



Centurion  
UNIVERSITY

Shaping Lives...  
Empowering Communities...

# Centurion Journal of Business, Economics and Social Science

Vol.2 | Issue 1 | June 2025

## Judiciary 2.0: Transforming The Future of Justice Through E-Courts and Virtual Hearings

**Girish Ranjan Sahoo**

Senior Assistant Professor, School of Law, CUTM Bhubaneswar, Odisha

girishranjan.sahoo@cutm.ac.in

**Srutakirti Panda**

Ph.D. Research Scholar, Faculty of Legal Studies, SOA National Institute of Law, Siksha  
'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India

srutakirtipanda.sp@gmail.com

**Khuku Milan Choudhury**

Ph.D. Research Scholar, Faculty of Legal Studies, SOA National Institute of Law, Siksha  
'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India

satishchoudhury851@gmail.com

### Abstract

The advent of the digital revolution has profoundly influenced numerous sectors, including the judiciary. The incorporation of digital technologies within the judicial framework denotes a significant evolution in the administration of justice, enhancing accessibility, efficiency, and transparency. The transition from conventional courtrooms to digital platforms has been characterized by the researchers here, as the beginning of the judiciary 2.0 era. The implementation of e-courts and virtual hearings has fundamentally transformed traditional judicial processes by enhancing case management efficiency, curtailing delays, and facilitating remote participation. Nonetheless, such transition introduces several challenges, such as concerns regarding data privacy, digital literacy, the preservation of procedural fairness, and the reformation in legislative frameworks to govern online judicial processes. The development of e-courts and virtual hearings represents not merely outcome

to modern challenges but rather a progression toward more robust and inclusive judicial structure. This research critically analyses the evolution of Judiciary 2.0, assessing its effects on due process, and the autonomy of the judiciary. This study assesses the efficacy of virtual hearings, particularly in the wake of the COVID-19 pandemic, which necessitated a rapid digital transition in court proceedings. It also seeks to examine international best practices and legal advancements, with the objective of offering insights into the future of digital justice and proposes recommendations for the efficient and fair implementation of e-courts and virtual hearings. This study highlights that although Judiciary 2.0 presents significant potential for the modernization of legal systems, its effectiveness depends on a measured strategy that protects due process and fundamental rights while integrating technological innovations. The findings aim to contribute to the ongoing discourse on the future of digital justice and the role of courts within a progressively virtual environment.

**Keywords:** Cybersecurity, Digital transformation, E-courts, Judicial efficiency, Technological advancements, Virtual hearings

## 1. Introduction

The right to access justice signifies as a core principle enshrined in the Constitution of India, ensuring that all individuals possess the legal authority to seek and obtain remedies for violations of their rights, regardless of their socioeconomic status, race, or gender. The Supreme Court of India, in the instance of Anita Kushwaha case [1], determined that access to justice constitutes a fundamental right as outlined in the Constitution of India, particularly within articles 14 and 21. This acts an essential role in promoting transparency, guaranteeing accountability, and upholding the rule of law within governance structures. The accessibility of legal resources and mechanisms empowers individuals to assert their rights, resolve conflicts amicably, and seek remedies for any injuries they may have endured. Nonetheless, numerous countries face

challenges in achieving comprehensive access to justice due to deficiencies in judicial infrastructure, inadequate resource allocation, and a widespread lack of public awareness regarding their legal rights. The importance of guaranteeing access to justice has been recognized by the global community, as evidenced by numerous international instruments, such as the ICCPR<sup>1</sup> and the UDHR<sup>1</sup>. Ensuring broad access to justice is vital for protecting human rights, fostering social justice, and building a unified and secure society.

The principle of access to justice is a foundation of any legal system, ensuring that all individuals have an avenue to seek and attain justice, irrespective of their socio-economic background or personal attributes. This principle serves as a fundamental element in maintaining justice, equity, and the core principles of the rule of law. [2]

Nonetheless, various impediments obstruct the application of justice, such as financial limitations, a lack of legal comprehension and literacy, geographic barriers, cultural and linguistic issues, along with inherent prejudices and inequalities present within the legal system. Whereas, addressing these challenges is essential for the development of an equitable and comprehensive legal framework, the digital transformation of judiciary is the master key. The advent of the digital era has significantly altered numerous facets of society, including the justice system. The adoption of electronic courts has become an essential component of the legal systems across several countries. [3]

E-courts represent their capabilities, especially in economically disadvantaged nations encountering obstacles associated with constrained judicial resources and infrastructure. Moreover, in COVID-19 epidemic situation, e-courts have turned out to be crucial by facilitating the continuation of legal proceedings while concurrently minimizing the danger of virus transmission.

