

## Law and Policy Review (LPR)

Volume 3 Issue 2, Fall 2024

ISSN(P): 2076-5614, ISSN(E): 3007-4290

Homepage: <https://journals.umt.edu.pk/index.php/lpr>



Article QR



**Title:** Prospect of Using Technology to Enhance Access to Justice: Comparative Analysis between Pakistan and Indian Legal System

**Author (s):** Shah Jalal ud Din


**Affiliation (s):** University of the Punjab, Lahore, Pakistan

**DOI:** <https://doi.org/10.32350/lpr.32.08>

**History:** Received: May 19, 2024, Revised: October 10, 2024, Accepted: December 23, 2024, Published: December 30, 2024

**Citation:** Din, S. J. (2024). Prospect of using technology to enhance access to justice: Comparative analysis between Pakistan and Indian legal system. *Law and Policy Review*, 3(2), 139–169. <https://doi.org/10.32350/lpr.32.08>

**Copyright:** © The Authors

**Licensing:**  This article is open access and is distributed under the terms of [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

**Conflict of Interest:** Author(s) declared no conflict of interest



A publication of  
School of Law and Policy  
University of Management and Technology, Lahore, Pakistan

# Prospect of Using Technology to Enhance Access to Justice: Comparative Analysis between Pakistan and Indian Legal System

Shah Jalal ud Din\*

Postgraduate School of Legal Studies, University of the Punjab, Lahore, Pakistan

## Abstract

Technology for justice is now the emerging concept in the global legal systems to ameliorate access to justice. This research aims to explore the potential of using technology to promote access to justice in legal systems of Pakistan and India. The study examines the potential of technology to promote access to justice to the extent of economic and geographical aspects. The study examines the technological initiatives and development of e-courts, e-filing, video conferencing and other initiatives of legal services that have the potential to promote access to justice in the legal system. The study is based on a qualitative framework with comparative design to look into the debate of interaction of law and technology in both countries from a neutral perspective. The research is culminated into four sections: the first one renders the conceptual framework of the study, the second one expedites the Indian account, the third one purveys the account of Pakistan and the fourth one finally resorts to comparative analysis that further follows the conclusion that advocates for using a hybrid model proposed by Susskind.

**Keywords:** access to justice, challenges, e-courts, e-filing, law and technology, legal system, prospects, potential, video-link

## Introduction

Access to justice is interlinked with the fulfillment of fundamental rights. It is generally used to describe a justice delivery framework where everyone can access legal processes, regardless of their socio-economic status (Taher & Jamaluddin, [2022](#)). Different scholars rendered different interpretations to the access to justice. Rhode provides the conceptual commotion by splitting it into equal justice under law and renders its theoretical and practical usage. Theoretically “equal justice under law” is difficult to oppose but practically, it raises concerns about whether the commitment lies in substantive or procedural fairness. Conventionally, the commotion seems

---

\*Corresponding Author: [jshah5584@gmail.com](mailto:jshah5584@gmail.com)

to deal with the procedural fairness resulting into the concept of equal access to law (Rhode, [2001](#)). Farrow provides the account of public perception into a broader conception including following heads; to some people it is a fundamental issue, to some it raises the concerns of simpler justice, and to some it means cheaper and convenient justice (Farrow, [2014](#)). Access to justice contains the elements of dispute resolution, dispute containment, dispute avoidance and access to opportunities that law creates in a broader perspective (Susskind, [2019](#)). The pandemic of Covid-19 posed significant challenges for the justice systems of India and Pakistan, access to justice was partially denied and the need emerged to introduce technology to fill the gap (Harris, [2022](#)).

Information Communication and Technology (ICT) provides a fundamental tool for the efficient delivery of legal services. Recognizing its value and benefits, the legal systems of different countries like Australia, Malaysia, and India resorted to ICT to diminish delays to procure the delivery of justice in an effective manner (Taher & Jamaluddin, [2022](#)). Technology plays a significant role in improving the lives of people all over the world, helping individuals gain better access to information and communication in various sectors. India is rapidly advancing in the use of technology within its courts to address deficiencies in the justice system. Supreme Court of India permitted witness deposition virtually in 2003 (Harris, [2022](#)). In Pakistan, Justice Syed Mansoor Ali Shah recently in a defamation suit Meesha Shafi v. Ali Zafar ([2022](#)), on a question of virtual attendance allowed the virtual attendance of Meesha Shafi under Rule 4, Order 18 Civil Procedure code, 1908, which requires the physical attendance of a witness in an open court. The technology in courts is always misunderstood by many conservatives and also argued by them continuously that both technology and law are worlds apart, how there could be a constructive interaction between law and technology? The counter argument is provided in the coming sections.

### **Conceptual Framework and Terminology**

Access to justice has been defined by different scholars in the above segment, but access to justice for this piece of work is constricted to capability of individual to navigate the legal system with having cost-effective justice and convenient access to courts. Two major complaints that have been voiced worldwide, and still persist today are that court processes are costly, and that courts are difficult to access. These challenges are more

prevalent in India and Pakistan where stakeholders have to travel long distances to reach to courts especially those districts where there are no high court benches or unavailability of special courts and they burden themselves with heavy travelling costs. The substantive evidence for this assertion can be found in 2<sup>nd</sup> and 3<sup>rd</sup> sections respectively. The challenges that are in consideration for this study include the economic and geographical aspects of access to justice. The study overall provides the argumentation of procedural facilitation through the use of technology. The procedures in civil proceedings and in criminal proceedings could be reformed by using consistent framework of technology to render the cost-effective and convenient access to courts. The study intends to scrutinize the compatibility of technology in legal systems of India and Pakistan and to provide the prospect of using tech-initiatives to address the challenges of economic and geographical aspects of access to justice.

### **Literature Review**

Researchers have argued that technology in courts bring transparency and efficiency within the justice system. Countries such as US, UK and other developed nations have adopted technological solutions in courts to enhance access to justice. Jane Ribadeneyra and Bonnie Rose Hough present innovative technological frameworks in their studies and argue that since 2000, access to legal information for low-income individuals in the US has increased (Cabral et al., [2012](#)). As the digital divide has been neglected over the technological advancement, it provided an opportunity to leverage technology to promote access to justice.

Thio ([2021](#)) argues that innovative technological solutions are being proposed to achieve the efficient administration of justice in Singapore. Bangladesh has also responded to the situation of halt and opprobrium regarding the dispensation of justice. Resultantly, the Supreme Court of Bangladesh issued 15-points pertaining the “Practice Directions for Virtual Courts”. Taqbir Huda argues that this initiative will maximize the access to justice in Bangladesh (Huda, [2020](#)). Ignacio Oltra Gras provides a tech-solution of online courts that is a refine development of already existing phenomenon of online dispute resolution (ODR) (Gras, [2021](#)).

Richard Susskind, argues that in this digital age, there is a dire need of upgradation of courts to reflect the changing reality. He is of the view that in modern world more people have access to internet than to access to

justice. The adoption of technology in courts, in a way of introducing online courts, virtual courts or the blend of physical courtrooms and virtual hearings, is the future of justice system. This approach, he contends, will lead to an effective justice system that is accessible to all, at any time (Susskind, [2019](#)).

