

Original Article ISSN (Online): 2582-7472

# MODERNIZING INDIA'S LEGAL SYSTEM: THE NEED OF ELECTRONIC SYSTEM IN CASE MANAGEMENT AND E-COURTS

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#### DOI

10.29121/shodhkosh.v5.i6.2024.301

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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## **ABSTRACT**

The study aims to demonstrate the Indian Supreme Court's e-court initiatives to enhance justice. Further ways include the digitalisation of case files, the development of online venues for online dispute resolution, and the facilitation of video conferencing. The goal is to reduce case backlogs, increase accessibility, and promote transparency. However, the technology also creates a digital divide, separating those without access. The judiciary must balance technological investments with closing the digital gap to ensure accessibility and effectiveness. Challenges include missing data and standardisation, as well as poor data quality due to a lack of systematic reviews and capacity building. The e-Courts project has transformed India's judicial system, improving case management, openness, and security for attorneys and clients. Accessibility and inclusivity must be prioritised when designing and implementing e-court systems. The success of e-Courts depends on addressing technical issues, data breaches, and privacy concerns. A well-defined policy framework, collaboration with experts in data protection, law, and technology, and a strong security system are necessary to address these issues.

**Keywords:** Virtual Courts, Judiciary, Technology, E-Courts, Online, Legal System

JEL Classification: K0, K1, K3, K4

## 1. INTRODUCTION

To begin with, the e-Courts initiative by the Indian Supreme Court aims to improve justice and reduce the number of cases in the judicial system. The e-Courts initiative has preserved and digitalised case documents, enabling courts and inmates to hold video conferences. As we shall see, the study proposes that, in addition to the e-Courts project, new services be developed in order to optimise the use of computer technology. However, one of these new services may be an online dispute resolution system. Second, using technology will make the legal system more transparent and accessible. Along with giving real-time information on ongoing cases, the endeavour has also resulted in digitalisation, archiving, and video conferencing. Nonetheless, we need to make the most of the current technology infrastructure beyond the purview of the e-Courts initiative. Following this, the e-Courts project is being implemented by the Supreme Court to improve the technology capabilities of the judiciary. To be more specific, the goals are to decrease case backlogs,

increase accessibility, particularly for the underprivileged, and promote transparency. Furthermore, by granting access to information from subordinate courts, India's e-court technology has greatly increased judicial openness. Conversely, technological advancements make the judicial system more effective. They also cause a digital divide that separates those without access to it even more. To conclude, the judiciary must keep up its technological investments while also figuring out how to close the digital gap. The advantage of this strategy is that it strikes a balance between accessibility and technological improvement. The Indian judiciary offers an alternate viewpoint, arguing that this can actually act as a model for other nations looking to advance their legal systems. Moreover, depending too much on technology might eliminate the human component of justice and result in choices that are made only using data and programs

#### 2. SCOPE OF THE REVIEW

Another problem with e-courts is that academics have to deal with problems like missing data and standardisation, which make the data less usable. More specifically, the lack of regular capacity building and quality checks on data continues to be a serious challenge, which limits the data's use for research. Problems with missing section numbers and statute titles, inconsistent case classification terms, erroneous data input, and incorrect case subcategories and statute names are also common, as will be discussed later. The Indian Supreme Court admits some of these problems in spite of these obstacles. We will now discuss how the absence of systematic reviews and capacity building is the primary cause of the poor quality of data. Prior to this, India's intricate judicial system was being transformed by the citizen-centric e-Courts project. In the following section, we will discuss the problems of electronic filing, case management, and virtual hearings. Next, we will refer to the solutions to the problems, which are the implementation of new technology and online access to information. The last section will discuss the results of the solutions that have improved the e-court system's case management, openness, and security for the benefit of attorneys and clients.

### 3. PROBLEMS

### Difficulties in Electronic filing and case management

According to Mahibha and Balasubramanian (2020), the controversial e-Courts debate has brought attention to a citizen-centric initiative that is transforming India's complex legal system. This citizen-centric project aims to provide quick and affordable justice. Thus enhancing efficiency and transparency in the judiciary. The e-Courts process is crucial to the Indian judicial system, but there are still challenges in implementing it. For example, people find it difficult to engage in virtual court hearings in rural India, where internet connectivity is limited. Consequently, there will be more marginalization. Furthermore, algorithms that are utilised to make decisions run the danger of being biased. Here, the possibility of sustaining injustices against specific marginalised groups may be explored further. The efficacy and transparency of the judiciary have increased due to the rapid dissemination of information made possible by smartphones and high-speed internet. Consequently, the goal of e-courts is to swiftly and affordably provide justice in India's intricate legal system. A different viewpoint is provided by Soundari et al. (2022), who contend that by preserving the court's electronic data, the e-court system is a digital tool that improves judicial delivery. It offers easy access to case records, hearing dates, and verdicts, minimising data loss from hard copy damage. This viewpoint, however, ignores the reality that not everyone has access to technology. As previously mentioned, this might worsen disparities in legal representation that currently exist. In addition, depending too much on electronic data might leave courts vulnerable to hacking and cyberattacks, undermining the fairness of the legal system. Another concern is that the e-Court technology guarantees accurate data and easy access to case files. However, while putting e-Court technology into practice, one must consider the potential for technical issues, data breaches, and privacy issues...

