-operation and Development (OECD)

Arguably, the key principles of AI that are identified worldwide are the OECD's Five Principles of Ethical AI,[1] which have paved the way for the future application of AI across every field of human endeavour, including the judiciary. These principles are briefly outlined below.

Principle One: Holistic Growth, Sustainable Development and Well-being

This principle affirms that the primary goal of AI is to contribute to the overall progress, prosperity, and development of all.[2] Therefore, decision-makers in the field of AI are required to:

> ...engage actively and proactively in responsibly supervising trustworthy AI to achieve outcomes that benefit people, including increasing human capabilities, fostering creativity, considering the needs and participation of minority groups in society, and reducing economic inequalities social, etc., and the protection of natural environments, which generally leads to support for the inclusive growth of all members of society and sustainable development and well-being.[3]

Based on this principle, it could be stated that an ethical AI tool should not serve itself but rather be optimised and deployed appropriately and competently for the good of humanity, specifically

1 Ibid.
2 Ibid.
3 Ibid.

improving quality of life for the general public. When adopting this principle in the Kingdom's policies, it follows that any application of AI technologies must be useful and productive for the majority of the population. In order for this to occur in a judicial context, the judiciary must have access to advanced AI technologies that take the current situation to a higher level. Thus, it becomes possible to take advantage of AI technologies as a means of reducing or completely eliminating the difficulties and challenges that might otherwise hinder fair procedure, for example, procedural delays, or the rising material cost of judicial procedures.

Principle Two: Human-centred Values and Justice

Decision-makers and users of AI technologies shall be committed to respect the rule of law.[1] Therefore, AI programmes must comply with human rights and values throughout the life of AI technologies. As such, the goal of AI technologies must not contradict state regulations, international treaties or international agreements, and should not serve any illegal or illegitimate goals. This will empower policy-makers to determine how AI technologies should be applied, and the extent to which they can be used and developed. In addition, there must be full respect for basic human rights, such as dignity, autonomy, and privacy. This will involve the protection of personal data, while at the same time upholding the principle of non-discrimination and equality. Hence,

1 Ibid.

diversity, fairness, and social justice will be encouraged, as well as compliance with internationally recognised labour rights.[1]

In order to translate and apply this principle to the Saudi courts, AI technologies must also be compatible with the principles of Islamic Sharia and the Kingdom's systems and laws in respect of human rights. Where this principle does not conflict with the Kingdom's existing policies and laws, the use of AI technologies may be permitted and introduced in a way that will not conflict with the ethical, social, or cultural principles that are established by Islamic Sharia and the Basic Law of Governance in the Kingdom.[2]

Principle Three: Transparency and Interpretability

This principle states that it is the responsibility of decision-makers and users of AI technologies to play an important role in ensuring transparency and disclosure within AI systems. To achieve this goal, appropriate information must be provided for the following: [3]

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1 Universal Declaration of Human Rights 1948, arts 1, 2, 3, 6, 7, 8, and 12 <https://www.ohchr.org/sites/default/files/UDHR/Documents/UDHR_Translations/eng.pdf> [Accessed: 02 April 2023].

2 Basic Law of Governance (n5), art 7: "[The] Government in the Kingdom of Saudi Arabia derives its authority from the Book of God and the Sunna of the Prophet (PBUH), which are the ultimate sources of reference for this Law and the other laws of the State"; art 26: "The State shall protect human rights in accordance with the Sharia"; art 27: "The State shall guarantee the rights of the citizens and their families in cases of emergency, illness, disability and old age. The State shall support the Social Insurance Law and encourage organizations and individuals to participate in philanthropic activities"; art 28 "The State shall facilitate job opportunities for every able person and enact laws to protect the worker and the employer"; art 29: "The State shall patronize sciences, letters and culture. It shall encourage scientific research, protect the Islamic and Arab heritage, and contribute towards Arab, Islamic and human civilization."

3 OECD (n11).

- The promotion and development of both a general understanding and comprehensive knowledge of AI.

- Increased awareness among decision-makers of how to manage AI, including in the workplace.

- Help for those affected by AI, enabling them to understand the associated effects and outcomes.

- Enabling those negatively affected by AI to overcome negative impacts by providing clear and easy-to-understand information about the recommendations, decisions, and predictions that result from the accompanying factors and causes.

This third principle is considered as pivotal to the judicial decision-making process. It requires that decisions based on AI be accompanied by a clear and detailed explanation of how a decision is made. Whether AI is used solely as a research aid, means of document review, or technical program that makes a specific decision based on its algorithms, its final output must be subject to review.

Principle Four: System Robustness, Security, and Safety

This principle states that AI technologies must be robust, safe, and efficient throughout their entire lifespan. Therefore, they should not pose an unacceptable risk to public safety or security.[1] Towards this end, decision-makers and users of AI technologies must:

1 Ibid.

> ...ensure traceability, including databases, processes and decisions made throughout the lifetime of AI technologies to enable analysis of the results of the AI system and its responses to queries, as appropriate to the context and according to the latest technology. AI technologies provides and implementers must constantly adopt a clear and consistent approach to risk management at every stage of the AI lifecycle to address risks related to technology, including privacy, digital security, integrity, and bias.[1]

This principle plays a very important role in the quality, robustness, safety, and effectiveness of AI models over their entire lifecycle. Therefore, it could be stated that all AI technologies applied to the judiciary in the Kingdom must be completely safe and free from any external factors that might negatively affect the quality of judicial rulings.[2]

Principle Five: Accountability and Liability

The fifth principle states that decision-makers and AI developers should be responsible for the correct operation of AI, abiding by the other principles listed above, according to their assignment and job position.[3] Based on this principle, policy-makers must establish clear limits of responsibility for the actions of AI tools in judicial proceedings. As such, they will have the right to determine who is

1 Ibid.

2 Basic Law of Governance (n5), art 46: "The Judiciary is an independent authority. The decisions of judges shall not be subject to any authority other than the authority of the Islamic Sharia"; art 47: "All people, either citizens or residents in the Kingdom, are entitled to file suit on an equal basis. The Law shall specify procedures for this purpose"; art 48: "The Courts shall apply rules of the Islamic Sharia in cases that are brought before them, according to the Holy Qur'an and the Sunna, and according to laws which are decreed by the ruler in agreement with the Holy Qur'an and the Sunna"; art 49: "Courts are empowered to arbitrate in all disputes and crimes."

3 OECD (n11).

responsible for the actions of AI: the country implementing the technology or the creators and developers who programme the technology. Therefore, it is suggested that decision-makers in the Kingdom adopt specific laws governing the application of AI technologies to the judiciary, and bear the responsibility for any associated outcomes by subjecting AI to control and accountability. This is because current legal systems do not provide legislative solutions to this issue.

European Ethical Charter on the Application of Artificial Intelligence (AI) to Judiciaries and Judicial Environments

During its 31st plenary session in Strasbourg, December 2018, CEPEJ approved the European Ethical Charter on the application of AI to judiciaries and their respective environments. [1] The European Commission (EC) recognised the importance of AI in contemporary society, in addition to its potential importance in providing and maintaining the efficiency and quality of justice, especially if deployed appropriately and correctly. The EC has officially endorsed five core principles for this application of AI, as follows:

Principle of Respect for Basic Rights

This principle states that the human rights provided for in international conventions must be respected, honoured, and observed

1 European Commission for the Efficiency of Justice (CEPEJ), CEPEJ European Ethical Charter on the Use of Artificial Intelligence (AI) in Judicial Systems and Their Environment (Council of Europe 2018) <https://www.coe.int/en/web/cepej/cepej-european-ethical-charter-on-the-use-of-artificial-intelligence-ai-in-judicial-systems-and-their-environment> [Accessed: 16 February 2023].

when operating or creating any AI technology and applying it to the legal field.[1] One of the most important things to consider in this principle is the protection of human rights within the court system if procedures are fully automated. This would include giving individuals recourse to the courts in civil proceedings, in order to seek compensation for civil wrongs or protection from violations of civil rights. In addition, the essential attributes of access to justice include access to an efficient dispute settlement mechanism, the right to a fair procedure, timely dispute resolution, and the general application of the principles of efficiency and effectiveness in the judicial system for all members of society.

Consequently, access to justice in civil proceedings evokes several rights, amongst which is the need to conduct and conclude proceedings within a reasonable timeframe. Long and unnecessary delays can undermine the rule of law and make it difficult for people to gain access to justice. Therefore, it may be surmised that the automation of civil procedures would facilitate the work of judges, who will be spared any redundant, time-consuming, or repetitive tasks. The automation of civil procedures would consequently contribute to the development of judicial analysis, help accelerate judicial procedures, and enhance the efficiency of the judiciary in general. Accordingly, AI has many potential benefits in terms of the time required for judicial procedures, especially as a delay in delivering justice will sometimes mean that justice cannot be experienced or enjoyed.

