

POTENTIAL BENEFITS OF ARTIFICIAL INTELLIGENCE IN IMPROVING EFFICIENCY AND ACCURACY IN LEGAL PROCEEDINGS IN THE NIGERIAN LEGAL SYSTEM*

Abstract

Artificial Intelligence (AI) has come to stay in the adjudication of cases in Nigeria. AI has gradually transformed various sectors globally, including the legal system. We cannot run away from the dynamism of the society where we live. Nigerian legal system must thrive to cope up with this new development in other not to be left behind in adapting to AI in the adjudication of cases. AI's integration into the legal sphere involves the use of technology to analyze legal data, predict case outcomes, automate routine legal tasks, and even assist in judicial decision-making. The application of AI in legal contexts is not uniform across jurisdictions, but there has been a discernible trend towards its adoption, particularly in advanced legal systems in the United States, the European Union and in Asia countries like China. The integration of Artificial Intelligence (AI) into the Nigerian legal system holds significant potential for enhancing the efficiency and accuracy of legal proceedings. With the adoption of Artificial Intelligence (AI) in the Nigerian judicial system, the numerous challenges like delays in case resolution, a backlog of cases, and inconsistencies in judicial decisions would be things of the past. AI can address these issues by automating routine tasks, predicting case outcomes, and ensuring consistent application of the law. The primary objective of this paper is to highlight the potential benefits of AI in improving efficiency and accuracy in legal proceedings in the Nigerian legal system.

Keywords: Potential Benefits, Artificial Intelligence, Improving Efficiency, Accuracy, Legal Proceedings.

1. Introduction

Artificial Intelligence (AI) has come to stay in the adjudication of disputes globally. AI tools are being utilized in areas such as legal research, where platforms like ROSS Intelligence,¹ Lex Machina.² These technologies have redefined legal research and decision-making, enabling more efficient legal processes and reducing human error. In the European Union, AI has been embraced cautiously, with a strong emphasis on ethical considerations and regulatory oversight. The EU Artificial Intelligence Act³ seeks to establish a legal framework for AI, ensuring that its deployment in sectors like the judiciary does not compromise fundamental rights or lead to discriminatory outcomes. The EU has also promoted the use of AI in legal adjudication through some projects,⁴ which explores the implications of AI on law and society. In Asia, countries like China have made significant strides in integrating AI into their legal systems.⁵ The court employs AI tools to process cases, from filing to judgment, and uses AI-generated judicial opinions to guide judges in their decision-making process. Nigeria should not be left out in this dynamism and that necessitated this paper aimed at highlighting the potential benefits of AI in improving efficiency and accuracy in legal proceedings in the Nigerian legal system.

2. Meaning of Artificial Intelligence (AI)

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are designed to think and act like humans. These systems can perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, perception, and language understanding. AI operates through algorithms and can be categorized into various types, including narrow AI⁶ and general AI.⁷ In *State v Loomis*,⁸ Eric Loomis was sentenced based on a risk assessment score generated by an AI-based algorithm, COMPAS.⁹ Loomis argued that the use of the AI algorithm violated his due process rights, as he could not assess the accuracy or reliability of the algorithm due to its proprietary nature. The Wisconsin Supreme Court upheld the use of the AI algorithm, stating that while it can be used, it should not be the sole determinant of a sentence. This case highlights the potential risks and challenges associated with the use of AI in judicial decision-making. Section 2(1),¹⁰ mandates that any processing of personal data must be lawful, fair, and transparent. This provision is crucial in the context of AI, as the processing of data by AI systems must adhere to these principles to protect individual rights and prevent misuse. Article 22¹¹ provides individuals the right not to be subject to a decision based solely on automated processing, including profiling, which significantly affects them. This statutory

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¹ Where AI to help lawyers find relevant case law faster and more accurately.

² This employs AI to analyze legal data, providing insights into litigation trends, judge behaviors, and case outcomes.

³ The EU Artificial Intelligence Act, 2021.

⁴ Like the COHUBICOL (Counting as a Human Being in the Era of Computational Law).

⁵ For example, the Hangzhou Internet Court, established in 2017, is a pioneering example where AI is used extensively in adjudicating internet-related disputes.

