

## Covid-19 and Virtual Court System in India

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### **Abstract**

*Globalization has opened the doors to the new age of technology. Across the globe, countries have taken the plunge to integrate technology with the justice system to remedy the previously existing inadequacies like pendency of cases, delayed justice delivery, etc in the court system. With technological advancements striking great heights on one hand, courts still preferred physical hearings until the onset of the COVID-19 outbreak. In March 2020, the declaration of coronavirus as a medical emergency by the World Health Organization (WHO) prompted the adoption of non-pharmaceutical measures like social distancing and lockdown by the government. These measures could prospectively bring the court operations to a standstill if the courts did not shift to technological mode of operation as recourse. India succumbed to the instant transition from physical court system to virtual court system engendering several challenges to the principal stakeholders of the court system. This article focuses on- firstly what necessitated the shift from traditional court system to virtual court system and what are the challenges that can be encountered adapting to such transition; secondly the mechanisms and measures adopted by the courts as part of E-Courts Project to deal with the sudden shift to virtual courts.*

**Keywords-** *Virtual Courts, video conferencing, COVID-19, e-justice, e-courts project, challenges*

### **1. Introduction**

Administration of Justice is the first pillar of Good Governance and plays an eminent role in upholding the spirit of the rule of law. Physical hearing was the preferred mode of operation of the courts in India until the outbreak of coronavirus in March 2020 . COVID-19 has inaugurated myriad changes in societal conditioning and human interactions across the world. The courts are one such social institution immensely impacted by the unexpected health crisis where physical hearings were suspended and people

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could not access courts due to lockdown and social distancing. The unforeseen COVID-19 outbreak and the measures that followed compelled the courts to shift from traditional or physical hearings to virtual hearings. Shifting to virtual hearings with the aid of technology was the only recourse available with the courts to strike a balance between public health and access to justice. The adoption of the virtual court system posed several challenges to the court system's principal stakeholders like the lawyers, litigants, judges, etc. This article focuses on two main aspects- firstly what necessitated the shift from traditional court system to virtual court system and what are the challenges that can be encountered adapting to such transition, the second being the mechanisms and measures adopted by the courts as part of E-Courts Project to tackle the sudden shift to virtual courts.

## 2. Impact of Covid-19 on Indian Court System

### 2.1 Covid-19 Pandemic

Around the world, the Pandemic has wreaked devastation in every aspect of life. In contrast to the difficulties that social organizations typically face as a result of unanticipated crises or situations, a pandemic is an existential crisis that has no clear beginning or finish. It resembles a natural disaster or a major global climatic crisis more.<sup>4</sup> However, a pandemic is a protracted event as opposed to a natural disaster like a hurricane or flood, which is a single discrete event. Additionally, there is little consistency in how calamities affect the afflicted people.<sup>5</sup> A nation's capacity to recover from a calamity is determined by its inequality and resource availability.<sup>6</sup>

Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2) viral illness that is brought on by the corona virus which triggers respiratory tract infection.<sup>7</sup> After the Chinese epidemic in December 2019, the WHO recognised SARS-CoV-2 as a novel corona virus in early 2020.<sup>8</sup> Globally, the infection soon spread like a fire. Person-to-person contact is how the virus is passed from one person to another.<sup>9</sup> The

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<sup>4</sup> Julie Marie Baldwin, John M. Essay and Erika J. Brooke, "Court Operations during the COVID-19 Pandemic", *AMERICAN JOURNAL OF CRIMINAL JUSTICE*, 45(5), pp 743- 758, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7354363/> (Last visited July 15, 2022)

<sup>5</sup> Ibid

<sup>6</sup> Ibid

<sup>7</sup> *Coronavirus and COVID-19: What You Should Know*, WEBMD (Dec 22, 2021), <https://www.webmd.com/lung/coronavirus> (Last visited July 15, 2022)

<sup>8</sup> ibid

<sup>9</sup> *Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations*, WORLD HEALTH ORGANISATION (Mar 29, 2020), <https://www.who.int/news-room/commentaries/detail/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations> (Last visited July 15, 2022)

closest 3 to 6 feet to an infectious source are where the danger of transmission is greatest.<sup>10</sup> The transmission rate is also very high.<sup>11</sup>

To stop the COVID-19 Pandemic's spread and safeguard the public's health, the government implemented social seclusion and lockdown.<sup>12</sup> To stop the virus's spread and gather the necessary supplies, the authorities instituted a lockdown.<sup>13</sup> According to a study, a city lockdown might be used as a temporary strategy to restrict and delay the development of a viral outbreak.<sup>14</sup> The administrative authorities are required under the constitution to impose lockdowns and curfews to restrict the movement of people and commodities when there is a threat to human life, public health, tranquility, etc. As a result of this shutdown, court business was momentarily suspended.

## 2.2 Impact of COVID-19 on Court System

To understand the issues facing the courts, a study of COVID-19's effects on the legal system is necessary. In addition to examining the difficulties, it's important to pinpoint the chances that the courts have in the wake of the incident to advance the justice system. Analyzing the difficulties can also assist improve the court system and better the courts in order to increase accountability, transparency, and access to justice. The effects of COVID-19 on the justice system are as follows.

### a. Suspension of physical hearings

Courts had to close and physical hearings had to be suspended due to the lockdown and social conventions of distance.<sup>15</sup> This led to unnecessary case adjournments, an increase in case pending time, etc. The rapidly spreading virus and rising death toll had a negative impact on both the quality and quantity of the workforce. Although the e-Courts mission initiative started the digitalization of courts back in 2005, most legal activities, like case hearings, the filing of documents and evidence, etc., were

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<sup>10</sup> *SARS-CoV-2 Transmission*, CENTERS FOR DISEASE CONTROL AND PREVENTION (May 7, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/sars-cov-2-transmission.html> (Last visited July 15, 2022)

<sup>11</sup> *Supra* note 7

<sup>12</sup> *ibid*

<sup>13</sup> *ibid*

<sup>14</sup> Xiaoxuan Yang, "Does city lockdown prevent the spread of COVID-19? New evidence from synthetic control method", *GLOBAL HEALTH RESEARCH AND POLICY*, 6, 20 (July 1, 2021), <https://ghrp.biomedcentral.com/articles/10.1186/s41256-021-00204-4> (Last visited July 15, 2022)

<sup>15</sup> Amish Sah, "Virtual Courts: Prospects and challenges", *LEGAL SERVICES INDIA*, <https://www.legalserviceindia.com/legal/article-4530-virtual-courts-prospects-and-challenges.html> (Last visited July 15, 2022)

still done physically. Also, the ICT revolution had little of an impact on district and taluk level courts.<sup>16</sup> Physical hearings were suspended and paperwork was filed as a result of the COVID-19 problem.