1 Convention for the Protection of Human Rights and Fundamental Freedoms as amended by Protocol Nos 11 and 14, supplemented by Protocol Nos 1, 4, 6, 7, 12, 13 and 16, Rome, 4 XI 1950.

Principle of Non-Discrimination

This principle states that discrimination in all its forms and manifestations is prohibited in AI, whether based on an individual's personal characteristics, or on the characteristics associated with a group of individuals. The principle of non-discrimination refers to three basic safeguards and preventive measures to ensure its application.

The first of these preventive measures and safeguards, considered as a precaution, is the creation of interdisciplinary research teams to develop systems that are free from discriminatory or racist tendencies. The second is one of basic guarantees, meaning that any form of discrimination will be identified while the technology is in use. The third guarantee is the widest in scope, as it focuses on the system's users, rather than the system itself. Here, decision-makers and the community concerned should be educated and sensitised to the system's potential flaws and risks.[1]

Principle of Quality and Safety

This principle provides for a number of guidelines on how to deal with court rulings and data, including reliance on recognised sources and data, the use of multidisciplinary models, and application in a safe technical environment to ensure the technology's safety.

The development of systems based on machine learning depends on several conditions that must be met in advance, including the possibility of obtaining data related to a court ruling. Therefore, it

1 Ibid.

should be considered that in cases where it is necessary to obtain data for judicial rulings, the data entered into a program that deploys a machine learning algorithm must be derived from reliable sources. Moreover, this input data should not be updated until its use in the machine learning is finished. In addition, the program must be able to track and follow up the entire procedure to ensure that no changes or modifications are made that might affect the validity of the judgement in the case under consideration.[1]

Principle of Transparency, Impartiality, and Fairness

This principle could be described as central to any judiciary. The EC has indicated its importance, highlighting the critical need to strike a balance, regarding the intellectual property.

Therefore, efforts to enhance transparency, accountability, liability, and responsibility must be redoubled when using AI in the judiciary, in order to anticipate the issues that might arise in future and to consider the human rights dimension.[2]

Principle of User Independence

This principle emphasises that users should be independent in their use of AI tools and services, whether they are administering justice in a professional capacity or serving as a litigator. In addition, the wider community employed in the judiciary should be permitted to review court rulings at any time and be given access to the data underpinning the rulings. However, they should not adopt these provisions directly

1 Ibid.
2 Ibid.

without examining and scrutinising each case according to its specific circumstances. If the litigants are users of AI tools, they must be informed in clear and straightforward language about whether the solutions proposed by the system's tools are legally binding, and of their available options. They should likewise be informed of their right to seek the assistance of an attorney, and the right to resort to the courts.[1]

Google's Ethical Principles for Artificial Intelligence (AI)

In this section, Google's Ethical AI Principles are presented as the final example of key principles that are adopted internationally for AI. Google was selected, so that the perspective of a technology giant that is pivotal to AI technology and the corresponding industry could be explored. This example is juxtaposed here with the organisational structure of countries. Google's Ethical AI Principles may be summarised as follows:

- The tools should be socially useful.
- Unfair bias must be avoided and not supported.
- Artificial intelligence (AI) tools should be designed and tested for safety.
- Responsibility must be assumed in relation to humans.
- All AI tools should incorporate design principles that safeguard privacy.

1 Ibid.

- Artificial intelligence tools should display high standards of scientific excellence.

- Artificial intelligence tools should be made available for applications that are consistent with AI principles.[1]

The core principles that are commonly applied to AI in the judicial environments of international institutions contain the following features, whereupon it could be argued that all ethical principles in AI policies worldwide share the same goals. As will become clear from an overview of these principles, the unwritten principle of AI is predominantly one of human organisational control. Thus, although AI has its own unique characteristics, it is the human factor that decides the principles of AI development, application, and limits. In addition, all written principles of AI agree on three main points:

1. Artificial intelligence is bound to serve and help humanity for the public interest.

2. Artificial intelligence should be transparent and understandable.

3. Artificial intelligence should be safe and stable.

1 Google Inc, Artificial Intelligence at Google: Our Principles <https://ai.google/principles/> [Accessed: 13 May 2023].

Section Three: Artificial Intelligence (AI) in the Saudi Courts – Benefits and Reasons for Applying AI in This Context, Possible Challenges and Solutions, and International Experiences of Applying AI to Litigation

Benefits of Artificial Intelligence (AI) and How It Can Improve the Efficiency and Outcomes of Court Procedures

The application of AI to the judiciary offers numerous important benefits. Technical progress means that AI technologies offer a host of different applications that could be considered, without diluting their power, as a means of enhancing law enforcement and the development of the courts.[1] However, the application of AI in courts is not limited to transferring the decision-making role from a human judge to a robot. Additionally, more time should be allowed to verify and develop these AI technologies before their adoption and implementation.[2] The key benefits of AI applications in the judiciary, according to global experiences, are summarised in the following paragraphs.

Effective Application of the System

In general, it may be argued that AI can facilitate the judicial process in many different ways, with tools and methods to enhance its implementation. The role of a judge goes beyond a deep and accurate interpretation of the law. This is agreed upon both in Western countries and KSA. For instance, judges also perform routine tasks like drafting

1 Reiling (n28).
2 Susskind (n22); Robert McDougall, 'The Uses and Abuses of Technology in the Courtroom' [Keynote address] (Society of Construction Law, Australia Conference of 2013, 2 August 2013), 4.

documents, reviewing the documents submitted by litigants, adjudicating and settling disputes, and issuing judicial decisions and rulings. This is where the Pareto 80/20 Principle comes into play:[1] the percentage of cases that require interpretation and deep contemplation of the law or Sharia often represent no more than 20% of the work of judges. Thus, AI could play a useful and effective role in the judiciary because it can sort a high volume of documents and identify meaningful patterns. Accordingly, AI could help judges with aspects that do not require any interpretation of the governing law. This would save time, leaving judges free to consider and interpret more complex aspects of the law. Such a benefit has been proven by document review software, which has recently become extremely popular among law firms, especially in legal research.

Further to the above, litigants, especially in complex cases, submit a large number of documents and papers as evidence to support their claims during the procedures for evidentiary consideration. Each party thereby carefully examines the evidence and answers inquiries related to its acceptability and importance. The same applies to judges in these complex cases, as it is their responsibility to analyse the documentary evidence carefully to determine whether or not it is admissible, and to verify the arguments or allegations presented by the litigants concerned. This aspect of judicial work does not usually require direct interpretation or any application of Islamic Sharia, because the system

1 The 80/20 principle is an economic principle developed by Vilfredo Pareto, which states that there is an asymmetric relationship between inputs and outputs. The principle states that 20% of the inputs invested are responsible for 80% of the results gained.

will merely be applied at the end, that is, after the results and conclusions are drawn from the documentary analysis.

This is where AI may be deployed to assist with the process, rendering it much faster and easier. It means that judges do not have to spend long hours (as is currently the case), analysing evidence and documents related to a case. Therefore, the implementation of AI tools will arguably not conflict with the Saudi legal system because the responsibility for issuing any ruling on the basis of an interpretation of Islamic Sharia will rest with the presiding human judge. As a result, it will not contradict the principles of Islamic Sharia but will rather open up the way for using AI tools and applications. The ensuing system may then be applied to the inferred facts more quickly and efficiently, consequently achieving the development goals of Saudi Vision 2030 and enhancing the Kingdom's global competitiveness.[1]

Consideration of the Evidence

The parties concerned in any given case may, during the court proceedings, submit all evidence and documents to support their claim and position, and to respond to all the other party's submissions. This is normal procedure in a litigation, but it is always time-consuming to complete. Regardless of any system in place for the courts to examine the evidence and relevant documents, the disputing parties may, at the start of the proceedings, conduct an automatic investigation of the information presented, so that they can determine the evidence to be

1 Saudi Arabia promises reform in its 2030 Vision. See *Saudi Vision 2030,* [Website] <http://vision2030.gov.sa/en> [Accessed: 2 January 2023]. See also *Saudi Ministry of Justice,* 'MOJ's Initiatives' [Online] <https://www.moj.gov.sa/English/Ministry/vision2030/Pages/Initiative.aspx>.

presented during the trial.[1] This may be supported by the use of machine learning and deep learning models.

