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## **‘E-COURT PROJECT’: THE NEW ERA OF INDIAN JUDICIARY**

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### **ABSTRACT**

The 21<sup>st</sup> Century is the era of Information and Communication Technology (ICT) which delivers easy, hassle-free, convenient, and transparent service to the citizens. To achieve the test of good governance, the first requirement is the transparency. The use of ICT is the first step towards the transparency. Like the e-Governance in the Government services, the Supreme Court of India has also introduced ICT in the administration of Justice for increasing the transparency in the justice delivery system in India. The ‘e-Court Project’ is gradually developing in Phases from the year 2007. By the use of ICT in the judicial eco-system, all the stakeholders of the Indian Judiciary, like Judges, Advocates, litigants etc., are benefitted in terms of convenience, transparency, mainly.

The Judges of the Indian Judiciary are outnumbered by the number of the cases that they have to handle which results in slow disposal of cases. To curve this problem, implementation of ICT is a promising measure for reducing the pendency and speedup the disposal of cases. The ‘e-Court Project’ provides the Judges, Advocates to conduct the cases with the help of Local Area Network (LAN) which helps the Advocates to present their cases using laptops and the Judges can comment upon the cases. Summons to witness, information of about the cause list etc. are being sent via SMS to the respective recipients.

This paper focuses on the efforts made by the Indian Judiciary to adopt the ICT in the judicial eco-system and provides proposals to evolve more into technology driven independent and transparent organ of the country.

**Keywords:** Indian Judiciary, e-Court Project, Information and Communication Technology (ICT), Transparency, Supreme Court of India, National Judicial Data Grid (NJDG).

## 1. Introduction:

The 21<sup>st</sup> Century is the age of Information and Communication Technology (ICT) which delivers easy, hassle-free, convenient, and transparent service to the citizens. Without transparency and convenience service there will not be the good governance. Citizens are provided with a convenient, transparent, and hassle-free service because of the widespread implementation of Information and Communication Technology (ICT) in governance. Like the Government, the Indian Judiciary also adopted the ICT to its ecosystem to deliver justice more efficiently, conveniently with more transparency. the adaptation of ICT and its tools provides the stakeholders of the Judiciary to have their required services conveniently through the ICT systems adopted. For example, the litigants, Advocates get daily updates about their cases through SMS or email service. The e-Committee of the Supreme Court of India has been formed to execute the e-Court Project in Phases across the country's judicial establishment and ecosystem. The Judges of the Indian Judiciary are outnumbered by the number of the cases that they must handle which results in slow disposal of cases. To curve this problem, implementation of ICT is a promising measure for reducing the pendency and speedup the disposal of cases.

## 2. Concept of e-Governance & e-Court Project:

Before understanding the meaning of e-Governance, we must understand the what is a good governance. The process of governing with an evaluative or normative quality is known as good governance. Human rights protection, the rule of law, effective participation, political pluralism, accountability and transparency in institutions and processes, equity, and attitudes and values that promote accountability, solidarity, and tolerance are the foundations of the governance process.<sup>1</sup>

Now e-Governance can be understood as the application of Information and communication Technology (ICT) in the process of governance. ICT helps governance transform into good governance where people have the easy access to governing information and knowledge. e-Governance increases the relations between the public authorities and civil society, improve the ability of the government to address the needs of

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<sup>1</sup>Office of the High Commissioner of Human Rights [OHCHR]. (n.d.). OHCHR AND GOOD GOVERNANCE. <https://www.ohchr.org/en/good-governance/about-good-governance>

the society with the help of ICT, and as such, increases the transparency in the governing process.

e-Governance originated in India during the 1970s with the objective of in-house government applications in the fields of defence, economic monitoring, planning and deployment of ICT to manage data intensive functions related to administration, tax, census etc. The National Information Centre (NIC) was set up in 1976 by the Ministry of Electronics and Information Technology (MeitY) to provide technology-driven solutions to the central and state governments. The District Information System initiative was started to deploy computers in all the district offices of the country. The objectives of e-Governance are improving service delivery to citizens; ushering in transparency and accountability; empowering people through information; improving efficiency within Governments i.e., between Centre-State or inter-States, or Institutions; etc.

e-Governance in India has grown progressively, starting with the computerisation of government departments and moving on to projects that focus on the finer features of governance, such as placing citizens first, focusing on service, and being open. The developing e-Governance strategy in the country has been greatly influenced by what has been learnt from past e-Governance projects. To speed up the adoption of e-Governance across all levels of government (national, state, and local), a program approach must be adopted, with a shared goal and plan. This approach might lead to big savings by letting people share core and support infrastructure, making it easier for different systems to work together by using standards, and giving people a clear picture of the government.<sup>2</sup>

The National e-Governance Plan (NeGP) looks at all of the e-Governance initiatives in the country as a whole and brings them together into a shared vision and goal. This strategy is creating massive infrastructure that will reach even the most remote communities in the country. It is also digitising a lot of government data so that people may easily, reliably, and transparently access them online. NeGP's Vision Statement indicates that the ultimate objective is to deliver public services to people's doors.