## **b. Disruption in Access to Justice**

The Pandemic has negative effects on vulnerable communities and marginalized people. While everyone stayed at home, some people were victims of violence and violations of human rights. During the lockdown, there was an uptick in domestic violence against women.<sup>17</sup> Detainees were also allegedly not adequately protected from the COVID-19 virus, and professionals like attorneys were not given adequate access to health care.<sup>18</sup> Migrant workers' right to a living was also allegedly violated. These human rights abuses are a result of the actions the government took to address the COVID-19 situation. The government did not take any action to limit these infractions.

Due to the lack of access to courts, these human rights breaches could not be challenged in court.<sup>19</sup> Even if the courts ran properly, they would only hear urgent cases. It is obvious that the increase in human rights breaches and the decrease in cases accepted by courts for hearing had a significant influence on access to justice.

## **c. Adoption of Virtual Court system**

The court systems may suffer as a result of the aforementioned two implications. John F. Kennedy rightly said, "In a crisis, be aware of the danger- but recognize the opportunity".<sup>20</sup> Adopting a virtual court system during the COVID-19 situation may be seen as a chance in the midst of a crisis. The virtual court system is a different method of operation that courts have embraced to continue delivering justice.

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<sup>16</sup> Akhila Pai H., "Evaluation of Indian E-Judiciary System", *INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS* VOL 5 ISSUE 3, E-ISSN 2348-1269, P-ISSN 2349-5138 (July- Sept 2018), [http://ijrar.com/upload\\_issue/ijrar\\_issue\\_20542960.pdf](http://ijrar.com/upload_issue/ijrar_issue_20542960.pdf) (Last visited July 15, 2022)

<sup>17</sup> Akshaya Krishnakumar and Shankey Verma, "Understanding Domestic Violence in India during COVID-19 : a Routine Activity Approach", *ASIA J CRIMINOL*, 2021, 16(1): 19-35, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7945968/> (Last visited July 15, 2022)

<sup>18</sup> *Violations of Human Rights during COVID-19*, LEGAL SERVICE INDIA, <https://www.legalserviceindia.com/legal/article-3851-violations-of-human-rights-during-lockdown.html>, (Last visited July 15, 2022)

<sup>19</sup> Mohammed R M Elshobake, "Human rights violations during the COVID-19 Pandemic", *INTERNATIONAL JOURNAL OF HUMAN RIGHTS IN HEALTHCARE*, ISSN 2056-4902 (June 10, 2021), <https://www.emerald.com/insight/content/doi/10.1108/IJHRH-11-2020-0097/full/html> (Last visited July 15, 2022)

<sup>20</sup> Ankita Pathak, "India's chance to seize opportunity amidst crisis", *THE TIMES OF INDIA* (May 9, 2020) <https://timesofindia.indiatimes.com/blogs/the-macro-faire/indias-chance-to-seize-opportunity-amidst-crisis/> (Last visited July 15, 2022)

In order to address the situational problem, the courts established a virtual system of operations.<sup>21</sup> Following the announcement of the lockdown, the Honorable Supreme Court made the spontaneous decision *via suo moto* order to switch to virtual mode, restrict access for attorneys to physical courts, and take up urgent cases.<sup>22</sup> The classification of cases as "very urgent matters" was not specified by the courts, and no standards or criteria were established. The following cases are considered extremely urgent based on the cases the Apex court took up for hearing.<sup>23</sup>

Cases pertaining

1. The welfare of migrant workers.
2. Citizens caught up in other countries.
3. Guidelines to be notified for prevention of the spread of coronavirus.
4. Protection of victims of Delhi riots.

Which cases were urgent and which were not was largely decided by the court registry.<sup>24</sup> If their cases weren't on the cause list, the plaintiffs and advocates had no way of getting in front of the court.<sup>25</sup> The difficulties with the virtual court system are thoroughly covered in the section that follows.

## 2.2 Challenges in Adopting Virtual Court System

### 2.2.1 STRUCTURAL CHALLENGES

#### A. DIGITAL INFRASTRUCTURE

Aside from the traditional infrastructure, such as roads, water, and power, digital infrastructure has emerged as a crucial component for the growth and advancement of the nation in the twenty-first century.<sup>26</sup> The COVID-19 brought about a transformation in the world order that also altered our understanding of how society functions. Despite the fact that technology had been there for a while, the Pandemic had brought it into our lives with more power. The operation of the virtual courts has made it

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<sup>21</sup> Ashish Tripathi, "Virtual Courts, an opportunity to overhaul the system", DECCAN HERALD (Dec 2, 2021, 11.36 pm IST), <https://www.deccanherald.com/opinion/panorama/virtual-courts-an-opportunity-to-overhaul-the-system-1057011.html> (Last visited July 15, 2022)

<sup>22</sup> Circular dated March 23, 2020, Supreme Court of India, New Delhi, [https://main.sci.gov.in/pdf/cir/23032020\\_153213.pdf](https://main.sci.gov.in/pdf/cir/23032020_153213.pdf) (Last visited July 16, 2022)

<sup>23</sup> Selvi Palani, "The pressing need to frame parameters for "extremely urgent" cases", BAR AND BENCH (June 8, 2020, 2.09 pm IST), <https://www.barandbench.com/columns/lockdown-diaries-the-supreme-court-of-india-framing-parameters-for-extremely-urgent-cases> (Last visited July 16, 2022)

<sup>24</sup> *ibid*

<sup>25</sup> *ibid*

<sup>26</sup> Naman Agrawal, S. Mohit Rao and Himanshu Agrawal, "The Role of Digital Infrastructure in Socio-economic Development", *INVENTION INTELLIGENCE* (March-April 2021), NITI AYOJ, <https://www.niti.gov.in/sites/default/files/2021-09/The-Role-of-Digital-Infrastructure-in-socio-economic-development-042021.pdf> (Last visited July 17, 2022)

clear that the nation's digital infrastructure, including the digital divide and lack of digital literacy, is inadequate.<sup>27</sup> Not everyone has access to technology or the know-how to operate the devices.