In this context, it has become possible to take advantage of the benefits of AI during the preliminary examination of cases. Artificial intelligence *per se* can apply data mining techniques to an exceptionally large amount of data and information, not only for digitally stored information, but also regarding the identities of those involved in a case, before any data is collected. By examining the association between the information and the parties concerned, AI can suggest others who might be called upon. The technology can also suggest important words, terms, and phrases to help search digitally stored information for a given case. There is no doubt that being able to narrow down the scope of a search to the most relevant information and persons, without prejudice to an individual's entitlement to defend his or her rights, will save a great deal of time and effort by reducing the bulk of the data sent for review. This will be pivotal to speeding up procedures for the initial consideration of a case.[2]

Overall, AI can facilitate the process of considering evidence (or pre-trial proceedings) by playing an important role in the routine process. It can also serve as an advisor, coordinator, or librarian and do so more

1 Sulaiman Mohammed Almuallem, 'A Reformative Legal Vision for the Kingdom: The Adoption of Rules of Discovery in the Civil Procedural System of Saudi Arabia: Considering the Example of the United States Discovery Regime' [Published doctoral dissertation] (University of Pittsburgh 2021).

2 Ajith Samuel, 'Artificial Intelligence Will Change E-Discovery in the Next Three Years' [Online] (*Law and Technology Today*, 2019), 23 April <https://www.lawtechnologytoday.org/2019/04/artificial-intelligence-will-change-e-discovery-in-the-next-three-years/>, 1.

effectively than a human because it can determine – through customised training – the most appropriate algorithms for extracting essential details from big data. It is now increasingly common practice for parties on both sides of a case, and even the judge, to rely on AI to review documents, automate tasks, and predict outcomes. This is because using AI is faster and more efficient than a manual file search performed by a human. It should also be emphasised that the lack of a physical consideration of the evidence and pre-trial procedures is inconsequential, since AI serves as a mere tool or strategy at this stage, as opposed to an independent person who is required to make qualitative assessments.

Providing Advisory Services before Litigation

One of the benefits of an AI application is that it can offer advisory opinions and expertise to litigants and interested parties who seek a legal solution. Not only do law professionals rely on AI to streamline their workflow and work procedures, they also use it to build legal strategies.[1] This model has begun to spread and become popular worldwide, as there are online platforms that provide legal services to their visitors. These tend to be available through subscriptions or payment options, whereupon the interested party can upload AI-generated court notes and warrants (lawsuits, court requests, petitions, forms, etc.) for use in court proceedings. Parties claiming monetary compensation or seeking a private hearing may likewise obtain

1 *Wolters Kluwer,* 'Impact of e-Justice on Law Firms: Firms - Are You Ready for the Future?' [Online] (2018). <https://www.wolterskluwer.com/en-gb/expert-insights/impact-of-e-justice-on-law-firms> [Accessed: 17 June 2023].

platform abstracts, [1] these being pre-drafted papers that contain information about the parties, statutes, and relevant case law.[2] This tool can be useful for individuals who lack the skills to write legal briefs or who cannot afford attorneys. The tool may also help disputants to reconcile, thereby avoiding litigation or arbitration altogether. This would open up the way for other applications of AI, as the technology is potentially productive and helpful for the judiciary. For example, it can predict results based on judges' precedent, past history and background, as well as the different strategies adopted by the disputing parties to a case.[3] There is no doubt that predicting outcomes in legal cases is essential to legal practice. Therefore, it is expected that attorneys and judges will welcome tools that can assist them in obtaining legal solutions to the cases brought before them.

However, it should be noted that the Kingdom's systems and laws at this present time do not support the adoption of AI applications or technologies to provide advisory services.[4] Rather, the provision of these services is limited to attorneys and human trainee lawyers. The Code of Law Practice, art 37 stipulates that the penalty shall be imprisonment for a period not exceeding one year, or a fine of no less than SAR 30,000 (or both) for anyone impersonating an attorney or

1 Such as the service that helps the individual seeking counsel to fill in their information and answer specific questions, and then the AI assists them with summary.
2 Wolters Kluwer (n57).
3 Ibid.
4 See Section Three, 'Challenges of Applying Artificial Intelligence (AI) to the Saudi Judiciary', 28.

practicing a legal profession in violation of the law.[1] This means that the Kingdom limits the provision of legal and advisory services solely to attorneys who are registered to practice or who are undergoing training, while criminalising the provision of any legal or advisory services from non-lawyers. Accordingly, it may be argued that it is difficult to use AI to provide legal or advisory services before litigation. Furthermore, several countries have systems that resemble that of KSA in this respect, such as Japan, China, Germany, and most of the EU. In contrast, Australia, the UK, the US, and Canada have defined and are still experimenting with limited non-attorney roles in their legal systems.[2]

Predictive Justice

It could be stated that AI is more capable, more efficient in analysis, and attains greater depth in predictive justice than humans or the tools that humans have traditionally tended to use. Thus, relying on predictions made by machines opens the door to predictive justice, which means using algorithms to assess the strength and validity of the arguments presented by legal advisors, and to predict the outcome of

1 Code of Law Practice, Royal Decree No (M/38) October, 15, 2001, art 37: "A term of imprisonment not exceeding one year and a minimum fine of SR30,000, or both, may be imposed on:(a) A person who holds himself out as a lawyer or practices law in violation of the provisions of this Code, (b) A lawyer who practices law after his name has been struck off the list. These forms of punishments shall be imposed by a competent court" <https://laws.boe.gov.sa/BoeLaws/Laws/LawDetails/f42655be-79b0-4fd4-bb90-a9a700f26a3e/1> [6 January 2023].

2 Merrow IM and Dusseault M, 'Non-lawyer Legal Services: An International Round-up' [Online] (*Just,* 2017), 22 June <https://www.oba.org/JUST/Archives_List/2017/June-2017/Non-lawyer-global-3> [Accessed: 23 June 2023]. See also Susskind (n22).

rulings.[1] Algorithms can process judicial data by evaluating the relevance of laws that have previously been applied and the likelihood of a law being applied to the facts of a given case, based on what the parties concerned have stated.

To elaborate on the above, some research studies have shown that human judges have poor predictive accuracy regarding the recidivism of offenders who are sentenced through the courts.[2] This undoubtedly raises questions about the potential impact on society of psychiatrists' expectations and assessments at conditional parole hearings, relating to the release of offenders who are apparently reformed and considered unlikely to reoffend. In particular, research by Richard Berk, Professor of Criminology and Statistics at the University of Pennsylvania, has revealed this to be a real issue, wherein poor prediction and evaluation are very common. Judges and other human experts cannot accurately predict how likely it is that offenders will reoffend once released, or whether their condition will improve. Moreover, these human judges are unlikely to even learn about the recidivism of ex-offenders.[3] However, while humans cannot predict legal outcomes with much certainty or accuracy, this is a matter for debate.

Nevertheless, some of the interested community have also found the predictions of AI-empowered judges to be unreliable, exhibiting bias,

1 Bhishm Khanna, 'Predictive Justice: Using AI for Justice' (2021) Centre for Public Policy Research 4, 4-5.
2 J Kleinberg and others, 'Human Decisions and Machine Predictions' (2018) 133(1) Quarterly Journal of Economics 237; J Jung and others, 'Simple Rules for Complex Decisions' [Online] (*Cornell University*, 2017) <arXiv:1702.04690>.
3 Richard A Berk, 'Accuracy and Fairness for Juvenile Justice Risk Assessments' (2019) 16 Journal of Empirical Legal Studies 175, 193.

racism, and proneness to error. The experience of using the computer program Correctional Offender Management Profiling for Alternative Sanction (COMPAS) in the US refers to determining alternative penalties, according to the likelihood of a convicted offender reoffending after release. It represents the best evidence of relevance,[1] whereupon an investigative team led by Julia Angwin examined the effectiveness of COMPAS, finding the predictions made by AI-empowered judges to be unreliable.[2]

Alternative Mechanisms for Dispute Resolution and Settlement

The application of information technology systems to facilitate alternative mechanisms of dispute settlement, especially via the Internet, may be adopted as a method of settling disputes.[3] Artificial intelligence interacts with parties' negotiating strategies, making suggestions in consideration of the interests and desires of those parties. Hence, many online platforms that offer alternative dispute settlement mechanisms have adopted sophisticated algorithms, leading to discussions about the potential capabilities of these algorithms and the extent to which they may be applied.[4] It could be argued that

1 See Section Three, 'The Experience of the United States', 31.

2 J Angwin and others, 'Machine Bias: There's Software Used Across the Country to Predict Future Criminals. And It's Biased against Blacks' [Online] (*ProPublica,* 2016), 23 May <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>, 1-3.

