

Solving the Problem of Delay in Adjudication of Cases in Nigeria through Artificial Intelligence (AI)

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Abstract

The Nigerian judiciary is often criticized for its inefficiency, with cases sometimes taking years, if not decades, to resolve. Nigerian judiciary faces numerous challenges, including delays in case resolution, a backlog of cases, and inconsistencies in judicial decisions. This has led to eroding of public confidence in the judicial system. Artificial Intelligence (AI) is a new phenomenon in adjudication of cases in Nigeria. Globally, AI has gradually transformed various sectors, including the legal system. The society where we are living is dynamic and as a result, Nigerian legal system must thrive to cope up with this new development in other not to be left behind in adapting to Artificial Intelligence (AI) in the adjudication of cases. Artificial Intelligence (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. Artificial Intelligence (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 integration of Artificial Intelligence (AI) into the Nigerian legal system holds significant potential for enhancing the efficiency and accuracy of legal proceedings. The writer adopted doctrinal methodology in writing this article. The primary objective of this paper is to explore the potential integration of Artificial Intelligence (AI) into the Nigerian judicial system, to solve the problem of delay in the dispensation of justice in Nigeria.

Key words: Solving, problem, delay, adjudication, cases and artificial intelligence

1. Introduction

In the European Union, Artificial Intelligence (AI) has been embraced cautiously, with a strong emphasis on ethical considerations and regulatory oversight. The EU Artificial Intelligence Act¹ seeks to establish a legal framework for Artificial Intelligence (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 Artificial Intelligence (AI) in legal adjudication through some projects,² which explores the implications of Artificial Intelligence (AI) on law and society. In Asia, countries like China have made significant strides in integrating Artificial Intelligence (AI) into their legal systems.³ The court employs Artificial Intelligence (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. Artificial Intelligence (AI) has come to stay in the adjudication of disputes globally and Nigeria in particular. Artificial Intelligence (AI) tools are being utilized in areas such as legal research, where platforms like ROSS Intelligence,⁴ and Lex Machina⁵ are employed. These technologies have redefined legal research and decision-making, enabling more efficient legal processes and reducing human error. This work employed doctrinal research methodology. This work looks at the definitions of basic concepts as well as the problems associated with delay in the adjudication of cases in Nigeria. This work makes a case for the introduction of Artificial Intelligence (AI) in Nigeria for purposes of curbing delay in the adjudication of cases in Nigeria.

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¹ The EU Artificial Intelligence Act, 2021.

² Like the COHUBICOL (Counting as a Human Being in the Era of Computational Law).

³ For example, the Hangzhou Internet Court, established in 2017, is a pioneering example where AI is used extensively in adjudicating internet-related disputes.

⁴ Where AI to help lawyers find relevant case law faster and more accurately.

⁵ This employs AI to analyze legal data, providing insights into litigation trends, judge behaviors, and case outcomes.