⁶ Designed for specific tasks like facial recognition or speech translation.

⁷ This can theoretically perform any intellectual task a human can do.

⁸ 881 N.W.2d 749 (Wis. 2016).

⁹ Correctional Offender Management Profiling for Alternative Sanctions.

¹⁰ Nigeria Data Protection Regulation (NDPR) 2019, National Information Technology Development Agency (NITDA).

¹¹ European Union General Data Protection Regulation (GDPR) 2016.

provision is critical in AI, as it ensures that humans have a say in decisions that impact their lives, rather than being entirely subject to AI-driven outcomes.

AI in legal systems can be categorized into several types, each serving different functions within the judicial process. The most commonly used types include predictive analytics, machine learning, and natural language processing (NLP). We shall briefly look at these types of AI used in Legal Systems.

Predictive Analytics

This type of AI uses statistical techniques to analyze historical data and predict future outcomes. In the legal context, predictive analytics is often used to forecast the likely outcome of a case based on previous similar cases. An example of this is the COMPAS¹² tool used in the United States, which predicts the likelihood of a defendant reoffending. This tool was notably used in *United States v Loomis*,¹³ where it influenced the sentencing decision. However, the use of such tool has raised concerns about transparency and potential biases in AI algorithms, particularly when the factors influencing predictions are not fully disclosed.

Machine Learning

Machine learning is a subset of AI that enables systems to learn from data and improve their performance over time without being explicitly programmed. In the legal field, machine learning algorithms can be used to analyze large volumes of legal documents, identify relevant case laws, and even assist in drafting legal briefs. For example, Lex Machina is a machine learning-based platform that helps legal professionals to predict the behaviors of judges, lawyers, and other stakeholders by analyzing litigation data. This tool has been used to enhance litigation strategies by providing insights into how similar cases were adjudicated.

Natural Language Processing (NLP)

NLP is a branch of AI that focuses on the interaction between computers and humans through natural language. In the legal context, NLP is used to analyze legal texts, extract relevant information, and generate summaries of legal documents. An example of NLP in action is ROSS Intelligence, which uses NLP to understand and respond to legal queries posed in natural language, providing relevant case laws and statutes that answer specific legal questions.¹⁴ NLP is particularly valuable in legal research, as it allows for more intuitive interaction with AI systems, enabling legal professionals to obtain information in a more natural and accessible way. The use of these AI technologies in legal adjudication is still in its early stages, but the potential benefits are substantial. However, the integration of AI into legal systems also raises important legal and ethical questions, particularly concerning the transparency, accountability, and fairness of AI-driven decisions. For example, the General Data Protection Regulation (GDPR) in the European Union includes provisions that protect individuals from decisions made solely by automated processing, emphasizing the need for human oversight in the use of AI, particularly in sensitive areas like legal adjudication.¹⁵ This regulation highlights the importance of ensuring that AI systems are used responsibly and that their decisions are subject to human review.

3. Meaning of Improving Efficiency and Accuracy in Legal Proceedings in the Nigerian Legal System

Improving efficiency in legal proceedings involves streamlining court processes to reduce delays, ensuring timely delivery of justice, and minimizing costs for litigants. Accuracy, on the other hand, refers to ensuring that legal decisions are based on sound interpretations of the law, correct application of the facts, and adherence to procedural fairness. In the Nigerian legal system, both aspects are critical to ensuring justice and upholding the rule of law. Efficiency and accuracy in legal proceedings in the Nigerian legal system can be achieved through:

Technology Integration: The use of technologies like e-filing systems, case management software, and Artificial Intelligence (AI) to enhance decision-making and reduce human errors. These tools allow for the quicker processing of cases, more accurate legal research, and faster rulings.

Reform of Court Procedures: Streamlining of court rules, such as the Civil Procedure Rules, which govern the pace and structure of legal proceedings. Efficient rules reduce unnecessary adjournments and procedural bottlenecks.

Training of Legal Professionals: Ensuring that judges, lawyers, and court staff receive continuous training on emerging trends in law, technology, and case management techniques.

Case Management Systems: Introducing pre-trial conferences and docket control to prevent unnecessary delays. Courts can implement active case management systems where judges take a proactive role in ensuring that cases move forward without undue delay.

