

**Optimizing the Use of Artificial Intelligence in Accelerating the Implementation of the Indonesian Judicial Reform Blue Print 2035****Andi Hakim Lubis**

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[misaelandry785@gmail.com](mailto:misaelandry785@gmail.com)**Abstract**

One of the real problems in the judiciary is the lack of judges assigned to judicial institutions to handle cases. The shortage of judges is a serious problem and should not be considered a minor issue. This is because the shortage of judges has the potential to produce new injustices. If the shortage of judges is left unaddressed and there is no effort to immediately find a solution, it is feared that it will result in the low quality of judges' decisions. This is because the number of cases to be tried will certainly drain a lot of energy and thought. The problem of a shortage of judges will be equivalent to the excess duties of the judge himself to cover the handling of other cases that are registered. The purpose of this research was carried out to be able to provide ideas about the importance of the use of technology, especially Artificial Intelligence in assisting technical tasks in court in accelerating the realization of the 2010-2035 Indonesian Judicial Reform blueprint (blue print) using normative research by examining the literature by taking a statute approach. The results of this research can be concluded that the importance of utilizing technology, especially Artificial Intelligence in supporting the completion of the workload of the judicial environment and the Supreme Court. Therefore, the benefits of this research are expected to be a consideration for the Supreme Court to further optimize the use of technology, especially Artificial Intelligence, to accelerate the realization of the 2010-2035 Indonesian Judicial Reform blue print.

**Keywords:** Utilization, Artificial Intelligence, Acceleration, Reform, Judiciary**INTRODUCTION**

The development of information technology (digitalization) has now penetrated into various sectors and has also become part of the civilization of modern society and the international world that cannot be slowed down. The presence of technology has changed almost all patterns of work and services

that have been conventionally transformed by utilizing the sophistication of digital technology. It is not only adapted in practices in the economic, agricultural and industrial sectors but has entered the realm of administering justice. If the use of technology is optimized, then of course it will have a significant and relevant influence as an effort to implement effective and efficient administration of justice in supporting the realization of the 2010-2035 Indonesian Judicial Reform blueprint. This blueprint is both a road map and a beacon that will guide and indicate the direction of judicial reform so that it can be more structured, measurable and targeted.

In the Supreme Court's Vision manifesto, there is also an expectation to become a modern judicial body based on integrated information technology. This implies the utilization of technology in the judiciary, which is a big leap from the overall efforts of the Supreme Court in carrying out administrative reform in the courts. This effort is a solution to three obstacles often faced by judicial institutions, namely complex case handling processes, difficulty in accessing court information, and the integrity of court officials.(1)

Digitalization is present to answer the demands of the fast-paced needs of modern society and to become service excellent as part of excellent service for the community, especially those seeking asylum in court and in supporting the principles of simple, fast and low cost justice. The adage has the substance that a slow judicial process is the same as not providing justice to the parties. so that inductively from public expectations of fast case handling immediately provides justice, legal certainty and expediency.(2)

The International Consortium for Court Excellence has agreed that the administration of justice must be carried out effectively and efficiently. The International Framework for Court Excellence, which is a guideline prepared by the ICCE, emphasizes that an effective and efficient judiciary is one of the indicators of court excellence. This in its implementation is strongly influenced by various factors including court support, including information technology.(3)

If we look at the annual performance reports published by the Supreme Court for the last 5 (five) years, the total caseload of the Supreme Court and the 4 (four) judicial institutions under it, including the General Courts, Religious Courts and State Administrative Courts, reaches millions of cases each year. This can be seen in the following table:

*Table 1. Case Load Data 2019-2023*

(Accessible on the website <https://mahkamahagung.go.id>)

Year	2019	2020	2021	2022	2023
<b>Number of Cases</b>	6.854.443	3.955.963	2.767.247	3.559.665	2.845.784

Looking at the data in the table above, it is not possible to fully expect the use of the five human senses to manage cases both administratively and substantively in a judicial institution with millions of cases. On the other hand, what is also problematic in the judiciary is the lack of quantity of human

resources or the number of judges assigned to judicial institutions to handle cases, especially at the first instance level.