*“Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of*

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<sup>2</sup>National E-Governance Plan | Ministry of Electronics and Information Technology, Government of India. (n.d.). <https://www.meity.gov.in/divisions/national-e-governance-plan/>

*such services at affordable costs to realise the basic needs of the common man”<sup>3</sup>*

The e-Court Project was conceived based on “National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in Indian Judiciary – 2005”<sup>4</sup>. The e-Committee, Supreme Court of India submitted it in with the goal of transforming the Indian Judiciary by making courts more compatible with technology. The Government of India set up the e-Committee to help the Hon'ble Chief Justice of India come up with a national strategy on making the Indian judiciary more computerised and to provide him advice on improvements relating to technology, communication, and management.<sup>5</sup>

The e-Court Project envisages to provide efficient & time-bound citizen centric services delivery; to automate the process to provide transparency in accessibility of information to its stakeholders like, Advocates, Judges and Litigants.

### **3. Development e-Court Project:**

As earlier stated, e-Court Project was conceptualised based on “National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in Indian Judiciary”<sup>6</sup> in 2005 as part of the National e-Governance Plan. It was developed in step by step in phases. There are 3 (three) Phases of the said ‘Action Plan’ discussed in detail below.

#### **3.1. Phase I:**

As part of the National e-Governance Plan of India, the e-Court Project began from 2007 and concluded with extended timelines up to 30<sup>th</sup> March, 2015. This period from 2007 to 2015 is considered as the Phase-I of the e-Court Project. During this period, a lot of Court Complexes, Computer Server Rooms, and Judicial Service Centres were set up for the District Courts to get computerised. Computerisation were made with installation of hardware, LAN connectivity and Case Information Software (CIS) in the District and Taluka Court Complexes covered in Phase-I, to provide basic case related information and

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<sup>3</sup> *Ibid.*

<sup>4</sup> *E-Courts Mission Mode Project | Official website of E-Committee, Supreme Court of India | India. (n.d.).*  
<https://ecommitteesci.gov.in/project/brief-overview-of-e-courts-project/>

<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*

services to the stakeholders i.e. litigants, lawyers etc. and a large number of District Courts have launched their own websites for the convenience of the stakeholders of the Indian Judiciary. Under this Phase-I, 14,249 Districts and Subordinate Courts were computerised, 13,686 courts provided with LAN connectivity.

For the implementation of the e-Court Project, computers & laptops were required in the court and for the Judges as well. And as such, laptops were provided to 14309 Judicial Officers. But the major problem to implement the e-Court Project was that most of the Judicial Officers and other officials & staffs of the courts were not trained with this new era of the Judiciary. So, as part of Phase-I, the Change Management exercise was done to educate the Judicial Officers and other Court officials and personnel how to utilise the computers and the Case Information System (CIS). Master Trainers were appointed to instruct the Judicial Officers in this regard. CIS Master Trainers were also recruited to train the District System Administrators (DASs) how to use CIS. After that, these DASs guided the Court Staffs how to use CIS.

In this Phase, Centralised Case Information Software were installed in 13672 courts and Judicial Service Centres (JSC) were opened as Filing Counters. e-Court Portal made operational and Video Conferencing facility installed in 347 Jails and 493 Courts in this Phase. The process of entering all the pending cases into the system has begun and is well on its way to being finished. During this time, the Case Information Software 1.0 recorded 7.2 crore cases. The National Judicial Data Grid (NJDG) is now up and running, and it lets people find out about the status of cases that are pending, resolved, or disposed of.