¹²Correctional Offender Management Profiling for Alternative Sanctions.

¹³ *Supra*.

¹⁴ ROSS Intelligence uses Natural Language Processing (NLP) to provide legal professionals with relevant case law and statutes in response to natural language queries.

¹⁵ General Data Protection Regulation (GDPR), Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016. The GDPR addresses the use of automated decision-making processes and emphasizes the need for human oversight in such processes.

UBANYIONWU: Potential Benefits of Artificial Intelligence in Improving Efficiency and Accuracy in Legal Proceedings in the Nigerian Legal System

In *Adegoke Motors Ltd v Adesanya*,¹⁶ that involved prolonged litigation due to procedural delays and misuse of adjournments. The Supreme Court highlighted the need for courts to avoid unnecessary delays in the dispensation of justice. The court reiterated that justice delayed is justice denied and called for procedural reforms to ensure speedier delivery of justice. This case underscored the importance of efficiency in legal proceedings and how procedural delays hinder justice. It led to reforms in civil procedure aimed at enhancing efficiency. In *A.G. Anambra v A.G. Federation*,¹⁷ the issue of boundary dispute between the plaintiff and the defendant had been dragged through various legal stages, causing significant delays in the resolution. The court criticized the slow pace of judicial processes. The court held that the courts have a duty to expedite matters to prevent unnecessary prolongation of disputes. This case demonstrates how inefficiency in legal proceedings can exacerbate disputes and lead to prolonged litigation. Also, in *Ojukwu v Military Governor of Lagos State*,¹⁸ the appellant was forcefully evicted from his residence by the military governor despite an ongoing court case. The case was delayed due to procedural issues and lack of adherence to court orders. The court held that the rule of law must prevail, and the enforcement of justice should not be hindered by procedural inefficiency. The case called for reforms in how legal processes are managed. This case highlights the negative consequences of inefficient legal processes, where procedural delays led to the violation of a citizen's rights.

Section 36 of the Constitution of the Federal Republic of Nigeria 1999 (as amended) guarantees the right to a fair hearing within a reasonable time. It emphasizes the need for courts to adjudicate cases efficiently and ensure that justice is not delayed. This provision enshrines the constitutional right to efficient legal proceedings, serving as a basis for advocating reforms in case management and procedural rules. Equally, Administration of Criminal Justice Act¹⁹ 2015 seeks to improve the speed of criminal trials through provisions like the prohibition of stay of proceedings, the introduction of case management systems, and the limitation of adjournments. This Act directly addresses inefficiency in criminal proceedings and aims to reduce delays in the criminal justice system. Again, the Civil Procedure Rules of various High Courts provide timelines for filing processes, limiting the number of adjournments, and encouraging the use of Alternative Dispute Resolution mechanisms. These rules promote efficiency in civil litigation by regulating the pace of proceedings and encouraging faster resolution of disputes.²⁰ In *Omar & Ors v FRCN & Ors*,²¹ the appellant faced delays in the trial process due to unnecessary adjournments. The court, in this case, emphasized the need for expeditious hearings. The Court of Appeal upheld the appellant's appeal and criticized the lower court for failing to manage the case efficiently. This case further underscores the judiciary's responsibility to prevent inefficiencies that prolong cases and delay justice.

Improving efficiency and accuracy in the Nigerian legal system is a multifaceted issue that requires judicial reforms, adoption of technology, and the proactive role of the judiciary in managing cases. Procedural reforms and statutory frameworks like the Administration of Criminal Justice Act and the Civil Procedure Rules play a vital role in addressing delays and promoting timely justice.

