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Digital transformation and building e-courts to meet the requirements of judicial reform in Vietnam

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Abstract: Currently, the rapid development of information technology has brought lots of opportunities for improving the efficiency of national governance activities and the implementation of justice in the world. The Fourth Industrial Revolution and the continuous development of digital technology have been profoundly changing the operation of the courts and providing opportunities for nations to transform from the traditional court model to the electronic court one. Building an e-court has become a global trend in order to respond to the COVID-19 pandemic and overcome court delays in resolving disputes. In that context, Vietnam has also advocated promoting the application of information technology, making the most of opportunities that are brought by the technological revolution so as to build e-courts, one of the important tasks of the Judicial Reform Strategy. From 2019 up to now, Vietnam has made efforts to strengthen judicial reform and build e-courts, however, the results are still quite modest. By qualitative research method, this article examines the achievements Vietnam has achieved as well as the limitations when the court system transforms to the e-court model, thereby making some recommendations to successfully build an e-court in Vietnam in order to meet the requirements of judicial reform.

Keywords: e-court; judicial reform; digital transformation; Vietnam

1. Introduction

In the face of the requirements of judicial reform, it is necessary to strengthen the application of information technology in court activities, especially in the context of the international and domestic situation continuing to fluctuate, the COVID-19 pandemic having negatively impacted all aspects of economic and social life because the State has different measures to impose restrictions on people's movement through Directives requiring social distancing and isolation (Primes Minister of Vietnam, 2020), thus directly affecting the operation of the courts (Supreme People's Court of Vietnam, 2021c). Many cases are due but cannot be brought to trial according to regulations. Some cases have been extended because parties and defendants are residing or temporarily detained in epidemic areas, so they cannot participate directly in court hearings (Supreme People's Court of Vietnam, 2021c). In fact, adjudication by the traditional way in that context has caused difficulties for the parties because the ability to directly take part in the proceedings is limited, even not feasible. This requires solutions to effectively bring cases to trial within the statutory time limit, timely protect human rights as well as legitimate rights and interests of organizations and individuals, stabilize social order and safety, and ensure safe epidemic prevention and control. In order to adapt to the new normal, applying information technology and developing a digital society is an insightful solution today.

Furthermore, people's lives are being changed in all aspects which include the court system and court proceedings. That's because the Fourth Industrial Revolution has happened. Also, information and communication technology, AI, and blockchain technology are exploding. Currently, most of the world's justice systems are encountering delays, excessive costs and inefficiencies (Briggs, 2016). This leads to dissatisfaction and failure to meet people's needs for accessing justice. There is a significant increase in the number of internet users annually (Datareportal, 2024) and the number of smartphone users globally (Datareportal, 2024), which makes the justice system must respond to new needs and help people have an access to justice whenever and wherever they choose. Hence, all countries' governments are calling for court reform based on applying modern technology.

Vietnam is without exception. Up to January 2023, the number of Vietnamese people using the internet is 77.93 million out of a total of 98.53 million people, accounting for 79.1% of the total population. Additionally, the number of social media users also reached 70 million, equivalent to 71% of the total population. The total number of active mobile connections is 161.6 million, or 164.0% of the total population (Vnetwork, 2023). This data shows that Vietnam has a significant total number of Internet and social media users, together with the number of mobile connections exceeding the total population (Vnetwork, 2023). Vietnam is now one of the 12 "largest" countries in cyberspace (Statista, 2023). Up to 16.5% of the country's GDP (Anh, 2023) is contributed by Vietnam's digital economy. Over the years, the Fourth Industrial Revolution has brought opportunities for the Party, the State of Vietnam as well as the whole society to have strongly implemented the policy of "... promote research, transfer and application of scientific and technological advances, innovation, chiefly the achievements of the fourth industrial revolution, implement national digital transformation..." (Communist Party of Vietnam, 2021). As a judicial agency, implementing judicial power, the Court system has actively promoted judicial reform activities, applied information technology in accordance with the requirements of building the rule of law in the digital era, comprehensively promoted digital transformation and built an e-court with the goal of "all operations are implemented online, all processes are implemented publicly, and all treatments are applied to technology"; thereby, improving efficiency, enhancing the professionalism, publicity and transparency of the Court's activities. Nevertheless, the process of building e-courts still faces some obstacles because of the incomplete legal framework, incomplete technological infrastructure and limited human resources. This article tries to answer the question: What are the results of building e-courts in Vietnam during the past time and the effectiveness of building e-courts in Vietnam? What are difficulties and challenges Vietnam faces in building e-courts and solutions to these difficulties?