A study on how virtual courts operate was provided by the Standing Committee on Personnel, Personal Grievances, Law, and Justice, which is chaired by Mr. Bhupender Yadav.<sup>28</sup> According to the report, many litigants and advocates lack access to high-speed internet and basic infrastructure, making it difficult for them to participate in online proceedings.<sup>29</sup> Examining India's digital divide will help us better understand why the country's digital infrastructure is so inadequate.

## B. TECHNOLOGICAL/ DIGITAL DIVIDE

There are many levels of access to technology in India.<sup>30</sup> The internet penetration rate in India as of January 2022 was 47% of the entire population, meaning that every second person is not online.<sup>31</sup> A digital divide is "An uneven distribution in the use of, access to or impact of information and communication technologies between any number of distinct groups, which can be defined based on social, geographical, or geopolitical criteria, or otherwise," according to the definition provided by the Digital Divide Initiative.<sup>32</sup> The phrase "digital divide" was frequently used in research and policies in the 1990s and the early 2000s. The notion of the digital divide has changed along with the advancement of ICTs and the expansion of access to them.

Now, it refers to:

1. Lack of infrastructure
2. Lack of information
3. Lack of access
4. inability to leverage information

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<sup>27</sup>Siddharth Mandrekar Rao, "Confronting the Digital Divide in Virtual Courts", *DAKSH INDIA* (May 4, 2020) <https://www.dakshindia.org/confronting-the-digital-divide-in-virtual-courts/> (Last visited July 17, 2022)

<sup>28</sup> *Standing Committee Report Summary- Functions of Virtual Courts*, PRS LEGISLATIVE RESEARCH, [https://prsindia.org/files/policy/policy\\_committee\\_reports/Report\\_Summary\\_SC\\_Virtual%20Courts.pdf](https://prsindia.org/files/policy/policy_committee_reports/Report_Summary_SC_Virtual%20Courts.pdf) (Last visited July 17, 2022)

<sup>29</sup> Ibid

<sup>30</sup> Ambika Gupta, "Indian Legal System and Access to Justice during COVID-19", *INTERNATIONAL JOURNAL OF LAW MANAGEMENT AND HUMANITIES*, Vol 3 Issue 6;149 ISSN (2581-5369), (2020), <https://www.ijlmh.com/wp-content/uploads/Indian-Legal-System-and-Access-to-Justice-during-COVID-19.pdf> (Last visited July 17, 2022)

<sup>31</sup>*Digital 2022: India*, DATA REPORTAL (Feb15, 2022), <https://datareportal.com/reports/digital-2022-india> (Last visited July 17, 2022)

<sup>32</sup> Eva Johanna Schweitzer, "Digital Divide", BRITANNICA, <https://www.britannica.com/topic/digital-divide> (Last visited July 17, 2022)

The urban-rural gap, regional difference, and gender divide are a few of the elements that contribute to the digital divide. India has a rural-urban digital gap as evidenced by the country's low rural broadband penetration of just 29% compared to the country's average of 51%.<sup>33</sup> According to a survey by the TRAI, more than 38% of all internet subscriptions in India as of March 2020 were in rural areas.<sup>34</sup> There are differences in terms of people's access to the internet and computers when we look at the United States. The highest rates of digital exclusion are found in Rajasthan's arid region and Himachal Pradesh's hilly region.

gender gap is nothing new and is present in many facets of life. In terms of internet accessibility, India has the largest gender gap. Even today, some women still rely on their husbands to get to the internet, and in some areas<sup>35</sup> it is still not permitted for women to use mobile phones.<sup>36</sup>

### C. DIGITAL LITERACY

According to the Ministry of Electronics and Information technology, the definition of digital literacy is “the ability of individuals and communities to understand and use digital technology for meaningful actions within life situations. Any individual who can operate a computer/laptop/tablet/Smartphone and use other IT related tools is being considered as digitally literate.”<sup>37</sup> Considering the aforementioned definition, just 38% of Indian households are digitally literate.<sup>38</sup> Urban areas have a greater rate of digital literacy (61%) than rural areas (25%).<sup>39</sup> Scheduled castes and Scheduled Tribes have the lowest rate of digital literacy among social groupings, at 21%.<sup>40</sup> Chandigarh, Lakshadweep, and Goa are in the top 10% of digitally literate Indian states and union territories, according to state-level statistics.<sup>41</sup>

<sup>33</sup>Shreya Goswami, “Social Justice in a Digital World: Can we ever bridge the Rural-Urban Divide?”, HER CIRCLE (Feb 11, 2022), <https://hercircle.in/engage/get-inspired/achievers/Social-Justice-In-A-Digital-World-Can-We-Ever-Bridge-The-RuralUrban-Divide-2168.html> (Last visited July 17, 2022)

<sup>34</sup> “Bridging the Gap: Digital Mission reaching Rural areas & role of Union Budget 2022”, NEWS ON AIR (Feb 2, 2022), <https://newsonair.com/2022/02/02/bridging-the-gap-digital-mission-reaching-rural-areas-role-of-union-budget-2022/> (Last visited July 17, 2022)

<sup>35</sup>“Could Virtual Courts in India Allow Legal Access Even After the Pandemic?”, ACADEMIKE, LAWCTOPUS (Aug 6, 2021), <https://www.lawctopus.com/academike/virtual-courts-in-india-hearing/> (Last visited July 17, 2022)