4. Judicial Challenges in Adjudication of Cases in Nigeria

The relevance of AI to Nigeria's judicial challenges cannot be overstated. The Nigerian judiciary is often criticized for its inefficiency, with cases sometimes taking years, if not decades, to resolve. This has led to a backlog of cases, eroding public confidence in the judicial system. AI has the potential to address these challenges by optimizing case management, improving access to justice, and reducing the time required for case resolution. The case of *Dr. Chris Ngige v Peter Obi*²² has become a reference point in the analysis of the problems and challenges of electoral dispute resolution. In this case, the petitioner (Peter Obi) called 45 witnesses while Dr. Chris Ngige of the Peoples Democratic Party (PDP) called 437 witnesses. INEC called 12 witnesses bringing the total to 437 witnesses for the determination of the petition. The tribunal took more than two years to hear all the witnesses and delivered judgment on the 12th day of August, 2005. The appeal came up for hearing on the 23rd day of January, 2006 and judgment was delivered on the 15th day of March, 2006. The petitioner waited for 35 months to receive justice out of a mandate of 4 years. *Dr. Chris Ngige v Peter Obi*²³ is not the only case where delay was noticed. The case of *Amaechi v INEC*,²⁴ readily comes to mind where it took nearly two years of litigation before the Supreme Court ruled in favor of Rotimi Amaechi, declaring him the rightful winner of the 2007 Rivers State governorship election. The lengthy duration of this case highlighted the inefficiencies within the Nigerian judicial system and the urgent need for reforms that could expedite legal processes. AI can play a pivotal role in reducing such delays by automating case management and ensuring that cases are assigned and handled more efficiently. AI-driven systems can monitor the progress of cases, flagging those that have been unduly delayed, and providing recommendations

¹⁶ (1989) 3 NWLR (Pt 109) 250.

¹⁷(2005) 9 NWLR (Pt. 931) 572.

¹⁸(1986) 3 NWLR (Pt. 26) 39.

¹⁹ Administration of Criminal Justice Act, (ACJA) 2015.

²⁰ High Court of Lagos State (Civil Procedure) Rules, 2019.

²¹ (2015) LPELR-24829 (CA).

²² (2006) 14 NWLR (Pt 999) 1; (2006) ALL FWLR (Pt 330) 1041.

²³ *Supra*.

²⁴(2008) 5 NWLR (Pt 1080) 227.

for expedited processing. This would not only reduce the backlog of cases but also enhance the public's perception of the judiciary's effectiveness.

Moreover, AI can help address the issue of inconsistency in judicial decisions, which is a significant concern in Nigeria. Cases with similar facts and legal issues sometimes result in different outcomes due to varying interpretations by judges. AI, by analyzing patterns in previous judgments, can provide insights that promote consistency in decision-making. In *Anambra State v Uba*,²⁵ the Supreme Court delivered a controversial judgment that was criticized for its inconsistency with previous rulings on similar issues. The application of AI in such scenarios could help harmonize judicial reasoning, ensuring that similar cases are treated alike, thereby reinforcing the principle of legal certainty.

To facilitate the integration of AI into the Nigerian legal system, it may be necessary to amend existing laws or introduce new legislation that explicitly recognizes and regulates the use of AI in legal adjudication. This could involve amendments to the Constitution of the Federal Republic of Nigeria 1999 (as amended) to incorporate provisions that address the use of AI in judicial processes.

5. The Emergence of AI Technologies in Legal Adjudication

The rise of AI in legal adjudication is rooted in the need for efficiency, consistency, and accuracy in legal processes. AI technologies have been developed to assist judges and lawyers in managing the increasing volume of legal cases and complex legal issues that require quick and precise decisions. One of the earliest instances of AI's impact on adjudication is seen in the *United States v Loomis case*,²⁶ where the use of an AI-based risk assessment tool, COMPAS (Correctional Offender Management Profiling for Alternative Sanctions), was challenged. COMPAS was used to assess the likelihood of a defendant reoffending, which influenced sentencing decisions. The court upheld the use of COMPAS, but the case sparked a debate on the transparency and fairness of AI in judicial decision-making, as the algorithm's proprietary nature made it difficult to scrutinize its accuracy and potential biases. In another significant case, *People v Carney*,²⁷ the AI system was used to analyze vast amounts of digital evidence to establish patterns and links that would have been nearly impossible for humans to detect in a timely manner. This helped prosecutors build a stronger case, leading to a conviction. The case demonstrated AI's potential to enhance the quality of legal adjudication by providing insights that human analysis alone might miss.

