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ENHANCING ACCESS TO JUSTICE THROUGH E-JUDICIARY IN BANGLADESH: A STUDY

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ABSTRACT

E-judiciary, meaning application of information and communication technologies (ICTs), in justice delivery mechanism is a global phenomenon as inordinate delay in settling disputes resulting in backlogs of cases is one of the common problems in access to justice in almost every judicial system. In Bangladesh, the backlog of cases has become a huge problem, creating a bottleneck in access to justice. Globally, case management is considered an approach appropriate to resolve the problem of delayed justice. Its attraction and utility lie in the ability of the mechanism to provide predictability in the administration of justice. ICTs are now regarded as essential tools for effective case management in addition to delivery of judicial services in an efficient manner. Realising its value as well as benefits,

the judiciary of other countries like Australia, Malaysia, and India is using ICTs for reducing the backlog of cases and delivery of justice in an effective way. The countries have already modified their laws as such. To solve Bangladesh's problem of delayed justice, a project for introducing ICTs in the judiciary has been launched by the Supreme Court of Bangladesh to facilitate prompt and efficient delivery of justice as well as necessary information to the litigants and the public. Hence, this article seeks to highlight the implications of ICTs in the justice delivery mechanism in Bangladesh. This study adopts the qualitative approach of research where primary and secondary data have been gathered from various statutes as well as existing literature. To underline the role of ICTs in making justice accessible, experiences of Australia, Malaysia and India have been shared in this paper. The paper finds that the application of ICTs in the judiciary can make a substantial impact in enhancing access to justice by reducing the backlog of cases. Therefore, the paper recommends that for ensuring access to justice, the application of ICTs in the justice delivery mechanism should be enhanced in Bangladesh.

Keywords: Access to justice, case management, e-judiciary, information and communication technologies.

INTRODUCTION

The backbone of an efficient judiciary depends on the appropriate management of case-related information (Saman, 2014). In order to reach a logical end and declare a conclusive verdict, courts, generally, rely on the obtainability, and comprehensiveness of reliable information regarding the dispute (Saman, 2014). In case of those disputes where records are improperly managed, the court finds it difficult to make a fair and complete quality decision (Saman, 2014). Consequently, people may be deprived of relief as well as justice as they seek from the judicial institutions. The purpose of timely justice (*Hussainara Khatoon vs. Home Secretary, State of Bihar* [1979] AIR SC 1360) can only be achieved when all the required pieces of information concerning the disputes are available as well as retrievable and properly managed from the beginning to the end.

Generally, management of information and retrieval of court records are not an easy task since the records hold precedents of earlier

disputes as well as references to the sources of law (Saman, 2014). In such a situation, the application of Information Communication Technologies (ICTs) offers prospects for court automation and management of information. The application of ICTs in judicial services is regarded as one of the important factors for improving the administration of justice (Velicogna, 2007). To avail the advantages, judiciaries around the world are applying ICTs in order to provide a timely remedy as well as reliable services to the people.

A well-functioning judiciary is a *sin qua non* for the overall progress and development of any country. However, the justice delivery mechanisms, mainly in developing countries, suffer from ineffectiveness that has a bad impact on ensuring access to justice (Masum, 2015). The Bangladesh judiciary, like the judiciary of other developing countries, faces the same problems and constraints. The ineffectiveness of the judiciary takes place due to the long period requires for the disputes to be resolved, the improbability in the advancement of proceedings, and challenges for the common people in access to justice (Masum, 2015). In this milieu, Masum (2015) stated that “case management techniques are ... widely adopted as a way to reduce case backlog, render timely justice, and increase predictability in the judicial system.”

In the present world, ICTs play a crucial role in case management as well as delivery of legal and judicial services in an effective manner (Velicogna, 2007). Because of ICTs, it becomes possible to address the information-intensive requirements of case management through its search and discovery capabilities as well as the latest developments in technology (*Harris Scarfe v Ernst & Young* [2005] SASC [para 18]). Given that technological advancements have their impact on society, the law should keep up with this to enhance the access to justice in society. The impacts of ICTs on the court system can be perceived from various existing literature (Anderson et al., 1992; Hamin et al., 2012). The ICTs based judiciary gives emphasis on the application of those mechanisms which are faster and effective. Therefore, this paper aims to analyse the role of ICTs in the judiciary towards enhancing access to justice in Bangladesh. It adopts an analytical approach as it investigates the impediments towards access to justice in Bangladesh. It also highlights the role of ICTs in justice delivery mechanisms. In order to understand the application of ICTs, experiences of other jurisdictions such as Australia, Malaysia, and India are highlighted.

CONCEPT OF ACCESS TO JUSTICE

The term ‘access to justice’ is generally used to indicate a justice delivery system where everybody can approach the legal processes regardless of their social or financial capability (Baxi, 2008). It emphasizes “that every person should receive a just and fair treatment within the legal system” (Muralidhar, 2004). Access to justice is, thus, much more than cultivating an individual’s access to the administration of justice, and/or ensuring legal representation (Cabral et al., 2012). The 1994 report of the Access to Justice Advisory Committee in Australia (Canberra, 1994) highlighted three main areas of access to justice, namely equality in resorting legal services, national equity as well as equality before the law and delivering legal services (Schetzer, 2002).

The term access to justice is also regarded as judicial protection of individuals’ rights and entitlement to remedy before a court of law or tribunal (Francioni, 2007). Begum and Saha (2017) state that the notion of access to justice is mainly based on the universal concept of equality that requires necessary institutional arrangements through which every person will have access to the legal system on equal footing. It, also, refers to the mechanisms by which the people can approach the courts and seek remedy (Faruque, 2006). Thus, access to justice embraces the complete area of legal and judicial services through which justice can be provided to the people in an effective way (Begum & Saha, 2017).

In general, the term ‘access’ indicates the way of being able to use or acquire something and, as such, access to justice indicates a system of being able to have a legal remedy. However, conventionally, access to justice refers to opening the formal legal process to the justice seekers especially underprivileged sections of society. It also refers to a transparent as well as efficient justice delivery system resulting in a just and adequate outcome (Akram, 2017). According to Rice (2011):

“the idea of ‘access to justice’ is, therefore, the capacity to understand the law, to get legal advice, to get legal assistance and representation, and to use public legal institutions such as the courts. It requires an ability to, for example, understand, communicate, travel and pay, and also requires the means to overcome the inability to do any of those things.”