3 Chief Justice Tom Bathurst, Bathurst T, CJ, 'ADR, ODR and AI-DR, or Do We Even Need Courts Anymore? [Speech] (Supreme Court of New South Wales, 20 September 2018).

4 David Allen Larson, 'Artificial Intelligence: Robots, Avatars, and the Demise of the Human Mediator' (2010) 25 Ohio State Journal on Dispute Resolution 105, 110. See also Scott J Shackelford and Ajanette H Raymond, Shackelford SJ and Raymond AH, 'Building the Virtual Courthouse: Ethical Considerations for

advanced algorithms will play a greater role in alternative dispute resolution in future, whether to support mediation, arbitration, or in the courts. Ethan Katsh, Professor of Law at the University of Massachusetts and Director of the National Center for Technology and Dispute Resolution in the US, has highlighted that online dispute resolution and settlement may eventually be the way in which most problems in our lives are resolved, especially when there is an algorithm that documents further solutions, suggested by people.[1] However, these future expectations have yet to be fulfilled. Therefore, it could be stated that the proposal to fully adopt AI in the Saudi judiciary is still premature, but it does open the door for AI to support alternative dispute settlement mechanisms.

Reasons for Applying Artificial Intelligence (AI) in the Saudi Courts

The judiciary in every country worldwide represents legitimacy and authority in the award of individual rights. As such, judiciaries are keen to ensure that judicial procedures are conducted fairly, transparently, and in respect of parties' rights. However, there are various challenges and obstacles that can prevent the realisation of these aspirations, for

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Design Implementation, and Regulation in the World of ODR' (2014) Wisconsin Law Review, Kelley School of Business Research Paper No 2014-10 <http://dx.doi.org/10.2139/ssrn.2387912>; Anthony J Fernandez and Marie E Masson, 'Online Mediations: Advantages and Pitfalls of New and Evolving Technologies and Why We Should Embrace Them' (2014) 81 Defense Counsel Journal 395.

1 Ethan Katsh and Colin Rule, 'What We Know and Need to Know about Online Dispute Resolution' [Online] (2016) 67(2) South Carolina Law Review, Article No 10 <https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=4166&context=sclr>, 343.

example, delays in deciding cases, the high financial costs associated with filing cases, and the ambiguity of judicial procedures. Consequently, each judiciary bears a big responsibility and heavy burden, given the high aspirations and hopes of the state and its public.[1] In this regard, the Saudi judiciary is not much different in its ambitions to overcome the challenges and obstacles that so often delay judicial decisions. Therefore, it is keen to apply technology in practical fields, develop the necessary infrastructure, support digital transformation, and prepare the Saudi courts to achieve this end. As a whole, the application of AI is a strategic choice to achieve these goals and potentially improve the performance of the Saudi courts.

In their application of AI, the Saudi courts intend to deploy computer systems that are capable of drawing logical conclusions in a way that is usually associated with the human mind. Therefore, it may be inferred that these machines can perform tasks that require human intelligence. Consequently, the rationale for using AI in the Saudi courts is arguably to improve communication, conduct in-depth analyses, expedite the adjudication of cases, facilitate the judicial process, provide services at a lower cost, offer efficiency and higher quality, and help save time and effort.[2]

Thus, some legal experts believe that the future of an AI-empowered legal and judicial system will be a prosperous one, with many

1 Caplen (n1); McIntyre (n2).
2 Damian Taylor and Natalie Osafo, 'Artificial Intelligence in the Courtroom' [Online] (*Law Society Gazette*, 2018), 9 April <https://www.lawgazette.co.uk/practice-points/artificial-intelligence-in-the-courtroom-/5065545.article> [Accessed: 11 June 2023].

advantages for the public. The main judiciary benefit of AI to the wider community is the cost and time it saves, combined with greater efficiency than traditional legal systems and procedures, which require abundant resources.[1] This is particularly advantageous in environments with few resources.[2] In brief, AI can give the general public greater access to the justice system.[3]

Specifically, a key facility of AI application in the courts is the digital judge, thereby reducing the unintended human bias that is inevitable in a human-led judicial process.[4] It could also be suggested that systems managed by AI may help eliminate unwanted external factors from court procedures, such as the use of witnesses who display and evince great enthusiasm and passion to try and influence the judge or jury concerned. This absence of human bias would increase the practical efficiency of the judiciary and ensure its impartiality and independence in issuing judicial decisions.[5] In Saudi Arabia, the Ministry of Justice has already launched a digital judge to predict judicial rulings and help

1 John Quinn, Vanessa Frias-Martinez, and Lakshminarayan Subramanian, 'Computational Sustainability and Artificial Intelligence in the Developing World' (2014) (*AI Magazine,* 2014), Vol 35, issue 3, 36.

2 Eric Niller, 'Can AI be a Fair Judge in Court? Estonia Thinks So' (*Wired*, 2019), 25 March <https://law.stanford.edu/press/can-ai-be-a-fair-judge-in-court-estonia-thinks-so/> [Accessed: 10 June 2023].

3 Darin Thompson, 'Creating New Pathways to Justice Using Simple Artificial Intelligence and Online Dispute Resolution' (2015) 1 International Journal of Online Dispute Resolution, Osgoode Legal Studies Research Paper No 27/2015 <SSRN: https://ssrn.com/abstract=2696499>, 53.

4 Logan Kugler, 'AI Judges and Juries' (2018) 61(12) *Communications of the ACM* 19-21, 20.

5 Arno Lodder and John Zeleznikow, *Enhanced Dispute Resolution through the Use of Information Technology* (CUP 2012).

human judges decide cases. The accuracy of this digital judge in predicting certain rulings may be greater than 94%.[1]

Challenges of Applying Artificial Intelligence (AI) in the Saudi Judiciary

Among the key challenges that can arise when applying AI in the Saudi courts is the legitimacy and independence of the rulings of digital judges, as well as the lack of any physical or tangible embodiment, and the extent to which the decisions issued by a digital judge are likely to be recognised and respected by the general community. Therefore, it could be suggested that one of the primary difficulties in automating the judicial process and applying AI is that it is not accepted by all members of society, as some may have doubts about it and treat it with distrust. This is likely to be based on the fear that a robotic judge will make fateful decisions about their rights and obligations as human beings.

Since KSA has implemented rapid reforms and taken serious steps towards developing its judicial environment, it has also instituted a reform-driven approach for the systems that preserve individual rights and establish the principles of justice and transparency. The Kingdom has also accomplished comprehensive development and satisfied the requirements for developing socio-economic life and technology, with the aim of achieving stability, development, and economic prosperity for the population as part of Saudi Vision 2030.

1 *Saudi Al-Ekhbariya Channel*, Interview with Engineer Fahd Al-Shuraim, General Supervisor of the Digital Judicial Portfolio at the Saudi Ministry of Justice (26 November 2022, 19:25 MEST).

Equally, the Kingdom's global competitiveness has been enhanced in accordance with the provisions of Islamic Sharia and the international conventions and treaties that also regulate the Kingdom. In turn, this is expected to have a positive impact on quality of life in Saudi Arabia, while also achieving the development goals of Saudi Vision 2030. Consequently, it would seem that nothing should prevent the application of AI technologies in such a way that does not conflict with the public interest. It can be seen that Islamic Sharia and the regulations issued in KSA directly support the application of AI to the judiciary, without colliding with or contradicting its adoption. However, it should also be noted that one of the key concerns when applying AI in the Saudi courts is that it is isolated from the context of the judiciary. In KSA, the judiciary takes the provisions of Islamic Sharia as its baseline,[1] whether in appointing an individual to resolve disputes between litigants (which is a key point when discussing AI applications as a digital judge) or applying Islamic Sharia to the issues brought under discussion.[2]

To overcome the potential challenges of applying AI, it must be emphasised that the application of this innovation in the judiciary may require a transitional period, in order for people to become more experienced and knowledgeable about the new technology, grow

1 Basic Law of Governance (n5), art ٤6: "The Judiciary is an independent authority. The decisions of judges shall not be subject to any authority other than the authority of the Islamic *Sharia*"; art ٤8: "The Courts shall apply rules of the Islamic Sharia in cases that are brought before them, according to the Holy Qur'an and the Sunna, and according to laws which are decreed by the ruler in agreement with the Holy Qur'an and the Sunna..."