In spite of this, the implementation of e-courts exhibits a number of various challenges also. Concerns regarding the protection of the confidentiality, privacy and security of court records are among the most important issues that need to be addressed. Another obstacle that needs to be addressed is the problem of ensuring that the electronic court system is

accessible to everyone, particularly for people who do not have access to the internet or other technological devices.

The current paper has aimed to analyse the evolution of such e-courts and virtual hearing technology along with the pros and cons of the same in different jurisdictions along with recommendations for effective implementation of digital justice delivery system.

## **2. Objectives**

The aims of this research are as follows:

- To study the evolution of E-courts and virtual hearings on judicial efficiency and accessibility.
- To analyse the pros and cons associated with digital transformation in the judiciary.
- To explore global best practices in digital justice and their applicability to different legal systems.
- To provide recommendations for the effective implementation of Judiciary 2.0.

## **3. Methodology**

- Research Design- This study incorporates a doctrinal legal research methodology, concentrating on a comprehensive analysis of the collected data.
- A comparative analysis- This study also employed a comparative analysis to analyse global best practices in digital

justice and their applicability to different legal systems in different jurisdictions.

- Sources of Data-
  - The primary sources of data include statutes, regulations, and pertinent judicial decisions from Indian courts.
  - The secondary sources of data include books, scholarly articles, legal commentaries, and reports.

#### **4. The Future of Justice: E-Courts and Virtual Hearings**

##### **4.1 History and evolution of E-Courts and Virtual Hearings**

A significant shift in the administration of justice has ensued through the advancement of e-courts and virtual hearings. This shift is particularly a response to the advancements in technology and the requirements of society. The concept of virtual courts is not completely novel, India's journey toward digital judiciary started with the initiatives of the National Informatics Centre (NIC) in the 1990s, which laid the groundwork for digitizing court records. Its origins can be traced back to earlier conversations about the function of technology in the legal system. It is possible to trace the earliest reference back to the year 1997, when Professor Frederick I. Lederer discussed the possibility of courtrooms functioning as information hubs, thereby

facilitating the exchange of data through the use of high technology.<sup>1</sup>

The Indian judiciary, recognized as one of the most extensive judicial systems globally, and the irony is it has been confronted with a significant backlog of cases, with millions remaining unresolved across numerous courts. The conventional judicial framework, dependent on in-person proceedings and substantial documentation, frequently results in postponements in the administration of justice. In this context, the implementation of E-Courts and Virtual Hearings is crucial for enhancing accessibility, efficiency, and transparency within the judicial process. The ongoing digital transformation within the judiciary, bolstered by technological advancements, seeks to establish a legal system that is more efficient, economical, and accessible for the populace.

The establishment of e-courts serves a fundamental purpose, to alleviate the backlog of cases. The Indian judiciary confronts significant challenges with a backlog of cases, where in-person hearings frequently result in avoidable delays stemming from scheduling conflicts, lawyer unavailability, and procedural inefficiencies. Virtual hearings facilitate an expedited judicial process by allowing judges to preside over cases from various locations without necessitating physical presence, thus minimizing adjournments and fostering a more rapid resolution of cases. This approach not only facilitates the resolution of outstanding cases but also

guarantees that new cases are addressed promptly and without unnecessary postponement.

One significant benefit of e-courts is finding easy access to justice by individuals residing in any remote and rural regions. A significant number of individuals encounter challenges in participating in hearings, attributable to considerable distances, economic limitations, or insufficient legal infrastructure within their locality. Virtual hearings enable litigants, attorneys, and witnesses to engage in court proceedings from any location, thereby enhancing the inclusivity of the legal system. This is especially advantageous in situations concerning women, elderly individuals, and persons with disabilities who might encounter challenges in attending court proceedings in person.