2. Meaning and Concept of Delay in Adjudication of Cases in Nigeria

Delay in adjudication of cases refers to the protracted time it takes for a court to resolve a case from its inception to its conclusion. This phenomenon hampers the judicial system and obstructs the dispensation of justice, often leading to the adage that "justice delayed is justice denied." In the Nigerian context, delays in court proceedings are caused by a combination of factors such as court congestion, inadequate judicial personnel, procedural inefficiencies, corruption, and dilatory tactics by litigants or their counsel. These delays affect both civil and criminal cases and have detrimental effects on the trust and confidence in the judiciary. Nigeria's courts are often overburdened with a high volume of cases and inadequate courtroom facilities, outdated technology, and lack of sufficient judges. Some lawyers or litigants intentionally delay proceedings by filing frivolous applications, adjournments, or appeals. Insufficient funds lead to poorly equipped courts and lack of resources to process cases expeditiously. Complex procedural rules and delays in service of court processes also contribute to delay. In *Akeredolu v Abraham*,⁶ the case arose from a political party primary election in Ondo State. The respondent, Abraham, challenged the victory of the appellant, Akeredolu, claiming irregularities. The case dragged on for months due to several interlocutory appeals and adjournments. The Supreme Court condemned the delays and stressed the need for electoral matters to be expedited, given their significance to democracy. The court highlighted the adverse effects of delay on justice, especially in time-sensitive electoral matters. This case showcases how delay in adjudication affects political cases, leading to a loss of faith in the judicial system. Also, in *AG; Lagos State v AG; Federation*,⁷ the case concerned the dispute between the Lagos State Government and the Federal Government over the management and control of local government councils' finances. The case took almost five years to conclude due to numerous procedural delays and interlocutory appeals. The Supreme Court ruled in favor of Lagos State but decried the delay in adjudicating the matter. The court emphasized that critical constitutional issues should not be bogged down by procedural technicalities. The case highlights how procedural inefficiencies can prolong critical cases, undermining the essence of justice. Equally in *Amadi v NNPC*,⁸ Amadi sued NNPC for wrongful termination of employment, and the case dragged on for over a decade due to multiple adjournments and procedural inefficiencies. The plaintiff passed away before the case was finally determined, and his estate had to continue the suit. The Supreme Court ruled in favor of the plaintiff's estate, but the court took the opportunity to criticize the delays in trial courts, particularly in labor disputes, stressing that such delays defeat the purpose of labor law protections. This case underscores the problem of delays in labor-related adjudication and its effect on the protection of workers' rights. In *Obasi Brothers Ltd. v MBAS Ltd.*,⁹ delays resulted from repeated adjournments, interlocutory appeals, and counsel's dilatory tactics. The case spanned over 15 years before reaching the Supreme Court. The Supreme Court eventually ruled in favor of the appellant but condemned the unwarranted delay. The court emphasized that delay diminishes the efficacy of the judicial system and causes undue hardship on the parties involved. The case demonstrates the impact of delay on commercial disputes, affecting business confidence and economic stability. Section 36(1)¹⁰ provides that every person is entitled to a fair hearing within a reasonable time. This provision underscores the constitutional obligation of courts to avoid undue delays in

⁶ (2018) 7 NWLR (Pt 1618) 525.

⁷ (2005) 2 WRN 1.

⁸ (2000) 10 NWLR (Pt 674) 76.

⁹ (2005) 9 NWLR (Pt 929) 117.

¹⁰ Constitution of the Federal Republic of Nigeria 1999 (as amended).

adjudication. The said section promotes the right to timely justice, which is often breached when cases are unnecessarily prolonged. The Electoral Act 2022 stipulates strict timelines for the resolution of electoral disputes. The law requires election petitions to be filed and determined within 180 days at the tribunal level, underscoring the importance of speedy adjudication in electoral matters. The Electoral Act attempts to curtail delay by imposing mandatory deadlines, showing a legislative commitment to expedite time-sensitive cases. The Administration of Criminal Justice Act 2015 mandates that criminal trials, once commenced, must be conducted daily and adjournments must not exceed 14 days unless in exceptional circumstances. This is aimed at reducing delays in criminal trials. The Administration of Criminal Justice Act 2015 (ACJA) seeks to combat procedural delays in criminal proceedings, addressing the widespread issue of prolonged trials in Nigeria's criminal justice system.

In *Ojukwu v Governor of Lagos State*,¹¹ the appellant, Ojukwu, sought to challenge the demolition of his property by the Lagos State Government. However, the case was delayed by a series of procedural hurdles and adjournments. The court criticized the delays, emphasizing that property rights must be protected swiftly. The court also recognized the adverse effect of delay on justice, especially in property disputes. The case underscores the need for prompt adjudication in property matters to avoid injustice. Also, in *Gani Fawehinmi v Nigerian Bar Association*,¹² that involved a challenge to the leadership of the Nigerian Bar Association. The case was delayed for years due to interlocutory appeals and judicial inefficiencies. The Supreme Court expressed concern about the delay, emphasizing that issues affecting professional associations like the NBA should be resolved expeditiously to maintain the integrity of the legal profession. The case illustrates the effect of delay on the professional regulatory framework in Nigeria.

Delays in the adjudication of cases in Nigeria undermine the effectiveness of the judicial system, violating the constitutional right to fair and timely hearings. Both statutory and judicial measures are necessary to address these delays and improve the efficiency of the courts.

3. Concept and Meaning of Adjudication

Adjudication refers to the legal process by which a judge or an appointed authority reviews evidence and arguments, including legal reasoning set forth by opposing parties or litigants, to come to a decision that determines the rights and obligations of the parties involved. This process typically results in a judgment or ruling that resolves the dispute. Adjudication is central to the judicial system and is used in various contexts, such as civil litigation, criminal trials, administrative proceedings, and arbitration. It involves not only the application of legal principles but also the interpretation of statutes, case laws, and regulations to resolve specific disputes. In *Owoniboy Technical Services Ltd v UBN Ltd*,¹³ the appellant (Owoniboy Technical Services Ltd) entered into a loan agreement with the respondent (Union Bank of Nigeria Ltd). A dispute arose over the repayment terms, leading the bank to institute an action to recover the loan. The case went through the adjudication process, where the court had to interpret the contract terms and the relevant banking regulations. The Supreme Court held that the adjudication process must be fair and just, emphasizing that the courts must strictly adhere to the principles of law and equity when resolving disputes arising from contractual agreements. Also in *Madu v Madu*,¹⁴ that has to do with a dispute over ownership of land. The parties presented their claims and evidence before the court.