### **A Hybrid System**

The procedural laws of Pakistan do not prohibit the use of technology in courts to facilitate the justice system; nevertheless, it is to be considered that adoption of technology is permissible where law does not explicitly prohibit the use of technology (Meesha Shafi v. Ali Zafar, [2022](#)). In Pakistan, technology could serve as a crucial tool to solve the issues of access to justice. These impediments could be solved by the use of e-courts inclusive of the e-filing and video conferencing in the dispensation of justice. This research aims to explore the qualitative aspects of research questions. The study employs a comparative analysis of the legal frameworks in India and Pakistan. The study also has limited generalization as it only compares the legal systems of Pakistan and India. Substantive law is not the focus of the study and it intends to propose reforms specifically for Pakistan, which may not be applicable to India or any other country.

### **Technological Developments in Indian Legal System to Promote Access to Justice**

In *Anita kushwaha v. Pushap Sudan* ([2016](#)) the apex court of India held that the right to access justice is a fundamental right protected under articles 14 and 21 of the constitution. Access to justice is one of the basic rights that ensures convenient access to courts (Anderson, [2003](#)). As proposed by Susskind in the literature, that time is changing and legal systems need up-gradation to provide convenient access to courts in accordance with the change in society (Susskind, [2019](#)). The access to court in India was partially denied amidst the lockdown in country; however, the problem regarding the inconvenient access to courts is an old one. People travel long distances to appear before the courts in the proceedings, and those in remote areas feel neglected. This inconvenience hampers their ability to access justice. According to Beqiraj and Mcnamara ([2014](#)) the physical accessibility to courts is one of the significant institutional barriers to the access to justice. A survey conducted by many countries including India, concluded that people in the rural and remote areas have less access to

courts than people living in the metropolitan areas of India (Beqiraj & Mcnamara, [2014](#)).

In the past years, to address the predicament of geographical barriers, Indian legal system adopted the policies of outreached courts (Lok Adalat) (Beqiraj & Mcnamara, [2014](#)), under the Legal Service Authority Act, 1987 in which retired judges and state officials volunteered to settle the disputes in the remote areas or for the people living far away from the reach of the courts, however the policy was failed due to the lack of resources and institutional infrastructure. Contrarily the consideration of the policy of mobile courts and Lok Adalat by the legal system of India leads to the inference that physical distance of courts by people living far away from the courts is a significant barrier in the modern legal system of India. Therefore, if one has to travel from one district or one unit territory to other district having High court for appeal, then it leads to prognosis that articulates the inconvenience of stakeholders to have convenient access to courts.

High cost for legal action encompasses the travel costs, cost to appear before court each time after the adjournment of the proceedings, and all other costs from the filing of the case to the final decision of case by the courts (Bock, [2021](#)). The litigants travel long distances to have access to courts, that exacerbates the overall cost of justice and burdens people with additional difficulties. In Indian legal system this barrier is commonly known as an economic barrier and significant one where the society is already divided between classes. People with good financial resources have better opportunities to access to justice, while those without sufficient funds face significant challenges in affording convenient access to justice (Prema et al., [2021](#)).

### **Technology: As Solution?**

In 2005, the e-committee of Supreme Court of India proposed the idea of introducing technology in courts to enhance access to justice (Harris, [2022](#)). The objective behind the proposition of National policy regarding the adoption of ICT in courts was to make legal system more accountable, accessible and transparent (Supreme Court of India, [2005](#)). In the past years the Indian courts and tribunals preferred the physical mode of recording, such as physical recording evidence or the filing of suits (Bedekar & Kevlani, [2002](#)) but recently the modus operandi of the conventional courts has been changed with the use of tech-solutions.

---

## Legal Framework: A Gateway for the Use of Technology

### *Judicial Precedents*

The courts in India emphasized the use of video conferencing during covid-19 pandemic. However, currently the use of technology i.e. e-filing, audio/video conferencing and the establishment of e-courts, is considered to be one of the most advantageous methods used by Indian judiciary. The courts through different judicial proceedings interpreted different provisions of C.P.C, Cr.P.C and The Evidence Act, 1872 resultantly allowed the use of technology in courts. The courts highlighted the need to use technology to promote access to justice. These judgments paved the way to allow the use of technology in courts.

The witness deposition for the very first time allowed by Supreme Court in *Saleem Advocate Bar Association, Tamil Nadu v. Union of India* (2003). In this case the apex court went ahead to interpret the provisions of Civil Procedure Code order 18 and allowed the use of technology at the stage of recording evidence. The court held that court or commissioner can record the evidence either through writing or mechanically. After a year of this judgment another case of Karnataka High Court in which the court allowed the cross-examination of a witness who was living abroad. A witness was located in the United State and applied a petition of cross-examination through video-conferencing in a civil suit of *Twentieth Century Fox Corporation Film v. NRI Film Production Associate (P) Ltd.* (2003). The court in this case laid down certain guidelines inclusive of affidavit or undertaking of the opposite party and the administration of oath to conduct video conferencing in order to cross-examine the witness (Ashwathappa et al., 2018). Currently, the courts use this technology to the examination of witnesses residing far away from the reach of courts in order to provide them better access to justice.

This demeanor of the courts regarding use of technology was not usual in the past years. However, technology was used by the courts in certain circumstances when it was burdensome for the officials to present the accused before court in criminal cases only. Now, In India, judges are using video conferencing technology to hear bail applications, cases of remand and the witness deposition (Ashwathappa et al., 2018). In case of *State of Maharashtra v. Dr. Praful B. Desai* (2003) while interpreting the section 273 of Criminal Procedure Code 1973, the court held that the mandated action

regarding the “Physical appearance of the accused” does not only infer the actual physical appearance in the premises of court, contrarily, it also includes the virtual presence of the accused too through video link. Thus, the court in this case allowed the video conferencing for recording evidence in the criminal trial when the accused cannot conveniently appear to the court. However, in *Bodala Murali Krishna v. Smt. Bodala Prathima* (2007) the court denied the use of technology over the application of petitioner who was residing in USA by stating that it is the duty of petitioner to ensure the court that the equipment for the use of recording the evidence is accurate and follow the instructions of court regarding the use of technology to approach court. The courts in Indian legal system took progressive approach in providing guidelines regarding the use of technology to fill the legislative gap (Rana, 2021).

In *Santhini v. Vijaya Venketesh* (2018) the Supreme Court of India made an exception by disallowing the use of technology in matrimonial cases. The court held that under section 11 of Family Courts Act, 1984, use of video conferencing in marital as well as in divorce cases is impermissible. The reason forwarded by the apex court that the use of technology in the marital cases may harm the settlement process between the spouses. The judgment also provided the account of non-establishment of emotional rapport between the parties by allowing the video conferencing in such complex nature of cases. The court held that the use of video conferencing is only allowed when there is a complete failure in the settlement of parties. But the decision was reversed during the times of covid-19 in which Supreme Court of India issued directions to all family courts to resort to video conferencing in order to provide better access to justice and to maintain social distancing. In *Anjali Brahmavar Chaun v. Navin Chaun* (2021) court allowed the use of video conferencing in all the matrimonial cases.