The cost-effectiveness of electronic courts represents a crucial element influencing their essentiality. Conventional judicial proceedings frequently necessitate that involved parties incur costs related to travel, lodging, and various additional expenditures. The transition to a virtual mode facilitates significant savings in both time and financial resources for litigants, thereby enhancing the accessibility and affordability of the justice system. Legal practitioners and their clients are now able to engage through online platforms, facilitating the digital submission of evidence and thereby minimizing logistical challenges. Furthermore,

electronic courts facilitate a judiciary that operates without reliance on paper, thereby reducing the volume of paperwork, safeguarding documents against loss or damage, and promoting environmental sustainability.

The COVID-19 epidemic underscored the significance of virtual courts. In response to lockdowns and limitations on in-person gatherings, the judiciary promptly transitioned to virtual proceedings, thereby guaranteeing that pressing cases, such as bail hearings, criminal issues, and public interest litigations, continued to be addressed. The pandemic demonstrated the efficacy of a digital legal system, leading the judiciary to persist in the integration of technology into routine proceedings, even following the lifting of restrictions.

Furthermore, virtual courts promote enhanced transparency and efficiency within the judicial system. The live-streaming of significant cases and the digital recording of proceedings serve to bolster accountability and foster public trust in the legal system. The inclusion of automated case supervision systems, digital filing processes, AI-assisted legal research etc. significantly improves judicial efficiency by minimizing human errors and mitigating administrative delays.

While there are many aids, it is essential to confront challenges such as internet connectivity issues, cybersecurity concerns, and the digital divide to ensure

the effective implementation of e-courts. Enhancing digital infrastructure, delivering adequate training to judicial officers and legal practitioners, and safeguarding data security will be crucial for the efficacy of virtual courts.

However, the shift towards e-courts and virtual hearings has evolved from a mere possibility to an essential requirement for the judicial system in India. Utilizing technological advancements, the judiciary has the potential to provide justice that is timely, cost-efficient, and accessible to all, thereby reinforcing the rule of law within the nation.

The e-Courts project in India, initiated under the "National Policy and Action Plan for the incorporation of Information and Communication Technology (ICT) in the Indian Judiciary – 2005,"<sup>1</sup> constitutes a substantial endeavour aimed at enhancing the Indian legal system via the incorporation of technological advancements. The e-Committee of the Supreme Court of India, launched in 2004, has been instrumental in formulating this policy and directing the integration of technological innovation within Indian judiciary.

The project has experienced multiple stages since its initiation:

- Phase I (2007-2014): The initiative aimed at modernizing district courts encompassed the creation of judicial facilities, data management hubs, and legal service centres, all within

a financial framework of Rs. 639 crores<sup>1</sup>. In 2010, the project received approval to encompass 14,249 courts, leading to the establishment of the e-Courts National portal in 2013, which offered vital case-related information.

- Phase II (2015-2020): In 2014, a budget of Rs. 1670 crores were sanctioned for this phase, which sought to augment judicial services by advancing the technological infrastructure. It is significant to note that the inaugural e-court in India was established in Hyderabad in the year 2016. In 2020, October 30 marked the opening of "Nyay Kaushal," India's first e-Resource Centre, in the city of Nagpur, Maharashtra. [4] It makes it easier for lawyers and litigants to use e-Court services online by allowing electronic filing in the Supreme Court, High Courts, and District Courts.
- Phase III (2023): Union Cabinet has recently granted approval for this phase, which is projected to extend over a period of four years with a financial allocation of Rs. 7210 crores. The initiative seeks to create paperless courts through the digitization of records and the advancement of e-filing and e-payments.

The e-Courts initiative embodies a thorough approach to utilizing information and communication technology to improve access to justice and enhance operational efficiency. In response to the necessity for educating judicial officers and court personnel, the e-Courts project also executed a "Change Management exercise"<sup>1</sup>. This initiative sought to enhance the capabilities of judicial officers and court personnel through training in computer utilization and the Case Information System (CIS).