¹¹ (1986) 3 NWLR (Pt 26) 39.

¹² (1989) 2 NWLR (Pt 105) 558.

¹³ (2003) 15 NWLR (Pt 844) 545.

¹⁴ (2008) 6 NWLR (Pt 1083) 296.

The court, in its adjudicatory role, was required to determine the rightful owner based on the evidence presented and the applicable law. The Supreme Court of Nigeria reiterated that adjudication requires careful consideration of all evidence and legal arguments. The court ruled in favor of the party with a stronger legal and factual claim, thereby resolving the dispute through the adjudication process. The adjudication process is sanctioned by the provision of the constitution.¹⁵ This section vests judicial powers in the courts, empowering them to adjudicate disputes between individuals, government bodies, and organizations. It is the constitutional foundation for the adjudication process in Nigeria.¹⁶

4. What is 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. Artificial Intelligence (AI) operates through algorithms and can be categorized into various types, including narrow Artificial Intelligence (AI)¹⁷ and general Artificial Intelligence (AI).¹⁸ In *State v Loomis*,¹⁹ Eric Loomis was sentenced based on a risk assessment score generated by an Artificial Intelligence AI-based algorithm, COMPAS.²⁰ Loomis argued that the use of the Artificial Intelligence (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 Artificial Intelligence (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 Artificial Intelligence (AI) in judicial decision-making. Section 2(1)²¹ mandates that any processing of personal data must be lawful, fair, and transparent. This provision is crucial in the context of Artificial Intelligence (AI), as the processing of data by Artificial Intelligence (AI) systems must adhere to these principles to protect individual rights and prevent misuse. Article 22²² provides individuals the right not to be subject to a decision based solely on automated processing, including profiling, which significantly affects them. This statutory provision is critical in Artificial Intelligence (AI), as it ensures that humans have a say in decisions that impact their lives, rather than being entirely subject to Artificial Intelligence AI-driven outcomes.

5. Theories of Delay in Adjudication of Cases in Nigeria

Delays in adjudication within the Nigerian judicial system have been analyzed through various theories. These theories seek to explain the causes, effects, and possible solutions to the issue of delayed justice. Theories of delay in adjudication can be categorized into systemic, human, procedural, and institutional explanations.

¹⁵ Section 6 of the Constitution of the Federal Republic of Nigeria, 1999 (as amended).

¹⁶ See Arbitration and Mediation Act, 2023, Cap A18, Laws of the Federation of Nigeria 2004 (as amended). Its provision outlines the powers of arbitrators during adjudication, including the authority to determine the rules of procedure, take evidence, and make awards that are binding on the parties. This statutory provision is essential for understanding the adjudication process within the context of arbitration and mediation.

¹⁷ Designed for specific tasks like facial recognition or speech translation.

¹⁸ This can theoretically perform any intellectual task a human can do.

¹⁹ 881 N.W.2d 749 (Wis. 2016).

²⁰ Correctional Offender Management Profiling for Alternative Sanctions.

²¹ Nigeria Data Protection Regulation (NDPR) 2019, National Information Technology Development Agency (NITDA).

²² European Union General Data Protection Regulation (GDPR) 2016.

5.1 Systemic Theory of Delay

This theory posits that delays in adjudication are caused by systemic inadequacies within the judicial system. These inadequacies include insufficient judicial infrastructure, overloaded dockets, and lack of judicial personnel. The theory argues that the system is overwhelmed by the sheer volume of cases, coupled with insufficient resources to handle them efficiently. See *AG; Lagos State v AG; Federation*²³ and *Obasi Brothers Ltd v MBAS Ltd*.²⁴

