
DIGITAL TRANSFORMATION OF CRIMINAL COURTS UNDER THE BNSS, 2023: A CRITICAL ANALYSIS OF FAIR TRIAL AND ACCESS TO JUSTICE IN INDIA

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1. ABSTRACT

The Indian criminal justice system is currently undergoing a major reform as a result of the incorporation of technology in the dispensation of criminal justice. The passage of the Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS) is one of the steps that have been taken in the process of updating criminal procedures and conducting technology-assisted criminal proceedings. For example, section 530 of the BNSS provides for the adoption of electronic communications and audio-video electronic communications in different aspects of criminal proceedings such as trials, investigations, examination of witnesses, gathering and presentation of evidence and appeals. In addition, this statutory provision complements efforts made to advance the e-Courts Project.

There are opportunities for digital transformation to make criminal courts more efficient, transparent and accessible as a result of eliminating delays, minimizing physical attendance and allowing remote participation as well as increasing access to judicial information. On the other hand, the growing usage of digital technology gives rise to serious issues associated with the right to a fair trial, adequate legal defense, confidentiality, privacy, cybersecurity and the digital divide. These challenges become especially critical in criminal cases because people's freedoms and rights are at stake there.

This paper critically evaluates the digitization of criminal courts in accordance with BNSS, 2023, focusing specifically on its effects on fair trial and access to justice. In addition to the analysis of the benefits and challenges associated with conducting cases through virtual hearings, electronic communication, digital evidence and technology-mediated criminal proceedings, it is suggested that the digitization of the criminal court system should not only be seen as a technical reform but also as a constitutional and rights-based revolution of the system. This paper calls for the implementation of the hybrid approach based on a combination of physical and virtual proceedings along with advanced digital legal aid, technological

infrastructure and protection of privacy and cybersecurity of the accused, victims and witnesses.

Keywords: Digital Criminal Courts, BNSS 2023, Fair Trail, Digital Evidence, Access to Justice, e- courts, Criminal Justice System, Virtual Hearings.

2. INTRODUCTION

Administering criminal justice is among the primary duties of the State and is important in maintaining law and order, upholding individual rights and the rule of law. Criminal justice includes various processes such as investigation, arrest, inquiry, prosecution, trial and sentencing. But at the same time, the criminal justice process should also strike the right balance between the interest of society, victims and basic rights of accused persons. Historically, criminal courts in India have relied heavily on traditional means of proceedings, paper record keeping and presence of accused persons, advocates and witnesses. However, delays, growing pendency, frequent adjournments, infrastructure problems and inaccessibility of courts have led to the need for more effective ways of delivering justice.

Information and Communication Technology have brought about new opportunities to solve these problems by way of e-filing, electronic record keeping in courts, video conferencing and virtual hearings. The coronavirus outbreak helped bring even more digital technologies into practice in the judiciary system and proved the significance of technologies in ensuring the continuity of the judicial process. In this respect, the passing of the Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS) is a major step towards the modernization of the criminal procedure law. Section 530 of BNSS allows for using electronic communications and audio-video electronic means in trials, inquires and other criminal proceedings, as well as the examination of witnesses and evidence recording in appeal cases.

However, the digital transformation of the criminal courts is also subject to several challenges related to the right to fair trial and access to justice. Even though the digitalization of the criminal courts may eliminate delays, travel expenses and geographic distance issues, the challenges like the digital divide, lack of technologic competence, inadequate internet connection, privacy, cybersecurity, and communication confidentiality issues may arise in terms of the effectiveness of the administration of justice. Thus, the digitalization should be done in a way ensuring that the constitutional rights of all stakeholders are not violated. The

aim of this paper is the critical analysis of the digital transformation of the criminal courts within the framework of the BNSS, 2023 with regards to its influence on the right to fair trial and access to justice.

3. CONCEPT OF DIGITAL TRANSFORMATION OF CRIMINAL COURTS

The concept of digital transformation of criminal courts implies the implementation of technology into the operation and administration of criminal courts. It goes beyond the use of video conferencing for conducting hearings.

This concept includes:

- electronic filing of cases;
- digitalization of judicial records;
- electronic delivery of summons and notifications;
- video conferencing;
- virtual hearing;
- recording of evidence electronically;
- access to case data in digital format;
- communication in digital format between courts and the other parties involved;
- case management electronically;
- use of artificial intelligence and other emerging technologies.