However, despite of such technological arrangements the total number of unresolved cases, which included over 180,000 cases that had been pending beyond 30 years in district and high courts, surpassed 51 million or 5.1 crores in 2024<sup>1</sup>. This figure includes all types of cases at all levels. More than 87 percent of the cases, or 4.5 crore out of 5.1 crore, are still pending in district courts as of the year 2024 which is a matter of concern.

E-courts and virtual hearings are still in the process of being governed by a legislative framework that is still in the process of developing, with existing laws frequently struggling to keep up with the rapid advancements in technology. Digital judicial procedures in India are supported by the Information Technology Act of 2000 as well as procedural legal statutes of the Indian Evidence Act, 1872 and the Code of Civil Procedure, 1908. These laws provide the legal foundation for digital judicial procedures. On the other hand,

these laws were not initially drafted with the intention of addressing the complexities of virtual courtrooms. As a result, there are ambiguities concerning the admissibility of electronic evidence, challenges connected to jurisdiction, and concerns regarding cybersecurity. There is a lack of comprehensive regulations that are specific to e-courts, which leads to inconsistent implementation across different jurisdictions. This creates barriers to uniform access to digital justice. In addition, the laws that protect data continue to be insufficient when it comes to addressing concerns regarding privacy and confidentiality in online judicial proceedings. It is possible that Judiciary 2.0 will result in operational inefficiencies and potential threats to the integrity of the judicial system if robust legal reforms and standardized digital court procedures are not implemented.

#### **4.2 Technological advancements in legal proceedings**

The advancement of technology is fundamentally transforming the judicial framework in India, facilitating the digitization of processes and promoting enhanced efficiency and transparency in judicial proceedings. The modernization of the such digital justice systems in a number of countries has resulted in the adoption of best practices of the technological tools, which have ensured transparency and inclusivity while simultaneously maintaining security and privacy. The extent to which these

practices are applicable alters according to the legal traditions, infrastructure, and governance frameworks that are in place. However, a number of factors, including the characteristics of the legal system, the technological infrastructure, and the readiness of regulatory bodies, influence the adoption of best practices for digital justice. Procedural flexibility is advantageous for common law jurisdictions, whereas civil law jurisdictions might need to make adjustments to their structure. Access to justice, judicial efficiency, and legal transparency can all be improved, globally, through the effective implementation of these practices.

In past few years, India's judicial system has undergone significant technological advancements, which have been witnessed by the country. Among the most important trends is the digitization of records. Projects such as the National Judicial Data Grid<sup>1</sup> have made millions of case records available online, which has contributed to increased accountability and transparency. The COVID-19 epidemic was a key contributor to the widespread use of virtual hearings in Indian courts. This was due to the fact that social distancing requirements necessitated remote dispute resolution. Within the Indian legal system, the pandemic brought to light the potential of technological tools that are not being utilized to their full potential and alternative work models, such as virtual hearings. In *Krishna Veni Nagam* case [5], the Supreme Court of India gave its

approval to the use of video-conferencing for the purpose of making decisions regarding matrimonial cases. Nevertheless, the course of action was only temporary. The decision to livestream the proceedings of the court is a step toward ensuring that the court is open and transparent. Though in *Santhini v. Vijaya Venketesh* case [6], the Supreme Court directed that personal presence in matrimonial cases is essential, and video conferencing should not be the norm unless both parties' consent. However, dissenting judges highlighted the importance of digital alternatives in reducing logistical burdens. Back in the lane, in *Hussainara Khatoon* case [7], The Supreme Court of India held that speedy trial is a fundamental right under Article 21 and that courts must adopt modern methods to prevent unnecessary delays. This ruling laid the foundation for future judicial reforms, including digital case management and in *All India Judges' Association v. Union of India* [8], Court emphasized the need for judicial digitization, ruling that courts must adapt to evolving circumstances while ensuring procedural fairness. It reiterated the judiciary's constitutional duty to reduce backlogs and expedite case resolution whereas, in *Amitabh Bagchi* case [9], Calcutta High Court ruled that video conferencing is a cost-effective method that prevents unnecessary delays and ensures judicial efficiency, recognizing its validity in civil proceedings.