As demonstrated before, those lacking access to conventional computer systems discover that mobile technology bridges the knowledge divide. For example, people living in rural or low-income regions can take part in court processes without having to travel great distances or negotiate complicated legal systems. This can guarantee that everyone, regardless of financial class or geography, has equal access to justice and help level the playing field. According to MacArthur (2024), one can now use a mobile device to attend court proceedings. However, this might possibly cause issues for those with little technological proficiency or those without access to stable internet connections. Even with the use of e-court technology, people still encounter obstacles while trying to obtain justice in some situations. In short, unexpected buttons and jargon unique to the legal system are among the usability issues with file and document management systems. Alternatively, confusion arises from users' incapacity to select between various document and file

types. This leads to delays in the legal process, particularly for those who are already at a disadvantage. It is evident that confusion results from users' inability to comprehend how their decision would affect their case and expenses. Therefore, people could make mistakes without the right assistance, which could seriously affect their legal processes. Furthermore, the need for users to download and re-upload PDFs across various platforms makes the PDF air gap a serious problem. It necessitates opening a new account and might be time-consuming. Focussing on the gap in PDF and the poor mobile interfaces makes the process more challenging. Moreover, mobile user interfaces might be low. Another significant difficulty is that file systems adhere to lower usability standards at their mobile width, which makes PDF download-uploading more difficult. This may cause people to lose hope, which would eventually cause them to lose faith in the e-Court system. As a result, courts frequently hold that once someone has an internet connection, the job is over. However, the experience is worse for users of mobile devices. Resolving these problems is essential to making file systems more user-friendly. The new generation of virtual courts has become the new norm for the judicial system, despite their challenges. In light of this, cutting-edge substitutes for conventional adversarial dispute resolution techniques that address concerns with expense and complexity include case management and e-court.

#### **Problems of Virtual hearings**

According to Ghorpade's (2021) argument, this contradicts the use of technology, especially artificial intelligence. Similarly, empower e-courts to focus on displacing juries and attorneys from physical courtrooms. This move is crucial to upholding unbiased and equitable justice and protecting fundamental rights and the Constitution. Despite this, the Supreme Court mandated that all courts hold judicial proceedings over video conference, doing away with the requirement for jurors. One may argue that technology can increase the efficiency and accessibility of judicial procedures. However, doing away with human components like juries and attorneys might undermine the integrity of justice and disregard humanity and empathy. After being formed, the program seeks to develop further standards, such as technological infrastructure, in courtrooms. The question of switching to a virtual court is also crucial to guaranteeing prompt administration of justice. Another perspective on virtual hearings offered by Hasan and Mia (2021) is that the COVID-19 pandemic has caused court closures. This leads to the judiciary putting in place an e-court system in an effort to cut down on court delays and case backlogs. This system, despite limited resources and inadequate digital infrastructures, could be a trailblazer in e-judiciary development. The goal is to determine the challenges of providing effective e-justice during the pandemic and how to turn it into a long-term system. Thus, the goals of virtual hearings are to eliminate court delays and case backlogs, develop an e-judiciary system, and lessen the necessity for a physical court. One important issue is that the initiative's success depends on a sound national strategy and technology support. This is in opposition to what Pal Singh (2021) believes. Because of the pandemic's profound effects on the court system, virtual hearings have been established to guarantee the continued administration of justice. For instance, during a virtual hearing session, a judge could unknowingly overlook subtle cues or body language that could influence how well they comprehend a witness's statement. When witnesses are not physically present or provide visual indications, it can be challenging for judges to determine a witness's credibility. Because of this, courts are becoming the new norm for the legal system, using software and remote working methods. Nevertheless, e-courts offer people continuous access to justice through digital or remote methods, but they can have drawbacks. However, issues such as protecting basic rights, admissibility of electronic evidence, and privacy and secrecy still need to be addressed. Finally, issues like formalism, online dangers, and the lack of human interaction must be resolved. Preserving basic rights and allowing electronic proof are also important.