National Information Centre (NIC) was made implementing agency for the e-Court Mission Mode Project Phase-I. The Process Re-Engineering project was started to provide the process, method, and system in different District Subordinate Courts a new face and improve the technology used in them. ₹639.41 Crore were the total expenditure of the e-Court Mission Mode Project Phase-I.<sup>7</sup>

### **3.2. Phase II:**

After analysing the conceptualisation, planning and strategies of the Phase-I of the e-

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<sup>7</sup> About us - eCourt India Services. (n.d.). [https://ecourts.gov.in/ecourts\\_home/static/about-us.php](https://ecourts.gov.in/ecourts_home/static/about-us.php)

Court Project it is found that there is some more goalpost to cross. Delivery of services by all the Courts, optimum automation of case workflow, unified CIS for all Courts, use of computers by all sections of the Registry for day-to-day processes and service delivery, Central Filing Centre with sufficient infrastructure, timely and regular updation of data on NJDG by all courts, scanning and digitization of case records, computerisation of the Court Libraries, automation of court record room management, video conferencing for all Courts with Jails, ICT enablement of the Legal Aid Offices (DLSA/SDLSA), mobile based service delivery through SMS and Mobile apps etc. are just a few of the many objectives of the Project. To achieve these, not only the Court rooms but also the Registry (Sections) of the Court Complex should have ICT applications to ensure optimum automation of judicial and administrative processes and the ideal delivery for the litigant centric services as well.

There is a problem with uploading data to NJDG, which is why services aren't available online. This is because Courts don't have effective, consistent, smooth, and reliable WAN access. For the effective, stable, seamless, and reliable WAN connectivity, uninterrupted electricity is required which can be generated through Solar Energy or otherwise, and as such it deserves immediate and effective attention.<sup>8</sup>

As a natural phenomenon, the journey so far covered under Phase-I has made the stakeholders more impatient to see the justice delivery system of the nation to transform with the modernisation enabled by Information and Communication Technology. Therefore, there was a necessity of an immediate next phase of the e-Court Project to succeed the Phase-I without any gap of time or efforts and to carry forward all pendency, arrears of Phase-I to the next Phase.

The Policy and Action Plan Document Phase II of the e-Court Project received approval from the Honourable Chief Justice of India on January 8, 2014. The Government of India approved the project on August 4, 2015. In Phase II, the enclosed courts are equipped with supplementary hardware featuring (1+3) systems per courtroom; the open courts from Phase I and the newly established courts are equipped with hardware featuring

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<sup>8</sup> *Ecommittee Supreme Court of India. (2014). Ecommittee Supreme Court of India Policy and Action Plan Document Phase II of the Ecourts Project (pp. 1–91) [Policy document].*  
[https://ecourts.gov.in/ecourts\\_home/static/manuals/PolicyActionPlanDocument-PhaseII-approved-08012014-indexed\\_Sign.pdf?utm\\_source=chatgpt.com](https://ecourts.gov.in/ecourts_home/static/manuals/PolicyActionPlanDocument-PhaseII-approved-08012014-indexed_Sign.pdf?utm_source=chatgpt.com)

(2+6) systems per courtroom. Additionally, the court complexes are provisioned for LAN and other hardware.<sup>9</sup>

The dynamic implementation structure is designed to enhance participation and collaboration among the e-Committee, the Department of Justice (Government of India), NIC, DietY, and the Ministry of Finance. The e-Court Project cannot achieve its objectives without the collaboration of the relevant institutions. The High Courts of the relevant State and/or Union Territories are designated as the Implementing Agency for the project to execute Phase II within their respective jurisdictions.

Under this Phase, Cloud Computing Architecture is adopted which is efficient and cost effective. Although, the present Server Rooms are retained as Network Room and the Judicial Service Centres retained as the Centralised Filing Centre.

*“Continuing with the implementation of Free and Open Source Solutions (FOSS), Phase-II has adopted the Core-Periphery model of Case Information Software, the core being Unified as National Core, while the periphery developed according to requirement of each High Court, with NIC, Pune continuing to be the Centre for Software Development and related applications, ensuring software compatibility and interoperability, both horizontally and vertically, with the data including metadata to be unified and standardized.”<sup>10</sup>*

### **3.3. Phase III:**

Before the drafting of the Vision Document for Phase III, the Sub-Committee undertook an exercise in evaluating the Phase I and II of the e-Court Project. Questionnaires were framed to gather information on the present status of the technology driven services and systems used in the said two phases; implementation and adoption barriers faced by the different stakeholder of the project.

The Sub-Committee gathered the following point of information from the above-mentioned evaluation exercise:

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<sup>9</sup> E-Courts: about us. (n.d.). [https://ecourts.gov.in/ecourts\\_home/static/about-us.php](https://ecourts.gov.in/ecourts_home/static/about-us.php)

<sup>10</sup> E-Courts: about us. (n.d.). [https://ecourts.gov.in/ecourts\\_home/static/about-us.php](https://ecourts.gov.in/ecourts_home/static/about-us.php)

- **Technology:** Architecture, details of core and peripheral modules of CIS, API specifications.
- **Supporting frameworks:** to what extent of process re-engineering has undertaken, what is the training structure and schedule of the same.
- **Administration:** what are the designations, qualifications, roles and responsibilities, and the hierarchy of the officer-in-charge of implementation of e-Court Project.
- **Challenges:** there is shortage of trained and qualified staff, lack of adoption, inefficient processes, etc.