An Artificial Intelligence Committee has also been established by the Supreme Court to investigate ways in which AI can enhance the efficacy of the judicial adjudication process and the decision-making process.

Likewise, in *Arnab Manoranjan Goswami v. State of Maharashtra* [10], when issue arise regarding whether urgent matters can be heard virtually or not, the Supreme Court of India itself emphasized that matter relating to bail applications and habeas corpus petitions must be prioritized in virtual hearings, reinforcing the importance of digital access to justice. However, in *Smti. Jothi Sahi* case[11], the

Meghalaya High Court held that virtual hearings must be allowed whenever physical presence is difficult, ensuring continuity of justice during crises like pandemics.

According to Justice D.Y. Chandrachud, the former Chief Justice of India, more than 1.78 crore cases in India have been resolved via virtual hearings in e-courts, with a total of 19.2 million cases being conducted virtually across High Courts and District courts as of April 2022, as per the available data. [12] The figure 1 below, depicts the Number of cases attended through Video Conferences throughout India. [13]

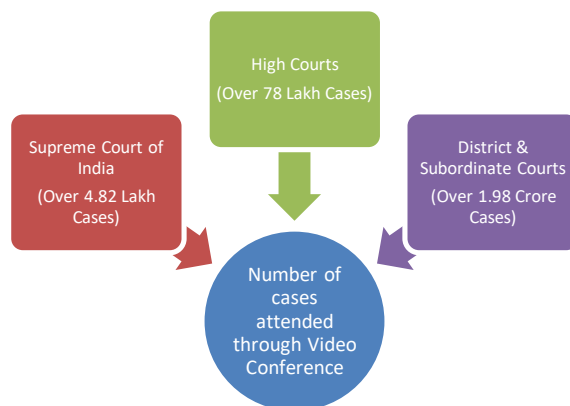


Figure 1: Number of cases attended through Video Conference

In recent era, the e-courts and online virtual hearings have been successfully incorporated into the legal systems of a number of republics, including the U.S.A., India, the U.K., Singapore, etc. among others as depicted in the table 1 below<sup>1</sup>. In order to address the challenges that are

associated with digital infrastructure, legal frameworks, and cybersecurity, every nation has gone about implementing their own distinct strategies. In contrast to the Supreme Courts of various other nations, the Supreme Court of the United States has managed to adjudicate a larger volume of

cases. From 5<sup>th</sup> of February to 29<sup>th</sup> of April, 2020, the United Kingdom Supreme Court has resolved 18 cases, while the Supreme Court of United States has put off 28 cases in between 24<sup>th</sup> of February to 27<sup>th</sup> of April, 2020 [14]. This information

is based on reports. The Indian Courts have, therefore, been able to accomplish a great deal more within the constraints of their limited resources, despite the fact that they have been confronted with circumstances that are almost identical.

**Table 1: Formats of E-Courts and Virtual Hearings Around the World**

<i>Country</i>	<i>Virtual Hearings</i>	<i>AI Usage</i>	<i>E-Filing</i>	<i>Blockchain</i>	<i>Key Challenges</i>
<i>United States</i>	Widely used (Zoom, Webex)	AI in case management	PACER & CM/ECF	Not mainstream	Cybersecurity, access issues
<i>United Kingdom</i>	Cloud Video Platform	AI transcription	Digital Case System	Not mainstream	Digital exclusion
<i>Canada</i>	Zoom/Webex	AI legal research	E-filing in most provinces	Testing phase	Uneven implementation
<i>Australia</i>	Microsoft Teams	AI case analysis	Paperless courts	Not mainstream	Indigenous access
<i>EU</i>	Cross-border hearings	AI legal assistance	e-Justice Portal	Some use	Integration challenges
<i>China</i>	AI-powered smart courts	AI judges	Nationwide digital courts	Recognized	AI transparency, privacy concerns
<i>Singapore</i>	Fully digital courts	AI in case management	Mandatory e-filing	Limited use	Cost, AI bias
<i>India</i>	Webex, Zoom	AI in experimental phase	E-courts portal	Not yet implemented	Infrastructure, digital literacy