Section 30 of Code of Civil Procedure, 1908 empowers courts to make reasonable orders deemed necessary in all matters regarding the admission of documents and facts. This section provides vast powers to courts to make orders appropriate in matters of recording the evidence and thus justifying the modern technological means in order to promote access to justice. The courts in the Indian legal system issued guidelines and orders for using technology in courts supplemented with the sections of 151 and 122 of CPC, 1908. Both sections empower courts with power that can be expanded to



the use of technological means to the ends of justice and provide convenient access to courts. Order XVIII Rule 4 emphasizes the examination and re-examination of attending witness directly by court or through Commissioner appointed by the court. This rule permits the use of recording evidence either through writing or mechanically.<sup>1</sup>

Sections 65A And 65B of Indian Evidence Act, 1872 were inserted through the amendment on 17th October 2000, that allowed the electronic recording of the evidence by video conferencing and made them admissible in the courts of India. The courts in India rendered a progressive approach in the adoption of technological means to promote access to justice (Bedekar & Kevlani, [2002](#)). Sections 275 (1) and 164 (1) were inserted through the amendment of 2009 in CrPC, 1973. Section 275 (1) expresses the recording of the evidence by witness and reiterates that evidence can be recorded through audio or video in the presence of the legal representative of an accused person. Section 164 (1) narrates itself that confession or statement can also be recorded through audio or video visuals allowing great ease to accused and witnesses who are residing far away or unable to appear before the court.<sup>2</sup>

### ***Technological Developments to Promote Access to Justice***

The integration of technology in the justice system will not replace the regular procedure of the court but it will provide better access and reduce the barriers of cost, and distance for parties (Badri, [2019](#)). The Supreme Court of India in a *Suo Motu* writ<sup>3</sup> directed the use of technology to cope with the situation over certain guidelines issued by the respective High Courts (Ashwathappa et al., [2018](#)). The courts in India issued guidelines and rules regarding the use of technology and those rules were almost similar issued by different high courts and different district courts. In India, high courts of Tamil Nadu and Tripura issued guidelines regarding the video

---

<sup>1</sup>See *State of Maharashtra v. Dr. Praful B. Desai (2003) 1 SCC 49, para 19*, where Supreme Court of India has interpreted the word mechanically into by using electronic means audio or video apparatus to provide convenient access to witnesses.

<sup>2</sup>See *State of Maharashtra v. DR. Praful Desai and Anr*, where Supreme Court of India allowed the recording of evidence through video conferencing for the people staying abroad. Resultantly, allowed the statutory provisions starting from 277 to 283 of Cr.P.C that these provisions are applicable to video conferencing in the same way as to normal court proceedings.

<sup>3</sup>*Suo Motu, Writ (Civil) No. 5/2020*, in the Supreme Court of India.

conferencing technology prior to the experience of Covid-19. These guidelines provide for the scope of video conferencing in the examination of witness, remands and bail applications.

The courts allowed the video-conferencing technology in courts under different circumstances such as in case of urgent matters, to overseas citizens, in sickness of the parties, through the consent of parties and in cases against women (Badri, [2019](#)). The exceptions included matrimonial cases, divorce cases and cases of complex nature in which physical presence was considered sine qua non due to the complex nature of cases. However, in certain cases as abovementioned the court also allowed the facility of video conferencing in matrimonial cases too.

### **Delhi High Court Video conferencing Rules, 2021**

The rules define the court '*Physical and a virtual court or tribunal*' and Court user as '*a user participating in Court proceedings through video conferencing at a Court Point*' (High Court of Delhi, [2021](#)). The rules also provide the definitions of terminologies like '*designated video conferencing software*' as the software provided by the High court to conduct video conferencing, and '*Live Link*' to any link audio or video where the witness is permitted to appear when he is physically absent from the court room. The rules define the '*Remote Point*' where the person is required to appear through video link (Rana, [2021](#)).

The Chapter 3 of rules for video conferencing sets the requisite procedure for procuring the facility of video conferencing. As it suggests that '*a party or witness seeking a video conferencing proceeding shall do so by making a request via the form prescribed in Schedule II.*' However, in case of dissatisfaction over the proceedings held through the video conferencing, the rules suggest that the parties may show their grievance to the court and after the consideration by court, the court may ask the parties to physically appear in the court. Chapter 3 also provides that the court through video conferencing may at its discretion at first instance order the detention of accused, and frame charge in a criminal trial. However, the court at the first instance cannot grant the judicial or physical remand over video conferencing ordinarily except in exceptional circumstances, i.e. Pandemic, Natural disaster or law and order situation.

Chapter 4 of the said rules suggests that all the protocols that are applied in the physical court regarding the proceedings would be applied to the

proceedings conducted virtually. This facility will be applicable to the judicial proceedings including on the provisions of CPC, Cr.P.C, Contempt of Courts Act, 1971, Indian Evidence Act, 1872 (Evidence Act), and Information Technology Act, 2000 (IT Act) (Rana, [2021](#)). The chapter 5 discusses the miscellaneous provisions regarding the use of video conferencing technology in courtrooms. This may provide an opportunity for the amalgamation of law and technology in the future of legal system (IPleaders, [2017](#)).

### **E-Courts in India; A Systematic Framework**

The e-courts mission mode project (MMP) was conceptualized in 2005 by the e-committee of Supreme Court of India, based on the National Policy and Action Plan to implement ICT in district courts (Prakash et al., [2011](#)). The scope of the project was to create, develop, introduce and implement automated decision making and decision support system in 700 courts across Delhi, Bombay, Kolkata and Chennai; 900 courts in the 29 capital city courts of states and Unit Territories and in 13000 district and subordinate courts (Ahmad, [2009](#)). The e-courts National Portal ([ecourts.gov.in](http://ecourts.gov.in)) was launched by the Chief Justice of India on 7<sup>th</sup> August 2013 to further the e-courts project. The National portal provides the case status, cause lists and cases files registered through the case information software (CIS) system. The objective behind the project of establishing e-courts was to promote access to justice to affordable courts and to reduce the costs of litigation (IPleaders, [2021](#)).

It is important to note that video conferencing technology alone does not constitute the operation of e-courts. The initiatives also include e-filing, case management system and evidence management system adopted by the Indian legal system to make e-courts fully operational in India. Although these developments have not yet been fully implemented in all courts to ensure convenient access to justice, they are crucial steps in the progress of e-court initiatives aimed at promoting access to justice. The project was designed to be completed in three phases step by step, currently in India e-courts project phase 2 is implemented (Seetharam & Chandrashekar, [2016](#)).

### **E-filing Services**

E-filing system provides a comprehensive solution for the filing of online complaints, written statements and other case related documents such as

replies and arguments. According to the e-filing services 3.0 User Manual, the litigants can file both civil as well as criminal cases through the e-filing services in India.<sup>4</sup> According to the e-committee of Supreme Court of India, e-filing mechanism aims to promote the paperless courts in India with other benefits of cost and time saving by the adoption of technological means to file cases online. The e-filing process eliminates the need to physically visit the court and very useful in cases where the courts are distant away from the reach of litigants. The Allahabad high court in India has fully operational e-filing and information management system (Singh et al., [2018](#)).

Currently, in Indian legal system five high courts have the facility of e-filing and some tribunals inclusive of Delhi, Bombay, Punjab, Allahabad and Haryana and Madhya Pradesh High Courts, and National Green Tribunal, National Company Law Tribunal and Income Tax Appellate Tribunal (Ashwathappa et al., [2018](#)). The official website of e-filing service provides a detailed procedure for both advocates and litigants to register and access system of e-filing services. After completeing the online oath recording and verification by the Bar council for advocates, and verification by the court for litigants, both advocates and litigants can access to e-filing services.