2. Research methods

This article is a qualitative research work, in which the author mainly uses the method of analyzing and evaluating documents in collecting data. The author uses the desk analysis method to analyze secondary sources such as articles, magazine articles, internet news, presentations at seminars, conferences, policies of the Communist Party of Vietnam, the State's legal norms and the data collected in the annual summary

reports of the Supreme People's Court, as well as the books evaluated by experts for scientific content. For example, the evaluation data on the results achieved in the process of building e-courts in Vietnam will be taken from research papers by Chief Justice of the Supreme People's Court Nguyen (2022b, 2023a) and Deputy Chief Justice of the Supreme People's Court Nguyen (2019). The practical data of cases adjudicated by online court hearings are taken from the annual summary reports of the Supreme People's Court, articles published in specialized law journals and seminar presentations. The monograph of Nguyen (2022a) is also one of the main materials for the author to refer to in the process of evaluating the results achieved as well as the difficulties in the process of building e-courts to meet the requirements of judicial reform in Vietnam. The websites also provide useful data for the author to update the latest information about the process of building e-courts in Vietnam. Based on the data collected from the above secondary sources, the authors used them as the basis for arguments and evaluations in the research paper.

The purposeful selection of relevant secondary sources is argued that the researcher using the material and the desk research should only select materials focusing on the topic under discussion according to the pre-conceived criteria. In selecting the data sources for this study, the author set some criteria to determine the suitability of the literature for the research topic. The first criterion is to examine the content of the document to see whether it is suitable for the research topic or not. In order to be able to check in terms of the content, the author will read the title and summary (in the case of journal articles), read the introduction and table of contents in the case of books, and check the title in the case of articles on the internet. This criterion allows authors to select the most relevant documents to the research topic and eliminate irrelevant documents (Flick, 2018; Poshai and Vyas Doorgapersad, 2023).

The second document selection criterion is based on checking the date of publication of the document. For this study, the authors prioritized selecting the most recently published sources so as to ensure that the data and reviews are up-to-date and not outdated.

On the basis of secondary documents, the author has enough data to survey and evaluate the initial results as well as the difficulties that Vietnam faces in the process of building e-courts, since then, the author has made recommendations in order to successfully build e-courts in Vietnam.

3. Literature review of e-courts

The e-court is often considered as a component of the e-justice system in many countries, especially in Europe over the past decade. All over the world, initiatives for online justice and e-courts are still new problems (Schmitz, 2019), because the traditional model of judicial proceedings uses face-to-face communication. In the U.S, the e-court can reduce costs and increase efficiency, but it has not become the norm yet because people are "afraid of the unknown, fear of losing jobs and positions, fear of set-up costs, and suspicions that technology will affect the fair process negatively" (Schmitz, 2019). This may also be true for other nations and legal systems. In Europe, the European Council's Strategy and Action Plan 2019–2023 (2019/C 96/04) (European Council, 2019) has asserted the e-justice model. Accordingly, the e-justice

model aims to improve the access to justice in a growing Europe-wide context, integrating information technology and communication in order to access legal information and the operation of the justice system. The procedures are carried out in a digital way. Electronic communication among participants in judicial proceedings has become an essential component of the effective operation of the judiciary in member states. It can be said that the e-justice system is characterized by simplified and digitized procedures and ways of communication based on digital media.

On the other hand, according to the Doing Business 2016 report, four electronic solutions of adjudication processes to improve efficiency and accessibility, reinforce transparency and accountability of courts are the ability to file lawsuits electronically, serve the process electronically, pay court fees electronically and announce judgments electronically (World Bank Group, 2016). The court automation solution can be considered as the beginning of the e-court. Not only that, recently, courts have also used more and more online conferencing platforms and recorded trials. Thus, what is an e-court?

It can be understood that the e-court is the court that will conduct proceedings through the application of information technology in receiving petitions, documents, evidence and online trials (Nguyen, 2023a). The parties can take part in the trial at home or in the office or even in prison if they have an internet connection without having to be directly present at the Court (Lendvai and Gosztanyi, 2024). The e-court has some characteristics differing from a traditional court trial in that: Firstly, the method of filing petitions and evidentiary documents is not carried out directly but through indirect submission by electronic software; Secondly, the parties must follow the pre-designed electronic software, which allows the parties to file an electronic lawsuit as well as provide documents, evidence, and testimony remotely. The application of e-courts plays an important part in reducing dependence on hard papers and documents during the trial process; providing services and information quickly and accurately to meet people's needs; consolidating and improving the access to justice, reducing travel costs for both plaintiffs and defendants, especially parties in areas far from the center or rural areas; assisting judges regardless of geographical area in performing their professional duties the most effectively; supporting the Court's administrative management department to the maximum in guiding and providing documents to the parties along with the people when they have work at the Court and specially improving the Court's efficiency in resolving cases through the quick access to information documents (Anh, 2024).