India has the potential to improve its e-court system through the integration of AI-assisted legal research and transcription, drawing on successful implementations observed in jurisdictions such as the UK, Singapore, and Canada, thereby facilitating more efficient case analysis and documentation. The implementation of blockchain technology for evidence submission, exemplified by practices in China, has the potential to enhance the authenticity and security of digital records. Implementing a standardized approach to video conferencing platforms within the judicial system, akin to practices observed in the US and UK, would promote uniformity and enhance accessibility across all tiers of the judiciary. Furthermore, India ought to transition to a system of paperless court filing and digital case management, similar to the practices observed in Australia and Singapore, in order to enhance efficiency and mitigate delays. To fully actualize these advancements, it is imperative for India to confront the existing infrastructure deficiencies in rural courts, facilitate training for judges and lawyers regarding digital tools, and enhance cybersecurity legislation to safeguard sensitive court records against potential threats.

## **5. Judiciary 2.0: Pros and Cons**

### **5.1 Benefits**

The emergence of electronic courts and virtual hearings presents several benefits that notably enhance the effectiveness,

easy access, and accountability of the legal process. The Supreme Court and High Courts have proficiently sustained their functions in an online format during the COVID-19 pandemic.

- E-courts and virtual hearings improve access to justice by enabling citizens to file cases, track status, pay fees, and access legal documents online. This eliminates the need for citizens to physically visit the courthouse.
- The digitization of court processes streamlines case management, reduces the amount of paperwork involved, and speeds up the resolution of cases, which ultimately results in fewer delays in the judicial system.
- Provided that litigants and legal representatives have the ability to monitor their cases from any location and at any time, online access to case-related information, which includes court orders and judgments, promotes transparency.
- The elimination of travel costs and the requirement for physical submissions, which results in significant time and cost efficiencies in the legal process, is one of the ways that online case filing helps to reduce the financial burden that litigants are under.
- The transition to electronic filing and a paperless judicial environment

reduces the amount of paper that is used, which makes a positive contribution to environmental sustainability while also making it easier to automatically digitize case records.

- Interoperable Criminal Justice System: Electronic courts make it easier for information to be shared between different branches of the state, such as the judicial system, the police, and the prison system, by utilizing the Interoperable Criminal Justice System (ICJS).
- In the realm of judicial oversight and management, judicial officers have the ability to utilize a variety of

## 5.2 Challenges

While e-courts and virtual hearings offer a multitude of advantages, various obstacles impede their successful implementation and broader acceptance.

- It is difficult for marginalized communities to effectively participate in virtual court proceedings because a sizeable portion of the population does not have access to dependable internet and essential devices. This is the impact of the digital divide.
- It is necessary to improve the technological infrastructure in many regions of India in order to support electronic courts. This includes ensuring that internet connectivity is reliable, upgrading both hardware

tools in order to effectively manage their courts, maintain oversight of pending cases, and access digitized case records. This helps to ensure that court operations are carried out in an efficient manner.

- A further improvement in convenience and efficiency in the legal process, virtual hearings allow citizens to verify hearing dates and access court judgments online. Virtual hearings reduce the need for in-person consultations between clients and legal representatives, which further enhances the convenience and efficiency of the legal process

and software, and providing training for judges, attorneys, and other court personnel.

- There is a significant lack of digital literacy among judges, court personnel, and legal practitioners, which hinders their ability to comprehend and make effective use of digital technology in the legal process. This is referred to as the "digital literacy."
- It is essential for the successful operation of electronic court systems to implement training programs and workshops that aim to improve the digital skills of judges, attorneys, and other court personnel.
- In order to protect individuals' privacy and reduce the risks

associated with hacking and other cybersecurity threats, it is necessary to implement stringent data security protocols when dealing with sensitive legal information.

- It is essential to address concerns and promote acceptance of electronic courts because there is a possibility that the transition from traditional court proceedings to electronic courts will be met with resistance from a variety of stakeholders at some point.
- The legal framework that governs electronic courts needs to be updated in order to address challenges to electronic evidence, authentication, and document admissibility. This will make sure that individuals with disabilities are able to access courts.
- The establishment of advanced electronic courts necessitates a substantial investment in technology as well as the resolution of ongoing problems such as the availability of electricity and internet connectivity. In order to improve access for underserved communities, E-Seva Kendras are going to be established in local court complexes.