Statutory frameworks are gradually being developed to regulate AI's role in the judiciary. For instance, the General Data Protection Regulation (GDPR) in the EU imposes strict requirements on the use of AI in legal decision-making, particularly in ensuring that individuals are not subject to decisions based solely on automated processing without human intervention.²⁸ Similarly, the Algorithmic Accountability Act of 2019²⁹ requires companies, including those developing AI for legal purposes, to assess and mitigate any potential bias in their algorithms.³⁰ As AI continues to evolve, its integration into the legal system is likely to expand, bringing with it both opportunities and challenges. While AI can enhance efficiency and consistency in adjudication, it also raises critical questions about transparency, accountability, and the potential erosion of human judicial discretion.

6. Potential Benefits of AI in Improving Efficiency and Accuracy in Legal Proceedings in the Nigerian Legal System

The integration of Artificial Intelligence (AI) into the Nigerian legal system holds significant potential for enhancing the efficiency and accuracy of legal proceedings. Nigeria's judiciary faces numerous challenges, including delays in case resolution, a backlog of cases, and inconsistencies in judicial decisions. AI can address these issues by automating routine tasks, predicting case outcomes, and ensuring consistent application of the law.

One of the primary benefits of AI is its ability to streamline legal research. AI-powered platforms like ROSS Intelligence and LexisNexis can quickly analyze vast amounts of legal data, statutes, and case law, providing lawyers and judges with relevant information in a fraction of the time it would take manually. This efficiency can help reduce the time spent on legal research, allowing cases to proceed more swiftly. For instance, in the United States case of *People v Diaz*,³¹ AI tools were used to sift through large volumes of digital evidence, leading to the identification of critical information that significantly impacted the case's outcome. The use of AI in this context not only expedited the trial but also enhanced the accuracy of the evidence presented.

²⁵ (2005) 15 NWLR (Pt 947) 44.

²⁶ *Supra*.

²⁷ 41 Cal. 3d 497 (Cal. 1986).

²⁸ General Data Protection Regulation (GDPR), Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016. The GDPR includes provisions that protect individuals from automated decision-making, including legal adjudication.

²⁹ Applicable in the United States of America.

³⁰ See Algorithmic Accountability Act of 2019, H.R.2231, 116th Congress (2019). This Act seeks to address potential biases in AI algorithms used in various sectors, including legal adjudication.

³¹ 53 Cal.4th 1171 (Cal. 2012).

UBANYIONWU: Potential Benefits of Artificial Intelligence in Improving Efficiency and Accuracy in Legal Proceedings in the Nigerian Legal System

In Nigeria, the adoption of AI could similarly expedite legal processes by reducing the time spent on mundane tasks such as document review and case law research. This would allow judges to focus more on substantive legal analysis, leading to more accurate and well-reasoned judgments. AI can also improve the accuracy of judicial decisions by minimizing human errors and biases. AI algorithms, when properly designed and trained, can ensure that legal principles are applied consistently across similar cases, thereby promoting fairness and justice. However, this requires careful oversight to avoid perpetuating existing biases or introducing new ones through flawed algorithmic design. The Evidence Act 2011 in Nigeria already provides a framework for the admissibility of electronic evidence, which could be expanded to include AI-generated evidence, further supporting the integration of AI in legal proceedings.³² This statutory provision underscores the Nigerian legal system's openness to technological advancements and lays the groundwork for AI's potential role in improving judicial efficiency and accuracy.

7. Areas where AI can enhance Nigerian Judicial Processes

Artificial Intelligence (AI) holds significant potential for enhancing various aspects of the Nigerian judicial process. Given the challenges of case backlogs, inconsistent judicial outcomes, and inefficiencies within the Nigerian legal system, the integration of AI could bring transformative changes in several key areas. Such areas like:

Case Management and Reduction of Backlogs

One of the most pressing issues facing the Nigerian judiciary is the overwhelming backlog of cases, which often leads to delayed justice. AI-powered case management systems can be instrumental in addressing this challenge by automating routine tasks such as scheduling, tracking case progress, and managing documentation. These systems can prioritize cases based on urgency, ensuring that critical matters are addressed promptly. For instance, the Nigerian judiciary could benefit from adopting AI tools similar to RELEX, used in the European Union, which automates case management and reduces administrative delays. By streamlining these processes, AI can significantly reduce the time it takes for cases to move through the judicial system, thereby enhancing access to justice in Nigeria.³³