In general, currently, the e-court model of countries is focusing on 3 main aspects: (i) Online lawsuit filing system; (ii) Electronic records management system; (iii) Electronic courtroom (Nguyen et al., 2021).

In the e-fill online filing system, normally, lawyers or related parties only need to "scan" the documents in their records and send them to the system. In order to be able to submit an application, people need to create an account to log into the electronic application portal. After logging in, the plaintiff will fill in the case information and attach "scanned" evidential documents. The electronic dossier procedures are completed when the parties complete the declaration of information and upload documents and evidence to the system (Nguyen, 2019).

In the e-court model, the case management system is built on the basis of software

application connected to the Internet so as to manage and supervise cases from the time of acceptance to the completion of settlement. This system will record cases, manage the list of cases that have been and will be tried as well as record court documents and the results of each case (Nguyen, 2019).

Case management in the e-court model is an important part of case management. It helps the court manage, store and access legal documents in a safe and efficient way. With the application of science and technology in case management, the system allows the digitization and encryption of paper documents such as minutes and evidences and is stored in electronic form. This minimizes the use of paperwork and makes it easy to access anywhere. With encrypted records management, the system will provide tools for document management, ensuring that documents are up to date and change tracing is easy. This is special important in cases there are multiple people editing or adding information to the case file. For instance, courts use blockchain technology, which is a special type of database, also known as a decentralized digital ledger that records transactions between two parties in a secure and tamper-proof manner (Binance Academy, 2023). These data are recorded by a special network of computers distributed in the world, called nodes. When a user initiates a transaction, it is broadcast to the network. Each node validates transactions by verifying digital signatures and other transaction data. Once verified, it will be added to a block along with other verified transactions. These blocks will be linked to each other through cryptographic hash function and arranged chronologically to form a cryptographically secured blockchain.

Decentralization in blockchain refers to the idea that in a blockchain network, there is no central authority or intermediary authority having control over the flow of data or transactions, but instead, computers operate according to a consensus mechanism, transactions are verified and recorded by a distributed network of computers that work together to maintain the data's integrity. All the factors in the system can agree on a single truth, even if some of the factors in the system are not working properly. They ensure that all nodes in the network have the same copy of the ledger, which contains a record of all transactions. With these outstanding advantages, the information stored on the blockchain cannot be forged, destroyed, altered, overwritten or deleted in any way, only added with the consent of all nodes in the system. Consensus mechanisms are very necessary for blockchains because blockchains inherently have no central authority verifying transactions and maintaining the integrity of the network. This is useful in situations when people need to coordinate with strangers or when they want to ensure their data's security and integrity. Blockchain has quickly become one of the breakthrough technology trends, is capable of wide application in many industries and fields and can also be effectively applied in the field of law to archive case files (Pham and Nguyen, 2023).

The record management is carried out on principles and techniques to ensure that the case is handled by the court in a timely and organized manner from the initial application to the trial. The record management system helps to improve the efficiency of processing and promotes the court to control cases early (World Bank Group, 2016), thereby minimizing delays and backlogs of records. Good record management also contributes to providing information to support the strategy of allocating time and resources to resolve the case (World Bank Group, 2016).

Although the principles of case management are applied differently by courts depending on the needs and legal culture of each nation, there are several principles that have been applied consistently in the world and have evolved into a set of core principles, which is the early intervention of the court, setting the time for meaningful events, strengthening the control mechanism to limit the extension and postponement of the trial (Gramckow and Nussenblatt, 2013; Michigan State Court Administrative Office, 2004; Rooze, 2010; Steelman et al., 2004). In order to support the effective implementation of records management systems, many countries use records management reports to analyze data on management performance. These reports indicate that in special cases, whether the management of records has met the target or not, what is the data on the number of pending cases? what is the proportion of adjudicated cases? what is the average time to resolve a case? what is the time of the case pending? Such reports can help administrators keep track of the entire case management process, and help them see inefficiencies or bottlenecks in the proceedings. In the records management system, the data is separated at the judge level, which means that each judge will have their own data. This data separation serves as an important tool for measuring the performance of judges, as the research shows that many delays in proceedings are due to judges' managing records laxly (World Bank Group, 2016).