## 6. Recommendations

After analysing all the pros and cons here are some recommendations that the authors intend to highlight upon,

for the effective implementation and smooth functioning of e- courts and virtual hearing.

- E-Courts: A Comprehensive Strategy for Online Administration A multifaceted approach that takes into account technological, legal, and social dimensions is required for the successful implementation of electronic courts and virtual hearings. This is necessary to ensure that judicial procedures are carried out within an efficient manner.
- In order to ensure that underrepresented communities have equal access to electronic court systems, it is essential to improve internet access and provide devices to those communities. Further improvement of access to legal services can be attained through the establishment of e-Sewa Kendras within court complexes.
- Connectivity to the internet that is dependable and cutting-edge hardware and software are both essential components of the technological infrastructure. While the digitization of court records is essential for the transition to a paperless judicial system, the adoption of cloud technology can make it easier to

access case information in real time.

- In order to make effective use of electronic court systems, regular training in information and communication technology (ICT) skills is required for judges, lawyers, and other court personnel. It is absolutely necessary to put in place stringent security measures, such as encryption and access controls, in order to safeguard sensitive legal information.
- It is necessary to amend legal frameworks in order to address the issues that are caused by online proceedings, particularly with regard to electronic evidence. For this reason, it is necessary to amend legal frameworks. Platforms for electronic courts ought to give accessibility a higher priority and incorporate assistive technologies in order to ensure inclusivity.
- It is essential to conduct public campaigns that educate citizens about the advantages of electronic courts in order to establish trust in the process of judicial administration. Continuous education for legal practitioners on the use of digital tools is also an important aspect.

- The utilization of alternative dispute resolution strategies has the potential to improve the effectiveness of case management. The transparency of the judicial process can be improved through the use of live streaming of court cases.
- For the purpose of providing assistance to users, it is essential to both establish dedicated IT support teams and grievance redressal systems. An increase in data sharing and consistency will result from the implementation of e-court procedures that are uniform across all jurisdictions. When it comes to evaluating the efficacy of electronic courts and adjusting to technological advancements, key performance indicators and feedback systems are essential components.

The adoption of these recommendations will allow the judicial system to significantly improve accessibility, efficiency, transparency, and equity in the administration of justice. This will be accomplished through the utilization of e-courts and virtual hearings if they are utilized effectively.

## **6. Conclusion**

In summary, the incorporation of e-courts and virtual hearings signifies a notable evolution in the quest for justice, indicating a transition towards a new era of

judicial processes. This development utilizes technology to enhance accessibility, efficacy, and transparency in legal system. Virtual courts, designed to reduce the necessity for in-person attendance, have proven effective in adjudicating minor disputes and motor vehicle violations, providing a practical means for case resolution. The advantages of electronic courts and virtual hearings are numerous. They minimize expenses related to travel and infrastructure, conserve time, and alleviate the pressure of outstanding cases. The digitization of court records and processes enhances transparency and facilitates the smooth exchange of information across various branches of the State. Virtual proceedings have demonstrated their significant value during crises such as pandemics, facilitating the ongoing operation of justice system. Nonetheless, the journey toward fully actualizing the potential of Judiciary 2.0 presents a series of challenges. The disparities in digital access, constraints imposed by technology, and the imperative for improved digital literacy among various stakeholders present considerable challenges. Concerns regarding data security, reluctance to embrace change, and the imperative for modernized legal frameworks necessitate thorough examination. Through the examination of these challenges and the application of the proposed strategies, electronic courts and virtual hearings have the potential to facilitate a justice system that is more

accessible, efficient, and transparent. Embracing Judiciary 2.0 represents a dedication to utilizing technology in a manner that serves the public interest, fundamentally reshaping the future of justice for the advantage of all stakeholders involved. There has been a revolutionary change in the legal landscape brought about by Judiciary 2.0, which offers improved efficiency, accessibility, and transparency in proceedings of justice delivery system. Despite the fact that e-courts and virtual hearings have brought about a revolution in the legal system, there are numerous hindrances that need to be curb to guarantee their efficiency. The implementation of robust digital infrastructure, cybersecurity measures, and legal frameworks are all examples of how Judiciary 2.0 has the potential to pave the way for a legal system that is more equitable and efficient. To safeguard the ultimate values of fairness, transparency, accessibility is maintained throughout the digital transformation process, the future of justice will be determined by the successful integration of technology with legal principles.