Legal Research and Document Review

Legal research is a time-consuming task that often requires sifting through vast amounts of legal texts, precedents, and statutes. AI can expedite this process by using natural language processing (NLP) to quickly identify relevant legal materials, making research more efficient and accurate. AI tools like ROSS Intelligence could be adapted for use in Nigeria to assist lawyers and judges in finding pertinent case law and statutes more rapidly, thereby improving the quality of legal arguments and judicial decisions. For example, in the U.S., ROSS Intelligence has been used in numerous cases to provide quick access to relevant precedents, which has proven essential in high-stakes litigation.³⁴ Implementing a similar AI-powered legal research tool in Nigeria could ensure that legal professionals have immediate access to critical information, thus enhancing the overall quality of legal proceedings.

Predictive Analytics for Case Outcomes

AI-driven predictive analytics can be a powerful tool for forecasting the likely outcomes of legal cases based on historical data. By analyzing patterns in past rulings, AI can provide judges and lawyers with data-driven insights into how similar cases were adjudicated. This can help in formulating strategies, managing client expectations, and even settling cases out of court, thereby reducing the burden on the judicial system. In China, the 206 System has been used to predict the outcomes of criminal cases, providing prosecutors with insights that guide their decisions.³⁵ Similarly, in Nigeria, predictive analytics could be employed in areas such as criminal law, contract disputes, and civil litigation to predict case outcomes, thereby aiding in decision-making and potentially reducing the need for lengthy trials.

Sentencing and Risk Assessment

AI can also enhance the sentencing process by providing judges with data-driven assessments of defendants' risk factors, thereby ensuring more consistent and fair sentencing. In the United States, the COMPAS tool has been used to assess the likelihood of reoffending, influencing sentencing decisions. While this tool has been controversial, it demonstrates the potential of AI in making sentencing more objective and data-driven.³⁶

In Nigeria, where concerns about sentencing disparities exist, an AI-based risk assessment tool could help in standardizing sentencing decisions, reducing the likelihood of bias, and ensuring that similar cases receive similar sentences. However, it is crucial to ensure transparency and accountability in the use of such tools to avoid the pitfalls seen in other jurisdictions.

³²Evidence Act 2011, Laws of the Federation of Nigeria. This Act provides the legal framework for the admissibility of electronic evidence in Nigerian courts.

³³ RELEX is an AI-powered case management tool used in the EU to automate administrative tasks, reduce case backlogs, and improve judicial efficiency.

³⁴ ROSS Intelligence uses natural language processing (NLP) to enhance legal research by providing quick access to relevant case law and statutes, improving the efficiency and accuracy of legal arguments.

³⁵ The 206 System is an AI tool used in China for criminal investigations, providing data-driven insights that guide prosecutorial decisions, particularly in complex cases like corruption investigations.

³⁶ COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) is a risk assessment tool used in the U.S. to predict the likelihood of reoffending, influencing sentencing decisions, as seen in *State v Loomis*, 881 N.W.2d 749 (Wis. 2016).

8. Case Studies of AI in Legal Adjudication in Other Jurisdictions

United States

The United States has been at the forefront of integrating AI into its legal system, particularly in the areas of legal research, predictive analytics, and risk assessment. One of the most notable examples is the use of the COMPAS³⁷ tool, which was developed to assess the likelihood of a defendant reoffending. COMPAS uses AI to analyze data on defendants and predict their future behavior, which can then be used by judges during sentencing. A significant case involving COMPAS is *State v Loomis*.³⁸ In this case that took place in 2016, the defendant, Eric Loomis, challenged the use of the COMPAS tool in his sentencing, arguing that the algorithm's proprietary nature made it impossible to verify how the risk score was calculated, thereby violating his due process rights. The Wisconsin Supreme Court upheld the use of COMPAS but noted that it should not be the sole basis for sentencing decisions. This case highlights the potential benefits and challenges of using AI in legal adjudication, particularly concerning transparency and accountability. Another example from the U.S. is the adoption of ROSS Intelligence, an AI-powered legal research tool that uses natural language processing (NLP) to assist lawyers in finding relevant legal precedents and statutes. ROSS helps legal professionals quickly navigate vast legal databases, improving the efficiency and accuracy of legal research, which in turn enhances the quality of legal arguments presented in court.