This concept is move from the conventional physical and paper-based administration of the courts to one that embraces technological advancements in delivering justice.

The evolution of the digitisation of courts could be seen in three phases.

- The first phase is Digital Administration

This includes the digitisation of court records, e-filing, and electronic case management.

- The second phase is Digital Proceeding

This includes video conferencing, virtual proceeding, and electronic examination of witnesses.

- The third phase is Intelligent Digital Courts

This includes technologies such as Artificial Intelligence, Machine Learning, Optical Character Recognition, and Natural Language Processing in helping with research, translating cases, transcribing and case management. But it should be carefully implemented. Technology could help the judge and court administrators but the determination of criminal liability should still rest on independent judicial decision.

4. BHARATIYA NAGARIK SURAKSHA SANKITA 2023, (BNSS) & THE DIGITAL TRANSFORMATION OF CRIMINAL COURTS

The BNSS, 2023 is a landmark piece of legislation in the criminal procedural law framework in India. An important feature of this Act is that it acknowledges the role of technology in criminal cases.

Section 530. All trials, inquiries and proceedings under this Sanhita, including—

- (i) issuance, service and execution of summons and warrant;
- (ii) examination of complainant and witnesses;
- (iii) recording of evidence in inquiries and trials; and
- (iv) all appellate proceedings or any other proceeding,

may be held in electronic mode, by use of electronic communication or use of audio-video electronic means.

Through section 530 of the BNSS, 2023, trials, inquiries and proceedings can be carried out by means of electronic communications and audio-video electronic means. This is important as it will serve as the basis for carrying out criminal proceedings through technology. Technology can be applied in a number of ways including:

4.1 Electronic Communication

Communications between courts and parties can increasingly occur via electronic communications, resulting in procedural efficiency.

4.2 Electronic Summonses and Warrants

Transmission of procedural documents via technological tools could result in speedier procedures.

4.3 Audio-Video Proceedings

The accused, witnesses and other parties may be able to participate in proceedings through audio-video means.

4.4 Examination of Witness

In certain cases, witnesses may also be able to appear via video conferencing.

4.5 Recording of Evidence

Evidence may be recorded and preserved electronically.

4.6 Appellate Proceedings

Use of technology could also make possible participation in appellate proceedings without any need for physical presence. It is evident from the inclusion of the above provisions that the criminal justice system is on its way to becoming one that does not necessarily rely on physical presence for the administration of justice.

However, the ability to use technology in proceedings should not be allowed to render physical proceedings obsolete. Whether to use technology in proceedings should depend upon the circumstances of the case and rights of the concerned individuals.

5. DIGITAL COURTS AND THE RIGHT TO FAIR TRIAL

The right to fair trial forms an essential part of the criminal justice process. In India, the right to fair trial is intimately associated with Article 21 of the Constitution, which provides for life

and personal liberty.

- Fair trial includes:
- Independent and impartial court;
- Adequate opportunity for defense;
- Effective legal representation;
- Opportunity for presenting evidence;
- Opportunity for cross-examination of witnesses;
- Presumption of innocence;
- Reasonable opportunity to take part in the proceedings.

Digitalization will help in strengthening some elements of the fair trial and could also introduce certain threats.

5.1 Effective Participation of the Accused

The accused needs to understand and actively participate in the criminal proceedings. Virtual participation of the accused should not amount to merely being physically present on a screen without being able to understand what is going on and to communicate with counsel.

Hence, it is important that the courts provide the accused with:

- Appropriate technological facilities;
- Language services;
- Opportunities to communicate with counsel;
- Access to documents.

5.2 Right to Legal Representation

Right to legal representation is a fundamental element of a fair criminal trial.

Virtual hearing can present certain problems for confidential communication between the accused person and his attorney. In the physical courts, the accused is able to have private communication with his attorney. In the virtual hearing, proper ways should be created to ensure confidentiality. Hence, virtual courts must make sure that technology does not jeopardise the connection between the accused person and his legal counsel.

5.3 Cross-Examination of Witnesses

Cross-examination of witnesses is one of the critical safeguards during criminal trials.

