

**Emerging Technologies and Judicial Integrity:
Challenges in Digital Transformation of the Indonesian Constitutional Court**

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Judicial integrity is a multi-faceted concept that covers the conduct and practices of judges as well as the structure and circumstances in which judges work. It encompasses the principles that ensure transparent, effective and accountable institutions as a critical component for promoting SDG 16's aim of peaceful, just and inclusive societies and justice for all.¹ Article 10 of the Universal Declaration of Human Rights proclaimed by the United Nations General Assembly on 10 December 1948 stated that Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him.² In this context, the judiciary is an area that has significant potential for emerging technologies to play a more prominent role.

E-justice is an umbrella term that captures any effort to administer, deliver, strengthen, or monitor justice services using digital technologies. It includes efforts by institutions like courts and governments, individuals like lawyers and human rights defenders, and private and civil society entities like technology providers and community partners.³

Some elements of these projects were introduced or accelerated because of the COVID-19 pandemic and ensuing quarantines, which required courts to operate virtually and restructure court processes as online transactions. The use of technology can increase speed and transparency of judicial decisions, increasing confidence, accountability and allowing for a greater public scrutiny of the system. The foundational protections of the rule of law built into justice systems may be compromised, unintentionally, by private

¹ 2030 Agenda for Sustainable Development, <https://sdgs.un.org/2030agenda>

² Universal Declaration of Human Rights, <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

³ International Consortium for Court Excellence, Court Excellence Self-Assessment Questionnaire.

sector technology developers. As changes are introduced, ongoing scrutiny of the impacts of technology changes on the judicial process will be critical.⁴

Digital Transformation in the Judicial System

The Indonesian Constitutional Court has implemented digital transformation in the judicial system in the last few years when digitalization has affected how people live and interact.

1. Digitalization of Court Proceedings

One of the most significant benefits of emerging technologies is the digitalization of court proceedings. The use of electronic systems can help in reducing paperwork, improving accessibility, and facilitating the efficient management of cases. The digitization of court records can help in making them easily accessible, improve transparency, and speed up the judicial process. For example, the e-Court project on **simpel.mkri.id**⁵ aims to computerize the working of courts in the country and make the judicial system more efficient.

2. Use of Machine Learning

Machine learning refers to computer systems that can learn and adapt without following explicit instructions by using algorithms and statistical models to analyze and draw inferences from patterns in data. AI uses an algorithm to apply a logical formula to data to predict or propose a result.⁶ An algorithm is the mathematical logic behind a system that performs tasks or makes decisions. In the court context, this can result in predicting court processes or timelines or generating draft decisions. When decisions are made using a predictive algorithm, it is also referred to as automated decision-making.

machine learning can help analyze vast amounts of data, identify patterns, and predict outcomes. Although still a debate among the judges, Indonesian Constitutional Court recognized the value and is considering the AI tools being introduced to enhance the efficiency of the justice delivery system – both in terms of quality and quantity. Currently, the courts have implemented the e-risalah, which is an AI-enabled transcription tool for conversion in courtrooms hearings/trials to written language.

3. E-filing of Cases

⁴ UNDP RBAP Emerging Technologies and Judicial Integrity in ASEAN, 2021

⁵ www.simpel.mkri.id

⁶ *Op.Cit.* UNDP RBAP

The use of e-filing can make the process of filing cases faster, more efficient, and cost-effective. E-filing can help reduce the time taken for filing, improve data accuracy, and eliminate the need for physical presence in court. For example, the e-filing portal of the Indonesian Constitutional Court enables lawyers and applicants to file cases and access case records online, namely the case-tracking system.

4. Video Conferencing for Hearings

The use of video conferencing can help in conducting hearings remotely, making it easier for lawyers and litigants to participate in the judicial process. Video conferencing can save time and money, reduce travel burdens, and ensure all participants' safety and security. For example, during the Covid-19 pandemic, the Indonesian Constitutional Court started using video conferencing to conduct virtual hearings, which is called the SmartBoard system. The SmartBoards are available in 50 universities around Indonesia and 3 regions that is granted “Desa Konstitusi” stature in cooperation with the Indonesian Constitutional Court.

5. Chain of Authority for Secure Record-Keeping

Chain of Authority technology can help ensure court records' security and transparency.

The use of *chain of authority* can help prevent tampering, maintain data integrity, and ensure that court records are secure and accessible only to authorized users.

It is undeniable that the huge positive impact of digital transformation is followed by challenges should be faced in the application of emerging technologies in the judicial system.

1. Data Security

With the increasing amount of sensitive data being collected by the judicial system, it is crucial to ensure that this data is kept secure. Any data breaches could compromise the justice system's integrity and undermine public trust.

2. Bias and Discrimination

Emerging technologies such as Machine learning may inadvertently perpetuate bias and discrimination if the algorithms are not designed carefully. There is also the risk that these technologies could amplify existing biases and inequalities in the justice system.

3. Lack of Understanding

Many legal professionals may not have the technical expertise required to fully understand the capabilities and limitations of emerging technologies. This could lead to misunderstandings about how these technologies should be applied, resulting in ineffective or inappropriate use.

4. Privacy Concerns

The use of emerging technologies could potentially violate privacy rights. For example, facial recognition technology could be used to identify individuals without their consent, and there is a risk that this technology could be misused by law enforcement or other organizations.

5. Cost

The implementation of emerging technologies can be expensive, and the judicial system may not have the resources to invest in these technologies. This could limit the potential benefits that these technologies could bring to the justice system.

6. Ethical Considerations

Several ethical considerations need to be taken-into-account when implementing emerging technologies in the judicial system. There is also concern with respect to the lack of the human element or ‘conscience’ required for the act of judging. For example, it is essential to ensure that these technologies do not compromise individuals' rights or undermine the justice system's integrity.

The Indonesian Constitutional Court should provide the following things in order to realize substantive justice for all citizens.⁷ *First*, the implementation of ethical considerations. Emerging technologies can have ethical implications, and the judicial system needs to ensure that these technologies are being used in a way that is consistent with ethical standards. *Second*, the effort to protect data Privacy and Security. Emerging technologies such as Internet of Things (IoT) rely heavily on data collection, and it is vital to ensure that this data is being collected and used in a way that is compliant with data privacy and security regulations. *Third*, ensuring accessibility for all *Justitia bellen*.⁸ The judicial system must ensure that emerging technologies do not create barriers to accessibility for individuals with disabilities or those with limited access to technology.

⁷ Saldi Isra, “Peran Mahkamah Konstitusi Dalam Penguatan Hak Asasi Manusia Di Indonesia,” *Jurnal Konstitusi* 11, no. 3 SE-Articles (May 20, 2016): 409–27, <https://doi.org/10.31078/jk1131>.

⁸ Agusti Carrilo, *E-Justice: Using Information Communication Technologies in the Court System* (New York: Information Science Reference, 2009).

Fourth, ensuring that the use of emerging technologies must be transparent and subject to accountability measures to ensure that they are being used fairly and justly. It can be daily accessed from the mkri.id. *Fifth*, providing training and education. The judicial system must ensure that judges, lawyers, and other stakeholders are adequately trained and educated on the use of emerging technologies to ensure that they are being used effectively and appropriately.

The emerging of technologies in the Indonesian Constitutional Court judicial system has provided substantive justice for all *Justitia bellan* in all over Indonesia, especially those who live in the remote area and has no any facilities to access the court directly.

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UNDP RBAP Emerging Technologies and Judicial Integrity in ASEAN, 2021

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