### **Document and Case Management System (CMS)**

The E-Courts Mission Mode Project Phase II, stresses over the need of digitization of documents but this initiative is not fully operational at all district courts. CMS refers to the digital storage where all the pleadings and documents are stored and accessed by all the stakeholders. Under the current system in India, CMS provides only basic information pertinent to the case and hearings (Ashwathappa et al., [2018](#)). The legal system in India uses CIS software for the management of cases online. The e-committee of Supreme Court has launched updated CIS 3.0 software with enhanced access to storage after the experiences of CIS 1.0 and CIS 2.0. Through CIS software the litigants can have access to the information regarding their cases at any time, can view the orders of court, and date hearings of the cases with all the progress of the case through this initiative. The CIS software is designed in a way to send automated e-mails to advocates and litigants with the details of the cases, date of next hearings, orders and

---

<sup>4</sup>See E-Filing Services 3.0, Manual Guide, 2022

---

judgments of courts.<sup>5</sup> These tech-based services make litigation more accessible and affordable, facilitating cost effective litigation.

### **National Judicial Data Grid (NJDG)**

The NJDG project has the elastic search technology that enables the smooth management of cases and its monitoring till the final disposal of the cases. Data collection on the NJDG can be analyzed through category wise, year wise, state wise, month wise and the information regarding the delay in the disposal of the cases. The statistics regarding the instituted cases, disposed and pendency of cases are updated on the daily basis on the NJDG by the respective courts, and the data is open in the public domain.

### **Potential and Challenges of Technology to Promote Access to Justice in India**

Indian legal system tends to render technological solutions of video-conferencing and e-courts project to procure the efficient administration and access of justice. However, India is still a developing country despite its advancement in the tech-sector and its revolution in the legal system. In India, when it comes to compare, digital literacy is thrice times lower than basic literacy that is 30% (Khokhar, [2016](#)) despite the efforts by the Indian government to make digitization in India. Indian government launched 'Digital India' in 2015 to digitally empower all the citizens due to its potential benefits in all the institutions. India has still to commute great lengths to fully empower its population with access to digital devices and information. According to the National Digital Literacy Mission (NDLM), only more than 110,000 people have been trained with digital knowledge and skills in the rural and remote areas but the objective of NDLM is far from being completed (Nasscom Foundation, [2020](#)). In case of resources to procure the full potential of e-courts project, there is not enough infrastructure to enable courts to conduct virtual hearings and adopting video-conferencing technology (Ashwathappa et al., [2018](#)).

### **Technological Developments in Pakistan's Legal System to Promote Access to Justice**

Pakistan faces significant challenges in terms of access to justice and its legal system is struggling to render solutions to these challenges. Inaccessible courts and costly justice are prevalent challenges faced by all

---

<sup>5</sup>See the official website of e-committee of Supreme Court of India

stakeholders in legal system. According to the report titled as *Understanding the Informal Justice System (2015) exploring the possibilities of legal pluralism in Pakistan*, more than 90% participants in a survey are of the view that the poor and lower-class people in Pakistan do not have access to formal justice system (George, [2006](#)). Individuals in Pakistan lack the basic knowledge of their legal rights. A study concluded that only 4% of the people have legal knowledge of their legal rights (WJP Rule of Law Index, [2022](#)). A report by United Nation Development Program (hereinafter UNDP) concluded that in some areas of Pakistan courts are situated up to 100 kilometers away from the closest village (United Nations Development Programme [UNDP], [2020](#)), amounting a significant barrier for accessing justice. A study conducted by Legal Aid Society in Pakistan found that travelling cost is also a significant barrier preventing people to have cost-effective justice (Legal Aid Society, [2021](#)). One relevant example comes from a case in 2020, where a woman in Baluchistan after being gang-raped was denied justice due to lack of convenience (Aziz & Sicangco, [2021](#)).

In 2019, the Chief justice of Pakistan Asif Saeed Khosa in a speech during a court reference hosted to honor the former chief justice Saqib Nisar regarded the access to justice in Pakistan as ‘a teething problem’ that hinders the convenience of litigants (“Improving Access to Justice”, [2019](#)). In a virtual conference organized by the Punjab University and Institute for Legal Research and Advocacy (ILRA), many stakeholders participated and emphasized the need for solutions to address the prevailing situation, in which access to justice for the common man is often completely denied (“IT Tools Necessary”, [2020](#)).

Qazi ([2023](#)), a district court judge of Karachi debunked the prevalent challenges faced by the judicial system of Pakistan. She was of the view that with many other impediments, lack of access to justice for marginalized communities and the people living in remote areas are big challenges, as many people remained unable to afford legal representation or they have to travel long distances in order to join the court proceedings (Qazi, [2023](#)). These challenges are overall reducing the effectiveness of the justice system in Pakistan. As Pakistan ranks poorly on various indicators inclusive of effectiveness of justice system, access to justice, protection and awareness of their legal rights, on World Justice Project Rule of Law Index (WJP Rule of Law Index, [2022](#)). Mr. Justice Rahmat Hussain Jafferri, a judge of

Supreme Court in Beijing (25–28 October, 2010), presented an overview presentation regarding the introduction of Information Technology (IT) in courts of Pakistan. He proposed a contingent framework regarding the automation process in the legal system of Pakistan to promote access to justice and accountability.

Dr. Muhammad Asif Khan, an Associate Professor at Bahriya University in his study extrapolated the compatibility of e-court system with the legal system of Pakistan (Khan & Ali, [2021](#)). The below table provides the application and software used in the courts of Pakistan;

**Table 1**

*Main Applications and Software Used by Different Courts in Pakistan*

Applications	Features	Courts
Case Flow Management System (CFMS)	Case information, Case law management system (CLMS)	-Supreme Court -Lahore High Court -Peshawar High Court -Sindh High Court
Online Court Proceedings (OCP), module of (CFMS)	Maintains instant information regarding case, Installations of TV/monitor screens in premises of courts	-Supreme Court -Sindh High Court
Case Law Management System (CLMS), module of (CFMS)	Maintains instant information regarding judgments and orders	-Sindh High Court
Case Record Management System (CRMS), module of (CFMS)	Maintains instant information regarding disposed cases	-Supreme Court -Lahore High Court -Balochistan High Court -Sindh High Court
Case information for public Information Desk	Information is provided to the public and advocates even on phone and advocates are provided with the same information through SMS alerts and emails	-Supreme Court -Lahore High Court -Balochistan High Court -Sindh/Peshawar High Court

Applications	Features	Courts
Websites of some Apex Courts	Maintains information regarding cases, causes lists and case laws	-Supreme Court -Lahore High Court -Balochistan High Court -Sindh/Peshawar High Court

*Note. Source: Presentation at Beijing in 2010 by Justice Rahmat Hussain Jafferri over the use of IT in Courts.<sup>6</sup>*

These technological applications were adopted by the courts in 2010, providing a foundation for the integration of technology into the legal system of Pakistan to facilitate the cause of justice. This supports the very argument of using tech-solutions in the justice system of Pakistan in which technology will facilitate the stakeholders and make the justice system more efficient. The Other technological developments and their infusion into the legal system in near future were also proposed by Justice Jafferri. These developments included case trials through video-conferencing, archiving of the case files at apex courts, case flow management system at 5 model district courts of each province, e-court system, and computerized public complaint management system. At a discussion titled as ‘Technology for Justice Forum’ (Khilji, [2023](#)) took place at capital and attended by many stakeholders, accounts were raised to consider the use of technology to fill the gap of access and dispensation of justice in the legal system of Pakistan. The discussion concluded that technology is reshaping the execution of legal processes, with citizens being the primary stakeholders. Ensuring their easy access to justice remains a significant challenge faced by the legal system in Pakistan.