Beside the case management system, some countries' courts have built many new courtrooms applying information technology advances to online trials when connected to the court's intranet and the internet, integrating audio and image systems, and connecting to the data and information systems of the Court. Many modern technical systems have been installed in high-tech courtrooms such as teleconferencing systems, through images and transmission lines to courtrooms or other locations so that civilians along with the media can follow them (Nguyen, 2019). Online trials are usually conducted by courts through an online conference platform (Video Conference). This online conferencing platform allows parties to conduct proceedings from different locations through computers connected to the Internet. During the trial, this system also allows users to share documents and images to serve the resolution of the case. In addition, the "recording" system is integrated into the online trial to support the trial process. When using this function, judges do not have to record the content of court proceedings, but electronic devices will record court proceedings automatically, which helps judges save time, concentrate and observe developments better.

In addition to benefits that e-courts bring, in building and operating e-courts, there are also many inadequacies and risks, which can be mentioned as follows:

Firstly, Parties taking part in the proceedings lack face-to-face contact. Body language, voice and facial expressions are important factors in communication. The absence of these non-verbal signals can lead to the reception of misinformation. In online trials, video conferencing and other online technologies can help parties make up for the lack of face-to-face communication but will not be able to completely replace it. The third party is neutral and technology plays an important role in providing meaningful information and building trust with parties, therefore, it is necessary for the third party to be trained because in the process of resolving the case, they also need to explain the communication information in writing (Duong, 2022).

Secondly, when building e-courts, the court system in nations must be changed, especially in organizing online trials. The challenge in this transition is to find the right balance between protecting both the rights and interests of parties and promoting the achievement of the goals set out in judicial reform (Duong, 2022). As part of the justice system, how can e-courts take a new approach while still ensuring the implementation of the court's core principles such as fair trial and public justice (Duong, 2022)? Whether the physical arrangements of the trial must be changed or not, because in theory, with the principle of public trial, the trial is held at the court's headquarters, everyone has the right to attend unless prescribed by law. On the one hand, this principle shows democracy, creates conditions for the people to inspect and supervise the activities of the Court and the subjects conducting the proceedings, thereby detecting shortcomings or mistakes in the process of settling cases, protecting the rights and interests of the State and citizens in accordance with the law. On the other hand, through public trials, it also has the effect of propagating the law to the people.

According to the American Bar Association's report on the future of legal services in the United States (American Bar Association, 2016), the Court should also consider whether the in-person presence of litigants, witnesses, lawyers, experts, and jurors is necessary for trials or whether the remote participation through ICT technology is feasible without intrusiveness to the legitimate rights and interests of the parties or does not affect the lawyer's ability to represent? If the core requirements of the court can only be maintained through adherence to the traditional way of conducting litigation, innovation in online courts is likely to be difficult.

In the UK, the online dispute resolution advisory group reported to the Civil Judicial Council of England and Wales that perhaps the question should be raised as to whether the courts are a service or a venue. Does the court always need the presence of a large number of the above subjects to be able to resolve the dispute (Online Dispute Resolution Advisory Group, 2015)? From the point of view of a French Chief Justice, the court is essentially one of a number of dispute resolution service providers (The Hon Robert French AC, 2009) and technology that will help the court rearrange and restructure it so that it is not a single physical location as we have conceived in history (Commonwealth Consolidated Acts, 1976). Nevertheless, when applying ICT technology to court sessions, it is necessary to consider the reciprocal relationship between the e-court model and the principle of human rights, including the principle of fair and open trial, considering the correlation between the trial and the complexity of the case, the right to interrogation and dialogue of competent procedural agencies and procedure participants in the process of conducting proceedings, how can courts both apply technology but still maintain the core requirements of the court. According to international human rights law, the right to a fair trial is a basic human right and is highly universal, existing in both criminal and non-criminal cases. Article 10 of the 1948 Universal Declaration of Human Rights (UDHR) states: "Everyone is equal in the right to a fair and public trial by an independent and impartial tribunal to determine their rights and obligations, as well as any charges against them". Clause 1, Article 14 of the 1966 International Covenant on Civil and Political Rights (ICCPR) stipulates: "Everyone is equal before the courts and the jurisdiction. Everyone has the right to a fair and public trial by a competent, independent, impartial and established court on the basis of law to decide on the accusation of the person in criminal cases, or to

determine the rights and obligations of the person in civil cases...”. Clause 1, Article 6 of the 1950 European Convention on Human Rights (ECHR) stipulates that, “...everyone has the right to be tried by an independent, objective adjudication body, established according to law”; The laws of many countries stipulate this right with the concept that it is an essential and indispensable right in a rule of law. The treatment of a person when they are accused reflects how much the state respects human rights, thus, the right to a fair trial has been considered a cornerstone of democratic societies. As for the fundamental changes in the form of trials, it will affect some elements of the right to a fair trial, namely the right to a trial in a reasonable time, the right to be heard by independent and objective decision-makers, to be provided with information related to the case, public trials and public pronouncements, ensuring the supervision of people’s trial activities.