2 See Section Three, 'International Experiences of Applying Artificial Intelligence (AI) to Litigation', 31.

accustomed to its application, and gain confidence in the new law. This seems to be of paramount importance, particularly in societies that are highly conservative or firmly rooted in Islamic Sharia. It is also worth considering that societal acceptance of expanding the role of arbitrators and judges into AI might not depend solely on mere technical capabilities but could also require deeper insights. Additionally, it may demand great effort to educate and convince the general public that AI is compatible with the purposes and objectives of Islamic Sharia, serving its principles, increasing efficiency, and contributing to the development of the judiciary in the Kingdom. Moreover, AI must serve the rule of law and comply with its precepts – as mentioned above.[1] Digital and intelligent software programs should easily be able to syntactically interpret rules and their corresponding provisions.

As mentioned previously, one of the challenges that the Saudi courts could face when applying AI is that it has not yet known whether the technology can capture or accommodate the 'spirit of the law', especially if that law is greatly influenced by Islamic moral and ethical principles. The principles of Islamic Sharia are very broad, requiring careful consideration by judicial policy-makers in their application of AI to the Saudi judiciary.[2]

Another challenge is to define the rules on responsibility for the decisions of a digital judge, given that AI does not yet possess any legal

1 See Section Two, 'Principle Two: Human-Centred Values and Justice', 13.
2 See Section Three, 'Challenges of Applying Artificial Intelligence (AI) in the Saudi Judiciary', 28.

capacity and is not an individual that can be a party to a process.[1] This raises the question of who is responsible for the actions or omissions of AI if the rights of individuals are harmed. Taken together, accountability and responsibility become central to ethical AI. Thus, who will be held accountable for the actions or omissions of a digital judge: the state? An AI developer? These are questions that judicial policy-makers in the Kingdom must consider when adopting an executive regulation for AI application.

Of equal importance is the fact that the Kingdom's systems and laws do not currently support the application of AI models or technologies in providing advisory services. As clarified previously,[2] this provision is limited to attorneys and human trainee lawyers. The Code of Law Practice, art 37 stipulates imprisonment and fines as the penalties for impersonating a legal professional in violation of the law.[3] This means that the Kingdom limits the entitlement to provide legal and advisory services to a list of registered lawyers, attorneys, and trainee lawyers, but criminalises the provision of legal and advisory services by non-lawyers. Accordingly, it could be difficult to apply AI in this context

1 Hassan El Hamrawy, 'The Basis of Civil Responsibility for Robots between the Traditional Rules and the Modern Trend' (Department of Private Law Sharia, Al Azhar University) <https://jfslt.journals.ekb.eg/article_218225_489ec22285f25bbb719c42b80e3e1face.pdf> [Accessed: 11 June 2023].

2 See Section Three, 'Providing Advisory Services before Litigation', 23.

3 Code of Law Practice (n62), art 37: "A term of imprisonment not exceeding one year and a minimum fine of SR30,000, or both, may be imposed on: (a) A person who holds himself out as a lawyer or practices law in violation of the provisions of this Code, (b) A lawyer who practices law after his name has been struck off the list. These forms of punishment shall be imposed by a competent court." <https://laws.boe.gov.sa/BoeLaws/Laws/LawDetails/f42655be-79b0-4fd4-bb90-a9a700f26a3e/1> [Accessed: 6 January 2023].

prior to litigation. However, several other countries have similar systems, namely, Japan, China, Germany and most of the EU Member States, whereas Australia, the UK, the US, and Canada have instituted experimental non-lawyer roles in their legal systems.[1]

Possible Solutions to the Challenges

One of the proposed solutions to the challenges discussed above, which may be appropriate and compatible with the nature of the Saudi judiciary, is to promote legal oversight of decisions made by AI. Therefore, AI systems and algorithms must be transparent and clear, so that judges, attorneys, and interested parties can easily review and understand the resulting AI-made decisions. Thus, it might not be appropriate for the decision-making role to be transferred from a human to a digital judge in the Kingdom, but rather for AI programs to create tools that will help judges make decisions faster and more efficiently. Final decisions and the responsibility for considering a given case shall therefore be placed with a human judge.

As mentioned above, an existing project devised by the Saudi Ministry of Justice features a Digital Judge that predicts judicial rulings to help human judges rule on cases. The accuracy of this Digital Judge in predicting certain rulings can be higher than 94%.[2] However, this tool purely predicts the rulings of human judges, without conflicting with the Kingdom's judicial principles. Consequently, it could open up the way for AI-supported tools to be deployed to assist judges in the judicial process.

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1 Merrow and Dusseault (n63); Susskind (n22).
2 Saudi Al-Ekhbariya TV Channel (n79).

International Experiences of Applying Artificial Intelligence (AI) to Litigation

The Experience of the United States

Digital inspection is now an accepted method at the evidentiary stage in the US, subject to the rules of civil procedure. Digital inspection includes the process of collecting, producing, searching for, and identifying digitally stored data at the request of one of the parties to a given case, in order to obtain data at the stage of submitting evidence. The US courts have explicitly upheld this method of presenting evidence. For example, in *Da Silva Moore v Publicis Groupe and MSL Group*,[1] Judge Andrew Beck held that the use of digital inspection and discovery was an acceptable method of presenting evidence in relevant cases for research on digital issues. Meanwhile, in *Rio Tinto PLC v Vale SA,*[2] Judge Beck confirmed the readiness of the technology-assisted evidence review protocol agreed on by the parties concerned. Judge Beck stated that the Court's acceptance of the evidence review protocol proposed by the parties was justified and it served to facilitate the proceedings. However, Judge Beck noted in *Hyles v City of New York*[3] that while the Court confirmed the technology-assisted review protocol agreed to by the parties, the evidence in favour of delegating the authority to operate the protocol was insufficient and inconsistent. However, such decisions show that the courts are increasingly willing

1 Da Silva Moore v Publicis Groupe and MSL Group No 11 Civ 1279 (ALC) (AJP) (SDNY, April 24, 2012).
2 Rio Tinto PLC v Vale SA, 2015 WL 872294 (SDNY, March 2, 2015).
3 Hyles v City of New York No 10 Civ 3119 (AT)(AJP) (SDNY, August 1, 2016).

to rely on information technology to facilitate implementation of the judicial system, although they are still very far from requiring parties to apply information technology.

Another example of applying AI to litigation in the US is the use of COMPAS software to determine alternative penalties for convicted offenders, based on the likelihood of them reoffending after release. However, following controversial results, COMPAS was renamed Equivalent in January 2017. In total, COMPAS assessed more than one million convicted criminals between 1998 and 2016. The method adopted by the program was to examine 137 characteristics of an offender to predict recidivism within a timeframe of two years.[1] An investigative team led by Julia Angwin tested the effectiveness of COMPAS by assessing 700 offenders in Broward County, Florida, based on predictors of recidivism. It was subsequently found that the machine's predictions were unreliable. Moreover, the predictions were racially biased, affecting black defendants in an unacceptable fashion. In contrast, the COMPAS results showed that 47.7% of white offenders were unlikely to reoffend.[2]

Others have put forward an opposite view, finding a digital judge to be more accurate in administering predictive justice.[3] For example, some research studies have shown that human judges demonstrate poor accuracy in predicting the recidivism of sentenced offenders.[4] Research by Richard Berk, Professor of Criminology and Statistics at the

1 Angwin and others (n68).
2 Ibid.
3 See Section Three, 'Predictive Justice', 24.
4 Kleinberg and others (n65); Jung and others (n65).

University of Pennsylvania, revealed this to be a real issue of ongoing concern, given that poor prediction and evaluation are very common in this area, possibly because human judges and experts cannot accurately predict how likely it is that offenders will reoffend after their releases.[1]

The Experience of the United Kingdom, France, and Estonia

In the UK, the Durham Police have deployed an important harm risk assessment tool (HART), similar to the COMPAS computer program. HART evaluates detainees based on 30 factors and impacts decisions on the detention of convicts before trial.[2] Meanwhile, in France, several startups have presented similar programs to the French government, claiming that use of this software will facilitate court proceedings. However, Richard Berk, Professor of Statistics and Criminology at the University of Pennsylvania evaluated 19 of the risk assessment instruments that are used in correctional facilities but failed to find a better performing alternative than human predictive power.[3]

Another example is the AI-assisted mediation used in Estonia in small claims courts or for cases of low importance, whereupon the parties can appeal to a judge to decide cases without regard to the outcome determined by the AI model. Although the aggrieved parties may choose to continue pursuing their claims, rulings rendered by AI-assisted mediation are just as enforceable as those of a human mediator.