1. Virtual examination of witnesses may raise doubts about:
2. externals influences;
3. coaching of witnesses;
4. unauthorized people's presence;
5. technical disruptions;
6. inability to properly observe the witness.

Therefore, virtual testimony should be done with certain guarantees.

6. DIGITALISATION AND ACCESS TO JUSTICE

Access to justice involves not only courts and laws but also the effective access of people to the judicial system and the right to a fair remedy. Digitalisation of the court system may enhance access to justice through:

1. Travel cost reductions;
2. Savings on time spent in court;
3. Remote participation opportunities;
4. Access to information about cases;
5. Electronic filing;

6. Minimizing the reliance on hard copy documents.

For instance, witnesses who reside in other states will not need to travel several hundreds kilometers to participate in each hearing if remote participation is feasible. In addition, attorneys can gain access to documents in the digital form instead of constantly visiting court buildings. Therefore, digitalisation of the criminal justice system can increase its accessibility. Nevertheless, access to the benefits of digitalisation may differ from person to person.

7. THE DIGITAL DIVIDE AND ACCESS TO JUSTICE

The biggest issue in digital justice is the issue of the digital divide.

The digital divide means that some people do not have equal access to:

- Internet connections;
- Smartphones;
- Computers;
- Digital platforms;
- Technical skills.

This issue is very relevant in India due to the involvement of a lot of vulnerable people in criminal justice processes. The accused from the rural area may not have:

- The stable internet connection;
- Computer access;
- Digital skills;
- The knowledge about how to go to court online.

It means that in case of the total digitalisation of courts, the people will get further deprived of their right to justice. Thus, the process of digitalisation should be inclusive rather than exclusive.

Inclusive approach would be to: Ensure that digital justice expands access to justice and does not erect another barrier to justice. It is extremely important to develop assistance centers and digital facilities.

8.IMPACT OF THE ACCUSED PERSON

The accused party is among the most vulnerable parties in criminal proceedings due to the investigative and prosecutorial power of the State.

- Virtual courts could be beneficial to the accused by:
- Saving unnecessary physical appearances;
- Reducing travel costs;
- Speeding up proceedings; and
- Permitting virtual participation.
- Possible disadvantages may include:
- Inaccessibility of technology;
- Inability to communicate with lawyers;
- Not being able to understand virtual proceedings;
- Lack of good internet connection; and
- Accessing digital evidence.

It is therefore important that the accused party is allowed physical proceedings in situations where virtual proceedings could harm the defense. The principle here should be that technology should make it easy for the rights of the accused to be exercised.

9. IMPACT ON THE VICTIMS AND WITNESSES

The digital courts may provide considerable advantages for the victims and witnesses. The

victims do not have to appear before the court again and again. In appropriate situations, vulnerable witnesses can give evidence in a remote setting. This is especially helpful where:

- children are involved;
- older people are concerned;
- there are individuals who have a disability;
- the victims are of sexual crimes; or
- the witnesses live far away from the court.

But care needs to be taken to ensure that the witnesses are not coerced or intimidated during remote hearing. Provisions should be made for:

- secure testimony;
- preserving identity of the witness;
- preventing witness intimidation;
- maintaining confidentiality; and
- preventing outside influence on the witnesses.

Thus, the digitalization process has to be combined with proper witness protection procedures.

10. DIGITAL EVIDENCE AND CRIMINAL ADJUDICATION

Digitalisation of criminal courts is associated with the significance of the rise of electronic and digital evidence in modern criminal investigation and adjudication. Criminal investigations nowadays depend on various types of digital evidence like CCTVs, data from mobile phones, emails, contents from social media, GPS data, digital pictures, audio and video recordings and cloud based information. The Bharatiya Sakshya Adhiniyam, 2023 understands the significance of electronic and digital evidence in the criminal justice system. Yet, the significance of digital evidence also raises several problems regarding its authenticity,

reliability, integrity, preservation and chain of custody. Therefore, it becomes necessary for courts to collect, preserve and use the digital evidence properly. Only the presence of digital information does not guarantee its reliability and evidentiary weight. It is necessary to develop proper methods to verify the source and integrity of the digital evidence and check whether it has been altered, manipulated and/or tampered with. Proper handling of digital evidence is essential for ensuring a fair and reliable criminal adjudication process.