## References

- Anita Kushwaha v Pushap Sudan, (2016) 8 S.C.C. 509
- Galanter, Marc S. and Krishnan, Jayanth K, Bread for the Poor: Access to Justice and the Rights of the Needy in India, 55 Hastings L.J., 2004, 789.

- Waseem, Sharma A., and Dr. Kumar A., Transforming Access to Justice in the Digital Age: The Role of E-Courts, NUJS Journal of Regulatory Studies, Vol VIII, Issue II, pp- 43-57.
- E- court Mission Mode Project, Press Information Bureau, Government of India, Ministry of Law and Justice, 5<sup>th</sup> Aug, 2022
- Krishna Veni Nagam v. Harish Nagam, AIR 2017 SC 1345
- Santhini v. Vijaya Venketesh, AIR 2018 SC 745
- Hussainara Khatoon v Home Secretary, State of Bihar (1980) 1 SCC 98
- All India Judges' Association v. Union of India (2002) 4 SCC 247
- Amitabh Bagchi v. Ena Bagchi, AIR 2005 Cal 69
- Arnab Manoranjan Goswami v. State of Maharashtra, AIR 2020 SC 7252
- Smti. Jothi Sahi v. Union of India, WP No. 640 of 2020, Meghalaya HC
- Harris, J., Access to justice: India leads post-Covid shift in courts' use of technology, International Bar Association, (The global voice of the legal profession), 2022.
- E-Courts Integrated Mission Mode Project, Ministry of Law & Justice, September 22, 2023
- Sarda K., Virtual hearing: India's Supreme Court way ahead than many counterparts, The New Indian Express, 2020.
- Ghorpade, A., E-Courts Project and Reforms in Judiciary. Jus Corpus LJ, 2021, 2, 681.
- Pyrohovska, V., Holota, N., Kolotilova, T., Hreku, A., & Kroitor, V., E-justice and the Development of Justice: Strengths, Challenges and Prospects. Lex Humana, 2024, ISSN 2175-0947, 16(1), 426-442.
- Baladhikari, S. K., Use of Technology in Access to Justice. Indian JL & Just., 2020, 11, 269.
- Ashwathappa, A., Kaul, A., Muthian, C., Verghese, L., PR, S., Naik, S., & Prakash BS, S., Video Conferencing in Indian Courts: A Pathway to the Justice Platform. Video Conferencing in Indian Courts: A Pathway to the Justice Platform, 2020.
- Zafar, P., Anjum, R., & Barkat, A., eCourts: A New Dawn for The Timely Dispensation of Justice. UCP Journal of Law & Legal Education, 2023, 2(1), 107-129.
- Ahmed, R. K., Muhammed, K. H., Pappel, I., & Draheim, D., Impact of e-court systems implementation: a case study. Transforming Government: People, Process and Policy, 2021, 15(1), 108-128.
- Hasan, M. I., & Mia, B., Initiation of virtual court system during COVID-



- 19 pandemic and e-judiciary: challenges and way forward. *Daengku: Journal of Humanities and Social Sciences Innovation*, 2021, 1(1), 8-17.
- Chauhan, S. D., E-Hearings in Indian Courts: Issues and Perspectives. *Turkish Online Journal of Qualitative Inquiry*, 2021, 12(8).
- Chatterjee, S., Virtual Hearing Platform: The Use of Technology to Ensure Access to Justice. *Issue 5 Int'l JL Mgmt. & Human.*, 2022, 5, 503.
- Dryland, E., & Siregar, H., The Impact of Technology Developments on Legal Practice: Challenges for Advocates in the E-Court Era. *Golden Ratio of Data in Summary*, 2025, 5(1), 15-22.
- Saxena, P., Technological Innovations in India's Legal Sector for Access to Justice During and Post Pandemic. *Law and Development Review*, 2024, <https://doi.org/10.1515/ldr-2024-0010>