<sup>36</sup> “Uttar pradesh village bans women from using mobile phones”, LIVE MINT (May 3, 2017), <https://www.livemint.com/Politics/mIGCffa0FywkkCJ2XHNSN/Uttar-Pradesh-village-bans-women-from-using-mobile-phones.html> (July 17, 2022)

<sup>37</sup>“Overview of NDLM”, NATIONAL INSTITUTE OF ELECTRONICS & INFORMATION TECHNOLOGY, AJMER, <https://nielit.gov.in/ajmer/content/national-digital-literacy-mission> (Last visited July 17, 2022)

<sup>38</sup> Venugopal Mothkooor, Fatima Mumtaz, “The digital dream: Upskilling India for the future”, IDEAS FOR INDIA (Mar 23, 2021), <https://www.ideasforindia.in/topics/governance/the-digital-dream-upskilling-india-for-the-future.html>, (Last visited July 17, 2022)

<sup>39</sup> Ibid

<sup>40</sup> Ibid

<sup>41</sup> Ibid

Lakshadweep has a far lower rural-urban difference than Chandigarh, which has the greatest rural-urban divide at 27%, at just 1%. Due to a number of measures taken by the State Government, only Kerala and Goa have reached more than 70% household digital literacy.<sup>42</sup>

## 2.2.2 BEHAVIORAL CHALLENGES

### A. PSYCHOLOGICAL BARRIER TO USE TECHNOLOGY

In India, there is a skill gap because the majority of people lack the knowledge and abilities needed to use digital platforms. Most of the adult population lacks digital literacy due to technophobia, a psychological barrier to living in the digital age. One-third of the population suffers from technophobia, which is defined as "an abnormal dread or concern about the consequences of sophisticated technology, producing health problems and the inability to function successfully."<sup>43</sup> Users of courts may feel computer anxiety, which is "concept-specific and includes a wide variety of circumstances in which individuals engage with computers," since they are unfamiliar with technology.<sup>44</sup> The fear of technology is more common among older generations when it comes to computer operations, difficult acronyms, etc., but not when it comes to mobile phones.<sup>45</sup>

### B. HABITUALIZATION TO THE TRADITION OF PHYSICAL COURTS

People must physically visit a court to resolve their disputes due to the long-standing practise of physical courts in India and other countries. Among court users of all ages, there is more to physical court buildings than merely comfort or a feeling of familiarity. But there is also a great deal of respect and prestige that goes along with it. When one enters the courts wearing the black robe and neckband, there is an intuitive sensation of mental tuning to the environment, which results in an innate mental deference to the judges and court surrounds.

An advocate "gets to comprehend the attitude of the judges and stands a higher chance of persuading them during physical hearings," according to advocate KM Riyaz Ahamed. However, having a hearing

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<sup>42</sup>Ibid

<sup>43</sup>Dina Di Giacomo, Jessica Ranieri, Meny D'Amico, Federica Guerra and Domenico Passafiume, "Psychological Barriers to Digital Living in Older Adults: Computer Anxiety as Predictive Mechanism for Technophobia", *BEHAVIORAL SCIENCE (BASEL)*, 9(9): 96, (Published online on Sept 11, 2019), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6770433/> (Last visited July 17, 2022)

<sup>44</sup> Ibid

<sup>45</sup> Ibid



online puts psychological strain on the judges and the attorneys.<sup>46</sup> Maintaining this civility on the virtual forum is difficult. In a recent case,<sup>47</sup> 114 practicing attorneys who are also members of the Supreme Court Bar Association asked the court to switch completely to physical hearings and emphasized that due to virtual hearings, the court's decorum and discipline were completely lost.<sup>48</sup>

### C. LACK OF SOCIALIZATION

Social interaction with seniors, colleagues, and other attorneys helps new lawyers learn at the bar. The art of advocating can only be honed through observation. It is difficult in the virtual court system for young and inexperienced lawyers to notice the body language of senior attorneys while they argue before the court. Additionally, in the virtual system, networking with colleagues—which promotes learning new things—is hindered.

## 2.2.3 OPERATIONAL CHALLENGES

### A. INTERNET AND BANDWIDTH

Virtual court sessions require a particular amount of IT infrastructure to be conducted. One needs high-speed internet and sufficient bandwidth while using devices to participate in virtual hearings, at least for the duration of the case hearing. As of February 2022, India ranks 115th for mobile broadband speed and 70th for fixed broadband speed globally in the Speed Test Global Index, which rates internet speed around the world.<sup>49</sup> The reasons for India's slow internet connections include the country's inadequate spectrum allocation, an increase in data consumption brought on by the rising use of smartphones<sup>50</sup>, and low-cost data plans, as well as the telecom sector's financial difficulties.<sup>51</sup> Even while technology has enabled courts to switch to a virtual form of operation, it has made it challenging for attorneys, judges, litigants, and the general public to work virtually due to poor internet connections.

### B. TECHNOLOGICAL GLITCHES

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<sup>46</sup> Richa Jain and Sarthak Chaudhary, “The Renaissance of Virtual Courts”, 4 (3) *IJLMH*, Page 5722 - 5732 (2021), <https://www.ijlmh.com/paper/the-renaissance-of-virtual-courts-towards-the-digital-age/#> (Last visited July 17, 2022)

<sup>47</sup> All India Association of Jurists & Anr v. High Court of Uttarakhand, Writ Petition (Civil), 941/2021

<sup>48</sup> Kewal Kiran Clothing Limited v. Narendra Mehta (HUF) & Ors, Interim Application (L) No. 15238 of 2021, Kaushal Kishore v. Brij Bhushan and Anr, Second Appeal No. 339 of 1980, Suo Motu Criminal Contempt Petition No.1699/ 2021

<sup>49</sup> *Speedtest Global Index*, SPEEDTEST (Feb, 2022), <https://www.speedtest.net/global-index> (Last visited July 17, 2022)