## **Legal Framework: Gateway for Use of Technology**

### ***Judicial Precedents***

Courts by interpreting the provisions of substantive laws allowed the use of technology in legal system of Pakistan, nevertheless there are certain cases in which court raised the issue of recording evidence through video-conferencing, if disregarded to certain guidelines violates the fundamental right of accused. The same issue was raised in case of Muhammad Israr son

<sup>6</sup>See websites (e-court Portals) of Supreme and High courts of Pakistan



of Siraj v. State etc. (2020) in which common legal question was raised by the counsel for appellants;

*whether the evidence of prosecution witness can be recorded through a video call using viber, Skype, IMO, WhatsApp, Facebook Messenger, Line Caller and Video Conference, if yes, whether such statement would be legal under section 353 of code of criminal procedure, 1898 that expressly provide that evidence shall be taken in presence of accused and when his personal attendance is dispensed with, through his pleader, and finally admissibility of such evidence recorded through modern devices under Article 164 of Qanun-e-Shahadat Order, 1984?*

The prosecution witness was residing in Saudi Arabia when his statement was recorded. The complainant, an eye witness in this case had also recorded his statement through video call from Dubai. Mr. Gohar Ali, an Amicus Curie quoted the instances of International Criminal Court (ICC), Article 69 (2) of Rome Statute, Rule 65 of the ICCs Rules of Procedure and Evidence, Rule 61 of ICCs, Regulation of the Office of Prosecutor and Regulation 45, 46 and 47 of the ICCs, and articulated that these provisions provide procedure and arrangement for recording evidence through the use of technology. He argued that by quoting “Prosecutor Vs Zejnil Delalic (1998)” in which the Tribunal after scanning the laws of ICCs quoted that;

*Video-conferencing is, merely an extension of the Trial Chamber to the location of the witness. The accused is therefore neither denied his right to confront the witness nor does he lose materially from the fact of the physical absence of the witness. It cannot, therefore, be said with any justification that testimony given by video link conferencing is a violation of the right of the accused to confront the witness*

Expert have argued that technological innovations have historically benefitted the legal profession, and in the future, technology could be leveraged to promote access to justice, ultimately improving the efficiency of justice system. Courts cannot afford to ignore these technological advancements and continue operating within the confines of outdated practices. The court though held that the statements are not being recorded according to the guidelines as these developments cannot come at the

expense of fundamental rights provided by the constitution and the case was remanded to the respective trial court.

There are other cases in which the approach of trial court remained progressive pertinent to the use of tech-solutions, while high courts remained reluctant to allow the use of technology. In *Waheed Shah v. Shahzad* (2020) high court set aside the order of trial court directing the recording of evidence of witness residing abroad through video-link. Accused challenged the order in high court on the grounds provided under section 352 of CrPC that in a criminal trial accused must be given an opportunity to cross-examine the witness, and testimony must be recorded in the presence of accused and judicial officer in open court. The high court set aside the order of trial court as contrary to the laws and revision was allowed in circumstances.

In *Munawar Hussain v. The State* (2020) high court provided that there are no legal impediments that prohibit the use of technology in courts, nevertheless, article 164 of Qanun-e-Shahadat Order, 1984 and Section 10 of Punjab Witness Protection Act, 2018 could be invoked to allow the use of technology in courts. The Supreme Court of Pakistan also directed the use of technology in certain cases where it is unable for stakeholders to attend court and avoid unnecessary cost. In case titled as *Salman Akram Raja and another v. Government of Punjab through Chief Secretary and others* (2013) the Court directed that the evidence of rape victims and juvenile and of those victims who are unable to attend court should be recorded through video-conferencing. Besides in Punjab, all the trial courts have been directed to record the evidences of Magistrates by using modern devices.

The Supreme Court of Pakistan recently with the advancement of technology emphasized the use of technology in certain cases to ameliorate access to justice. The court stressed that technology could be used by people living far away from the premises of court and for those living abroad to provide them convenient access to justice. In case *Mian Muhammad Nawaz Sharif v. the State* (2018) The Islamabad High court allowed the recording of evidence at High Commission at London of a witness through skype/video-link app to provide facilitation to witness. The Peshawar High court in a case reiterated the use of modern technologies to promote access to justice and its significance by stating that technological advancements in legal systems cannot be ignored or over sighted, otherwise there would be

consequences to push the legal system in dark alleys. In recent case titled as Meesha Shafi v. Ali Zafar (2022) Justice Mansoor Ali Shah allowed the witness deposition virtually through applying the updated construction to the provisions of Rule 4, Order 18 of Civil Procedure Code, 1908 and stated that there are no legal impediments in a way to prohibit the use of technology in the legal system, and law is an organic thing that must respond to the realities in society.

Article 164 of QSO, 1984 provides the direct relevance of credibility of technological use in legal system through admissibility of evidence obtained by modern devices. This article provides an inference regarding the use of technological devices in court to accept the change in reality and consider the account of technological advancement in society. The courts in Pakistan constituted a progressive approach by interpreting the article 164 to the extent of using video-conferencing technology for the people living abroad for recording the arguments by arguing that technology will facilitate the justice process.

Justice Mansoor Ali Shah in case of Meesha Shafi v. Ali Zafar (2022) allowed the use of technology to record evidence, by justifying his decision with section 151 and Rule 4 order 18 of civil procedure. Section 151 of civil procedure, 1908 provides the inherent powers of the court in which nothing could limit the powers of court to make such orders to meet the ends of justice.

Section 353 of CrPC, 1898 specifies the manner in which evidence should be recorded in criminal proceedings. It mandates that the evidence be recorded in the presence of accused, and in case in which personal attendance is dispensed by the court then the evidence should be recorded in the presence of his pleader. Nonetheless, the courts in Pakistan in modern times played a significant role by allowing taking the evidence through using video-conferencing through updated construction, a principle of interpretation proposed by Francis Bennion in “Statutory Interpretation” that denotes law has to be treated as always speaking, a construction that updates it (Muhammad Israr v. The State).

### ***Technological Advancements in Legal System of Pakistan***

Pakistan also has also recognized the potential of technology to enhance access to justice. The debate gets operationalized first time when an accountability judge of Court No.3 of Rawalpindi Sohail Nasir took

statements of two witnesses using online system through Skype to provide convenience and facilitation as witnesses were in different city. This provided an inference that tech-based solutions could be used in legal system of Pakistan to promote further access to justice. The exertions to consider the embrace of technology got aggravated when by three-member bench headed by former CJP, Mr. Justice Asif Saeed Khan Khosa, Mr. Justice Sardar Tariq Masood and Mr. Justice Mazhar Alam Khan Miankhel of Supreme Court adjudicated the case online by recording the statements of witnesses via video link connection amidst covid-19 (Khan & Ali, [2021](#)).

### **E-Courts in Pakistan: A Fledgling Court**

Exceptional circumstances (Covid-19) have compelled the justice system to take measures, and different directions were issued by Sindh, Lahore, Peshawar and Baluchistan High courts pertinent to technological infrastructure. The courts adjudicated only urgent matters and female judges were also exempted from performing duties. The e-court system in Pakistan is a new phenomenon, and despite the commendable exertions by the Supreme Court of Pakistan, involvement of technology in court proceedings is still limited to the extent that different High Courts in Pakistan have introduced CMS (Khan & Ali, [2021](#)). As the literature reiterated that e-court system provides us a complete system of online pleadings (Susskind, [2019](#)) is still far away to be implemented in the legal system of Pakistan. E-filing system is still an alien concept in the legal system of Pakistan (Qazi, [2023](#)) though from the judicial pronouncements abovementioned, it provides the lukewarm use of video-conferencing facility in Supreme and high courts of Pakistan to this far.