The lack of quantity of human resources or the number of judges was also conveyed by the Chief Justice of the Supreme Court Syarifuddin in the coaching activities of the leaders of Technical Development and Judicial Administration offline for Leaders, Judges and Judicial Appellate and First Level Judicial Apparatus in 4 (four) Judicial institution followed online by Leaders, Judges, and Judicial Appellate and First Level Judicial Apparatus in 4 (four) Judicial institution throughout Indonesia in October 2023. According to Syaifuddin: "Based on the data we currently have, the number of shortage of judges in 3 (three) judicial institution according to the calculation of workload in court work units throughout Indonesia is 4,224 people, consisting of 2,762 General Courts, 1,347 religious courts, and 115 State Administrative Courts. In fact, the APP (Judicial Case Analyst) recruited in 2021 who are projected to become judges, there are only 1531 people, meaning that this number will not be sufficient to cover the current shortage".(4) The judiciary is a forum for seeking justice for the community, so the community has expectations of the judiciary.(5) Judges who are given the duty and authority to adjudicate may not suspend or reject the case they are asked to adjudicate.(6)

The shortage of human resources or the number of judges in the judiciary and the Supreme Court is a serious problem and cannot be considered a naive matter. According to the author, the shortage of judges has the potential to produce new injustices and become new problems in reality. If the shortage of judges is ignored and there is no effort to immediately recruit and innovate, it is feared that it will result in the low quality of judges' decisions. This is because the number of cases that will be worked on by judges will certainly drain a lot of energy and thoughts. This means that if it is true that there is a shortage of judges in the judiciary, this should be equivalent to an excess of judges' duties to cover case handling.

Basically, all judges have the same status, but when examined in practice, each judge has different roles and functions according to their seniority level, as well as the status background of career and non-career judges. For example, in special courts, non-career judges are often not involved in making decisions due to lack of competence. Although it cannot be generalized, in practice, the President of the Panel usually gives more role to the second member of the panel (the most junior judge) in making decisions. According to several judges, this practice has become a habit among judges. This is due to the absence of rules requiring one judge from a panel to be responsible for making decisions. Apart from being influenced by the form of involvement of judges, differences in the performance of judges in producing or making decisions are also caused by the number of cases that enter the court and the number of judges assigned to the court concerned.(7)

Based on the data and facts that the author has presented above, the use of technology in supporting the workload within the judiciary and the Supreme Court is a necessity and part of the acceleration of the manifestation of the blueprint for the 2010-2035 Indonesian Judicial Reform. The

utilization of Artificial Intelligence is something that cannot be separated from the development of advanced technology. This was also conveyed by the Chief Justice of the Supreme Court Syaifuddin in the Special Session of the MA RI Annual Report for 2023: AI technology will be embedded as a Decision Support System (DSS) that can provide information as early as possible about the possibility of similarities between one case and another. At least, by utilizing technology as part of providing legal certainty and avoiding conflicts between 2 decisions on a case that is essentially the same, the Supreme Court is currently starting to develop an information technology based on artificial intelligence as a DSS.(8) *The Supreme Court is also preparing a system for appointing a panel of judges using technological devices, namely by utilizing artificial intelligence (AI) machines based on the type and qualifications of cases and the workload of the Supreme Court judges.*

However, in the author's view, the use of Artificial Intelligence must be limited only to technical issues, not to the substance. If it is applied in supporting technical performance, it is an innovation. However, if it enters the substance, it will eliminate substantive justice. The same thing was also conveyed by the Chief Justice of the Supreme Court Syaifuddin that no matter how sophisticated the IT devices we have, we as humans will still play a role, because IT devices are only tools to facilitate the implementation of tasks and work. IT devices can only work according to the commands that have been patterned in the system that we create, while humans have the creativity and intelligence to continue to innovate and change. Despite claims that algorithms can accurately predict court decisions, and that we won't need judges anymore.(9)

Overburdening judges with cases is also an act of injustice towards judges. The task of judges is a noble task, about a human struggle. This statement reminds us of how depleted a judge's energy is when carrying out their duties, because they have to undergo an inner struggle, having to make choices that are not easy. A judge who realizes that he or she is truly in a humanitarian struggle is faced with the rule of law, the facts, the arguments of the prosecutor, the arguments of the defendant and the advocate and more than that, must put his or her ear to the heart of society.(10) Judges' considerations are the thoughts or the opinion of the judge in handing down a verdict by looking at things that are implied.(11) Therefore, the use of technology in supporting the performance of the judiciary and the Supreme Court is a must.

## **METHODS**

This research is normative research. research conducted by examining the literature by taking a statute approach. Normative legal research with a statute approach is a method that prioritizes the analysis of existing legal texts, such as laws, regulations, judge decisions, and other legal documents.(12) This approach focuses on the interpretation and application of legal texts to understand and describe the applicable law. Data collection techniques using literature studies with secondary data in the form of judge decisions, legal texts, such as laws, regulations, and other legal documents., The data obtained from the results of the literature study will be analyzed using a qualitative descriptive method, namely by

classifying the data obtained in accordance with the existing problems, then systematized and analyzed to serve as a basis for drawing conclusions.