Access to justice has social, economic, geographical, legal, and psychological aspects (Begum & Saha, 2017). The social aspect of access to justice signifies people's awareness of their legal rights and enabling them to invoke their legal rights and receive legal services. The economic aspect, however, indicates the affordability of the judicial system by the common people (Cransto & Mendonca, 1997). The geographical aspect indicates that the locations of courts should be distributed within the range of the common people. Therefore, a fair decentralisation of the courts is imperative for making the justice system accessible. The nature of the legal system itself is the legal aspect of access to justice (Begum & Saha, 2017). If legal norms are not poor friendly, suffer from gender bias, and are incomprehensible, litigants can hardly avail relief from the judiciary (Begum & Saha, 2017). Therefore, to make the judicial system accessible, legal texts and procedures should be lucid and comprehensible by the common people (Working Group Report, 2008). From this aspect, it can be said that access to justice depends on the nature of the legal system *per se*. The psychological aspect of access to justice indicates people's fear and distrust over the judicial system because of their perception of biasness as well as excessive formalism in the justice delivery mechanism (Gloppen, 2006).

IMPEDIMENTS TO ACCESS TO JUSTICE

The international human rights instruments recognised access to justice as a human right (Universal Declaration of Human Rights, 1948, International Covenant on Civil and Political Rights, 1966). Hence, everyone is entitled to have access to justice. However, the gap between the formal entitlements and actual access is enormous (Akram, 2017). In Bangladesh, litigants face various obstacles in almost every stage of the legal process, starting from the decision to take legal action until the judgement is obtained (Kabir, 2016). As a result, justice within the prescribed legal process is beyond the capacities of a number of litigants especially those who are vulnerable and marginalized (Akram, 2017; Shikhelman, 2018). The impediments that most justice seekers encounter while looking for justice through the formal trial procedure are, *inter alia*, inordinate delay in resolving disputes, the backlog of cases, exorbitant cost, absence of case management, location of the court, procedural complexities, and

physical environment of the court (Akram, 2017). In addition, the mental and emotional toll of approaching the adversarial justice system discourages many litigants to refer their disputes to a court or a tribunal (Cashman & Ginnivan, 2019).

Inordinate Delay in Resolving Disputes

One of the key principles of access to justice is that cases ought to be settled as early as possible, in a way proportionate to the number of issues in the said cases (Cashman & Ginnivan, 2019). Long delays are considered as an impediment to access to justice in Bangladesh. Begum and Saha (2017) found in their study that delays may come about at every stage of the legal process and can take few months to twenty years to resolve a dispute finally. Consequently, by the time the verdict is declared the requirement for it in many aspects may have been ended (Alam, 2001). This illustrates that, “speedy trial is...the essence of...justice and there can be no doubt that delays in trial by itself constitutes denial of justice” (Chattaraj, 2011).

Prolonged delays in resolving a dispute causes suffering which in turn results in an increase in costs, including continued lawyers’ fees and time taken off from work (Sharmin, 2013). It is usual for some lawyers to defer or change dates of cases regularly, resulting in them charging a fee each time they appear in the court (Sharmin, 2013). Apart from lawyers’ fees, the judicial system of Bangladesh requires other financial involvement such as travelling costs, costs for production of witnesses, and procurement of documents (Begum & Saha, 2017). Exorbitant costs associated with the justice delivery mechanism make the justice system inaccessible for a good number of people (Begum & Saha, 2017; Akram, 2017). Thus, the delay in settling disputes will increase the cost associated with the case.

Backlog of Cases

Bangladesh judiciary is overburdened with a huge case backlog (Shamim, 2016). The judiciary is encountering a backlog of about 3.4 million pending cases, triggering immense suffering to the litigants (Star Online Report, 2019). The backlog of cases causes a frustrating delay in the adjudicative process and, as such, becomes a challenge in ensuring access to justice (Alam, 2000). While the delay in the dispute

settlement process creates a backlog, the increasing backlog puts huge pressure on existing cases. It is suggested that the rate of settlement of disputes and the backlogs are alarming for ensuring access to justice as well as rule of law of the country (Alam, 2000).

Absence of Case Management

Lack of appropriate case management is one of the major impediments to the pathway to access to justice. Case management means detailed scheduling of the history of a case. It implies scheduling, appropriate maintenance of data, and bringing periodical management information to the notice of the judicial officers (Akram, 2017). In a civil suit, after the submission of a written statement, the case management involves an early judicial intervention including the order of the sitting judge, ensuring active participation of the parties, and firm compliance of the schedule under the court's supervision (Alam, 2000). Besides, case management is regarded as a procedural calendar of a particular dispute where the parties are required to comply with it (Alam, 2000). However, an effective case management system is still absent in the delivery mechanism of justice in Bangladesh (Tahura, 2015).

Procedural Complexity

Several procedural formalities are involved in a legal dispute in Bangladesh. Sometimes, these procedures are difficult to comprehend even for those who are aware of legal proceedings. To many people, the whole procedure becomes an exercise in alienation (Akram, 2017). As a result, procedural complexities pose another problem to access to justice. At times litigants remain unaware that they will be required to produce written documents and even when they do, they have no clue about where to find them (Begum & Saha, 2015). Indicating such complexities in Indian Court, Justice Krishna Iyer comments that “watching the dilatory complexities of our forensic procedures, the meaningless waste of judicial time and energy from the trial courts to the supreme courts and the easy possibility of the economy of time and money, one wonders why we hesitate to change” (Iyer, 1989). These complexities become an impediment to access to justice when they deter or discourage the people from pursuing the relevant redress.

Location of the Courts

Access to justice is, sometimes, hindered due to the physical inaccessibility of courts. Where the judicial institutions are in remote areas, the impediments to access to justice become greater especially if the transportation system is not good and/or unaffordable. Begiraj and McNamara (2014) have found in one of their studies that the people residing in rural areas were more affected. The physical distance of the courts from the rural litigants is a challenge in Bangladesh, where most of the people are still living in villages (Begum & Saha, 2017). At the Union Council level, which is the smallest local government unit in Bangladesh, even though the Village Courts are functioning, these Courts' jurisdictions are only limited to petty offences (Local Government Report, 2010). Therefore, poor people must travel to the district headquarters to file a suit which sometimes may discourage them from seeking the needed remedy (Begum & Saha, 2017).

Physical Environment of the Courts

Aside from geographical barriers, in Bangladesh, the physical environment of the judicial institutions may create an atmosphere of exclusion, alienation, or disempowerment for litigants rather than ensuring access (Begum & Saha, 2017). Facilities and processes within the courts are not often favourable specially to female litigants, creating the feeling of uneasiness with the system. It is sometimes alleged that women litigants face gender-biased attitudes and behaviour by the male lawyers during hearings. Besides, lack of available and clean washrooms, the absence of security to protect these women from harassment and intimidation, insufficient seating arrangements in the courtroom or waiting areas are discouraging them from seeking the legal remedy, hence denying them access to justice (Begum & Saha, 2017).