China

China has rapidly embraced AI in its legal system, particularly in judicial decision-making and case management. One of the most significant developments is the introduction of AI judges in certain courts. These AI systems, embedded within China's "Smart Court" system, assist human judges by providing recommendations on cases, particularly in routine or less complex matters. For instance, in the Shanghai Pudong Court, an AI judge was used to handle a case involving a traffic violation. The AI system analyzed the evidence, applied relevant laws, and suggested a ruling, which the human judge then reviewed and approved. This case illustrates the potential of AI to expedite judicial processes, reduce human error, and ensure consistency in decision-making.³⁹ China has also developed the 206 System, an AI-powered tool used in criminal investigations and prosecutions. The 206 System can predict the outcomes of cases, assess the likelihood of conviction, and identify potential legal risks. It has been used in several high-profile cases, including corruption investigations, to provide prosecutors with data-driven insights that guide their decisions.⁴⁰

European Union

The European Union has been cautious yet progressive in integrating AI into its legal systems, particularly in enhancing judicial efficiency and ensuring access to justice. The European Court of Human Rights (ECHR) has been exploring AI's potential in legal research and case management. One notable example is the use of Case Prediction Tools developed by researchers in collaboration with the ECHR. These AI tools analyze past cases and predict the outcomes of new cases based on patterns identified in previous judgments. While still in experimental stages, these tools have demonstrated high accuracy in predicting the court's decisions, offering valuable insights for lawyers and litigants.⁴¹ In the EU, AI is also being used to streamline administrative tasks within the judiciary. For example, RELEX is an AI-powered tool used in some EU member States to manage case files, schedule hearings, and ensure timely case processing. This tool has helped reduce case backlogs and improve the efficiency of judicial administration, particularly in courts with high caseloads.⁴²

9. Employment of AI in Legal Research, Decision-Making, and Case Management

AI is being increasingly integrated into various aspects of legal systems worldwide, including legal research, decision-making, and case management. These applications not only enhance the efficiency of legal processes but also improve the accuracy and consistency of judicial outcomes. We shall briefly discuss it hereunder:

Legal Research

AI has revolutionized legal research by enabling faster and more accurate access to relevant case law, statutes, and legal commentary. Tools like ROSS Intelligence and LexisNexis utilize natural language processing (NLP) to allow legal professionals to pose complex legal questions and receive precise answers. This reduces the time spent on legal research and increases the quality of the information used in legal arguments. For example, ROSS Intelligence has been used in several high-profile cases in the United States, where it helped lawyers quickly identify relevant precedents that were critical to the outcome of their cases. The ability of AI to process vast amounts of legal data and provide relevant insights demonstrates its potential to enhance the quality of legal research significantly.⁴³

³⁷ Correctional Offender Management Profiling for Alternative Sanctions.

³⁸ *Supra*.

³⁹ The Shanghai Pudong Court used an AI judge to handle a traffic violation case, showcasing AI's potential in expediting judicial processes and ensuring consistency in decision-making.

⁴⁰ The 206 System is an AI tool used in China for criminal investigations, providing data-driven insights that guide prosecutorial decisions, particularly in complex cases like corruption investigations.

⁴¹ Case Prediction Tools developed for the European Court of Human Rights analyze past cases and predict outcomes based on identified patterns, demonstrating the potential of AI in legal adjudication

⁴² RELEX is an AI-powered case management tool used in some EU member states to automate administrative tasks, reduce case backlogs, and improve judicial efficiency.

⁴³ ROSS Intelligence has been used in high-profile cases in the United States, demonstrating its potential to enhance the quality and efficiency of legal research.