However, Peshawar and Sindh High Courts have played a significant role in the adoption of technology to promote access to justice. As Peshawar High Court, Mingora Bench has introduced the facility of online system to render the facility of online pleadings for lawyers coming from distant areas of province to provide them better access to justice (Khan & Ali, [2021](#)). The High Court of Sindh on the contrary have full operational CFMS, providing information to all stakeholders regarding access to case information, real time information to status of case, date hearings and a complete history (Qazi, [2023](#)). It has carried out video conferencing facility for virtual case hearings, empowering stakeholders to appear in court without having to physically appear. This has assisted the legal system with resolving issues of geographical hindrances and travel costs, especially for defendants and

legal counselors situated in distant regions. One more outstanding drive is the foundation of e-Court Centers that render litigants' range of services such as e-payments and online case tracking system. It has likewise launched an application that provides admittance to the legal framework. A few e-Court centers have been established across the province, with plans to multitude later on. Additionally, the court has fostered an internet-based framework for the accommodation of bail bonds and the installment of fines and charges. The framework has made the interaction more advantageous and convenient for the litigants (Qazi, [2023](#)).

While hearing the first case, the Chief Justice Asif Saeed Khosa acknowledged the efforts and commented that a huge achievement has been procured in the Legal history of Pakistan that cases are being decided through adoption of innovative technology. The adoption of technology helps legal advisors and defendants to save both time and money. The official website provides the requirements and Performa for availing the facility of e-court system. From the above discussion, it is concluded that e-court system in Pakistan is limited to the facilities of video-conferencing at Supreme Court which is connected through video-link to Lahore Branch Registry (LBR), Quetta Branch Registry (QBR) and Karachi Branch Registry (KBR).

### **Standard Operating Procedures (SOPs) for Video Link Facility**

The Supreme Court of Pakistan (SCP) has issued standard operating procedures (SOPs) to avail the facility of video-link. The purpose behind these SOPs is to provide the video connect framework to examine and focus on the video-link demands that the contentions regard to non-accessibility of the video-link might be avoided. Any advocate or petitioner in person may avail this facility by simply forwarding a formal application. The applicant has to put forward the sufficient grounds to avail the facility of video-conferencing. On application the data is entered by the DEO at Deputy Registrar office (Principal Seat Islamabad) and relevant officer at Branch Registries irrespective of the status of approval and denial of the facility of video-conferencing. The scrutiny of the requests is made in consultation with the Deputy Registrar. The IT department of Supreme Court of Pakistan (SCP) ensures the arrangements so that approved requests might be handled with effectiveness. However, this facility is available to the extent of availability of infrastructure and First Come First Service (FCFS) based. At initial stages the requests from LBR, QBR and KBR will

be entertained to consider the large distance from the principal seat at Islamabad with exceptions to PBR. The Video-link SOPs and request Performa is available at the official website of SCP.

### **Standard Operating Procedure (SOP) for Trial Courts in Khyber Pakhtunkhwa (KPK)**

The leading case of Muhammad Israr v. State over the debate of the interaction of law and technology also provided the SOPs for trial courts to avail the facility of video-conferencing to record the statements of witness. The main SOPs are following;

- In Appropriate cases the trial court may direct the witness to be examined on video-link
- The facility is provided to people of intra-province, inter-province and overseas Pakistan
- Consent of both parties is requisite
- Same courtesies and protocols shall be applied as in open court proceedings
- The Trial Judge shall act as “Coordinator” on both sides
- The Trial court shall ensure the necessary arrangements
- If possible, the audio/video data shall be saved in court computer till the final decision

These SOPs provides guidelines while recording the statements of witness living far away from the premises of court. As recently, the Mingora Bench, Peshawar High Court (Qazi, [2023](#)) has introduced the online facility, to provide online proceedings for people of different cities living far away from the premises of court.

### **Potential and Challenges of Technology to Promote Access to Justice in Pakistan**

Despite the efforts made to incorporate the infusion of tech-based solutions to promote access to justice in preceding sections, Pakistan is still far from fully realizing the full potential of technology and its integration into the legal system. Gras ([2021](#)) provides technological solution to bridge the gap between access and justice and proposes the idea of “irrational

rejectionism” for those who negate the use of technology in courts. The challenge to hinder the innovative ways into field of law by legal professionals cannot be overlooked. It is manifested from the establishment of model courts in which lawyers went for strike and demonstrated for the end of system, as law is a conservative profession in which lawyers have designed their techniques for their own gains in order to delay justice (Khan & Ali, [2021](#)). The digital literacy among the judges, lawyers and court staff is also another challenge to infuse tech-based solutions to promote access to justice in Pakistan, as many of the legal professionals do not have digital literacy to cope with the tech based solutions into legal system (Qazi, [2023](#)).

There is not enough infrastructure and resources to regulate the technology for justice. As the case for CFMS in High Court of Sindh, all the local courts from across the region are bound to submit CFMS produced reports with the High Court on a fortnightly basis, resulting an unnecessary burden of limited resources including papers, time, and fuel as bailiffs need to convey reports from remote areas by hand to district headquarters and for forward submission to High Court. Practically all the correspondence between High Court and district courts is done through a manual manner because of absence of an electronic e-Mail module. High cost for implementation of e-court system and data security are also big challenges for Pakistan legal system (Qazi, [2023](#)).

There is a compatibility of technology with the legal system of Pakistan (Khan & Ali, [2021](#)). With proper infrastructure and amendments to allow the use of technology will facilitate the cause of justice to meet provided challenges. Pakistan could utilize the potential of technology by allowing a consistent framework of e-court system in appropriate cases at initial stages to consider these challenges. This would be possible by providing the necessary infrastructure and legislation to allow the hybrid working system of courts in which tech-based solutions would be utilized in its full potential to enhance access to justice.

## **Comparative Analysis of Technological Developments in Pakistan and Indian legal Systems to Promote Access to Justice**

### **Legal Framework and Judicial Approach**

In India, the judicial pronouncements interpreted the different provisions of substantive and procedural laws to allow the video conferencing facility and allowed the tech-procedures like e-filing system

and CFMS. The first case was *State of Maharashtra v. Dr. Praful Desai and Anr.* in which Supreme Court of India allowed the recording of evidence in civil and criminal litigations by using the video conferencing. Section 122, 151, Order 18, Rule 4 of Code of Civil Procedure, were interpreted in different judicial pronouncements, however no specific amendment was made in Code of Civil Procedure of India. Section 65A and 65B of Indian Evidence Act, 1872 were inserted through amendment in 2000, allowing the recording of evidence through video conferencing facility. Similarly, sections 275 (1) and 164 (1) of Code of Criminal Procedure were also inserted through amendment in 2009, allowing the witness deposition in Criminal litigation.

The courts in Pakistan allowed the witness deposition through video conferencing in *Meesha Shafi vs Ali Zafar*. The court in *Muhammad Israr son of Siraj v. State* interpreted the section 353 of Code of Criminal Procedure and allowed the recording of evidence in criminal litigations and held that by following proper procedure this practice does not violate the fundamental rights of accused. The courts applied a progressive approach and allowed the application of using technology in courts however, Article 164 of QSO, 1984 provides direct relevance of use of technology and its permissibility in the legal system of Pakistan. In both countries, courts have contributed a significant role to adopt tech-solutions to promote access to justice.

