

NATIONAL JUDICIAL ACADEMY



**WORKSHOP FOR HIGH COURT JUSTICES ON INFORMATION AND
COMMUNICATION TECHNOLOGY (ICT): 20th August, 2023**

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PROGRAMME REPORT

PROGRAMME COORDINATORS: PAIKER NASIR & NITIKA JAIN

FACULTY, NATIONAL JUDICIAL ACADEMY, BHOPAL

The workshop provided a comprehensive exploration of the profound digital transformation that has reshaped the Indian Judicial system. Central to this examination was a meticulous review of the phased implementation of the e-courts project, which has been a cornerstone in this transformative journey. Participants were offered a unique opportunity to gain deep insights into the evolution of ICT within the realm of Indian law and justice. A significant portion of the workshop was dedicated to dissecting the e-courts project, acknowledged for its pivotal role in modernizing the Indian Judiciary. The discussions delved into the intricacies and nuances of the project, offering a nuanced understanding of the challenges encountered at various stages of its implementation. These challenges were thoughtfully contrasted with emerging best practices, providing participants with a profound appreciation for the complexities and successes associated with this transformative initiative. Moreover, the workshop placed a strong emphasis on harnessing the power of Information and Communication Technology (ICT) solutions to democratize access to justice. It highlighted the integration of innovative e-services, including e-filing, virtual courts, and video conferencing, as key mechanisms for enhancing accessibility to legal processes.

The workshop was a forum for sharing insights into pivotal elements of the Indian Judiciary's digital infrastructure, including the National Judicial Data Grid (NJDG), Case Information Software (CIS), and Electronic Case Management Tools (ECMT). In a forward-looking approach, the workshop dedicated significant attention to the role of Artificial Intelligence (AI) as a potential game-changer in courtroom technology. Attendees engaged in extensive discussions and exploration of AI's significance and its promising applications within the legal sphere. In sum, the workshop offered a comprehensive panorama of ICT advancements within the Indian Judiciary, with a laser focus on the e-courts project, innovative software systems,

and the transformative potential of AI, fostering an environment of mutual learning and exploration among key stakeholders.

Session 1 Digital Transformation in Indian Judicial System

Speakers: Justice Atul Sreedharan & Justice R.C. Chavan

The session commenced by delving deep into the intricate landscape of Information and Communication Technology (ICT) within the Indian Judiciary, offering an in-depth exploration of the systematic phases underlying the e-Courts Project. This focused examination allowed attendees to gain a comprehensive understanding of the evolution of ICT within the context of the Indian Judiciary, tracing its development through the e-Courts Project. A substantial portion of the session was dedicated to the e-Courts Project, recognized for its pivotal role in redefining the Indian Judicial System. Participants had the unique opportunity to embark on a detailed journey through the challenges faced at each stage of project implementation. These challenges were thoughtfully compared with the emerging best practices that have proven to be critical to the success of the project success. This segment enabled participants to develop a nuanced appreciation for the intricate interplay of complexities and triumphs inherent in this transformative initiative.

Furthermore, the session provided valuable insights into the strategic maneuvers employed to ensure the successful implementation of the e-Courts Project. This included a meticulous examination of key facets such as the deployment of essential infrastructure and the intricacies of hardware procurement. The focal point of this segment was the indispensable role played by Central Project Coordinators (CPC) in orchestrating the multifaceted elements essential for the seamless execution of the project. The latter part of the session turned its spotlight onto the realm of software systems, with particular emphasis on innovations at the High Court level by

showcasing innovative approaches and best practices that have been not only successfully implemented but have also significantly enhanced the efficacy of software systems within the Indian Judiciary. This segment underscored how these technological innovations serve as potent tools for modernizing and elevating the judicial process, making it more efficient and accessible.

Session 2: Enhancing Access to Justice through ICT Solutions

Speakers: Justice Mohamed Mustaque & Justice Atul Sreedharan

The session served as a key exploration of the transformative potential of Information and Communication Technology (ICT) within the realm of justice. It commenced with a strong focus on the efficient management of courts and cases using ICT tools. Participants collectively recognized the paramount importance of tools like the National Judicial Data Grid (NJDG), Case Information Software (CIS), and Electronic Case Management Tools (ECMT). These technological assets were celebrated for their remarkable capacity to streamline case data management, promote transparency, and expedite the judicial process. Subsequently, the session shifted its attention to addressing the imperative of bridging the digital divide in the context of justice delivery. Robust discussions revolved around a comprehensive array of e-services, encompassing e-filing, e-payments, virtual courts, the Inter Operable Criminal Justice System (ICJS), and video conferencing. These digital solutions were lauded for their potential to democratize access to justice, allowing individuals to engage more seamlessly with the legal system. Furthermore, the session underscored the crucial need to maximize the utilization of citizen-centric services offered by the e-Courts Project, aligning efforts with the overarching goal of extending the reach of justice.

Additionally, the session emphasized the vital importance of fostering a culture of collaborative learning and knowledge exchange among essential stakeholders. This included organizations such as the National Informatics Centre (NIC), Inter Operable Criminal Justice System (ICJS), Crime and Criminal Tracking Network & System (CCTNS), and CIS. The focus was on the mutual sharing of best practices and the latest technological advancements. The session served as a reminder that nurturing a climate of collaboration and innovation should consistently take precedence within the technology landscape, with an unwavering commitment to enhancing the delivery of justice services.