5.2 Human Theory of Delay

This theory attributes delays in adjudication to the actions or inactions of the key players within the judicial process, such as judges, lawyers, and litigants. This includes dilatory tactics by lawyers, judicial inefficiency, **and** deliberate delays by litigants who may seek to manipulate the system for personal gain. In *Amadi v NNPC*,²⁵ Amadi challenged his termination from the NNPC in a labour dispute. The case dragged on for over a decade due to dilatory tactics employed by both the defence counsel and the plaintiff, including multiple adjournments. The Supreme Court ruled in favor of Amadi, condemning the delays as a product of deliberate stalling tactics by the parties and their legal representatives. This case illustrates how the human factor, particularly dilatory tactics by lawyers, contributes significantly to delays in adjudication. The court stressed the need for strict control of case management by judges to prevent delays resulting from dilatory tactics. See also *Gani Fawehinmi v Nigerian Bar Association*.²⁶

5.3 Procedural Theory of Delay

This theory points to the complex and technical procedural rules that govern court processes as a primary cause of delay. It argues that the rules of court, which often allow for interlocutory appeals, multiple adjournments, and procedural technicalities, contribute to slowing down the adjudication process. See *Akeredolu v Abraham*²⁷ and *Ojukwu v Governor of Lagos State*.²⁸

5.4 Institutional Theory of Delay

This theory attributes delays in adjudication to institutional shortcomings within the judiciary, including poor funding, lack of technological advancement, and inefficient case management systems. The theory argues that without adequate resources, training, and infrastructure, the courts cannot function efficiently. In *Ademola v State*,²⁹ Ademola was charged with a criminal offence, but his trial was delayed for years due to the lack of adequate courtroom facilities and funding. The court condemned the institutional delays caused by poor infrastructure and underfunding of the judiciary, emphasizing that such delays undermine the integrity of the criminal justice system. This case reflects how institutional deficiencies contribute to delay in criminal trials, often leading to violations of the accuser's rights to a fair and speedy trial. The court's ruling stressed the need for increased funding and infrastructural development in the judiciary to reduce institutional delays. See also *Imasuen v University of Benin*,³⁰ where the appellant challenged his dismissal from the University of Benin. The case suffered delays due to inadequate judicial facilities and

²³ *Supra*.

²⁴ *Supra*.

²⁵ (2000) 10 NWLR (Pt 674) 76.

²⁶ *Supra*.

²⁷ *Supra*.

²⁸ *Supra*.

²⁹ (1991) 1 NWLR (Pt 170) 128.

³⁰ (1991) 9 NWLR (Pt 213) 101.

lack of resources to expedite the trial. The court acknowledged the institutional delays and called for reforms in the administration of justice to ensure cases are heard without unnecessary delay. This case illustrates how institutional shortcomings, such as lack of courtrooms and judicial staff, contribute to delays in adjudication.

6. Judicial challenges of Delay in the Adjudication of Cases in Nigeria

The relevance of Artificial Intelligence (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. Artificial Intelligence (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*³¹ 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*³² is not the only case where delay was noticed. The case of *Amaechi v INEC*,³³ 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. Artificial Intelligence (AI) can play a pivotal role in reducing such delays by automating case management and ensuring that cases are assigned and handled more efficiently. Artificial Intelligence AI-driven systems can monitor the progress of cases, flagging those that have been unduly delayed, and providing recommendations 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, Artificial Intelligence (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. Artificial Intelligence (AI), by analyzing patterns in previous judgments, can provide insights that promote consistency in decision-making. In *Anambra State v Uba*,³⁴ the Supreme Court delivered a controversial judgment that was criticized for its inconsistency with previous rulings on similar issues. The application of Artificial Intelligence (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 Artificial Intelligence (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 Artificial Intelligence (AI) in legal adjudication. This could involve

³¹ (2006) 14 NWLR (Pt 999) 1; (2006) ALL FWLR (Pt 330) 1041.

³² *Supra*.

³³ (2008) 5 NWLR (Pt 1080) 227.

³⁴ (2005) 15 NWLR (Pt 947) 44.

amendments to the Constitution of the Federal Republic of Nigeria 1999 (as amended) to incorporate provisions that address the use of Artificial Intelligence (AI) in judicial processes.