E-JUDICIARY AND ACCESS TO JUSTICE

Failing to ensure access to justice designates that the cases may remain unsettled resulting in serious social and/or financial impact. Litigants in need of resolving disputes may have to accept private or non-binding agreements or submit to the demands of a strong party. If the

justice seekers are unable to “readily defend their rights, enforce their rights or seek justice, the rule of law is weakened, and unfair or illegal activity can flourish” (Cashman & Ginnivan, 2019). In this context, e-judiciary aims to make justice processes smooth and accessible. Under the e-judicial system, the whole work is performed digitally. In this system, “the information that is shared and generated is stored as a database and synched to a particular software” (Pai H, 2018). This software will be accessible to the litigants, judges, and lawyers at any time and from anywhere. Thus, e-judiciary makes the judicial services accessible, affordable, faster, and transparent. It also reduces work in the filing of the documents (Pai H, 2018). Access to justice can be enhanced through various types of e-judiciary mechanisms such as Electronic Filing (E-filing), Electronic Case Management System (ECMS), Video Conferencing System (VCS), Queue Management System (QMS), and Case Recording and Transcribing (CRT) (Hasan & Mokhtar, 2011).

Electronic Filing

E-filing is known as an electronic process of filing or submitting a dispute (Hasan & Mokhtar, 2011). It is the process of filing as well as submitting court documents using a computer with internet access. Generally, every court will have a software and/or website online system for filing cases and submitting documents electronically. After scanning the documents, the lawyers or parties involved can upload their cases by using that software from any computer. Through electronic filing, the litigants can save their time and money since they do not need to approach the court or tribunal for filing their complaints. Besides, e-filing is especially significant for the “female litigants who are from conservative families often requiring male relatives to accompany them” (Huda, 2020). It is equally helpful for the litigants who are elderly and find it difficult to travel on their own to file a complaint (Huda, 2020).

Electronic Case Management System

Electronic Case Management System (ECMS) is the management of cases electronically to develop efficiency in the delivery of services during the handling of disputes in court. Prior to the introduction of this system, the judiciary would apply a manual system in dealing

with cases (Hasan & Mokhtar, 2011). ECMS allows all courts' data to be stored and managed in a systematic integrated system. It also enables the court to maintain a proper database to be developed, updated, and backed up frequently without problems (Saman, 2014). Management of cases is more systematic and secured in this process. This system is accessible by court officials as well as judges. A sub-module known as 'Personalized My Page' is available under ECMS. It is framed to manage all cases in a more organized way in that every judicial officer will have a personal web page that comprises data and information pertaining to every case (Hasan & Mokhtar, 2011). ECMS provides the foundation for the e-filing system. This system paves the way for the relevant stakeholders towards easy access to information regarding their cases. Under this system, the core functionality of the courts such as data entry and data retrieval can be managed more effectively and efficiently.

Video Conferencing System

Video Conferencing System (VCS) is another tool under e-judiciary that is effective in enhancing justice through providing legal services (Forell et al., 2011). For the purpose of communication, two or more people staying in different locations are connected virtually in VCS. In a simple term, video conferencing indicates the transmission of static images and conversation between two separate areas. At present, it is possible to transmit full-motion video images and high-quality audio from one place to another through a video conferencing system. In settling the disputes, the role of VC is crucial as it paves the way for joining the people who would not normally be able to present in the court physically. VC enables a person related to a particular dispute to be involved in a hearing from a distant location. Each of the parties in a dispute can see the others on a screen and both audio and visual signals are communicated via high-speed telephone lines (Johnson & Wiggins, 2006).

The potential for saving time and money through the application of VC is countless in cases involving imprisoned perpetrators or witnesses. When the perpetrators or witnesses are in prison, the law enforcement agency, usually, makes arrangements for their appearance in an open court. It goes without saying that security challenges are involved in this process in addition to monetary expenses (Hasan & Mokhtar,

2011). Therefore, expenses of transportation and security challenges can be avoided by ensuring the appearances of imprisoned defendants and witnesses through video conferencing. It also allows the hearing to take place earlier than it would otherwise, especially where the courthouse is located far from the prison (Johnson & Wiggins, 2006). Thus, access to justice of litigants from rural areas is ensured through the application of VCS. Without the application of VCS, the affected litigants might face some problems in approaching the judiciary because of their remote location. With the implementation of VCS, regardless of their distant location, the litigant people could be connected to the court's procedure (Mohamad et al., 2020).

Queue Management System

The Queue Management System (QMS) is an electronic process that makes an arrangement for attendance of lawyers. If a case needs to be heard by the judge, a date for the hearing will be listed in ECMS (Saman & Haider, 2012). After arriving at the registry of the court, the lawyers will record their presence. The benefit of this system is that the hearing of a case can commence immediately once the parties record their attendance. The exact time of attendance by parties involved with the dispute can also be known under this system. To make it easier for the parties who sometimes have cases in more than one court simultaneously, a notice system *via* SMS is created to remind the parties involved in interlocutory trials/applications (Hasan & Mokhtar, 2011). If one lawyer is present at the court and the other remains absent, the former can seek out the registrar to determine how to proceed. Thus, QMS helps to avoid the problem of scheduling a hearing which is generally postponed due to the absence of one lawyer (Saman & Haider, 2013).

Case Recording and Transcribing

Case Recording and Transcribing (CRT) is a system that offers a full range of court recording solutions. This system makes it possible to share audio, video, and information regarding cases in several locations. Besides, preserving storage space and save on storage media is possible at the same time under this system. The positive aspect of this system is the resulting accurateness added to the transcription process. It takes the human factor out of the recording process since

there is a possibility for a human being to slip a word or words. After recording, the proceedings are stored right to a hard drive, which permits someone to ensure that the integrity of the records is maintained. CRT removes the pressure of recording and paves the way for a person to focus on what they are hearing. In the courtroom, when the trial proceeds, the CRT is in operation. Under this system, the proceedings are recorded in audio-video format and saved as well. It is possible to retrieve the recordings when required, for example, at the time of preparing a report or a case summary (Saman & Haider, 2012).