11. PRIVACY AND CYBERSECURITY

The digitalisation of criminal courts requires the gathering, processing and storage of vast amounts of private information concerning criminal proceedings. The court records can contain private information regarding the accused, the victims and witnesses, medical information, financial details and many more pieces of private information. Unauthorized use, disclosure or abuse of this information could lead to severe damage for the individual. In this case, the right to privacy which is considered as a fundamental right of India by the Supreme Court in the case of Justice K.S. Puttaswamy (Retd.) v Union of India becomes crucial during the process of digitalisation of criminal courts. Thus, the digital courts should implement effective cybersecurity measures for the protection of private judicial information from any kind of hacking, data breach or unauthorized access. Encryption, restricted access, secure storage of the data, proper authentication measures and data retention policy are necessary for the protection of digital court records. Consequently, privacy and cybersecurity should be seen as an inseparable part of digital justice.

12. DIGITAL COURTS AND JUDICIAL INDEPENDENCE

As digital technology is increasingly used in courtrooms, care must be taken to ensure that the independence and impartiality of the judiciary is not compromised thereby. Digital technology will be extremely helpful to judges and judicial officers in many different kinds of administrative and supporting work such as legal research, document management, translation, transcription and case management. Some emerging forms of technology such as Artificial Intelligence can enhance efficiency even further by aiding in organizing and analyzing large volumes of legal information. Yet judicial decisions on important matters like whether the accused is guilty or innocent, bail, sentencing, evaluation of witnesses and safeguarding of constitutional rights need to stay in the hands of an independent and impartial judiciary of human judges. Judicial decision making requires complex legal, factual and ethical judgments

which cannot be wholly entrusted to any machine. Hence, the role of AI should only be that of an assistive system rather than a decision-making one. The principle here should be that AI can help the judge but not replace the judge.

13. MAJOR CHALLENGES IN DIGITAL CRIMINAL COURTS

13.1. Digital Divide

The unequal access to smartphones, computers and internet connectivity can create equal access to digital courts. Some economically weaker and rural communities may find it difficult to participate in virtual proceedings. Hence, digitisation may end up excluding the weaker sections of the society from the justice system.

13.2. Infrastructure Issues

Smooth digital court proceedings require internet connectivity, technological infrastructure and digital platform. Poor connectivity, power cuts and technological issues may hinder the process of court proceeding. These problems may impact the effective participation of accused, lawyers and witnesses.

13.3. Privacy

Personal and confidential information related to accused persons, victims and witnesses forms part of criminal court proceedings. The digital storage and transference of such information pose the threat of data leakages and any kind of unauthorised disclosure. This necessitates the adoption of proper privacy measures.

13.4. Cybersecurity

Digital court systems can face threats of hacking and cyberattacks. Any kind of compromise of digital records can have an adverse effect on the confidentiality and integrity of criminal proceedings. Thus, the courts need to adopt adequate cybersecurity measures and encrypting techniques.

13.5. Fair Trial Issues

The virtual proceeding system may pose challenges in guaranteeing the effective participation

of the accused in court procedures. Problems in connectivity, lack of access to digital technology and problems in understanding the virtual proceeding system may affect the right to fair trial. Consequently, use of technology must not undermine the procedural and constitutional rights of the accused.

13.6. Confidential Communication

Confidential communication between an accused person and his or her legal representative is crucial in providing an effective defense. Confidential communication between the lawyer and the accused may become problematic in the virtual proceeding system. Consequently, adequate technological measures should be provided to ensure confidential communication.

13.7. Witnesses Protection

Remote examination of witnesses may increase chances of external influence, coaching or intimidation. It may also be problematic for the court to determine whether the witness gives evidence freely. Consequently, necessary measures must be adopted to protect the integrity of witnesses' evidence.

13.8. Digital Literacy

Judges, lawyers, court staff and litigants must be adequately literate on the use of digital court systems. Lack of literacy may cause confusion and delays. Consequently, regular training is necessary to implement digital courts successfully.

13.9. Linguistic Issues

The presence of many languages in India poses a problem for the use of the digital court platform and legal services online. Different languages need to be used in digital systems in order to make sure that litigants understand the process.