7. Emergence of AI Technologies in curbing Delay in Legal Adjudication in Nigeria

The rise of Artificial Intelligence (AI) in legal adjudication is rooted in the need for efficiency, consistency, and accuracy in legal processes. Artificial Intelligence (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 Artificial Intelligence AI's impact on adjudication is seen in the *United States v Loomis case*,³⁵ where the use of an Artificial Intelligence 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 Artificial Intelligence (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*,³⁶ the Artificial Intelligence (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 Artificial Intelligence 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 Artificial Intelligence AI's role in the judiciary. For instance, the General Data Protection Regulation (GDPR) in the EU imposes strict requirements on the use of Artificial Intelligence (AI) in legal decision-making, particularly in ensuring that individuals are not subject to decisions based solely on automated processing without human intervention.³⁷ Similarly, the Algorithmic Accountability Act of 2019³⁸ requires companies, including those developing Artificial Intelligence (AI) for legal purposes, to assess and mitigate any potential bias in their algorithms.³⁹

As Artificial Intelligence (AI) continues to evolve, its integration into the legal system is likely to expand, bringing with it both opportunities and challenges. While Artificial Intelligence (AI) can enhance efficiency and consistency in adjudication, it also raises critical questions about transparency, accountability, and the potential erosion of human judicial discretion.

In Nigeria, the adoption of Artificial Intelligence (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. Artificial Intelligence (AI) can also improve the accuracy of judicial decisions by minimizing human errors and biases. Artificial Intelligence (AI) algorithms, when properly designed and trained, can ensure that legal principles are applied consistently across similar cases,

³⁵ *Supra*.

³⁶ 41 Cal. 3d 497 (Cal. 1986).

³⁷ 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.

³⁸ Applicable in the United States of America.

³⁹ 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.

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 Artificial Intelligence AI-generated evidence, further supporting the integration of Artificial Intelligence (AI) in legal proceedings.⁴⁰ This statutory provision underscores the Nigerian legal system's openness to technological advancements and lays the groundwork for Artificial Intelligence AI's potential role in improving judicial efficiency and accuracy.

8. Types of AI that can be used in the Nigerian Legal System

Artificial Intelligence (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 Artificial Intelligence (AI) used in Legal Systems.

8.1 Predictive Analytics

This type of Artificial Intelligence (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 COMPAS⁴¹ tool used in the United States, which predicts the likelihood of a defendant reoffending. This tool was notably used in *United States v Loomis*,⁴² where it influenced the sentencing decision. However, the use of such tool has raised concerns about transparency and potential biases in Artificial Intelligence (AI) algorithms, particularly when the factors influencing predictions are not fully disclosed.

8.2 Machine Learning

Machine learning is a subset of Artificial Intelligence (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.

8.3 Natural Language Processing (NLP)

NLP is a branch of Artificial Intelligence (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.⁴³ NLP is particularly valuable in legal research, as it allows for more intuitive interaction with

⁴⁰Evidence Act 2011, Laws of the Federation of Nigeria. This Act provides the legal framework for the admissibility of electronic evidence in Nigerian courts.

⁴¹Correctional Offender Management Profiling for Alternative Sanctions.

⁴²*Supra*.

⁴³ **ROSS Intelligence** uses Natural Language Processing (NLP) to provide legal professionals with relevant case law and statutes in response to natural language queries.

Artificial Intelligence (AI) systems, enabling legal professionals to obtain information in a more natural and accessible way.

The use of these Artificial Intelligence (AI) technologies in legal adjudication is still in its early stages, but the potential benefits are substantial. However, the integration of Artificial Intelligence (AI) into legal systems also raises important legal and ethical questions, particularly concerning the transparency, accountability, and fairness of Artificial Intelligence (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 Artificial Intelligence (AI), particularly in sensitive areas like legal adjudication.⁴⁴ This regulation highlights the importance of ensuring that Artificial Intelligence (AI) systems are used responsibly and that their decisions are subject to human review.

9. Case Studies of Artificial Intelligence (AI) in Legal Adjudication in other Jurisdictions

9.1 The United States

The United States has been at the forefront of integrating Artificial Intelligence (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 **COMPAS**⁴⁵ tool, which was developed to assess the likelihood of a defendant reoffending. COMPAS uses Artificial Intelligence (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*.⁴⁶ 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 Artificial Intelligence (AI) in legal adjudication, particularly concerning transparency and accountability. Another example from the U.S. is the adoption of ROSS Intelligence, an Artificial Intelligence (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.

9.2 China

China has rapidly embraced Artificial Intelligence (AI) in its legal system, particularly in judicial decision-making and case management. One of the most significant developments is the introduction of Artificial Intelligence (AI) judges in certain courts. These Artificial Intelligence (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 Artificial Intelligence (AI) judge was used to handle a case involving a traffic violation. The Artificial Intelligence (AI) system analyzed the evidence, applied relevant laws, and suggested a ruling, which the human judge then reviewed and approved. This case

⁴⁴ 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.