The Sub-Committee consulted with various technology experts and technocrats to learn about the latest advancements in technology and how they can be applied to the Indian Judicial System, based on what they learnt from the Phase I and II evaluation exercise.

The Phase III of the e-Court Project is based on the following learnings:

(i) Adaptation of 'Ecosystem' Approach:

Phase I mainly focused on procuring and installing hardware, software and network connectivity, digitisation of case records and operationalisation of the national e-Court Portal (<http://ecourts.gov.in>) where stakeholders can get limited online services.

Whereas Phase II switched to focus on the needs of the litigants by creating 'monolithic system': develop end-to-end digitisation system (e.g. CIS), portal for the citizens to access information (e.g. NJDG), systems for delivery of services (e-filing, e-payments etc.).

After the said two Phase, Phase III needs to evolve so that the institutions that offer justice may easily develop, connect, and improve solutions. This can greatly improve how effectively the different parts of the judicial system work together and how well they connect with each other.

(ii) Strengthening Feedback Loops:

Phase I and II provided with limited strategies or processes for organised feedback at various levels of services. Feedback loops helps to learn the hurdles and develop the system accordingly. Phase III focused on strengthening the Feedback Loops at mission, system, and service level. This will include seamless communication and exchange of ideas between various justice delivery institutions.

(iii) Competency and accountability mechanism:

In any large-scale digital reforms, the role and responsibilities must be structured in a way that ensures the competencies required for the project. The time and capacity of most of the judges were allocated to advance implementation of the project, while in fact time of the judges should be optimised for the judicial decision making. Most of the judges in the Phase I and II were burdened with the extra role and responsibilities over and above their judicial works. Phase III, with this learning, must involve dedicated experts in process re-engineering, technology, product design.

#### **4. Implementation of ICT in Judicial Process:**

Now here we will discuss about the implementation of ICT in Judicial Process. In phase I and II of e-Court Project, many initiatives and ICT tools were implemented and are continuing to develop from time to time. Some of the major ICT's are discussed hereunder:

##### ***4.1. System and Application Software:***

The efficiency and sufficiency of hardware is worth its value, only when efficient software is installed in that hardware. The major guiding principles of the e-Court Project is the adoption of the best FOSS Application for the courts across the Country. Under this objective, the software implementation has been carried out as follows:

- (i) e-Committee to be Nodal Agency: e-Committee will be the Nodal Agency for Policy on software solutions for the project in order to ensure optimum uniformity in the software solutions across the country for the project.
- (ii) Free and Open-Source Solutions (FOSS): All the software solutions are deployed for the e-Court Project are Free and Open-Source Solutions (FOSS) having

community driven support on the web.

- (iii) Operating System: Free and Open-Source Desktop Linux Operating System as customised by the e-Committee are continued to supply to the Courts for Laptops and other Computers that are used by the Judicial Officers and the Court officials and staffs for the delivery of service.
- (iv) Case Information Software (CIS): The Case Information Software (CIS) is a browser-based application with open-source technology. The newer version of CIS has compatibility with Cloud Architecture and takes care of the Process Re-engineering requirements. The National Information Centre (NIC)'s Software Development Centre at Pune is responsible for the development and customisation services for CIS across the Country.

#### ***4.2. Scanning, Digitization and Digital Preservation of Case Records:***

Although the Paperless Courts across the country is a dream now, but at least less paper courts can be imagined by combining all the practical technical advancements offered in the ICT regime. To achieve this, the foremost necessity for the courts is to start the conversion of the existing case records to electronic form. This is only possible by the following steps as follows:

- (i) Scanning and Digitization of the Case Records: The case records of the pending as well as disposed of cases are to be converted to electronic form by the process of scanning and digitization. The electronic file of the digitised file has either to be PDF/A or its advanced versions with features like water-marking and digital signatures to confirm the authenticity of the electronic record.
- (ii) Document Management System (DMS): For the optimum utilization of the electronic output of the case records, there is need for a Document Management System. FOSS DMS is the DMS for scanning and digitize the case records. For the data entry in DMS, data fields are minimum requirement.
- (iii) Long Term Digital Preservation of Case Records: In the process of digitization of the case records and other relevant documents, after the conversion got the physical case record into electronic record, the prime requirement for optimum

and sustained usage of the e-records is to Retrieval and Preservation/Archival. The Retrieval is ensured by porting the digital copies of the data into DMS. The purpose achieved by retrieval is only limited to day-to-day use of the documents which does not take care of the long-term preservation of the document. Whereas, the digital documents generally form the backbone of knowledge and reference for Courts and as such it needs to be preserved and archived for considerably long period of time. Due to the inability of the retrieval solution to serve for long term preservation, there is need for an archival solution.