13.10. Overreliance on Technology

Overreliance on technology is likely to pose some very serious problems in cases where there are technical issues and failures in the system. Access to justice cannot be denied simply because of technological problems. Thus, alternate means must always be available.

14. SUGGESTIONS AND RECOMMENDATIONS

The digitalization of criminal courts should follow a rights-centric approach that takes into account inclusivity.

14.1 Hybrid Court System

A hybrid system of conducting court proceedings both physically and virtually needs to be adopted in India. While routine procedural issues may be carried out through virtual proceedings, the critical steps in criminal trials can be undertaken through physical proceedings when personal interaction becomes indispensable. The selection between physical and virtual proceeding would be based on:

- nature of the case;
- rights of the accused;
- interests of the victims;
- witness examination;
- justice requirements.

14.2. Improving Digital Legal Aid Services

Legal aid facilities in terms of digital proceedings need to be made available to economically weak accused persons. Legal aid organizations need to support accused persons in: participating in virtual proceedings; understanding digital processes; and accessing electronic documents.

14.3 Extension of e-Sewa Services

Digital services centers need to be set up and expanded at the district and local level. These centers should assist people who do not have internet facilities; and digital devices.

14.4 Protection of Accused Persons

Opportunities to allow participation of accused persons in digital hearings must be ensured.

Communication of accused persons with their lawyers must be made confidential.

14.5 Better Witnesses' Protection

Virtual hearings of witnesses must have provisions to ensure that witnesses are not:

- Tutored;
- Intimidated;
- Influenced;
- Monitored by people unauthorized to do so.

14.6 Data Protection and Cyber Security

Courts must adopt stringent cyber security measures. Criminal records that require confidentiality must be secured by:

- Encryption;
- Access controls;
- Authentication;
- Cyber security auditing.

14.7 Digital Literacy and Training

Judges, lawyers, prosecutors, police officers and court staffs must be trained regularly on digital technologies. Litigants and other vulnerable communities must also be sensitized in digital literacy programs.

14.8 Multilingual and Accessible Digital Court Platforms

Digital court systems must be designed to accommodate Indian languages. Digital courts must be made accessible to disabled persons.

14.9 Responsible AI Usage

AI must be allowed to operate as an assistive technology. AI must not have the authority to determine:

- Guilt;
- Innocence;
- Granting bail;
- Sentencing.

14.10 Technology Should Not Become Mandatory in Every Case

Digital proceedings should not be imposed mechanically. Where technology creates a risk to fair trial or meaningful participation, physical proceedings should remain available.

15. CONCLUSION

The digitisation of criminal courts via the BNSS, 2023 is a major step towards modernisation of India's criminal justice system. The provision of electronic and audio-visual methods of conduct will open up the possibility of making criminal courts efficient and more responsive to the requirements of modern society. Digital courts can help in eliminating delays, reducing costs incurred on travel, providing remote access and ensuring access to judicial data. Digital courts will also be useful in helping out those victims and witnesses who have trouble attending court hearings in person.

Nevertheless, digitalisation comes with some problems. The digital divide, lack of infrastructure, security issues, privacy concerns and participation difficulties may pose new barriers to justice. These barriers will be of great importance in criminal cases since fundamental rights of the individuals are involved. Thus, digitalisation of criminal courts needs to be undertaken on the basis of constitutional principles. The right to a fair hearing, right to legal aid, privacy and equality have to be kept in focus during any technological reform.

The Ideal way forward for India is not the outright replacement of the physical court system with a virtual court system but the evolution of a balanced hybrid model. Technology can be

incorporated where it makes things more efficient and accessible, and the physical process has to be retained in situations where face-to-face interaction is crucial for the maintenance of fairness. Thus, the future of criminal justice has to be designed keeping in mind the principle that technology should be made to serve justice and not the other way round. The effectiveness of the digital criminal courts cannot be judged just on the basis of the quantum of proceedings held online but on how the technology helps every single person involved in the process.

Ultimately, the digital transformation of criminal courts under the BNSS, 2023 has the potential to reshape the Indian criminal justice system. However, such transformation will be successful only when it combines technological innovation with constitutional safeguards, digital inclusion with equal access, and efficiency with fairness. A rights-based and human-centred digital criminal justice system can ensure that technological progress becomes a means of strengthening the rule of law and expanding access to justice rather than creating new forms of exclusion.

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