#### 4. SOLUTIONS

#### Implementation of new technology

Ahmed et al. (2021) claim that case management and the administration of justice have significantly improved under the e-court system. Among the benefits that come from this are enhanced security, greater transparency, and better case management. For a more extensive proposal to integrate all appellate courts in other cities, the e-court system serves as a test bed. According to Pyrohovska et al. (2024), developing block-chain- and AI-powered e-court systems is essential for enhancing accessibility and effectiveness while lowering bureaucratic processes and corruption. Legal practitioners will need to carefully adapt to and incorporate these instruments as technology develops, always keeping in mind the fundamental principles of the legal system. Another way to look at things. The e-Court system may be made more accessible and user-friendly for everyone by enhancing the user interface and streamlining the downloading and uploading process of documents. Kumar (2014) argues that immediate record retrieval, real-time monitoring, and

efficient case analysis are just a few of the ways that visual animation technology is transforming court proceedings. This technology, when combined with online tools, can reduce physical obstacles and enhance the court system's effectiveness. It facilitates argument presentation, case analysis support, and real-time monitoring, improving productivity and fostering a welcoming environment within the legal system. The use of visual animation in courtrooms allows for data access, real-time monitoring, and thorough case analysis, enhancing comfort and efficiency. Digital literacy is crucial in the digital age, as technology enhances the accessibility and efficiency of legal procedures. In India, cooperation between legislators, attorneys, and IT specialists is necessary to ensure fair access to justice. As Waseem et al. (2023) elucidated, legislative cooperation is necessary to address legal and ethical challenges. Consequently, in India's digital age, legal professionals and technological experts should work together to optimise the benefits of e-courts while upholding the principles of justice. The legal system is increasingly reliant on the growth of e-justice and e-administration, offering benefits such as expediency, accessibility, speed, and reduced bureaucratic procedures. The future of digital justice is promising, emphasising the need for innovation and cyber-security to ensure efficient and convenient court services. The modern judicial system relies on the growth of e-justice, emphasising the need for innovation and cyber-security to overcome these challenges. Overall, the potential benefits of computerised justice include lower levels of corruption and greater efficacy.

#### **Online Access to information**

We may expand on our earlier discussion of the e-Court system, which is an essential tool in the legal system for improving the administration of justice by monitoring electronic court records. Schmitz (2019) asserts that the introduction of artificial intelligence (AI) and virtual courts, which offer a fourth-party dispute settlement mechanism, is transforming the legal system. These technologies enable various processes, such as arbitration, mediation, and negotiation, in online dispute resolution (ODR). Online dispute resolution, also known as the virtual hearing platform, is a legal method that replaces traditional court procedures in corporate and commercial matters. Despite the growth of ecommerce enterprises, public courts still use traditional face-to-face processes. However, online dispute resolution is emerging globally, particularly in property tax and minor claim cases. These technologies can improve court access and efficiency, as demonstrated by e-courts. To guarantee justice, due process, openness, and effectiveness in the settlement of public disputes, policymakers and business executives are increasingly interested in these developments. These technological advancements are crucial for ensuring due process, equity, and openness in court cases, especially in the area of online dispute resolution. As a result, corporate executives are increasingly using AI and e-courts in conflict resolution to increase access to justice and remedies. In short, the e-Courts system maintains electronic data, simplifies case file selection, and ensures impartial decisions. These technologies are crucial for ensuring due process, equity, and openness in court cases, particularly in online dispute resolution. Mohd Saman & Haider (2012) state that there is an automated platform intended to speed up the administration of justice. This system ensures impartial decisions, prevents corruption, and preserves community and individual rights. The implementation of electronic records management systems in civil courts is indicative of a notable enhancement in the efficiency and effectiveness of the legal system. These technologies provide the courts with comprehensive information, ensuring impartial judgements and preventing corruption. As was already said, the introduction of e-Court has enhanced the standing of the legal system and strengthened its protection of civil and political liberties. As a result, the implementation of the system has improved the management of court documents, guaranteeing unbiased decision-making and defending the rights and prestige of the judicial system. In contrast, courts are looking at the e-court system to improve judicial delivery, according to Zain et al. (2018). As previously said, address existing issues, increase efficiency, and provide a legal foundation for e-court. The e-Court system also simplifies the process of choosing an advocate, ensuring correct data and convenient access to case files. As an alternative, the e-Court system's convenient access to case files and information can facilitate a more efficient legal procedure. As a result, provide clients and attorneys with the information they need to guarantee a fair trial. This digital instrument ensures reliable data transmission and communication between parties, minimising data loss from hard copy degradation. The demands of advocates and clients who find it difficult to keep up with case files and documentation are addressed by the e-Court system. Selecting an attorney is made easier by the e-Court system, which offers detailed information and a case history of potential attorneys. Rather, e-Court, an online chat procedure, offers a novel method of case administration. Users can read case materials and evaluate their case without the assistance of advocates, ensuring a seamless and easy process. Finally, the e-Court system improves judicial delivery and data maintenance by streamlining the administration and selection of case files for advocates and users.