Under this system, judges are free from writing the particulars of trial since the electronic gadgets record everything and, as a result, time of the court process is saved. Generally, a transcriber will be engaged in this system to take notes and this reduces the duties of the judge in recording the proceeding. The advantage is that the judges can concentrate and discern the proceeding better. They can refer to the transcript typed by the transcribers on the computer screen, when necessary. Through this process evidence is being recorded as well as stored and, consequently, the risk of loss of data and evidence can be avoided (Hasan & Mokhtar, 2011). This type of recording offers more advantages. For example, it allows experts to review the facial expression of the witnesses or the accused while they are giving their testimony. Since the recording is regarded as a public document, lawyers can have a copy of the recording to bring back to their office. This may reduce complaints by the lawyers alleging that misunderstanding occurred during the trial (Saman & Haider, 2013).

BENEFITS OF E-JUDICIARY

E-judiciary comprises a cohesive judicial “system for the acquisition of audio/video depositions within courtrooms, the archiving of legal documents, information retrieval and synchronized audio/video/text consultation” (Mohamed, 2011). The E-judiciary system has been proven to be beneficial for enhancing access to justice.

Effective, Transparent, and Faster Remedy

The e-judiciary mechanism is regarded as effective, transparent, and provides a faster remedy to justice seekers. This mechanism saves

energy, time, and the expenses of travelling from one place to another (Mohamed, 2011). With the e-judiciary, even the defence lawyers and the prosecutors, after acquiring some technical expertise, are able to present their cases before the courts efficiently (Mohamed, 2011).

Digitalized Format

The e-judiciary provides a judge with facilities for viewing any file in digitized format through date-wise, section-wise, and/or name-wise screening (Prakash et al., 2011). By the installation of an LCD screen under the e-judiciary system, any document can be projected on the screen so that it becomes visible to the parties and their lawyers in the court. Other relevant stakeholders of a particular dispute can visit e-files through a secure login ID and password (Prakash et al., 2011). The method reduces paperwork and can be used as a backup for checking documents by concerned people to ascertain the genuineness of the said documents. It is also possible for different courts to share information online. Besides, the courts, the hospitals, and the prison authority can share their documents and information in a more secure way. The complainants from distant locations “can depose through video conferencing facility using ISDN and Broadband links” (Prakash et al., 2011).

The confidential documents that are not expected to be moved out of the department yet require to be shared with other agencies can be easily presented and discussed using ICTs. In the e-judiciary system, it is possible for the doctors to depose and provide their expert opinions in a more favourable environment as they need not to be present in the court (Prakash et al., 2011). The application of ICTs in the judiciary is also beneficial to curb corruption in the judiciary (Khan, 2020). Thus, the impact of ICTs in the justice delivery mechanism is crucial.

Electronic Monitoring

The e-judiciary allows electronic monitoring of pending cases in different courts and other key supervising criteria of the courts. The speedy disposal through ICTs makes a significant impact on reducing the pendency of cases. Proficient and active delivery of services in consonance with access to justice is also ensured. The people can avail the services at the Judicial Service Centre or access the information

online at their convenient time (Pai H, 2018). The application of ICTs within courtrooms can fundamentally change the administration of justice and revolutionise judicial practices (Donoghue, 2017). Overall, the application of ICTs can make a significant impact on the judicial system and institutional reforms as technology lead to a “golden age of access to justice” (Barton & Bibas, 2017).

EXPERIENCES OF OTHER JURISDICTIONS

Countries all-over the world have initiated their electronic courtroom programmes in order to infuse ICTs into their justice delivery system (Shahani & Jain, 2016). The countries like Australia and Singapore are pioneers in the application of ICTs in their judicial systems. The application of ICTs in the Malaysian system has also started in the first decade of the 21st century. The courts of India are also utilizing ICTs in their justice delivery mechanism. The experiences of these jurisdictions are discussed here in this part starting with the experiences of e-judiciary in Australia.

Australia

In Australia, the utilisation of ICTs in the justice delivery system (electronic courtrooms) started from the early 1980s onwards (Kirby, 1998). At that time the use of ICTs was observed mainly “in the back office’ or administrative areas of courts.” With the installation of the updated word processing software, the Australian judiciary replaced more complicated, main-framed based systems (Wallace, 2009). In the criminal prosecutions, the application of ICTs within Australian courtrooms was in the early 1990s (Potter et al., 2009). During the period of 1990s, some high technology electronic courtrooms were specially established for conducting the trial for complex white-collar crimes (Wallace, 2009). Such courts were also used to conduct a trial of multiparty civil litigation as well as prolonged commissions of inquiry (Wallace, 2009). Existing literature suggests that during the entire period of the 1990s, modern courtroom support systems featuring various forms of ICT were developed (Potter et al., 2009). Besides, the capability to establish hyperlinks among the documents of diverse formats was a great innovation during this period which ultimately managed “the first use of case-specific intranets” (Potter et al., 2009).

In the Australian Federal Court, through the e-Lodgment, documents can be submitted electronically from any place at any time (Size, 2017). Subsequently, the documents are stamped or sealed electronically. However, this is not limited to the Federal Court only but includes other courts like the New South Wales Supreme Court, which has its Online Registration process. However, the system in the Victorian Supreme Court includes electronic filing as well as case management. The courts in Queensland also embraced online filing of disputes. In Western Australia, electronic filing has been mandatory in the civil jurisdiction of the Supreme Court since 1 March 2018. However, a new e-filing system known as Registry Online was recently launched in South Australia. It has been observed in the case of Tasmania that the litigant people can also utilize email attachments to submit the court's documents (Allsop, 2019).

From the late 1980s, the courts in Australia realized the necessity of a favourable way to take evidence from the witnesses, remotely located from the court. Consequently, they started to use closed-circuit television (CCTV) and VC on a trial basis, to provide audio and visual links between the remote areas and the courtrooms. After the successful trial application, Australian courts recognised the potential of VC and started using it widely. By 1999, it was mentioned that "Australia...is internationally recognised for the effective use of video-conferencing in legal processes" (Wallace, 2009).

Apart from the above, Australian courts understood the necessity to frame protocols and procedures regarding the preparation of disputes for trial in the courtroom which is equipped with ICTs. It has been found that several courts have come to the forefront with the "practice directions and rules to guide the parties and to encourage early consideration of the use of technology" (Macdonald & Wallace, 2004). Since the year 2000 technology has set about performing a more crucial role in the functioning of courts across the country. Now, the application of ICTs in justice delivery has become an integral part of various court processes (Macdonald, 2006).

Malaysia

In Malaysia, it is worth noting that the Government of Malaysia has been proactive in using ICTs in the administration of justice. A cursory

examination of the legislative landscape in Malaysia demonstrates that Malaysia has one of the most comprehensive sets of technology and cyber-related legislation with the aim of catapulting Malaysia to the future of digitalisation, such as Computer Crimes Act 1997, the Digital Signature Act 1997, the Communications and Multimedia Act 1998. Moreover, Malaysia is also one of the countries that has recognised electronic evidence as admissible evidence in courts (Zain et al., 2018, *Ahmad Najib Aris v PP* [2009] 2 CLJ 800).