The session subsequently delved deeply into the foundational principles that underpin assessments within the Indian judicial system. These principles were meticulously categorized into three distinct perspectives: the national perspective, the court perspective, and the judge perspective. Each of these perspectives aimed to provide a comprehensive evaluation of judicial processes and decisions from multiple vantage points, with the ultimate goal of enhancing the quality and efficiency of justice delivery. Following this, the session embarked on an exploration of the concept of case managers (CMs). It was emphatically conveyed that CMs held the potential to play a pivotal role in the judicial process, as they are entrusted professionals responsible for meticulously coordinating and overseeing various facets of a case. Their primary responsibilities are thoughtfully designed to ensure procedural compliance, facilitate effective communication, oversee the completion of processes, and ensure that cases are impeccably prepared for final hearings before they are presented to the bench. The session underscored that the introduction of CMs is expected to yield a plethora of benefits, including a significant reduction in the judicial time allocated to procedural compliance, heightened productivity, assurance that cases are genuinely prepared for judicial intervention, and a decrease in the time spent on granting adjournments.

Session 3: Artificial Intelligence (AI) and its Implications as Prospective Courtroom Technology

Speakers: Justice Mohamed Mustaque & Justice R.C. Chavan

The session dedicated to Artificial Intelligence (AI) within the context of courtroom technology provided an extensive and enlightening exploration of this transformative subject. AI has risen to prominence as a significant and far-reaching topic with profound implications for the future of the judicial system. The primary objective of this session was to comprehensively delve into the multifaceted aspects of integrating AI into court processes while addressing the challenges and concerns that accompany this transition. The session commenced by illuminating the fundamental concept of AI, describing it as the capacity of digital computers or computer-controlled robots to perform tasks that are typically attributed to intelligent beings. It accentuated that AI possesses the capability to mimic and execute a wide spectrum of tasks, ranging from rudimentary to highly complex, underpinned by the principles of machine learning, including deep learning and neural networks.

Extensive discussions unfolded regarding the integration of AI into court processes, with a predominant focus on its potential to enhance administrative efficiency within the judicial system. The session underscored the paramount importance of developing task-specific narrow AI tools as the initial wave of AI innovation. These specialized tools hold the promise of providing sophisticated automation for routine and time-consuming administrative tasks, including but not limited to scheduling hearings and reviewing evidentiary documents. Moreover, the session introduced AI applications such as smart e-filing, intelligent case prioritization, and comprehensive case tracking as instrumental means to enhance administrative processes. The session further delved into how AI can elevate decision-making within the justice system. AI tools for intelligent analytics and research emerged as valuable

assets capable of generating comprehensive legal briefs, expediting legal research, and adeptly identifying critical legal points and facts. The session emphasized that legal bots have the potential to assist litigants in making well-informed decisions by offering guidance on legal rights and facilitating access to fundamental legal services. Additionally, ability of AI to assist judges in their decision-making processes by cataloging essential case documents and extracting pertinent information was elucidated.

One of the central challenges addressed during the session pertained to the necessity for open access to judicial data. Recognizing that AI-driven technologies heavily rely on accessible data, the session acknowledged the existing limitations in India, where open access to judicial datasets is restricted, primarily due to technical impediments that hinder access to basic legal databases. In light of this, the session advocated for the judiciary to establish an open-access policy outlining the types of non-sensitive data that should be readily accessible, accompanied by comprehensive rules governing data sharing practices.

The challenges associated with AI integration were meticulously categorized into short-term and long-term concerns. Short-term challenges encompassed the imperative of ensuring transparency and explainability in AI systems, mitigating data and design biases that may perpetuate social inequalities, and crafting decision support systems that act as complements rather than replacements for human judgment. On the other hand, long-term challenges were discussed, including the risk of value lock-ins and stagnation in legal processes, and the necessity to contemplate the constitutional roles of judges and the separation of powers, with reference to cases such as the contentious use of COMPAS in the United States.

The session also explored the inherent risks related to disclosure and transparency in AI systems. While increased transparency was encouraged, the session noted that explanations could potentially be vulnerable to hacking, introducing vulnerabilities in AI systems.

Furthermore, it was acknowledged that companies utilizing AI might encounter legal actions and regulatory consequences due to disclosed information, particularly in cases involving sensitive personal data. The session underscored the importance of striking a delicate balance between transparency and safeguarding privacy as AI becomes increasingly embedded in justice systems.

AI and Machine Learning (ML) biases within the justice system emerged as critical topics of discussion. The session underscored that AI/ML systems, whether intentionally or inadvertently, could perpetuate biases present in initial datasets, potentially amplifying the problem through the personal biases of algorithm developers. This systemic replication of biases was deemed a significant concern, as it could lead to prolonged discrimination against specific communities and contribute to large-scale inequality. Addressing and rectifying these biases were recognized as vital steps towards achieving a justice system that is fair and equitable.

Additionally, the session offered insights into the potential role of blockchain technology in enhancing cybersecurity within the judiciary. The remarkable ability of AI to swiftly identify and pre-empt potential threats was contrasted with traditional methods, which often require weeks to identify and address threats. The session briefly introduced various AI-based tools, including JUST AI, Jugalbandi, TERES_CORD, and Lawctopus, highlighting the promising advancements in the AI domain. The session emphasized the critical need for responsible AI development and underscored its pivotal role in shaping the future landscape of the judiciary.