<sup>50</sup> Ankit Tuteja, *Explained: Why 4G network is slow in India*, WION (Mar 13, 2020), <https://www.wionews.com/opinions-blogs/explained-why-4g-network-is-slow-in-india-286106> (Last visited July 17, 2022)

<sup>51</sup> “Why Internet is Slow in India- Reasons and Future Predictions”, *SELECTRA*, <https://selectra.in/internet-speedtest/internet-network-speed-now-and-future> (Last visited July 17, 2022)

Glitches that stakeholders encounter on a daily basis when using technology present another operational challenge for the virtual court system. Numerous obstacles could arise during the court procedures as a result of these technical problems. Since it would be difficult to distinguish between body language and facial expressions, both of which are important factors in a witness's response, the cross-examination of witnesses may effectively defeat the entire objective of the process. A slow internet connection could cause the visual screen to buffer or become too blurry for the user to see the people on the other side. The Calcutta High Court recently brought attention to common connectivity problems and electrical interferences with video and audio devices that have a significant negative influence on adjudication.<sup>52</sup> Therefore, the delivery of justice may be significantly harmed by these technological flaws.

### C. PRIVACY AND SECURITY ISSUES

Technology-related data piracy and security problems are nothing new and can be extremely harmful to the parties involved.<sup>53</sup> Due to security flaws in the court system, sensitive cases including rape, murder, and other crimes could result in serious harm to the parties involved. Third-party software and services, such as Cisco WebEx, Microsoft Teams, etc., are utilized for virtual hearings.<sup>54</sup> Because the software owners have easy access to sensitive information given by users, these programmes increase the danger of information leakage.<sup>55</sup>

### D. INACCESSIBILITY TO OPEN COURTS AND JUSTICE

The virtual court system faces difficulties with relation to access to public courts. The number of attendees at the virtual hearings was relatively small. The public was not permitted to attend case hearings to observe court proceedings.<sup>56</sup> In such circumstances, the issue is how to preserve public confidence while striking a balance between the public's right to open courts and the use of new technologies, such as video conferencing. Live broadcasting of case hearings is a practice used by several Indian courts.<sup>57</sup> In the

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<sup>52</sup> Sri Jadav Saredar and Jadab Sardar v. Sri Basudev Tarafder, C.O 891 of 2021 (Via Video Conferencing)

<sup>53</sup>Supra note 30

<sup>54</sup>Julie Marie Balswin, John M Eassey and Erika J Brook, "Court Operations during the COVID-19 Pandemic", *AM J CRIM JUS* 45, 743-758 (2020), <https://link.springer.com/article/10.1007%2Fs12103-020-09553-1> (Last visited July 17, 2022)

<sup>55</sup> Ibid

<sup>56</sup> Pramod Kumar Dubey, "Virtual Courts: A sustainable option?", *BAR AND BENCH* (Apr 12, 2020), <https://www.barandbench.com/columns/virtual-courts-a-sustainable-option> (Last visited July 17, 2022)

<sup>57</sup> Apoorva Mandhani, "As SC contemplates live telecast of hearings, Gujarat HC has been showing the way for long", *THE PRINT* (May 13, 2021, 5.22 pm IST), <https://theprint.in/judiciary/as-sc-contemplates-live-telecast-of-hearings-gujarat-hc-has-been-showing-the-way-for-long/657606/> (Last visited July 17, 2022)

case of *Swapnil Tripathi v. Supreme Court of India*<sup>58</sup> from 2018, the Supreme Court maintained the possibility of live streaming. Only a small number of Indian courts, like the Gujarat High Court, stream case sessions live to the general public.

### E. ANTIQUATED ANCILLARY LEGAL PROCEDURES

Before or during the execution of the documents, stamping is a crucial legal activity that must be completed. There are currently no rules in India that permit the electronic stamping of papers.<sup>59</sup>

### F. DUE PROCESS CHALLENGES

One of the difficulties with the Due Process is that during the virtual hearing, the attorneys may instruct their witnesses by covert ways such as texts, etc.<sup>60</sup> Witness coaching undermines the entire goal of justice. Additionally, during virtual cross-examination, there is debate over the veracity of witness testimony. It might be difficult to establish whether a witness is telling the truth by reading their body language and facial expressions, which are crucial indicators.<sup>61</sup> Additionally, there was a breach of the attorney-client privilege during the Pandemic.<sup>62</sup> From 23 March 2020 until 1 October 2020, no in-person interactions were permitted between attorneys and plaintiffs. Therefore, the detainees virtually met their attorneys in front of cops across unsecured lines. Due to heightened likelihood of police eavesdropping, the detainees could not have a private conversation with their attorneys.

## 3. Measures Adopted by the Courts during the Pandemic

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<sup>58</sup> Writ Petition (Civil) 1232/2017

<sup>59</sup> *Electronic Signature Laws & Regulations- India*, ADOBE, (Last Updated Feb 14, 2022), <https://helpx.adobe.com/sign/using/legality-india.html> (Last visited July 17, 2022)

<sup>60</sup> Saniya Mirani, "Due Process Concerns in Virtual Witness Testimonies: An Indian Perspective", *KLUWER ARBITRATION BLOG* (Nov 17, 2020), <http://arbitrationblog.kluwerarbitration.com/2020/11/17/due-process-concerns-in-virtual-witness-testimonies-an-indian-perspective/> (Last visited July 17, 2022)

<sup>61</sup> *ibid*

<sup>62</sup> "Right to a Speedy Trial in India during the COVID-19 Pandemic", *LEXLIFE INDIA* (Aug 31, 2021) <https://lexlife.in/2021/08/31/right-to-a-speedy-trial-in-india-during-the-covid-19-pandemic/> (Last visited July 17, 2022)

The courts operated manually up until the advent of technology, which presented various difficulties for the legal system. Delivering justice slowly has been the Indian judicial system's biggest flaw.<sup>63</sup> The other challenges facing the Indian Judiciary are:

- Pendency of cases.
- Vacancy of judges.
- Lack of transparency.
- Unnecessary adjournments.
- Lack of interaction with society and lack of awareness among society.