On the other hand, from the judiciary perspective, e-judiciary is considered as one of the Malaysian Electronic Government projects under the responsibility of the Legal Affairs Division (BHEUU) of the Prime Minister's Department whereas the Federal Court Chief Registrar's Office is tasked to plan and execute its implementation (Saman & Haider, 2013). As such, the first attempt of the e-judiciary project was adopted as early as 2002 but it was not successful due to various reasons including the disinclination of judges to apply technology, absence of enforcement order from the top authority, problems of network facility, limitation of budget, etc. (Saman & Haider, 2013).

In 2009, the then Chief Justice of Malaysia, Tun Zaki Azmi launched new commercial courts equipped with a computerised system. Since then, various e-Court procedures have been implemented, among others, Recording & Voice to Text System, the Case Management System (CMS), the Queue Management System (QMS), the e-Filing system, and the Quick Response Code (QR Code), to verify the authenticity of a court order (Koshy, 2009; Tuan Mat, 2020).

In 2016, e-Lelong was introduced in certain High Courts where the online system conducts the public auction of immovable property in foreclosure proceedings. In addition, a cyber court was established in September 2016 to regulate cyber activities and to address the increasing number of civil and criminal cyber offences (Babulal, 2016).

In 2018, the Malaysian Judgments Portal was launched and designated as the official repository of Malaysian Court Judgments, which is consonant with the judicial transformation programme to enhance public access to justice via legal information (Sharif, 2018).

In the same year, e-Review was introduced to the appellate courts where the online forum enables judges, judicial officers, and legal representatives to conduct case management via exchange of written messages without having physical presence at the court. Pertinently, the Chief Registrar of the Federal Court of Malaysia, in an official circular, stated that the e-Review system would be expanded to all High Courts and lower courts in Peninsular Malaysia with effect from 2 January 2020.

In line with the judicial digitalisation reform, Artificial Intelligence (AI) was used to assist the judges in Sabah to determine the appropriate sentences for certain criminal offences such as drug possession under section 12 of the Dangerous Drugs Act 1952 and rape under section 376 of the Penal Code (Miwil, 2020). The adoption of the AI system has further been expanded to several other criminal offences (Diyana, 2021). In February 2020, an online bail system, eJamin was launched to enable the petitioners to make the bail payment electronically, instead of approaching a bank physically to procure the required bail bond (Tariq, 2020). Notably, the judiciary has also adopted the e-Appellate system for appeals heard by the Court of Appeal and the Federal Court, and the e-Bicara project for appeals heard by selected courtrooms in the High Court of Kuala Lumpur, where these hearings are conducted on an entirely paperless basis.

It can be seen from the above that Malaysia is dedicated to leveraging technology in enhancing the judicial process. More recently, following the implementation of the various movement restrictive orders by the Government of Malaysia to curb the spread of the COVID-19 virus, the judiciary remains steadfast in allowing applications to conduct court hearings by way of video conferences or otherwise in certain cases, subject to the mutual agreement of the parties (Mohamad, 2020). Amendments have also been made in relevant regulations such as the Rules of Court 2012, the Rules of the Court of Appeal 1994, and the Rules of the Federal Court 1995 to provide a legislative framework and to ensure continued momentum of online hearings. Crucially, Order 33A was newly inserted in the Rules of Court 2012 which contains specific procedures on how online trials are to be conducted. For completeness, the judiciary has also decided to hear petitions of aspiring to-be-lawyers for their admissions to the Bar online. This illustrates the firm commitment of the judiciary in Malaysia to facilitate and enhance the administration of justice.

India

In India, to address the problem of delayed justice, the central government took the initiative in the early part of the 2000s (Shah & Gupta, 2017). As such, a proposal was framed and submitted by the Ministry of Law and Justice to form an e-committee. This committee was required to draft a policy for the establishment of electronic courts in India (Khanna & Sonu, 2017; Pai, 2018). As a result, in 2005, the e-committee prepared a policy for the establishment of electronic courts all over the country (Prakash, 2014). The project on electronic courts (e-courts) has been conceptualised based on the ‘National Policy and Action Plan for Implementation of Information and Communication Technology in the Indian Judiciary (NPAPIICT) 2005.’ The e-courts project was approved by the Cabinet Committee of Economic Affairs (CCEA) on 8 February 2007. In the same year, the then Indian President Dr. APJ Abdul Kalam “launched the process of establishing e-courts to cover the complete judicial system of India from lower courts to the Apex Court” (Khanna & Sonu, 2017). Under this project, at the district level, the Gujarat District and Sessions Court was the first lower court where a “Model e-Courts pilot project” was started in 2009 with a view to making the justice delivery system more obvious and providing faster judicial services (Bhardwaj, 2013). This project would be providing video conferencing facilities among the relevant law enforcing agencies such as police, courtroom, forensic science laboratory, and probation authority (Bhardwaj, 2013).

However, the existing format of the project was finally approved in September 2010. The project is supposed to be implemented by the National Informatics Centre (NIC). It will enable the courts to provide the services to the justice seekers with the assistance of ICTs. Moreover, the E-Court Integrated Mission Mode Project has been initiated by the Government with the purpose of improving access to justice (Juvekar, 2020). This project envisions an improved ICTs enablement of the judiciary through computerization of the courts, application of cloud computing, digitalization of case records, and enhanced accessibility of electronic services. Providing the required hardware and software applications, this project also aimed to enable the courts to deliver e-services as well as empower the judiciary to manage and supervise the activities of the courts. Ghosh (2018) mentions that under this project “the courts are envisaged to provide

a host of e-services such as case filing, certified copies of orders and judgments and case status to litigants and public at large through the e-Courts portal.”

Phase I of the project is dedicated to the enhancement of ICTs infrastructure in High Courts and the Supreme Court and ICTs enablement in 14,249 districts and subordinate courts located in 3,069 court complexes across the country. Phase II is currently in progress. The objective of Phase II is to set up centralised filing centres as well as digitisation of documents (Juvekar, 2020). It also aims to create e-filing and e-payment gateways (Juvekar, 2020). Under this project, India’s first e-court (paperless court) was launched at Hyderabad’s High Court of Judicature in 2016 (Juvekar, 2020). On 12th March 2016, Chief Justice Honourable Mr. Justice Tirath Singh Thakur formally inaugurated the Centre for Information Technology (IT) in the Allahabad High Court. The building has a Data Centre and Video-Conferencing Halls to assist the e-Court project. The building is well equipped with internet connectivity equipment and integrated with the Allahabad High Court in order to successfully implement and operate the e-Court project (Singh et al., 2018).