⁴⁵ Correctional Offender Management Profiling for Alternative Sanctions.

⁴⁶ *Supra*.

illustrates the potential of Artificial Intelligence (AI) to expedite judicial processes, reduce human error, and ensure consistency in decision-making.⁴⁷ China has also developed the 206 System, an Artificial Intelligence (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.⁴⁸

9.3 The European Union

The European Union has been cautious yet progressive in integrating Artificial Intelligence (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 Artificial Intelligence 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 Artificial Intelligence (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.⁴⁹ In the EU, Artificial Intelligence (AI) is also being used to streamline administrative tasks within the judiciary. For example, RELEX is an Artificial Intelligence (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.⁵⁰

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

Artificial Intelligence (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:

10.1 Legal Research

Artificial Intelligence (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 Artificial Intelligence (AI) to process vast amounts of legal data and provide relevant insights demonstrates its potential to enhance the quality of legal research significantly.⁵¹

⁴⁷The **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.

⁴⁸ 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.

⁴⁹**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

⁵⁰ **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.

⁵¹ **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.

10.2 Decision-Making

Artificial Intelligence (AI)'s role in decision-making is perhaps the most controversial yet impactful. Predictive analytics and Artificial Intelligence (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 Artificial Intelligence (AI)'s opacity and potential biases, it also demonstrated Artificial Intelligence (AI)'s ability to provide data-driven insights that can enhance judicial decision-making.⁵²

In China, Artificial Intelligence (AI) judges have been deployed in several courts to assist in decision-making for routine cases. These Artificial Intelligence (AI) systems analyze evidence, apply relevant laws, and suggest rulings that human judges can review and approve. This application of Artificial Intelligence (AI) helps expedite judicial processes, particularly in courts with high caseloads, ensuring that justice is delivered more swiftly.⁵³

10.2 Case Management

Artificial Intelligence (AI) is also being used to improve case management in legal systems worldwide. Artificial Intelligence (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, Artificial Intelligence (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 Artificial Intelligence (AI) helps ensure that cases are processed in a timely manner, reducing delays and improving access to justice.⁵⁴

11. 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 Artificial Intelligence (AI) could bring transformative changes in several key areas. Such areas like:

11.1 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. Artificial Intelligence (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 Artificial Intelligence (AI) tools similar to RELEX, used in the European Union, which automates case management and reduces administrative delays. By streamlining these processes, Artificial Intelligence (AI) can significantly reduce the time it takes for cases to move through the judicial system, thereby enhancing access to justice in Nigeria.⁵⁵

⁵² *State v Loomis* (*supra*).

⁵³ 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.

⁵⁴ RELEX in the EU is used for case management, automating administrative tasks, reducing delays, and improving access to justice.

⁵⁵ RELEX is an AI-powered case management tool used in the EU to automate administrative tasks, reduce case backlogs, and improve judicial efficiency.

11.2 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. Artificial Intelligence (AI) can expedite this process by using natural language processing (NLP) to quickly identify relevant legal materials, making research more efficient and accurate. Artificial Intelligence (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.⁵⁶ Implementing a similar Artificial Intelligence (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.

11.3 Predictive Analytics for Case Outcomes

Artificial Intelligence (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, Artificial Intelligence (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.⁵⁷ 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.

11.4 Sentencing and Risk Assessment

Artificial Intelligence (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 Artificial Intelligence (AI) in making sentencing more objective and data-driven.⁵⁸

In Nigeria, where concerns about sentencing disparities exist, an Artificial Intelligence (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.

⁵⁶ 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.

⁵⁷ 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.

⁵⁸ 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).

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

They are as follows:

12.1 ROSS Intelligence

As mentioned earlier, ROSS Intelligence is an Artificial Intelligence (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.⁵⁹

12.2 RELEX for case management

RELEX, an Artificial Intelligence (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.⁶⁰

12.3 Predictive Analytics Tools

Artificial Intelligence (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.⁶¹

12.4 Artificial Intelligence (AI)-Based Risk Assessment Tools

Adopting Artificial Intelligence (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.⁶²

13. Conclusion

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. This will go a long way in tackling the problems of delay and backlog of cases in Nigeria. All hands must be on deck towards this transformation process for the benefit of our judicial system.

⁵⁹ 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.

⁶⁰ RELEX in the EU is used for case management, automating administrative tasks, reducing delays, and improving access to justice.

⁶¹ 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.

⁶² 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.