Due to inconsistencies in the system, the Indian Judiciary was forced to quickly reengineer its processes by utilizing ICT to its fullest. Since 1990, there have been efforts made to computerize the Indian judicial system.<sup>64</sup> The creation of the e-Committee was recommended by Justice RC Lahoti, a former Chief Justice of India, as a means of implementing new technology. There was a need felt to make the program of ICT integration into the Judiciary mission-centric.<sup>65</sup> A nationwide programme in India called E-Courts Project aims to adopt and incorporate technology into the legal system.<sup>66</sup> The nodal body in charge of managing the e-courts project is called the E-Committee.

The E-Courts project is divided into three phases. Phase I focused on laying the foundation for technological integration and implementation into India's court system.<sup>67</sup> The Phase II initiative is concerned with providing services to various participants in the legal system, such as litigants, advocates, and others. As part of the Phase II of the E-Courts project, the E-Committee carried out a number of actions throughout the Pandemic. The project's Phase III is currently in the proposal stage, and the proposal's goal is to transition to paperless courts and eliminate the massive amount of paper case files.<sup>68</sup>

The following are the measures taken by the E-Committee during the Pandemic as part of Phase II of the e-Courts Project:

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<sup>63</sup> Dr. Swathi Jindal Garg, "Justice Delayed is Justice Denied", *RISING KASHMIR*, (Jan 6, 2022), <https://www.risingkashmir.com/-JUSTICE-DELAYED-IS-JUSTICE-DENIED--98384> (Last visited July 16, 2022)

<sup>64</sup> National Policy and Action Plan for Implementation of Information and Communication Technology in the Indian Judiciary, E-COMMITTEE, Supreme Court of India, (Aug 1, 2005), <https://main.sci.gov.in/pdf/ecommittee/action-plan-ecourt.pdf> (Last visited July 16, 2022)

<sup>65</sup> Ibid

<sup>66</sup> Ibid

<sup>67</sup> Ibid

<sup>68</sup> Digital Courts Vision & Roadmap, Phase III of the eCourts Project (Draft), E-COMMITTEE SUPREME COURT OF INDIA, [https://highcourtcd.gov.in/sub\\_pages/left\\_menu/dcv/dcv\\_pdf/Draft\\_Vision\\_Document\\_eCommittee.pdf](https://highcourtcd.gov.in/sub_pages/left_menu/dcv/dcv_pdf/Draft_Vision_Document_eCommittee.pdf) (Last visited July 16, 2022)

### **a. Studio based courts**

A studio court is a system where judges hear cases while seated in their chambers and attorneys present their arguments from a courtroom set aside for video conferencing. A new studio court system for hearing cases was implemented by the Patna High Court in 2020 as an experiment during the COVID.<sup>69</sup>

### **a. Justice clock**

Technology called a "justice clock" shows statistics about the institution, resolution, and status of cases in the High Court and district courts. It is a 7 by 10 foot LED display that is positioned 17 feet above the ground.<sup>70</sup> The interface, which was created in-house, will show information from the National Judicial Data Grid.<sup>71</sup> A virtual justice clock that mimics a real justice clock has been set up by the Karnataka High Court.<sup>72</sup> The fundamental goal of this system is to increase openness and accountability by making the statistics and data available to everyone.

The case clearance rate for this day, this week, this year, and last year, according to Gujarat High Court Chief Justice Arvind Kumar, is "one of the essential aspects addressed in the content of the Justice clock."<sup>73</sup> The purpose of providing such data is to intentionally inspire people to work hard and reach 100% where disposition matches the institution of cases.<sup>74</sup>

### **b. Virtual Court**

The idea of a virtual court was developed so that disputes or cases might be decided without the need for litigants or attorneys to physically appear in court. The litigants can check the case status and pay fines online through an online virtual court using various service delivery channels that have been built. This mechanism handles issues of minor traffic violations.

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<sup>69</sup>“Court Hearings amid COVID-19: Patna HC Issues SOP for functioning of Studio-based Courts”, BAR AND BENCH, (Oct 12, 2020, 11:20 IST), <https://www.barandbench.com/news/patna-hc-issues-sop-for-functioning-of-studio-based-courts-read-procedure> (Last visited July 16, 2022)

<sup>70</sup> Sohini Ghosh, “Explained: Gujarat HC’s ‘Justice Clock’ and other digital initiatives”, THE INDIAN EXPRESS, (Jan 21, 2022, 9:42 IST) <https://indianexpress.com/article/explained/explained-gujarat-hcs-justice-clock-and-other-digital-initiatives-7733994/> (Last visited July 16, 2022)

<sup>71</sup> Ibid

<sup>72</sup> Ibid

<sup>73</sup> Ibid

<sup>74</sup> Ibid

### c. Live Streaming

The primary goal of implementing live streaming was to increase the openness and accountability of the courts and make the courtrooms accessible to a large audience outside of the real courtrooms' four walls.<sup>75</sup> Currently, six high courts, including those in Gujarat, Karnataka, Patna, Jharkhand, and Madhya Pradesh, offer live streaming of court proceedings on YouTube channels. The Supreme Court is still considering a plan to introduce a unique platform for streaming live court hearings.<sup>76</sup> Live streaming of court proceedings has a number of difficulties, including the technological gap, digital illiteracy, and bandwidth and internet problems.