In the Supreme Court, the digital filing of cases started in May 2017 as a part of its attempt to become a paperless court. Besides, some citizen-centric measures such as sending auto-generated SMSs, online access to orders, and videoconferencing facility have been initiated (Ghosh, 2018). Thus, it can be said that with its continuing advancements, it will not be too long for the Indian judiciary to fully embrace ICTs in the justice delivery process.

From the discussion made above it is observed that the judiciary of Australia, Malaysia, and India are applying ICTs in providing judicial services before the corona pandemic. The discussion indicates that Australia is the pioneer in this regard. Since 2018 electronic filing in the civil jurisdiction of the Supreme Court is mandatory. Realising its benefits, the application of video conferencing systems has been started since the 1980s. In Malaysia, in addition to the application of ICTs in the judiciary, the e-Review system has been introduced to the appellate courts. This system enables judges, judicial officers, and legal representatives to conduct case management online. India is trying to implement ICTs in all aspects of judicial services. Thus,

Bangladesh should implement e-judiciary completely. As such, to avail the advantages of e-judiciary, all mechanisms of e-judiciary e.g. electronic filing, video conference system, and electronic case management, etc. should be applied appropriately.

SCENARIO OF E-JUDICIARY IN BANGLADESH

In Bangladesh, the application of ICTs in the justice delivery mechanism began in 2009 (Anwar, 2015; Syeed, 2017). In order to further enhanced access to justice through the application of ICTs, a project titled the Judicial Strengthening (JUST) Project was initiated in 2012 by the Supreme Court of Bangladesh. Under this project, along with the Supreme Court, three district courts (Dhaka, Kishoreganj, and Rangamati) were chosen to improve case management and administrative capacity (Hasan & Rupa, 2021). The JUST Project received technical and financial support from the United Nations Development Program (UNDP-JUST) with a view to strengthening its capacity to run the court system effectively. Besides, the objective of providing support was to enhance access to justice by reducing the backlogs of cases. Under the JUST project, a workshop titled ‘Digitalization of Bangladesh Judiciary’ was held on 4th July 2015 where the speakers emphasized the introduction of ICTs in the Bangladesh Judiciary (Masum, 2019).

Towards the introduction of the ICTs in the judiciary, some steps were adopted such as providing the ICT training to the judges and court officials, installation of internet connection in the courtroom, giving laptops to the newly appointed judges and magistrates. All these indicate that Bangladesh is on the way to make its judiciary digital. Besides, with the support of UNDP-JUST, the Supreme Court has launched an online cause list along with the SMS-based automated case status information service for justice seekers. Through the online cause list of the Supreme Court website, the litigants may visit their case history anytime, anywhere. The people who seek remedy in the subordinate courts of the three JUST pilot districts can visit the court’s website for any information about their cases. It is worth mentioning that the information regarding the cases is also available via mobile phones as well as SMS updates (Croucher, 2015).

The government as a part of its vision to establish digital Bangladesh, has decided to apply ICTs in all aspects of the judicial process to improve the legal services for the citizens. Consequently, the Ministry of Law, Justice, and Parliamentary Affairs has undertaken an e-judiciary project involving TK 26.90 billion to introduce ICTs in the judiciary (The Financial Express, 2019). The plan was approved by the project evaluation committee on November 4, 2018, and is now waiting for the final approval of the Executive Committee of the National Economic Council (ECNEC). The Prime Minister of Bangladesh recently instructed the concerned officials to establish virtual amenities in all the prisons across the country so that no movement is required of prisoners from prison to court. By the virtual system, the judges would be allowed to run the trial through VC, keeping the prisoners in prison.

Under the e-judiciary project, a virtual private network (VPN) for all the offices under judiciary as well as a data centre of law and justice division would be established (Islam, 2019). In addition, the activities of this project include “developing enterprise architecture for judicial service, developing enterprise resource planning software, recording testimonies through video conferencing, and recording digital evidences” (Dhaka Tribune, 2019). Apart from that, the Supreme Court’s data centre will be upgraded along with the establishment of a network operation centre. Across the country, a total of 1,400 courtrooms would be turned into e-courtrooms. At the district level, Microdata centres will be established and there will be an interconnection between the data centres and the Supreme Court. Also, a proposal for a new enactment for the effective functioning of e-judiciary under the project will be introduced (The Daily Star, 2019).

The judiciary of Bangladesh has ushered in a new era with the promulgation of the ‘Usage of Information and Communication Technology by Court Ordinance, 2020’ (Mashraf, 2020). This ordinance was promulgated by the President of Bangladesh in May 2020 to empower the judiciary in carrying out the trial process through digital means. It is considered as a giant leap towards the digitalization of the judiciary of Bangladesh. Subsequently, on 8 July 2020, the Parliament passed a bill titled “*Adalat Katrik Tothya Projukti Byabohar Bill 2020*” (Use of Information Communication

Technology Bill) which in turn becomes an Act after the assent of the President (The Daily Star, 2020). With this enactment, Bangladesh has entered into a new era of ensuring access to justice. Under this Act, it is now possible for the judges to conduct the trial through videoconferences and other digital ways without the need to have the accused physically present in court. The lawyers can attend the cases and make submissions online.

Under the Act of 2020, the lawyers receive the detailed information of the case as well as the date and time of hearing along with a video conference link through their email. It is required to send the copy of application and the other relevant documents to the virtual court's judges to their email. Regarding the submission of petition/application, the lawyers can contact with the bench officer as their contact numbers will be available in the courts' website. Subsequently, if required, the court send a notice to the parties about the virtual hearing (Mishra & Chowdhury, 2021).

ROLE OF E-JUDICIARY IN ENHANCING ACCESS TO JUSTICE IN BANGLADESH

“... Justice is not justice at all if it takes too long, is too expensive for people or if it is not available to everyone . . .” (Bhatt, 2005). The existing literature suggests that the e-judiciary increases productivity and enhances transparency and accountability by reducing time, saving energy and money (Hasan & Rupa, 2021; Hasan & Mia, 2021). It also reduces red tape formalities and corruption in the administration of justice. By reducing time and increasing productivity, e-judiciary can bring a fundamental change in the justice delivery mechanism in Bangladesh. In the context of the Covid-19 pandemic, Bangladesh began its journey of conducting judicial proceedings through virtual courts on 12 May 2020. As such, the Supreme Court of Bangladesh issued practice directives for the Appellate Division along with the High Court Division and the subordinate courts. The directives focus on the conduct of judicial proceedings through video conferencing during the Covid-19 pandemic. It is worth mentioning that in the first virtual hearing, the High Court Division issued directives to end the killing of dolphins in the Halda River (Murshed, 2020).