## **RESULTS AND DISCUSSION**

### **Optimizing the Use of Technology as a Blue Print for Indonesian Judicial Reform**

Based on experience in various parts of the world, the use of technology is still concentrated on electronic recording solutions only. Information technology has not been optimized to the maximum to progressively improve the performance of judicial bodies. Therefore, technology initiatives undertaken have not yielded satisfactory results for judicial institutions. One of the reasons is that judicial bodies failed to establish the role and strategic direction of technology within the judicial organization itself. This failure has the potential to create an inability to reap maximum results, even in the implementation of technology itself. The implementation of technology in the Judiciary considers the dynamics and potential changes, especially in guiding radical changes in the current work process. Thus, there needs to be a serious effort to overcome inefficiencies and potential abuse of authority due to weaknesses in the prevailing regulations and formal rules of the game.<sup>(13)</sup>

In other words, there needs to be clarity on the strategic direction used as the basis for formulating and determining the role and position of technology as a strategic supporting instrument in modernizing the judiciary. In addition, the Supreme Court felt the need to synchronize the role and support of technology with the regulations applicable in the Judiciary.

The goal of technology implementation in MA can be formulated as a means of support to achieve the following :

1. Improving the quality of decisions, by providing access to all relevant information from inside and outside the court, including decisions, law journals, and others.
2. Improved court administration systems, including access to court activities from outside the building, e.g. registration, information requests, and testimony
3. Establishing efficient work processes in judicial institutions, by reducing manual work and replacing it with computer-based processes.
4. Establishment of a performance-based organization, which uses technology as a tool to monitor and control performance.
5. Establishing a learning institution within the organization, by providing e-learning or distance learning facilities.

Since the last 5 (five) years, the Supreme Court and the judiciary under it have indeed made many breakthroughs in the use of technology. Supreme Court Regulation (PERMA) Number 3 of 2018 concerning Electronic Court Case Administration which was refined through PERMA Number 1 of 2019

signaled the beginning of the utilization of information technology in improving the quality of judicial performance which is the legal umbrella for the implementation of E-Court.

E-Court is an instrument of the Court as a form of service to the community in terms of online case registration, electronic estimation of fees, online payment of fees, online summoning and online trial sending trial documents (Replik, Duplik, Conclusion, Answer).(14) The e-Court case application is expected to be able to improve services in its function of receiving online case registration where the public will save time and money when registering cases, where information technology is utilized in the administration of cases and the implementation of procedural law.(15)

The E-Court application is a necessity that is carried out to accelerate and streamline the time of registering cases in court so that it facilitates many things for its users, including without having to attend directly to the Court to register.

The grand design for the reform of the administration of justice contained in the 2010 2035 plan stipulated that one of the indicators of an ideal judiciary was a modern Judiciary based on integrated Information Technology. The word integrated arose from the fact that at the time of the preparation of the plan, which was before 2010, the Supreme Court had realized that there was no comprehensive and integrated information technology management. The Supreme Court has also developed several applications both in terms of technical and non-technical. Technical applications include Case Tracking Information System (SIPP) at the Court of First Instance and Appeal, Case Administration Information System (SIAP) at the Supreme Court level.

The question that arises is whether that is enough? Of course not. Advanced technological developments continue to be created in accordance with the times. One thing that is interesting to be discussed again both in scientific forums and popular academic studies is related to the use of Artificial Intelligence. MA has again shown its sharpness as an institution that always adapts to change. The discourse on the use of Artificial Intelligence has become the latest innovation in supporting other needs. Recently, the Supreme Court has started to develop an information technology based on artificial intelligence as a DSS.(16) The Supreme Court is also preparing a system for appointing a panel of judges using technological devices, namely by utilizing artificial intelligence (AI) machines based on the type and qualifications of cases and the workload of the Supreme Court judges, which will be discussed how urgency in the next discussion.

### **The Urgency of Using Artificial Intelligence in the Judiciary**

There are at least 5 (five) reasons according to the author for the urgency of utilizing Artificial Intelligence in accelerating the implementation of the Indonesian judicial reform blue print in 2035 as follows:

1. Speeding up the technical administrative process in court
2. Anticipating the occurrence of different verdicts in similar cases

3. Regarding what technology is most appropriate to use. It must be understood that not all digital platforms are powerful or AI-based. For courts that handle so many cases such as the Constitutional Court and the Supreme Court, the existence of AI-based technology is relevant.