### **Implementation of E-courts and Tech Developments**

The first phase of the e-courts in Indian legal system was launched in 2007 in which superior and district courts were computerized and requisite hardware and software were installed. Other tech developments like CIS and different district courts websites were installed to allow the application of e-courts in India. The courts and judicial staff were also trained and the biggest achievement of this phase was the execution of the e-filing system that allowed litigants to file their cases online through official websites of district courts and NJDG that provided case information to litigants. This phase was completed in 2015 with the beginning of 2nd phase (Khan & Ali, [2021](#)). The high courts and district courts in India issued guidelines to avail tech facilities in courts that reflected a consistent approach towards incorporation of technology to promote access to justice in the legal system of India (Rana, [2021](#)).



In Pakistan, the e-court system remains a relatively new concept, despite the compatibility of technology in legal system of Pakistan. Judicial pronouncements allowed the use of video-conferencing facility and considered it as an extension of the trial court by allowing the cost-effective mechanism to prevail justice. The situation is not the same in all provinces regarding the efforts and developments to incorporate technology, the situation in high courts of four provinces is better pertinent to infrastructure to support video-conferencing,<sup>7</sup> and in progress to leverage technology to promote access to justice. Overall, the development reflects lackluster concerns and efforts by the stakeholders to provide a consistent framework regarding the adoption and development of e-court system practically.

E-filing system as part of the e-court system to allow convenience to the litigants in promoting access to justice (Cowan, [2020](#)) is still an alien and neglected concept in legal system of Pakistan. Pakistan lacks any statutory amendments to practically achieve this mechanism as cases in civil or criminal litigations are filed manually. Practically, the civil nature case is filed by filing the plaint with all the requisite documents and criminal nature case is filed through lodging a complaint or FIR, the same practice prevailed in times of covid-19 (Khan & Ali, [2021](#)). However, the technology is incorporated to the extent of allowing video-conferencing facility with certain SOPs issued by Supreme Court in limited cases.

### **Prospect of Embracing Technology to Promote Access to Justice**

The E-courts project in India is steadily progressing towards realizing its full potential in addressing barriers of access to justice. The tech-developments followed by a consistent framework is likely to facilitate access to justice with the transformation of old ways that hinders the access to justice with special reference to geographical and economical barriers. Judicial pronouncements are all in favor of allowing the technology to promote access to justice and other concerns of transparency, combating corruption and backlog of cases (Asian News International, [2023](#)).

In Pakistan, the legal system is compatible with the use of technology, as statutory provisions do not prohibit its adoption for facilitative purposes. And is likely to promote access to justice in future if it follows a consistent framework. The e-court system is however in early stages, and does not

---

<sup>7</sup>(See 3<sup>rd</sup> section of Technological advancements and E-court system, Mingora Bench, SHC, LHC)

follow any consistent framework and also faces certain challenges to overcome with in future to achieve the full potential of technology to promote access to justice.

### **Conclusion**

An in-depth examination reveals the potential of certain technologies, such as e-court system and video-conferencing to promote access to justice. Indeed, these technologies provide valuable opportunities for addressing geographical and financial barriers to justice. The positive effects can also be beneficial to overall legal health promotion, dispute avoidance and management and adjudication in future.

The study highlights the benefits of fully operational e-court services and the use of video-conferencing technology for various purposes in both civil and criminal proceedings, as permitted by the judicial pronouncements of both countries. These are cited as some of the mechanisms introduced by institutions of justice to address the barriers negating many Indians living far away from premises of courts from accessing the justice system. In the same way, the justice institutions in Pakistan are making significant progress in leveraging the potential of technology to reduce the barriers hindrance to many Pakistanis from accessing the justice system. However, compared to India, the institutions of justice in Pakistan do not follow any consistent framework and the mechanisms integrated in India may thus provide useful lessons for Pakistan in its quest to use technology as a means of improving access to justice.

As tech-based initiatives basically involve digital devices, software and their operationalization, harnessing tech-environment and trainings to court staff by reducing digital divide are prerequisites for these initiatives; amounting their rate of incorporation into the corresponding legal systems of both countries. There is consequently a need for mechanisms to follow the accounts of consistent framework and operationalization for access to justice initially to get the facilitation purpose by focusing on the hybrid-system of courts (Susskind, [2019](#)). This would be possible through allowing the tech initiatives of e-filing, video-conferencing and other facilities on the preferences of litigants, or the extent to which the intended beneficiaries who are living far away from the premises of court, or have to travel long distance to appear in court should have smooth access by using these technologies.

The prognosis based on the commotion to leverage technology to ameliorate access to justice would be dependent on factors of digital divide and the capacity building of clients regarding the adoption of tech-initiatives. The operationalization of the tech-initiatives would not be fruitful without considering the aspects of access of technology to all corners and enhancing the capability of stakeholders to adopt tech-solutions. The findings to these problems are not all positive in the context of Pakistan in which measures could be adopted to empower clients with technology by providing tech-infrastructure to lower courts and considering the account of reducing the digital gap in Pakistan. This tech-solution to promote access to justice is based to facilitate the most downtrodden and cares not to alienate them rather it has a tendency of inclusiveness to promote access to justice for people who are distant living to courts or have to travel long distances by bearing the economic cost without discrimination to navigate the legal system.

### **Conflict of Interest**

The author of the manuscript has no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

### **Data Availability Statement**

Data availability is not applicable as no new data was created.

### **Funding Details**

No funding has been received for this research.

### **References**

- Ahmad, D. T. (2009). *E-Courts in Indian perspective*. Social Science Research Network. <https://doi.org/10.2139/ssrn.1511202>
- Anderson, M. (2003). *Access to justice and legal process: Making legal institutions responsive to poor people in LDCs*. GSDRC Applied Knowledge Services. <https://gsdrc.org/document-library/access-to-justice-and-legal-process-making-legal-institutions-responsive-to-poor-people-in-ldcs/>
- Anita Khushwaha V. Pushpa Sudan, AIR SC (2016)
- Anjali Brahmavar Chaun v. Navin Chaun, SC 38 (2021)
- Ashwathappa, A., Arunav, K., Muthian, C., Verghese, L., Sandhya, P. R.,

- Naik, S., & Parkash, S. (2018). *Video Conferencing in Indian Courts: A pathway to the justice platform*. Daksh. <https://www.dakshindia.org/wp-content/uploads/2020/06/Paper-4-Video-Conferencing-in-Indian-Courts.pdf>
- Asian News International. (2023, January 24). *Technology has become a powerful tool in the legal system: CJI DY Chandrachud*. <https://www.aninews.in/news/national/general-news/technology-has-become-a-powerful-tool-in-the-legal-system-cji-dy-chandrachud20230124213444/>
- Aziz, Z. A., & Sicangco, M. C. T. (2021). *Court companion on gender-based violence cases*. Asian Development Bank. <http://dx.doi.org/10.22617/TCS210340-2>
- Badri, S. P. (2019). *Video Conference Technology in Indian Judiciary System*. Legal Service India E-Journal. <https://www.legalserviceindia.com/legal/article-10910-video-conference-technology-in-indian-judiciary-system.html>
- Bedekar, A., & Kevlani, A. (2002). *Electronic recording of evidence in civil suits*. Solomon & Co. <https://solomonco.in/wp-content/uploads/2020/05/Electronic-recording-of-evidence-in-civil-suits.pdf>
- Beqiraj, J., & Mcnamara, L. (2014, October). *International access to justice : Barriers and solutions*. Brigham Center for the Rule of Law. [https://www.biiicl.org/documents/485\\_iba\\_report\\_060215.pdf](https://www.biiicl.org/documents/485_iba_report_060215.pdf)
- Bock, S. (2021, March 25). *4 Barriers Blocking Access to Justice ( and How to Help Break Them )*. Relativity Blog. <https://www.relativity.com/blog/4-barriers-blocking-access-to-justice-and-how-to-break-them/>
- Bodala Murali Krishna v. Smt. Bodala Prathima, AIR 2007 AP 43 (2006)
- Cabral, J. E., Chavan, A., Clarke, T. M., Greacen, J., Hough, B. R., Rexer, L., Ribadeneyra, J., & Zorza, R. (2012). Using technology to enhance access to justice. *Harvard Journal of Law & Technology*, 26(1), 241–324.
- Cowan, D. (2020). Richard Susskind, *Online Courts and the Future of Justice* (Oxford: Oxford University Press, 2019) (Oxford: Oxford University Press, 2019) [Review of the book *Online courts and the future*

*of justice, by Richard Susskind*]. *Canadian Journal of Law and Technology*, 18(2), Article e303.