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1 Berk (n66), 193.
2 M Oswald and others, 'Algorithmic Risk Assessment Policy Models: Lessons from the Durham HART Model and Experimental Proportionality' (2018) 27 Information & Communication Technology Law 223, 227-229.
3 Berk (n66), 175-194.

The Experience of Canada

British Columbia's Civil Determination Court in Canada is an example of a successful AI-empowered judiciary experience, where advisory services are provided. The Civil Determination Court settles disputes related to subsidised housing and joint real estate. Its jurisdiction was expanded in April 2019, due to its success in dispute resolution, and the Court is now entrusted with settling disputes relating to personal injuries from traffic accidents. The Court has additionally begun offering a free digital legal information aid called Solution Explorer[1] to help make settlements fast and fair. This expert tool is used to answer questions that are commonly asked by parties, as a means of preparing for court proceedings. The system is regularly updated by specialists to enable users to obtain the necessary information at no cost. The system is also updated on the basis of feedback culled from users and analytical data associated with the tool.[2]

The Experience of China

Thousands of cases of theft and dangerous driving are judged by AI in Zhejiang Province, China, before being reviewed by human judges. These cases represent more than 70% of minor lawsuits involving small sums.[3] Since millions of people frequently commit such offences, it is

1 Shannon Salter, 'What is the Solution Explorer?' [Online] (*Bar Talk,* 2018). <https://www.cbabc.org/BarTalk/Articles/2018/April/Features/What-is-the-Solution-Explorer> [Accessed: 20 January 2023].
2 Davide Carneiro and others, 'Online Dispute Resolution: An Artificial Intelligence Perspective' (2014) 41 Artificial Intelligence Review 211, 228.
3 Lodder and Thiessen (n10).

easy to build and train machine learning models to handle the issues, so that dispute settlement and adjudication can be realised quickly.[1]

Other Examples of Successful Artificial Intelligence (AI) Tools

There are numerous other examples of AI tools that can provide expert legal advice, one being Kira Systems, wherein information relevant to analytics is searched and identified with a level of accuracy and care that exceeds human ability.[2] Another example is Leverton, a cloud-based computing tool developed by the German Institute for Artificial Intelligence, which likewise searches and identifies relevant information, while also analysing contract terms in more than 20 languages, managing documents, and providing guidance and advisory services to users.[3] A further example of an AI tool is eBrevia, which can extract relevant data from legal documents and guide attorneys and jurists in their analyses. In the same vein, eBrevia enables attorneys and jurists to draw upon and adapt information from myriads of filtered legal documents, in order to create effective trial strategies. Additionally, eBrevia allows researchers to examine as many court decisions and laws as required by summarising extracts and presenting documents in the form of reports. Aside from these reports and analyses, eBrevia can suggest expected outcomes, according to the different approaches adopted by users (i.e. attorneys and jurists).[4] In

1 Rachel E Stern and others, 'Automating Fairness? Artificial Intelligence in the Chinese Court' (2021) 59 Columbia Journal of Transnational Law. 515, 518; Xuhui Fang, 'Recent Development of Internet Courts in China' (2018) 5(1–2) International Journal on Online Dispute Resolution 49.
2 Ibid.
3 Ibid.
4 Ibid.

addition, these suggestions can help judges determine the most equitable outcomes.

In fact, there are many important platforms for use in this context, such as Smart Settle ONE, which enables parties who are not represented by attorneys to submit offers for settlement and respond to the offers submitted, using a crossbar of numbers that range from zero to the amount claimed by the plaintiff.[1] Smart Settle ONE therefore allows the parties to adjust their demands according to the development of the negotiations. Similar platforms include GetAid, Adjusted Winner, ALIS, and Asset Divider.[2]

Based on the foregoing, it is clear that advisory services could likewise be provided by AI to attorneys, jurists, and the general public in KSA. Nevertheless, it should also be borne in mind that a successful AI experience in one judiciary cannot always be replicated in another, especially where the cultural, social and legal frameworks are markedly different. In brief, there is no one-size-fits-all AI solution. Therefore, many jurists consider that the use of AI to either partially or completely replace human judges, legislators, arbitrators, and mediators is ethically unacceptable.[3] This perspective could have more gravity when seeking to allow AI to partially or completely replace judges in the Kingdom. This is because the limits for allowing the transfer of judicial competence in interpreting the provisions of Islamic Sharia and the

1 Ibid.
2 Ibid.
3 This could be a serious threat to the rule of law. See Stanley Greenstein, 'Preserving the Rule of Law in the Era of Artificial Intelligence' (2021) Artificial Intelligence and Law 1; Lodder and Zeleznikow (n78), 291.

Kingdom's laws to a third party are not fully identifiable at present, especially when the third party is not a specialist who meets the legal conditions of a judge under Islamic Sharia.

Inasmuch as the Kingdom's judiciary is built on solid legal foundations, since all judicial rulings must comply with the underlying religious concepts, principles, and rules, it is not known whether a software program that operates through algorithms can apply the ethical principles of Islamic Sharia. One of the primary concerns when applying AI is that the technology is isolated from the context of the Kingdom's judiciary, which considers the provisions of Islamic Sharia as its bedrock, even in the appointment of a mediator to resolve disputes between litigants. This is the most important consideration when discussing the application of AI as a digital or AI-empowered judge, and the application of Islamic Sharia to any subject of discussion or examination.[1]

Hence, it is yet to be proven whether AI can capture the 'spirit of the law', especially where that law is profoundly influenced by the moral and ethical principles derived from Islam. The ethical and doctrinal principles of Islamic Sharia are very broad, which could make it

1 Basic Law of Governance (n5), art ٤6: "The Judiciary is an independent authority. The decisions of judges shall not be subject to any authority other than the authority of the Islamic *Sharia*"; art ٤8: "The Courts shall apply rules of the Islamic Sharia in cases that are brought before them, according to the Holy Qur'an and the Sunna, and according to laws which are decreed by the ruler in agreement with the Holy Qur'an and the Sunna...".

difficult for them to be dealt with by AI alone.[1] It should also be considered that the Kingdom's laws and judicial system do not currently support the provision of advisory services by means of AI. As clarified previously,[2] only registered attorneys and trainee lawyers are permitted to deliver professional legal advice. The Code of Law Practice, art 37 stipulates that the penalty for breaching this rule is a custodial sentence of up to one year, and/or a minimum fine of SAR 30,000, on the ground that impersonating an attorney or practicing a legal profession without the requisite registration and qualification represents a breach of the law.[3] Accordingly, it could be difficult to apply AI in this capacity, without redefining the status of AI.

Section Four: Can Artificial Intelligence (AI) Render Law Enforcement More Effective in Saudi Arabia?

In this section, the direct implications of applying AI in the Saudi judiciary will be addressed. In particular, an attempt will be made to analyse how AI may be directly applied to cases in the Saudi courts. Additionally, a detailed examination of how AI could affect the

1 See Section Three, 'Challenges of Applying Artificial Intelligence (AI) in the Saudi Judiciary', 28. See also Section Four, 'Application of Artificial Intelligence (AI) to Cases in the Saudi Courts', 37.

2 See Section Three, 'Providing Advisory Services before Litigation', 23. See also Section Three, 'Challenges of Applying Artificial Intelligence (AI) in the Saudi Judiciary', 28.

3 Code of Law Practice (n64), art 37: "A term of imprisonment not exceeding one year and a minimum fine of SR30,000, or both, may be imposed on:(a) A person who holds himself out as a lawyer or practices law in violation of the provisions of this Code, (b) A lawyer who practices law after his name has been struck off the list. These forms of punishment shall be imposed by a competent court."

principle of independence will be presented in relation to the Saudi judiciary and in light of the judicial principle of the right to a fair trial.

Application of Artificial Intelligence (AI) to Cases in the Saudi Courts

As mentioned previously, the rulings issued by the Saudi courts and the regulations that the Saudi courts can apply are derived from Islamic Sharia, as stipulated in the Basic Law of Governance, art 48. The above Article states that the courts must apply the provisions of Islamic Sharia to the cases brought before them, corresponding to the Holy Quran and the Sunnah of the Prophet. Also applied in the Saudi courts are regulations issued by the legislating authorities, but these must not contradict the Holy Quran or the Sunnah.[1]

It is not yet known whether complete reliance on a digital judge using AI algorithms would enable an automated interpretation of the principles of Islamic Sharia, given that the teachings and principles of Islam are not sharply defined.[2] The interpretation of systems, particularly those with a wide religious, cultural, or moral context (as is the case in Saudi Arabia) requires a deeper understanding of those systems as a whole. Thus, if AI is applied to the Saudi judiciary, with full reliance on a digital judge, challenges could arise that should be

1 Basic Law of Governance (n5), art 48: "The Courts shall apply rules of the Islamic Sharia in cases that are brought before them, according to the Holy Qur'an and the Sunna, and according to laws which are decreed by the ruler in agreement with the Holy Qur'an and the Sunna."