### d. Paperless Court

Electronic digitization and transfer of case records to the courtroom are two aspects of the Paperless Court. The electronic case records in the database are synced with the electronic cause list before the Hon'ble Judge.<sup>77</sup> Additionally, the judgement can be dictated into a computer, which the stenographer can use afterwards.<sup>78</sup> The idea of a paperless court focuses on managing the flow of case records, which often requires time and labour, and bringing electronic paper into the courtroom.<sup>79</sup>

### e. Digitization of court records

For the following reasons, the scanning and digitization of court records from both active and closed cases is a continuous process:<sup>80</sup>

1. Paperless courts with Wacom display boards
2. Paperless court materials to the Advocates in the court hall
3. Virtual courts through video conference
4. Assigning QR codes to case bundles
5. Issuance of certified documents

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<sup>75</sup> Ibid

<sup>76</sup> Ibid

<sup>77</sup> TSHC- Paperless Courts with Wacom Display Boards, E-COMMITTEE SUPREME COURT OF INDIA, <https://ecommitteesci.gov.in/project/paperless-courts-with-wacom-display-boards/> (Last visited July 16, 2022)

<sup>78</sup> Ibid

<sup>79</sup> Ibid

<sup>80</sup> TSHC- Digitisation of case records, E-COMMITTEE SUPREME COURT OF INDIA, <https://ecommitteesci.gov.in/project/digitization-of-case-records-of-case-records/> (Last visited July 16, 2022)

## **f. E-Seva Kendra**

Advocates and litigants can access all ICT-enabled services, including e-filing, at the centralized service centre known as E-Seva Kendra.<sup>81</sup> Seva Kendras' main goal is to guarantee that everyone access to justice.<sup>82</sup> Within e-Seva Kendra, there are support desks and video conferencing cabins.<sup>83</sup> The institution offers the following help to litigants:<sup>84</sup>

1. Provides information about their case status
2. E-filing of cases
3. Access to a court or case-related information
4. Obtaining e-copies of judgments and orders

This service is necessary because not everyone in India is proficient and effective in using technology and there is a lack of digital literacy in the country. With the use of these facilities, people can become at ease and knowledgeable about technology.

## **g. Automated Email system for sending orders/ judgments**

The CIS software automatically emails the intended user with information about the case status, the next hearing date, the cause list, and the order and judgement once the intended user, who may be an advocate or litigant, registers a user email address with the programme.<sup>85</sup> The daily notifications about case hearings, cause lists, judgments, and orders are automatically sent in pdf format to the email address, saving stakeholders time and effort.<sup>86</sup>

## **h. Training and Awareness Programmes**

The e-committee has stressed numerous times the importance of educating judges, attorneys, and judicial officers about technological use. A number of awareness-raising and training programmes have been organized by the e-committee.<sup>87</sup>

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<sup>81</sup>e-SEWA KENDRA, E-COMMITTEE SUPREME COURT OF INDIA, <https://ecommitteesci.gov.in/service/e-sewa-kendra/> (Last visited July 16, 2022)

<sup>82</sup> Ibid

<sup>83</sup> Ibid

<sup>84</sup> Ibid

<sup>85</sup>Automated Email, E-COMMITTEE SUPREME COURT OF INDIA, <https://ecommitteesci.gov.in/service/automated-email/> (Last visited July 16, 2022)

<sup>86</sup> Ibid

<sup>87</sup> Ibid

### **i. NSTEP**

NSTEP is a web application and a mobile application that is a centralized process service tracking programme intended to speed up the process.<sup>88</sup> The concept behind this application is that the conventional techniques of summons and process service inevitably result in delays in the swift resolution of disputes. The bailiffs and process servers.<sup>89</sup> The bailiffs and process servers can monitor the delivery of notifications and summonses thanks to the smartphone application.<sup>90</sup>

## **4. Conclusion**

The article describes the reasons behind the switch from the old court system to the virtual court system, the difficulties in implementing the virtual court system, and the strategies used by the Supreme Court and High Courts to make the switch. Although using virtual courts can be helpful in difficult situations like the Pandemic, doing so presents structural, behavioral, and practical difficulties. The Indian Supreme Judicial's E-Committee has worked incredibly hard to establish and integrate technology into the court system and implement strategies to combat the COVID-19 pandemic. However, the programmes are only used in small-scale trial projects. These measures are currently only in the beginning stages of implementation.

Here are a few strategies for overcoming the structural, behavioral, and operational difficulties that the virtual court system faces.

**There are two aspects in overcoming structural challenges of the virtual court system:**

### **A. Better Implementation of Technology**

Technology now plays a crucial and vital part in the administration of justice. As a result, a plan for implementation must be chosen that will support technological scalability and reinforce the IT infrastructure. Here are a few strategies for improving the effectiveness of technology installation.

#### **1. Decentralization (Vertical Approach)**

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<sup>88</sup>NSTEP, E-COMMITTEE SUPREME COURT OF INDIA, <https://ecommitteesci.gov.in/nstep/> (Last visited July 16, 2022)

<sup>89</sup> Ibid

<sup>90</sup> Ibid



A decentralized method could make the project easier to accomplish than a top-down or hierarchical strategy. The district or lower courts are in a better position to comprehend the infrastructural and humanitarian demands in that specific location when it comes to implementing technology at the lower courts. Additionally, it helps the higher courts save time and effort as they have other obligations to consider. Additionally, granting lesser courts their own autonomy might allow them to develop new tactics that would work best for them.

## **2. Co-creation through a Horizontal Approach**

The idea of contracting out some services has already been endorsed by the E-Committee. The courts have contracted with commercial companies to handle the scanning of large amounts of court documents, which has made the procedure more convenient. The usage of newest technologies, cost effectiveness, links to talented workers and subject matter experts, shortened turnaround times, more focus on core business functions, and improved customer service are just a few benefits of outsourcing. The fact that the e-Committee has not been able to finish the projects by the deadline must be noted. This may be seen by the fact that the project's Phase I started in 2007 and was completed in 2015 with stretched schedules. Courts can install technology at reduced costs and within the allotted times through outsourcing and partnerships with commercial organizations.

## **3. Grievance Redressal Mechanism**

Because technology integration into the legal system is still a relatively new occurrence in India and not everyone is comfortable utilizing technology, the E-Committee must develop a grievance redress process. Since there was no functioning electronic filing system during the Pandemic, a temporary system was used to submit electronic papers. The cases became backlogged due to a technical issue after a functioning system was put in place, forcing the attorneys to re-file the paperwork. Advocates, plaintiffs, and other parties involved have encountered technological issues with the systems on numerous occasions. As a result, a system for resolving complaints is required in order to guarantee the effective implementation of e-Courts initiatives.