- Farrow, T. C. (2014). What is access to justice? *Osgoode Hall Law Journal*, 10(12), 12–13. <https://doi.org/10.2139/ssrn.4050575>
- George, J. P. (2006). Access to justice, costs, and legal aid. *American Journal of Comparative Law*, 54, 293–315. <https://doi.org/10.1093/ajcl/54.suppl1.293>
- Gras, I. O. (2021). Online courts: Bridging the gap between access and justice. *UCL Journal of Law and Jurisprudence*, 10(1), 24–51. <https://doi.org/10.14324/111.444.2052-1871.1214>
- Harris, J. (2022, October 12). *Access to justice : India leads post-Covid shift in courts 'use of technology*. International Bar Association. <https://www.ibanet.org/Access-to-justice-India-virtual-courts>
- High Court of Delhi. (2021). *Video conferencing rules*. [http://delhihighcourt.nic.in/writereaddata/upload/Notification/NotificationFile\\_ULDC4UVQWZ9.PDF](http://delhihighcourt.nic.in/writereaddata/upload/Notification/NotificationFile_ULDC4UVQWZ9.PDF)
- Huda, T. (2020, May 21). Virtual courts and the future of justice. *The Daily Star*. <https://www.thedailystar.net/opinion/news/virtual-courts-and-the-future-justice-1904500>
- Improving access to justice. (2019). *Dawn*. <https://www.dawn.com/news/1485233>
- Ipleaders. (2017, September 22). *Court proceedings through video conferencing*. <https://blog.ipleaders.in/court-proceedings-video-conferencing/>
- Ipleaders. (2021, September 16). *Digitalization and its impact on the Indian legal system*. <https://blog.ipleaders.in/digitalization-impact-indian-legal-system/>
- IT tools necessary part of judicial system. (2020, April 28). *Dawn*. <https://www.dawn.com/news/1552705>
- Khan, A., & Ali, A. B. (2021). Electronic court system and speedy justice: A comparative critical analysis of legal systems in Pakistan, Malaysia, and India. *Journal of Law and Social Policy*, 3, 26–50.
- Khilji, U. (2023, October 14). Technology for justice. *Dawn*. <https://www.dawn.com/news/1510741>

- Khokhar, A. S. (2016). Digital literacy: How prepared is India to embrace it? *International Journal of Digital Literacy and Digital Competence*, 7(3), 1–12. <https://doi.org/10.4018/ijdlldc.2016070101>
- Legal Aid Society. (2021). *Justice and rights for religious minorities in Sindh, Pakistan: A legal needs assessment report*. <https://www.las.org.pk/wp-content/uploads/2021/10/LNA-Justice-Rights-for-Religious-Minorities-in-Sindh-Legal-Aid-Society.pdf>
- Meesha Shafi V. Ali Zafar, SC, Civil Petition No. 1795 of 2022, (2022).
- Mian Muhammad Nawaz Sharif v. The State, PLD (148) (2018).
- Muhammad Israr son of Siraj v. The State etc, Cr. A. No.1143-P/2019 (2020).
- Munawar Hussain and another v. The State, PCr.L.J 1184 (2020)
- Nasscom Foundation. (2020). *National digital literacy mission*. Nasscom Foundation. <https://nasscomfoundation.org/national-digital-literacy-mission/>
- Prakash, R., Mohanty, T., Gupta, R., & Jain, V. (2011). ICT in Indian court challenges & solution. *International Journal of Internet Computing*, 1(2), 21–25.
- Prema, E., Sundar, V. S., & Rajavenkatesan, P. R. L. (2021). Access to justice for marginalized dalit people in India : Analyzing the challenges in attaining the sustainable development goals. *Advances in Social Science, Education and Humanities Research*, 592, 438–442.
- Qazi, M. (2023). *Infusing digital technology in judicial operations in Pakistan: A critical analysis of global best practices and local initiatives*. Social Science Research Network. <https://dx.doi.org/10.2139/ssrn.4378378>
- Rana, S. S. (2021, October 26). *Delhi high court releases video conferencing rules 2021*. Lexology. <https://www.lexology.com/library/detail.aspx?g=9eb5e51e-67e8-4f82-9812-0b4931b5ce0c>
- Rhode, D. L. (2001). Access to justice. *Fordham Law Review*, 69(5), 1785–1819.
- Saleem Advocate Bar Association, Tamil Nadu V. Union of India, AIR SC 189 (2003)

- Salman Akram Raja and another v. Government of Punjab through Chief Secretary and others, SCMR 203 (2013).
- Santhini v. Vijaya Venketesh, SC 62 (2018)
- Seetharam, S., & Chandrashekar, S. (2016, June). *E-courts in India: From policy formulation to implementation*. In Vidhi Centre For Legal Policy. [https://vidhilegalpolicy.in/wp-content/uploads/2019/05/eCourtsinIndia\\_Vidhi.pdf](https://vidhilegalpolicy.in/wp-content/uploads/2019/05/eCourtsinIndia_Vidhi.pdf)
- Singh, M., Sahu, G. P., Dwivedi, Y., Rana, N., & Tamilmani, K. (2018, June 26–30). *Success factors for e-court implementation at Allahabad high-court* [Paper presentation]. Proceedings of 22th Pacific Asia Conference on Information Systems. Tokyo, Japan.
- State of Maharashtra v. Dr. Praful B. Desai, SC 601 (2003)
- Supreme Court of India. (2005, August 1). *National policy and action plan for implementation of information and communication technology in the Indian Judiciary*. <https://cdnbbsr.s3waas.gov.in/s388ef51f0bf911e452e8dbb1d807a81ab/uploads/2020/05/2020053162.pdf>
- Susskind, R. (2019). *Online courts and the future of justice*. Oxford University Press.
- Taher, M. A., & Jamaluddin, S. Z. (2022). Enhancing access to justice through e-judiciary in Bangladesh: A study. *UUM Journal of Legal Studies*, 2(13), 317–344.
- Thio, L. (2021). *Public law and technology in Singapore*. Social Science Research Network. <https://doi.org/10.2139/ssrn.3766068>
- Twentieth Century Fox Film Corporation v. NRI Film Production Associates (P) Ltd, (AIR Kant 148) (2003)
- United Nations Development Programme. (2020). *Human development report 2020: The three Ps of inequality: Power, People, and Policy*. <https://www.undp.org/sites/g/files/zskgke326/files/migration/pk/NHD-R-Inequality-2020---Overview-Low-Res.pdf>
- Waheed Shah and others v. Shahzad and others, YLR 718 (2020).
- World Justice Project Rule of Law Index. (2022). *WJP rule of law index: Pakistan insights*. <https://worldjusticeproject.org/rule-of-law-index/country/2022/Pakistan/>