Decision-Making

AI's role in decision-making is perhaps the most controversial yet impactful. Predictive analytics and AI-driven decision support systems are increasingly being used to assist judges in making more informed decisions. In the *State v Loomis* case, the COMPAS tool was used to assess the defendant's risk of reoffending, influencing the sentencing decision. While this case highlighted concerns about AI's opacity and potential biases, it also demonstrated AI's ability to provide data-driven insights that can enhance judicial decision-making.⁴⁴ In China, AI judges have been deployed in several courts to assist in decision-making for routine cases. These AI systems analyze evidence, apply relevant laws, and suggest rulings that human judges can review and approve. This application of AI helps expedite judicial processes, particularly in courts with high caseloads, ensuring that justice is delivered more swiftly.⁴⁵

Case Management

AI is also being used to improve case management in legal systems worldwide. AI-powered tools can track case progress, manage schedules, and ensure that deadlines are met, reducing case backlogs and improving the overall efficiency of the judicial process. In the EU, AI tools like RELEX are used to manage case files and automate administrative tasks within the judiciary. This has been particularly beneficial in courts with high volumes of cases, where AI helps ensure that cases are processed in a timely manner, reducing delays and improving access to justice.⁴⁶

9. Examples of AI tools that could be adopted in Nigeria

They are as follows:

ROSS Intelligence

As mentioned earlier, ROSS Intelligence is an AI-powered legal research tool that could greatly benefit the Nigerian judiciary. By using natural language processing (NLP) to quickly find relevant case law and statutes, ROSS can enhance the efficiency of legal research in Nigeria. Adopting a similar tool could provide Nigerian legal professionals with a powerful resource for making well-informed legal arguments, ultimately improving the quality of judicial decisions.⁴⁷

RELEX for case management

RELEX, an AI-powered case management tool used in the European Union, could be adapted to the Nigerian context to help manage case backlogs and streamline administrative processes. By automating tasks such as scheduling, case tracking, and document management, RELEX could significantly reduce the time it takes for cases to move through the Nigerian judicial system. This would enhance access to justice and improve the overall efficiency of the judiciary.⁴⁸

Predictive Analytics Tools

AI-driven predictive analytics tools, like those used in the 206 System in China, could be employed in Nigeria to forecast case outcomes based on historical data. Such tools could be particularly useful in criminal law, where predicting the likely outcome of a case could inform prosecutorial strategies and plea bargaining, thereby reducing the need for protracted trials. Predictive analytics could also help in civil cases, where understanding likely outcomes could facilitate settlements and reduce the burden on the courts.⁴⁹

AI-Based Risk Assessment Tools

Adopting AI-based risk assessment tools, similar to the COMPAS tool used in the U.S., could help the Nigerian judiciary in making more consistent and data-driven sentencing decisions. By assessing a defendant's likelihood of reoffending, these tools can provide judges with valuable insights that lead to more informed and equitable sentencing. However, the implementation of such tools would need to be accompanied by strong safeguards to ensure transparency and prevent potential biases.⁵⁰

10. Conclusion

There are a lot of benefits inherent in the application of Artificial Intelligence (AI) in legal proceedings in the Nigerian legal system. With the growing influence in the development of technology driven adjudication of cases in advanced societies worldwide, Nigeria should as a matter of urgency adapt itself towards the reception of this fast-tracking method of adjudication of cases. AI will be utilized in legal research, decision-making, and case management. This will go a long way in tackling the problems of backlog of cases in Nigeria. All hands must be on deck towards this transformation process for the benefit of our judicial system.

⁴⁴ *State v Loomis* (*supra*).

⁴⁵ AI judges in Chinese courts, such as those used in the Shanghai Pudong Court, assist in decision-making for routine cases, expediting processes and reducing judicial workloads.

⁴⁶ RELEX in the EU is used for case management, automating administrative tasks, reducing delays, and improving access to justice.

⁴⁷ ROSS Intelligence has been used in high-profile cases in the United States, demonstrating its potential to enhance the quality and efficiency of legal research.

⁴⁸ RELEX in the EU is used for case management, automating administrative tasks, reducing delays, and improving access to justice.

⁴⁹ The 206 System in China demonstrates how predictive analytics can inform prosecutorial strategies and aid in the adjudication of cases by forecasting likely outcomes based on historical data.

⁵⁰ The COMPAS tool's application in the U.S., as demonstrated in *State v Loomis*, shows the potential benefits and challenges of using AI-based risk assessment tools in sentencing decisions.