Throughout the country, a number of accused have been released on bail from the magistrate courts through virtual hearings. If the hearings would not have conducted through video conferences perhaps such accused had to wait a long period of time for being released. These hearings are considered as significant steps towards the e-judiciary in Bangladesh (Murshed, 2020). In a newspaper report of 21 May 2021, it is mentioned that virtual courts and tribunals have granted bail to 42827 people in only 25 working days (The Financial Express, 2021). Such statistics indicate the application of ICTs in the Bangladeshi courts and their impacts on the administration of justice. Thus, it can be said that e-judiciary has a huge potential for enhancing access to justice as it would significantly save time, money, and energy. Additionally, the e-judiciary is effective to increase access to justice for the litigants who are in remote and rural areas.

CONCLUSION

The study explored the role of ICTs in the justice delivery mechanism so that access to justice is enhanced in Bangladesh. It is found that ICTs can play a crucial role in enhancing access to justice. This has been observed in several jurisdictions and legal systems of the globe. In this study, it has been observed that some countries like Australia and Malaysia have already implemented e-judiciary within their judicial system. With a view to apply the technology in the judicial system whereas Australia and Malaysia have amended their laws and procedures, India had adopted a policy for the application of ICT in their judicial services.

It is found that there is a potential for the application of ICTs in the Bangladeshi courts to settle disputes and to ensure the proper administration of justice. Bangladesh is not lagging behind since the country has already enacted legislation on the application of ICTs in the justice delivery mechanism. However, in addition to ensuring the virtual presence of the parties, this Act should incorporate the provisions for easing the filing of softcopies of the plaint or petition, FIR, and complaint. Besides, the provisions relating to the e-service of summons/notices, the digital signature of the parties as well as lawyers and judges, issuing certified digital copies of the judgments and judicial orders should be incorporated. More importantly, the ICTs

in the judiciary should not be applied during the Covid-19 situation only, rather they should be applied in the normal situation too. It is a strong belief that the appropriate application of ICTs in the judiciary will increase the efficiency, accountability, and transparency of the justice delivery system in Bangladesh. Apart from that, e-judiciary will empower the citizens of Bangladesh to take part in court processes, and, as such, access to justice will be enhanced.

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REFERENCES

- Akram, M. S. (2017). A Critical Analysis of Access to Justice in Bangladesh. *International Journal of Humanities and Social Science Invention*, 6(8), 50-58.
- Alam, M. S. (2000, April 16). A Possible way out of Backlog in our judiciary. *The Daily Star*.
- Alam, M. S. (2001). *Alternative Dispute Resolution by early judicial intervention: A possible way out of delay and backlog in our judiciary*. Manual for clinical legal education, Dhaka.
- Anderson IV, R., Borgersen, E., Brest, P., & Fenwick, W. (1992). The impact of information technology on judicial administration: A research agenda for the future. *S. Cal. L. Rev.*, 66, 1761.
- Anwar, I. (2015, November 10). Digitalisation of Courts. *The Daily Star*.
- Babulal, V. (2016). Malaysia's first cyber court begins operations today. *News Straits Times*, 1 September.
- Barton, B. H., & Bibas, S. (2017). *Rebooting Justice: More technology, fewer lawyers, and the future of law*. Encounter Books.
- Baxi, P. (2008). Access to Justice and Rule-of (Good) Law: The cunning of judicial reform in India. *Indian Journal of Human Development*, 2(2), 279-302.
- Begum, N., & Saha, N. K. (2017). Women's access to justice in Bangladesh. *Journal of Malaysian and Comparative Law*, 44(2), 41.

- Beqiraj, J., & McNamara, L. (2014). International access to justice: Barriers and solutions. *London: Bingham Centre for the Rule of Law*.
- Bhardwaj, R. K. (2013). The Indian judicial system: Transition from print to digital. *Legal Information Management*, 13(3) 205.
- Cabral, J. E., Chavan, A., Clarke, T. M., & Greacen, J. (2012). Using technology to enhance access to justice. *Harv. JL & Tech.*, 26, 241.
- Cashman, P., & Ginnivan, E. (2019). Digital justice: online resolution of minor civil disputes and the use of digital technology in complex litigation and class actions. *Macquarie LJ*, 19, 39.
- Chattaraj, A. (2011). Justice delayed-justice denied-the right to speedy trial in India. *SSRN Electronic Journal*, 1. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1919493
- Cranston, R., & de Mendonca, M. L. V. P. (1997). Access to justice in South and South-east Asia. In *Good Government and Law* (pp. 233-257). Palgrave Macmillan, London.
- Diyana P, (2021). AI sentencing guideline to be implemented this month in the peninsula, *The Star Online*. <https://www.thestar.com.my/news/nation/2021/07/22/ai-sentencing-guideline-to-be-implemented-this-month-in-the-peninsula>
- Donoghue, J. (2017). The rise of digital justice: Courtroom technology, public participation and access to justice. *The Modern Law Review*, 80(6), 995-1025.
- Faruque, A. A. (2006). Promoting access to justice through judicial mediation: The Bangladesh experience. Commonwealth Legal Education Conference.
- Francioni, F. (2007). The rights of access to justice under customary international law. In F. Francioni (Eds.), *Access to Justice as a Human Right* (pp. 1-55). Oxford: Oxford University Press.
- Forell, S., Laufer, M., & Digiusto, E. (2011). Legal assistance by video conferencing: What is known? *Justice Issues*, 15, 1-23.
- Gloppen, S. (2006). Courts and social transformation: An analytical framework. In Gargarella, R., Domingo, P. and Roux, T. (Eds.), *Courts and Social Transformation in New Democracies: an institutional voice for the poor?* (pp.35-59). Ashgate Publishing Ltd.
- Hamin, Z., Othman, M. B., & Mohamad, A. M. (2012, June). Benefits and achievements of ICT adoption by the high courts of Malaysia. In *2012 IEEE Symposium on Humanities, Science and Engineering Research* (pp. 1233-1238). IEEE.