Based on the reasons for the urgency of utilizing Artificial Intelligence in the judicial environment as stated above, it is necessary to consider the following points:

1. It is necessary to conduct an academic study regarding the need for AI in the courts. AI can be useful in various ways to fulfill different needs. The sales talk about AI for courts is overwhelming. Some argue that 'it will make it fairer, and moreover, unlike human judges, AI does not get tired and does not rely on glucose levels to function.
2. Court cases do not always require complex, tailor-made approaches to decision-making and many cases can be processed automatically, at least partially. That is why the application of information technology, including artificial intelligence, is not the same for all types of cases.
3. Develop Ethical Guidelines for the use of artificial intelligence in the administration of justice.
4. The AI used should be user familiar. Easy to use and not cumbersome for the user.

AI can be useful in many different ways to meet different requirements. Sales talk on AI for courts is abundant. It has been argued that 'it would make it fairer, and moreover, unlike human judges, AI does not get tired and does not depend on its glucose levels to function.'<sup>5</sup> That is mostly speculation. The discussion here, however, focuses mainly on what we already know from evidence, are as follows :

1. Organising Information.
2. Advise
3. Predictions

As a comparison to other countries, In the United States, various prediction tools are offered commercially.<sup>(17)</sup> Their workings are therefore business secrets, so we do not know how they work. However, there are some non-commercial applications, and we do have some insight into their operation. For example, a group of American academics has developed a machine learning application that claims to be able to predict the outcome of a case at the Supreme Court of the United States (SCOTUS) with an accuracy of 70.2%, and the voting behavior of individual judges with 71.9% accuracy.<sup>(18)</sup>

The most extensively described application is one that claims to be able to predict decisions of the European Court of Human Rights (ECHR). This tool uses using natural language processing and machine learning to predict whether or not in a particular situation the Court will rule whether a particular provision of the)has been violated.<sup>(19)</sup>

Predicting recidivism in criminal cases is another practical example of the use of AI, from the US. This tool, the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS), is used in practice by U.S. criminal judges in some states when assessing the recidivism risk of defendants or convicted persons, in decisions on pre-trial detention, sentencing or early release.<sup>(20)</sup>

In China, The stance of Zhou Qiang, the current Chief Justice and President of the Supreme People's Court of China, is that "AI will never replace human judges and can only serve judges [as assistants]"(21)

The urgency of utilizing advanced technology, one of which is Artificial Intelligence, will have a positive impact on developments in the judiciary, when looking at the principles of speed, simplicity and low cost, as stated in Article 2 paragraph 4 of Law Number 48 of 2009 concerning Judicial Power.(22) Simple means that the process of examination and settlement of cases is carried out in an efficient and effective manner, if seen in the application of e-Court services, some case settlement processes have been replaced in online form such as replication, duplicates, answers and conclusions so that case settlement becomes simple and fast. Fast in the sense that the time of the case is not protracted or long in legal terms is known as the "adage justice delayed justice denied" which means that delay in providing justice is another form of injustice. Then the principle of light costs, light costs here mean that the cost of cases can be reached by the community so that it can facilitate the community when seeking protection to the court.

## **CONLUSSION**

### **Summary**

The use of advanced technology is a breakthrough in the judicial institution that must be maintained and optimized to accelerate the implementation of the Indonesian Judicial Reform Blue Print 2035. One of the innovations that has begun to be developed is Artificial Intelligence, namely the Decision Support System (DSS) which can provide information as early as possible about the possibility of similarities between one case and the system for appointing a panel of judges using technological devices, namely by utilizing AI machines based on the type and qualifications of cases and the workload of the Supreme Court judges and this is something that is urgent .

### **Advice**

The use of Artificial Intelligence can only be used to support technical work in the judiciary and not to enter the substantive realm such as legal considerations or more crucially replace the position of judges. Because AI will not be able to replace the position of humans who have conscience, feelings, humanity and always consider the benefits and justice in the judge's decision.

## **REFERENCES**

1. Lubis AH. Transformasi Digital (E-Court) Dalam Penyelenggaraan Peradilan Menuju Modernisasi Peradilan Berbasis Teknologi, Tabloid Intelektual Edisi XXI. Tabloid Intelekt. 2022;
2. Nursobah A. Pemanfaatan Teknologi Informasi Untuk Mendorong Percepatan Penyelesaian Perkara di Mahkamah Agung. J Huk dan Peradil. 2015;4(2):323–34.
3. Iqbal, M., Susanto, S., & Sutoro M. The International Framework for Court Excellence, Edisi