2 See Section Three, 'Providing Advisory Services before Litigation, 23. See also Section Three, 'Challenges of Applying Artificial Intelligence (AI) in the Saudi Judiciary', 28.

carefully considered.[1] However, it has already been established in this paper that not all cases require a direct or in-depth interpretation of Islamic Sharia. Thus, the focus should not purely be limited to complex civil cases, since many standard and uncomplicated cases simply require a routine approach. This is where a possible lack of objectivity, to which humans are prone, could lead to errors of judgement.

Hence, it could be argued that the use of AI in court cases does not always have to be a creative process that requires an individual approach based on skills and legal knowledge.[2] There is no doubt that reducing the burden on judges by lifting routine work off their shoulders would allow them more time to consider the complex cases that require significantly greater intellectual investment, knowledge, and skill.

Artificial Intelligence (AI) and the Independence of the Saudi Judiciary

The principle of the independence of the judiciary in Saudi Arabia means that it is a distinct authority that issues its rulings without any influence, making it a means of achieving justice. In fact, the judiciary is considered as an independent authority in Saudi Arabia; one which protects the community engaged in the judiciary, so as to motivate the rule of law and elicit fairness. The Basic Law of Governance, art 46 provides that there is no authority higher than judges in their decisions,

1 Ibid.
2 Paweł Marcin Nowotko, 'AI in Judicial Application of Law and the Right to a Court' (Faculty of Law and Administration, University of Szczecin, Poland), 70-240.

rulings, or judgements, other than the authority of Islamic Sharia.[1] The above-mentioned Article 46 also assumes that those who issue judicial rulings are human judges.

The Saudi judiciary states several conditions for assuming a judicial position. These are provided for in the Judicial Law, art 31, derived from Islamic Sharia.[2] Thus, the issuance of judicial rulings in the Saudi judiciary at this present time is limited solely to human judges, with the implication that AI-empowered courts do not meet this requirement.[3] However, the Saudi judicial system may allow specific applications of AI to assist the role of the judiciary, as enshrined in the Basic Law of Governance.[4] Hence, AI models could be adopted to fulfil a purely

1 Basic Law of Governance (n5), art 46: "The Judiciary is an independent authority. The decisions of judges shall not be subject to any authority other than the authority of the Islamic *Sharia*."

2 Law of the Judiciary, Royal Decree No M/78, October 01, 2007, art 31: "To be appointed as a judge, a candidate shall fulfill the following requirements' He shall be of Saudi nationality, he shall be of good character and conduct, he shall be fully qualified to hold position of judge in accordance with the Sharia provisions, he shall hold the degree of one of the Sharia colleges in the Kingdom of Saudi Arabia or any equivalent certificate, provided that, in latter case, he shall pass a special examination to be prepared by the Ministry of Justice. In case of necessity, persons well-known for their learning and knowledge who do not hold the required degree may be appointed as judges, he shall not be less than forty years of age if he is to be appointed to the rank of an appellate judge, and not less than twenty two if he is to be appointed to any other rank in the judiciary, he shall not have been sentenced to a *hadd* (Qur'anic prescribed punishment) or a *Ta'zir* (discretionary punishment) or for a crime affecting honor, or punished by disciplinary action dismissing him from a public office, even though he may have been rehabilitated"
<https://laws.boe.gov.sa/BoeLaws/Laws/LawDetails/ea1765a3-dec3-41a0-a32f-a9a700f26d58/1> [Accessed: 6 January 2023].

3 Nowotko (n116),70-240.

4 Basic Law of Governance (n5), art ٤6: "The Judiciary is an independent authority. The decisions of judges shall not be subject to any authority other than the authority of the Islamic *Sharia*"; art 47: "All people, either citizens or

advisory role for the benefit of judges, such as proposing rulings, provided that the final decision rests with the human judge, irrespective of the case. However, it should be noted that the adoption of AI models to perform these advisory tasks is not without flaws or risks. Pre-suggested decisions from AI models could influence a judge's ruling before it is rendered, possibly leading to excessive permissiveness or an over-reliance on AI.

Therefore, the topic as a whole should receive careful long-term consideration from judicial policy-makers in KSA. Appropriate solutions must then be formulated to avoid the pitfalls. Conversely, the application of previously presented AI models that do not offer judicial rulings but focus only on document review and facilitating routine procedures would seem to be less risky than the introduction of AI models that suggest actual rulings to judges.

Artificial Intelligence (AI) and the Right to a Fair Trial

The right to a fair trial in the Kingdom is stipulated and guaranteed in the Basic Law of Governance, art 47.[1] All individuals, whether citizens or residents of the Kingdom, shall have an equal right to litigate and

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residents in the Kingdom, are entitled to file suit on an equal basis. The Law shall specify procedures for this purpose"; art ٤8: "The Courts shall apply rules of the Islamic Sharia in cases that are brought before them, according to the Holy Qur'an and the Sunna, and according to laws which are decreed by the ruler in agreement with the Holy Qur'an and the Sunna."

1 Ibid, art 47: "The Judiciary is an independent authority. The decisions of judges shall not be subject to any authority other than the authority of the Islamic *Sharia*"; art 48: "The Courts shall apply rules of the Islamic Sharia in cases that are brought before them, according to the Holy Qur'an and the Sunna, and according to laws which are decreed by the ruler in agreement with the Holy Qur'an and the Sunna."

file any lawsuit. As stated in the Basic Law of Governance, art 49, the Saudi courts have the power to adjudicate and settle all disputes and complaints. [1] The Basic Law of Governance also stipulates that individuals have the right to access the judiciary, have their cases reviewed by an independent judge, and receive final supervision from the relevant court. This means that all citizens and residents of the Kingdom are entitled to have their cases reviewed by the relevant (independent) court, based on the principle of equality. Thus, having a digital judge decide a case completely independently on the basis of its algorithm, rather than a human judge, could be considered as precluding the right to resort to the customary in-person courts.

According to this legal framework, one might venture that the decision to transfer all procedures to an AI technology could have a detrimental effect on the rights of individuals. For example, a litigant may be denied the opportunity to observe non-verbal cues and evidence. Therefore, sceptics argue that the application of AI and remote technology in criminal trials could negatively affect the ability of attorneys to cross-examine witnesses, challenge arguments, or present other pieces of evidence.[2] In particular, some concerns have been raised over the use of remote witnesses, in that they may deny the counterparty an opportunity for cross-examination by bringing forward witnesses and cross-examining them on the counterparty's behalf and under the same conditions as human witnesses during inference. This

1 Ibid, art ٤9: "Courts are empowered to arbitrate in all disputes and crimes, taking into account the provisions of Article 53 of this Law."

2 For the video link in the criminal justice system, see Penelope Gibbs, Defendants on Video – Conveyor Belt Justice or a Revolution in Access? (Transform Justice 2017).

appears to be one of the reasons why CEPEJ emphasises that the procedures for applying AI should be subject to constant review, and that people should be informed in clear language of any decisions made using AI models. Justice undoubtedly constitutes the cornerstone and pillar of the rule of law, and a fair procedure is an indispensable condition for justice.[1] As such, the benefits and advantages to be realised from applying AI models, particularly in terms of efficiency, must be weighed against the risks and disadvantages that can acompany the pursuit of a fair and efficient judicial process.[2]

Arguably, however, the transfer of some litigation services to online platforms is less challenging in civil and commercial cases than in criminal cases. Since criminal proceedings may include sentences, rulings, and penalties of a more severe nature, it is logical for a court to insist on being meticulous and rigorous in its disposal of the associated documents and evidence. As for civil and commercial cases, the scope is broader and allows priority to be given to facilitating the process, reducing costs, avoiding complexity, and speeding up judgments. Taken together, all of this is in the interest of the beneficiaries of the court procedures.[3] However, competency is not the only factor, as has

1 See Directorate General of Human Rights and Rule of Law at the Council of Europe, Technical Study on Online Dispute Resolution Mechanisms (Secretariat, Strasbourg: CDCJ 2018), 5; See also Monika Zalnieriute, Lyria Bennett Moses, and George Williams, 'The Rule of Law and Automation of Government Decision- Making' (2019) 82(3) Modern Law Review 425.
2 Ibid.
3 Susskind (n22).

already been explained; there are further important factors, such as the type of court and nature of the case.[1]

In light of the above, it is appropriate for judicial policy-makers, when adopting AI in the Saudi courts, to ensure the right of litigants to a fair trial and to avoid any hindrance to this right. Therefore, it is necessary to evaluate the results of applying AI models in the courts and to study them carefully, learning about the appropriate conditions for their correct application, while at the same time avoiding anything that might negatively affect the right to a fair trial. It is also necessary to find the necessary guarantees, consider the social, religious and cultural values of Saudi society, and raise awareness of the tendency to rely on technology in general in the modern world.