#### 5. RESULTS

Governments worldwide collaborate to support virtual courts, which have been instrumental in adjudicating cases and administering justice. According to Pal Singh (2021), virtual courts, which were first designed to provide a structure for enforcing the law and administering justice, have evolved into the new standard. This goes against Williams's (2021) assertion that these techniques, such as mediation sessions, forums for contractual resolution, and casualties, offer courts a more economical and effective means of managing cases. There is another school of thought that is more effective and tackles the challenges that lawyers and litigants have in the conventional adversarial dispute resolution paradigm. This approach encourages a culture of change and improves court access to justice. The legal landscape has undergone significant changes due to parties seeking alternative conflict resolution methods. Chatterjee (2022) offers an opposing viewpoint, arguing that technology has led to the emergence of alternate dispute resolution techniques such as arbitration, mediation, negotiation, and conciliation. Another thing to remember is that, in the twenty-first century, the judicial system needs to be digitalized. This indicates that in business and corporate contexts, online dispute resolution is now common. This research provides practitioners and decision-makers with a solid foundation for future expansion. Consequently, the e-court system has experienced notable advancements in case administration, transparency, and security. However, this makes it a crucial place to start for practitioners who are promoting egovernment and putting in place e-court systems. By integrating technology into the legal system, lawyers can work more efficiently and effectively, ultimately benefiting their clients. Saving time and money by having attorneys present in numerous places can help to better understand the role of litigants. Since they might not have to physically attend every court hearing, this can also help clients understand their position in the judicial system. The evidence demonstrates how the legal process may be streamlined by utilising techniques like electronic filing, electronic evidence management, and virtual courtrooms. In order to give their clients the best representation possible, attorneys must embrace and adjust to the constant developments in technology...

#### 6. CONCLUSION

To sum up, the Indian legal system offers a chance to improve and expand its infrastructure, especially when it comes to e-courts. However, there is the issue of the digital divide, in which those without access to technology or dependable internet can find themselves at a disadvantage in online court hearings. Furthermore, litigants find it more difficult to comprehend the seriousness of their case and to properly participate in the judicial system if they are not physically present in courtrooms. Nevertheless, challenges include inadequate implementation procedures and the separation of the judiciary and legal profession. That is to say, progress is being impeded by the need for robust security measures. These security precautions are required to safeguard private data and guarantee the integrity of online court proceedings. In contrast, those who lack access to the required tools or who are not tech-savvy may find it difficult to comply with the strict criteria for authentication and encryption. A well-defined policy framework is required to solve these problems and promote the creation of e-courts. Apart from that, the framework must provide precise rules for the use of technology in legal processes, including procedures for holding virtual hearings and safeguarding private information. Next, lawmakers need to develop a comprehensive plan by collaborating with experts in data protection, law, and technology. Another way to address these problems is to create a more efficient and welcoming legal system.

The government has to prioritise modernising the current infrastructure, which includes putting in place a strong security system to allow for safe access to case data. To put it another way, this will require a large investment in hardware and software updates, in addition to making sure that everyone involved has access to dependable internet connectivity. Furthermore, it is imperative to develop unambiguous norms and protocols that safeguard the secrecy and privacy of all participants engaged in virtual court proceedings. To find and fix any vulnerabilities in the system, routine audits and assessments will also be required. It is evident that in order to preserve sensitive data, this would necessitate investing in strong cyber-security safeguards and secure communication channels. Those who utilise e-courts will be more likely to do so if the system is easy to use. In addition, user-friendly interfaces that facilitate the navigation of the virtual court system by individuals and legal experts can be established. On a positive note, make sure that everyone, regardless of technological ability, can engage in the legal process successfully. When designing and implementing e-court systems and accessibility, inclusivity must be given first attention. Moreover, it is essential to spend money on staff

training to maintain e-data, provide judge training sessions, and hold presentations and seminars to increase public knowledge of e-courts. The money spent on education and training must benefit all parties—judges, lawyers, and litigants alike. More crucially, they can be ready to work in the computerised court system. The effectiveness of the legal system depends on discovering ways to make it better as technology advances. On the other hand, the government has to decide what infrastructure is required to support the e-court initiative and build it, including a strong security system for safe access to case data. Therefore, holding training sessions to acquaint judges with the structure and protocols of e-courts might significantly augment their efficacy. To summarise, e-courts help highlight the conveniences and amenities that they can provide by raising awareness of them through speeches and seminars. Therefore, India can accomplish its objective of having a fully operational and effective e-court system by addressing these issues and concentrating on enhancing the judicial and infrastructural systems.

### **CONFLICT OF INTERESTS**

None.

#### **ACKNOWLEDGMENTS**

None.

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