- Hasan, M. I., & Rupa, F. J. (2021). Digitalization of Bangladesh judiciary and access to justice. *Asian Journal of Social Sciences and Legal Studies*, 3(3), 49-58.
- Hasan, M. I., & Mia, B. (2021). Initiation of virtual court system during COVID-19 Pandemic and E-judiciary: Challenges and way forward. *Daengku: Journal of Humanities and Social Sciences Innovation*, 1(1), 8-17.
- Hassan, K. H., & Mokhtar, M. F. (2011). The e-court system in Malaysia. In *Proceedings of 2nd International Conference on Education and Management Technology, Singapore*.
- Huda, T. (2020, May 21). Virtual courts and the future of justice. *The Daily Star*.
- Iyer, V. R. K. (1989). *Law, lawyers and justice*. Delhi: B.R. Publishing Corporation.
- James Allsop AO, J. (2019). Technology and the future of the courts. *University of Queensland Law Journal*, 38(1), 4-5.
- Johnson, M. T., & Wiggins, E. C. (2006). Videoconferencing in criminal proceedings: Legal and empirical issues and directions for research. *Law & Policy*, 28(2), 211-227.
- Juvekar, D. (2020, January 17). Can e-courts help speeding up justice delivery? *Business Today*.
- Kabir, S. F. (2016, April 28). Delayed justice: How long is too long? *The Daily Star*.
- Khan, A. R. (2020, February 12). How can technology revive judicial independence in Bangladesh? *The Daily Star*.
- Khanna, A. D., & Sonu, D. (2017). Development of e-courts in India. *International Journal of Legal Research and Studies*, 2(3), 77.
- Kirby, M. (1998). The future of courts - Do they have one? *Journal of Law, Information and Science*, 9 (2), 143.
- Koshy, S. 2009. Zaki launches e-court system. *The Star Online*. <https://www.thestar.com.my/news/nation/2009/09/02/zaki-launches-ecourt-system>
- Macdonald, R., & Wallace, A. (2004). Review of the extent of courtroom technology in Australia. *William & Mary Bill of Rights Journal*, 12(3), 649.
- MacDonald, R. M., Burdon, M., & Jackson, S. M. (2006). Ensuring the integrity of the e-court process. In *Justice Environments Conference 2006* (pp. 1-12).
- Mashraf, A. (2020, May 28). To ensure effective operation of virtual courts. *The Daily Star*.

- Mohamed, D. (2011). Electronic court system (E-Court): Development and implementation in the Malaysian courts and other jurisdictions. *The Law Review*, 476-489.
- Mishra, S., & Chowdhury, A. M. (2021, August 17). Virtual court system in Bangladesh. *The Daily Star*.
- Miwil, O. (2020, February 15). Sabah court to make history on Wednesday by using AI in sentencing. *New Straits Times*.
- Mohamad, A. M., Hamin, Z., MZ, M. N., Kamaruddin, S., & Radzi, N. M. (2020). The implications of audio/video conference systems on the administration of justice at the Malaysian courts. *Webology*, 17(2), 904-921.
- Muralidhar, S. (2004). *Law, poverty and legal aid: Access to criminal justice* (Vol. 234). LexisNexis Butterworth.
- Murshed, M. M. (2020, May 18). Virtual courts in Bangladesh: Prospects and challenges. *The Daily Star*.
- Pai, A. (2018). Evaluation of Indian e-judiciary system. *International Journal of Research and Analytical Reviews*, 5(3), 392.
- Potter, S., Farrelly, P., & Begg, D. (2009). The e-court roadmap: Innovation and Integration an Australian case study. In Martinez, A. C. and Abat, P. F. (Eds.), *E-Justice: Using Information Communication Technologies in the Court System* (pp. 165-185). IGI Global.
- Prakash, R., Mohanty, T., Gupta, R., & Jain, V. (2011). ICT in Indian court challenges & solution. *International Journal of Internet Computing*, ISSN, (2231-6965).
- Rice, S. (2011). Access to a lawyer in rural Australia: Thoughts on the evidence we need. *Deakin L. Rev.*, 16, 13.
- Saman, W. S. W. M. (2014). *Technology implementation and institutionalisation: A case of Malaysian courts* (Doctoral dissertation, University of South Australia).
- Saman, W. S. W. M., & Haider, A. (2012). Electronic court records management: A case study. *Journal of e-Government Studies and Best Practices*, 5, 1-11.
- Saman, W. S. W. M., & Haider, A. (2013). E-court: Technology diffusion in court management. In the *Proceedings of the Nineteenth Americas Conference on Information Systems*. Chicago, Illinois.
- Schetzer, L., Mullins, J., & Buanamano, R. (2002). *Access to justice and legal needs*. New South Wales: Law and Justice Foundation.
- Shikhelman, V. (2018). Access to justice in the United Nations human rights committee. *Mich. J. Int'l L.*, 39, 453.

- Shamim, M. U. (2016, December 22). Justice delayed. *Dhaka Tribune*.
- Sharmin, S. (2013). Women's access to justice in Bangladesh: Obstacles and remedial measures. *The Chittagong University Journal of Law*, 18, 79-104.
- Shah, K. P. & Gupata, M. (2017). Role of information technology in expediting the process of justice: An assessment of current challenges and future goals. *International Journal of Multidisciplinary Educational Research*, 6(5), 167.
- Singh, M., Sahu, G. P., Dwivedi, Y., Rana, N., & Tamilmani, K. (2018). Success factors for e-court implementation at Allahabad High-Court. In the *Proceedings of Pacific Asia Conference on Information System (PACIS)*, 137.
- Size, R. (2017). Taking advantage of advances in technology to enhance the rule of law. *Australian Law Journal*, 91(7), 575-587.
- Syed, M. A. (2017, January 6). Justice Going Digital. *Dhaka Tribune*.
- Tahura, U. S. (2015, January 6). Case management system to reduce case backlog. *The Daily Star*.
- Tariq, Q. (2020). New online payment service allows bail to be paid in 30 minutes. *The Star Online*. <https://www.thestar.com.my/tech/tech-news/2020/02/21/new-ejain-service-allows-bail-to-be-paid-in-30-minutes>.
- Velicogna, M. (2007). Justice systems and ICT-What can be learned from Europe. *Utrecht L. Rev.*, 3, 129.
- Wallace, A. (2009). E-Justice: An Australian perspective. In Martinez, A. C., & Abat, P. F. (Eds.), *E-Justice: Using Information Communication Technologies in the Court System* (pp. 204-228). IGI Global.
- Zain, N. A. M., Saman, W. S. W. M., Yatin, S. F. M., Rahman, A., Ahmad, N. S., Mokhtar, W. N. H. W., & Ramlee, N. N. E. N. (2018). Developing legal framework for e-court in judicial delivery. *International Journal of Engineering & Technology*, 7(3.7), 202-205.