In sum, AI has multiple facets and features, some of which are difficult to apply, at least in the short term, and especially where major risks are involved. In contrast, there are AI models that pose fewer risks. Therefore, these could be applied in such a manner that would serve the Kingdom's legal system and afford only benefits to the judiciary. Undoubtedly, careful consideration of AI overall and the selection of appropriate models would help improve court procedures significantly in the Kingdom.

1 Campaign Master (UK) Ltd v Forty-Two International Pty Ltd [No 3] [2009] FCA 1306 at [78]; Blackrock Asset Management Australia Services Ltd v Waked [No 2] [2017] FCA 479 at [46]; Magi Enterprises Pty Ltd v Luvalot Clothing Pty Ltd [No 2] [2017] FCA 1143 at [20]; Vasiliades v Commissioner of Taxation [No 2] [2017] FCA 185; Deputy Commissioner of Taxation v Binetter [2017] FCA 69.

Drawing this discussion to a close, it should be noted that there are no strictly negative or positive responses to any of the questions relating to AI in a judicial context. Instead, there is always room for mediating between the two extremes. Therefore, it is suggested that the door should not be completely closed to applying AI to the judiciary in Saudi Arabia. However, it is appropriate to identify how AI can serve the principles of the Kingdom's legal system. In more specific terms, if AI can be applied in the Saudi legal system, it must on no account contradict or harm the judicial independence that is stipulated in the Basic Law of Governance.

Conclusion

It may be concluded that the development of AI technologies is necessary for making and issuing judicial rulings and conducting related processes in the Saudi courts, especially when comparisons are drawn with the judicial systems of comparable countries that have previously benefited from AI technologies or adopted them into their judicial systems (for example, China, Canada, and the US). In addition, applying AI technologies to the Saudi judiciary could prove useful for strengthening the Kingdom's position as a centre of international trade and an attractive environment for foreign and domestic investment. This could be achieved by taking practical steps towards enhancing the quality and efficiency of judicial rulings.

As such, this study suggests that the Saudi courts have adopted AI because it is becoming increasingly clear that AI models enable courts and employees to deal with cases more efficiently and transparently. In addition, technological innovation in the provision of court services

will contribute to the achievement of important goals. For example, AI helps to reduce the cost of filing claims and cases, making court services less expensive and more accessible to the public. In turn, these improvements enhance the reputation of the Saudi courts and the entire Saudi judiciary. The adoption of AI could therefore be an important turning point for the Kingdom's judiciary, especially with regard to the competition with parallel international commercial courts and alternative commercial and international dispute settlement centres (for example, arbitration and mediation centres).

Nevertheless, it should be recognised that the application of AI to the issuing of judicial rulings is a double-edged sword. Artificial intelligence will undoubtedly be useful in commercial and some civil cases, wherein the litigants can prove the merits of their claims by submitting many of their essential documents with ease. In fact, the application of AI tools to review documents, prepare litigation requirements, and manage court procedures in general could shorten the process, thereby relieving judges of the burden of dealing with mundane and uncomplicated work that does not require much mental exertion or precise interpretation of Islamic Sharia and its regulations. Conversely, replacing the authority to issue judicial rulings with a fully digitised, AI-empowered judge, and transferring court procedures entirely to online platforms with no direct human interaction could be detrimental to rulings in the Saudi courts.

To illustrate this further, judges may be unable to make direct observations at the time of litigation. By the same token, judges may be rendered helpless when expressing deep insights that are crucial to

evaluating and deliberating on cases as part of a fair trial. This may prevent cases from being heard by an independent court. Therefore, there need to be clear limits imposed on the role of AI models in identifying legal cases, facts, and adjudication methods, as well as in the issuing of rulings. It should be understood that a judicial ruling is a uniquely human effort, in which a human judge considers the different interests before meting out justice carefully and accurately on a case-by-case basis, aligned with the systems and laws from which he derives his authority.[1]

In sum, it is acknowledged that the application of AI models to the judiciary has many potential advantages. Therefore, the Saudi judiciary should not miss the opportunity to apply AI models. Undoubtedly, digital transformation and automation will develop and improve the judiciary and achieve a number of important benefits, such as speed of completion, facilitated procedures, reduced costs, and the expansion of justice in general. Conversely, there are certain challenges to applying AI models in the courts. However, international experiences have shown that these challenges can be overcome by drafting policies that clearly define the limits of AI use, whether in the form of a digital decision-maker or as an additional tool to help judges and the disputing parties.

1 J Allsop, 'Courts as (Living) Institutions and Workplaces' [Speech] (Joint Federal and Supreme Court Conference, 23 January 2019) <www.fedcourt.gov.au/digital-law-library/judges-speeches/chief-justice-allsop/allsop-cj-20190123> [Accessed: 15 June 2023].

Recommendations

It is recommended that first and foremost, legislative policy-makers in KSA do not fear, downplay, or resist AI implementation. Instead, the legal and judicial community should welcome and herald AI as a sign of digital development, benefitting from its advantages, provided that AI technologies are governed by a firm policy that defines their application. The first step toward achieving this goal is to establish the core values and principles that AI must comply with if it is to properly serve the Saudi judiciary. As such, the basic globally recognised principles for using AI technologies in judicial systems should be considered.[1] The impact of the principles of AI use in the issuing of judicial rulings in the Saudi courts will depend on adopting a policy that resembles those that are already recognised internationally.[2] At the same time, care should be taken to ensure that the AI used is designed or adapted specifically for the Saudi judiciary.[3]

The final recommendation is that legislative policy-makers in KSA consider the use and optimisation of AI in the Saudi courts, in accordance with the basic principles for applying AI technologies in judiciaries worldwide, which would include the following.

I. Artificial Intelligence (AI) Must Serve the Rule of Law

It has become clear through this study that the basic principles for applying AI technologies do not affect the rule of law. On the contrary,

1 See Section Two, 'The Globally Recognised Core Principles of Artificial Intelligence (AI)', 12.
2 Ibid.
3 Ibid.

AI strongly supports the legal and judicial environment, as reflected in the literature. Thus, AI technologies should be applied to support the independence of the judiciary and help it to achieve its goals. Specifically, these AI technologies should be allocated and customised, so that they do not conflict with the principles of Islamic Sharia, or the regulations issued by the authorities, where these are compatible with the principles of Islamic Sharia.

II. Artificial Intelligence (AI) Must Enhance the Realisation of Justice

The expectation is that AI will accelerate the judicial process, make it more efficient, and enable it to unfold smoothly and accurately. In addition, AI should lead to lower procedural costs for the parties involved. This will require that the algorithms required by AI tools to perform their tasks are transparent, understandable, and modifiable. Any ruling or decision issued by AI must likewise be subject to judicial control, especially when considering the extent to which a ruling or decision falls under the principles and provisions of Islamic Sharia and its related systems. In addition, the parties concerned must have the right to object, with appropriate methods of voicing their objection to decisions or rulings made by AI. In this regard, AI must not present an obstacle to the judiciary applying the principles and provisions of Islamic Sharia.

III. Artificial Intelligence (AI) Should Be Optimised to Best Serve People

Most importantly, AI should be free from bias in all its forms and manifestations since AI-empowered rulings and decisions must be unbiased. Moreover, AI must promote equality for all in the courts and before judicial bodies, with respect for the rights of all citizens and residents of KSA. This is so that lawsuits can be filed without discrimination, as provided for in the Basic Law of Governance, art 47: the right to litigation is guaranteed and maintained equally for all KSA citizens and residents, and the law shows the relevant procedures that are required in this regard.[1]

IV. Artificial Intelligence (AI) Must Be Safe and Robust

Artificial intelligence (AI) must be robust, safe, and effective throughout its application. The AI tools deployed in the judiciary need to be protected in such a manner that guarantees and upholds the integrity of the process and the rights of the parties involved.

1 Basic Law of Governance (n5), art 47: "All people, either citizens or residents in the Kingdom, are entitled to file suit on an equal basis. The Law shall specify procedures for this purpose."

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