## **4. Feedback Mechanism**

Understanding the needs of the stakeholders and how the e-Courts initiative is currently operating requires a feedback mechanism. In order to create technologies for the future that will meet people's needs, it is crucial to gauge how satisfied stakeholders are with the technologies already in use. The IT infrastructure can occasionally be improved with the aid of a strong feedback mechanism.

## **B. Enhancement of IT Infrastructure**

It is necessary to improve the IT infrastructure through the adoption of legal and technological principles while developing a plan for technological integration into the justice system in order to ensure that technology is used properly and benefits everyone. Fast justice, equal access to justice, fairness and due process, respect to natural justice principles, transparency, accountability, open justice, and data and privacy protection are among the legal principles. Scalable design, value addition, straightforward design, sustainability, and quality are the technological guiding principles. A design that can be implemented on a vast scale is referred to as being scalable. A design that is sustainable minimises its negative effects on the environment while yet meeting existing and future needs. For instance, cloud computing is an eco-friendly choice since users use 84 percent less power and emit 88 percent less carbon dioxide. However, the courts are free to explore further options like Edge and Fog computing.<sup>91</sup> These ideas contribute to improving technological infrastructure. These guidelines should be kept in mind while creating a plan for technology integration to ensure that the technology used is effective and fulfills the courts' overarching objectives of prompt conflict settlement, reduced case pending, and effective administration of justice. Scalability is now a problem in the application of technology. These projects can be carried out on a broad scale by improving the judicial system's technology infrastructure based on these ideas.

### **1. Software Development v. Hardware Development**

The courts must gradually switch their attention from hardware to software development. Software may be changed more easily and at a lower cost than hardware. With software, it is feasible to develop many versions with more features, something that is not achievable with hardware. The courts have placed a strong emphasis on software development in nations including the US, Singapore, and England.

**The following are ways to overcome the behavioral challenges of the virtual court system:**

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<sup>91</sup> *Check these alternatives to cloud computing*, CLOUD TECH BRIEF, (Dec 6, 2021), <https://www.cloudtechbrief.com/index.php/cloudservices/item/7254-check-these-alternatives-to-cloud-computing> (Last visited July 24, 2022)

## 1. Need for more Awareness Programmes at ground or district level

A decentralized strategy can be used to implement significant awareness and training programmes at the district and local levels. Additionally, helplines must be established so that individuals can call them for assistance with using technology or for clarification on how to utilize a certain technological system, such as e-filing or access to judgments, causerlists, orders, or any other material relevant to courts.

## 2. Manage push backs from stakeholders

The courts can work with the bar organizations to address the complaints of the attorneys, such as setting up free internet in designated courtrooms and making provisions to supply necessary technological devices to individuals who cannot afford them.

### The following are ways to overcome the operational challenges of the virtual court system

#### 1. Improve Internet and Bandwidth

Better internet connectivity must be provided by the courts so that participants can do court business online. Courts can resolve concerns with bandwidth and the internet in a number of ways:

- a. **Subsidized internet plans:** The courts or the bar council can work with Internet Service Providers to offer advocates and other stakeholders subsidized internet plans so they can participate in virtual hearings and conduct other court business online at a reasonable price.<sup>92</sup>
- b. **Expansion of network coverage:** Countries like Kenya are using Google's Loon Balloons in an effort to increase network coverage. These floating balloons with 4G network base stations are in the atmosphere. These loon balloons assist in providing internet and bandwidth to remote and rural areas. They offer connectivity throughout 80 kms.<sup>93</sup>
- c. **Provision of additional data:** In order to save low-income advocates money on data purchases, the courts or the bar council must take steps to provide them with additional data.

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<sup>92</sup> *Global ideas that can reduce digital divide in India amid coronavirus crisis*, INDIA TODAY, (June 13, 2020), <https://www.indiatoday.in/education-today/featurephilia/story/global-ideas-that-can-reduce-digital-divide-in-india-amid-coronavirus-crisis-1688467-2020-06-13> (Last visited July 26, 2022)

<sup>93</sup> Ibid

- d. **Free WiFi Spots:** In order to make it simple for participants to use the internet, the courts may also install free WiFi hotspots on their property. Additionally, the administration must work aggressively to bring about 5G, which will improve internet connectivity throughout the nation.

## **2. Live streaming through television and online streaming channels**

Live broadcasting has only been made available in six Indian High Courts as of right now. Television networks that are solely dedicated to court proceedings are one way to access court proceedings. Given that the majority of people own a television, this will aid in reaching a sizable portion of the public. The court sessions can be webcast on YouTube and the court website in addition to television channels. For district courts, these channels must be accessible in local languages. Since it is impossible to stream every case, the courts must concentrate on those with a higher public interest. If it is difficult to watch the court hearings, the courts can additionally provide daily case headlines on these channels.

## **3. Design own application for virtual hearings**

Currently, the courts use third-party video conferencing programmes like Zoom, Google Meet, Cisco Webex, etc. Privacy and data protection, trouble presenting arguments, miscommunication, recording of evidence, difficulty conducting trials, and cross-examination of witnesses and accused are the most frequent concerns surrounding these programmes. It's crucial to keep in mind that these video conferencing tools are best used in business settings rather than in courts. Therefore, the judiciary and other stakeholders' needs must be taken into consideration while designing a video conferencing application by the courts. Courts must attempt to use blockchain technology, like those in England and China, to ensure the privacy and security of data, particularly digital or electronic evidence.

Therefore, it is crucial to recognise that technology is here to stay. However, it is important to note that at the moment it is not practical to build an entire virtual court system because Indian courts are still in the catch-up phase where they are attempting to adapt to technological changes in comparison to other technologically advanced nations like China, the US, England, and Singapore. Until a robust technological infrastructure is developed in the nation, technology can only be used as a support system to carry out supported functions of court activities. It is futile to continue creating and growing technologies without such a solid infrastructure. Blockchain and artificial intelligence have a bright future ahead of us,

but the nation's technological infrastructure and literacy need to be reinforced, and the government and judiciary must diligently work toward that goal.

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