2. Maret 2013 dikutip dari Efektifitas Sistem Administrasi E-court dalam Upaya Mendukung Proses Administrasi Cepat, Sederhana dan Biaya Ringan di Pengadilan. *J Ilmu Huk.* 2019;8(2):302–15.
4. Mahkamah Agung Republik Indonesia [Internet]. 2023. Direktori Mahkamah Agung.
5. Lubis, A. H., Lubis, J. ., & Rizal S. Optimalisasi Pengawasan Dan Pembinaan Hakim Menuju Kekuasaan Kehakiman Yang Berintegritas Dan Bermartabat. *Ilmu Hukum Prima* [Internet]. 2022;5(1):12–24. Available from: <https://doi.org/10.34012/jihp.v5i1.2456>
6. Lubis AH. Maslahat Aspects As A Basis For Judges Considerations In The Implementation Of Forced Money (Dwangsom) In Religious Courts. *Pena Justisia Media Komun dan Kaji Huk.* 2023;22(2).
7. Yudisial K. *Problematika Hakim Dalam Ranah Hukum, Pengadilan, dan Masyarakat di Indonesia: Studi Sosio-Legal*'''. Jakarta: Sekretariat Jenderal Komisi Yudisial Republik Indonesia; 2017.
8. Mahardipa MW, , Ni Putu Rai Yuliantini RAW. Implementasi Asas Peradilan Sederhana, Cepat, Dan Biaya Ringan Pada Perkara Pidana Di Pengadilan Negeri Singaraja Kelas I B. *e-Journal Komunitas Yust Univ Pendidik Ganesha Jur Ilmu Huk.* 2019;2(3):181–91.
9. A. D. Dory Reiling. Courts and Artificial Intelligence. *Int J Court Adm.* 2019;8(4).
10. Yudisal K. *Kualitas Hakim Dalam Putusan.* In Jakarta; 2020.
11. Lubis, A. H., & Hasbi M. Pertimbangan Hukum Hakim Dalam Menetapkan Suatu Putusan di Persidangan Perkara Pidana. *Madani J Ilm Multidisiplin.* 2023;12(1).
12. Deassy J.A. Hehanussa MG et. a. Metode Penelitian Hukum [Internet]. Jaelani E, editor. Vol. 4, *Jurnal Widina Bhakti Persada.* Bandung: Widina Bhakti Persada Bandung; 2023. 65 p. Available from: <https://medium.com/@arifwicaksanaa/pengertian-use-case-a7e576e1b6bf%0Ahttps://doi.org/016/j.biteb.2021.100642>
13. Mahkamah Agung Republik Indonesia. Cetak Biru Pembaharuan Pengaduan 2010-2035. Mahkamah Agung Republik Indones [Internet]. 2010;107. Available from: <https://www.mahkamahagung.go.id/media/198>
14. Susanto, M. I., & Supriyatna W. Creating an Efficient Justice System with E-Court System in State Court and Religious Court of Rights. *Int J Arts Soc Sci.* 2020;3(3):354–61.
15. Djatmiko H. Implementasi Peradilan Elektronik (e-Court) Pasca Diundangkannya PERMA Nomor 3 Tahun 2018 Tentang Administrasi Perkara di Pengadilan secara Elektronik. *J Huk Leg.* 2019;1(1):22–32.
16. Salli IY, Rahman S, Zaman B. Implementasi Intelligent Decision Support System Pada Pengambilan Keputusan Player Dalam Video Game. *J Ilmu Komput.* (2011):1–8.
17. Realing ADD. Courts and Artificial Intelligence. *Int J Court Adm.* 2020;11(2):1–10.
18. Katz DM et al. A. General Approach for Predicting the Behavior of the Supreme Court of the United States (January 16, 2017). *Int J Court Adm* [Internet]. 2018;8(4). Available from: <https://doi.org/10.36745/ijca.343>
19. Aletras N, Tsarapatsanis D, Preoțiu-Pietro D L V. Predicting judicial decisions of the European Court of Human Rights: a Natural Language Processing perspective. *Peer Comput Sci* [Internet]. 2016; Available from: <https://doi.org/10.36745/ijca.343>
20. Prakken H. Komt de robotrechter eraan Is the robot judge arriving. *Ned Juristenbl* [Internet]. 2018;207(4). Available from: <https://doi.org/10.36745/ijca.343>
21. Wang, N., & Tian MY. “Intelligent Justice”: human-centered considerations in China’s legal AI transformation. *AI Ethics.* 2023;3(2):349–54.
22. Jayani, D. I., Elfitaningsih, V. Y., Agustin, D. A., & Raditya R. Urgensi Pembentukan E-Court Sebagai Wujud Peradilan Yang Berkembang. *Lontar merah.* 2020;3(1):281–90.