- (iv) National Digital Preservation Programme: The experience of the IT industry shows that every five years, the technological advancements bring about a drastic change in various software and hardware areas. Department of Electronics and Information Technology (DeitY) has established a Centre of Excellence for Digital Preservation under the umbrella of Centre for Development of Advanced Computing (CDAC) as a part of the National Digital Preservation Programme (NDDP) (<http://www.nddp.in/>).

#### ***4.3. Video-Conferencing for Courts, Jails, and other Law enforcement Agencies:***

The need and importance of video-conferencing infrastructure for courts does not need to emphasis as it has shown and proved to be of immense benefit to Courts, Jails, law enforcement agencies, government witnesses and litigants as well. The video-conferencing now has been extended beyond the routine remand of under trial prisoners and recording of evidence in some specific cases. It is now a broad-based video conferencing which also include recording of evidence in sensitive cases, recording of evidence of doctors and other professionals in criminal cases, legal aid matters, child abuse or domestic violence or sexual abuse cases etc. For such video-conferencing a well mechanised set-up is required. It may be studio based or software based which must be compatible with audio-video recording devices as there will be requirement of having recorded copy of the video-conferences.

#### ***4.4. Judicial Knowledge Management System:***

The function of adjudication is governed by vast and diverse rules & laws and as such the Justice Delivery System is a knowledge intensive domain. The Courts has to

apply and interpret legislations, principles, rules & regulations, while dealing with the daily caseloads. As well as the prime governing factor in adjudication is the case laws that are ever developing. All these knowledges driven governing factor form the backbone of justice delivery system which needs to be supplemented by the ICT tools like as follows:

- (i) Integrated Library Management Software (ILMS): Every Courts at district level, all the High Courts and the Supreme Court of India have a library which for want of proper and sufficient computerisation, the optimum utilisation of these libraries are becoming difficult. So, there is need of a robust library management software (ILMS) in the court libraries. KOHA is a FOSS ILMS which has been successfully deployed in the Judges Library at Supreme Court of India. The ILMS does all functions of a library such as, acquisition, circulation, catalogue generation etc.
- (ii) Digital Library: The ILMS can also be used as the Digital Library wherein the resources are ported in digital form and can be accessed by its stakeholders online.
- (iii) National Judicial Data Grid (NJDG): In the Justice Delivery System a large number of data is being generated and updated continuously and as such it requires to be stored systematically and methodically and also require regular mining and analysis for meaningful assistance for adjudication. The National Judicial Data Grid (NJDG) is intended to be the National Data Warehouse for case related data across the country. Data Warehouse is a process of extracting and storing data which help in more efficient centralisation or aggregation of data from multiple sources into one common repository. Data mining operates at a detail level instead of a summary level and discovers the hidden patterns in data which will assist to provide meaningful and insightful trend analysis for the policy makers. There are other tools such as Online Analytical Processing (OLAP), Business Intelligence (B.I) Tools, that help in the most informative management information system and dashboards for effective Court Management.

## **5. Conclusion:**

The use of Information and Communication Technology (ICT) will obviously have assistance in smoothening the workload and fastening the workforce in governance. The

need of the hour forced the Indian Judiciary and the Government of India to make policy to adopt the ICT in its ecosystem. The new era of information technology has shown that by its use many difficult works can be turned into easy and convenient. The e-Committee of the Supreme Court of India, by the e-Court Project, develop the judicial ecosystem into more efficient and successful e-ecosystem in the judiciary that helps in anyway to all the stakeholders of the Judiciary. The use of various ICT tools helps the judiciary to function more transparently, efficiently. Though, as the technology develops from time to time, the use of the old technologies should be removed and the updated secure technologies should be adopted by the Indian Judiciary in its ecosystem. We have seen that the lack of judges in the Indian Judiciary makes it critical for the justice delivery to the litigants as there are delays to dispose of the cases. The use of ICT in the ecosystem of the judiciary will save the time and fasten the justice delivery, the ultimate objective of the Judiciary.