Thirdly, the actual experience of an online trial will be significantly different from being in a courtroom. Legal proceedings are conducted in a direct court environment as “a physical expression of our relationship to the ideal of justice” (Mulcahy, 2011). The layout of the courtroom reflects the relationship among the participants: judges, people’s jurors, lawyers, witnesses, defendants and the public. There are appropriate times for them to stand, sit or speak. The attire of judges, lawyers, and court clerks also speaks to their roles and status. The court symbol and the seating layout, the objects in the courtroom as well as the combination of them show the solemnity of the proceedings. When setting up an e-court system with online trials, it is difficult to achieve this through the internet, especially in the case of trial participants accessing their home network. Even if they access at the office, even though the office is carefully prepared, it cannot achieve the same majesty as in the courtroom. The overall effect can create a sense of loss of the majesty of the trial and the severity of the law. This will probably promote skepticism, rather than belief in the legality of the judgment and the severity of the court (Rowden, 2013). Our view is that these ceremonial aspects of the court should not be overlooked when transitioning to online mode. What does the user interface convey about the nature of the court? How can independence, impartiality, and objectivity be shown in the online space? How does the arrangement of seats, frames, and camera angles through the webcam affect the perception of the solemnity and majesty of the proceedings (Tait et al., 2017)? If a person is disrespectful or disruptive during the online trial, how will this issue be resolved, whether the trial panel will be resolved by muting the person or removing them from the trial? These questions and many other questions will inevitably arise in the future and we need to pay attention to them when building e-courts. Respecting the dignity of the courts is an integral element of our justice system.

Fourthly, when using e-courts, there are also some legal problems due to the lack of clear legal standards. Issues such as validity and authenticity of signatures, validity of document transmission, inspection and authentication of documents and evidence provided by the parties, information security issues, etc. are also set. Moreover, under the impact of new technology in the context of the Fourth Industrial Revolution, the space limit of the law will be changed. Civil and commercial acts are carried out in a “borderless” and even “non-subjective” manner with the help of information technology and artificial intelligence (Dang, 2021). Civil law subjects commit acts that cross borders, beyond the national territory. That challenges the traditional

principles of determining civil jurisdiction that are primarily based on territorial factors.

4. Results and discussion

4.1. Results of building e-court in Vietnam over the years

Judicial reform is a major line of the Communist Party of Vietnam. Since the beginning of the 2000s, the Politburo Bureau has issued some important resolutions on judicial reform and improvement of Vietnam's legal system, including: Resolution 08-NQ/TW (2002) of the Politburo Bureau on "Some key tasks of judicial work in the upcoming time" (Politburo Bureau, 2002); Resolution 48-NQ-TW of the Politburo Bureau on the Strategy to build and perfect Vietnam's legal system to 2010, with a vision to 2020 (Politburo Bureau, 2005a); especially Resolution 49-NQ/TW dated 2 June 2005 of the Politburo Bureau on the "Strategy for judicial reform to 2020". Judicial reform needs promoting to meet the change of the new situation, which is the need for the application of information technology to meet the requirements of international integration. Resolution No. 49-NQ/TW has set out the tasks of judicial reform, namely: "Strongly reforming judicial procedures in the direction of democracy, equality, openness, transparency, strictness but convenience", "renewing the organization of court trials", "renewing administrative procedures in judicial agencies in order to create favorable conditions for civils to access justice", including the task of "... strengthening the application of IT to the operation of judicial agencies..." (Politburo Bureau, 2005b). This is an important policy on judicial reform in the direction of meeting the requirements of the fourth industrial revolution. Furthermore, Vietnam has joined the 17th Asia-Pacific Conference of Chief Justices, the 9th ASEAN Council of Chief Justices Meeting and committed to completing the e-court construction by 2025. This is the basis and also the driving force for Vietnam to strengthen the application of information technology in judicial activities and move towards building an e-court to meet the judicial reform requirements of the court system.

Apart from judicial reform policies and strategies, Vietnam has issued several resolutions to promote digital transformation and increase the use of information technology in the Government and society (Nguyen, 2022a). For instance, Resolution 52-NQ/TW dated 27 September 2019 of the Politburo on a number of guidelines and policies to actively participate in the Fourth Industrial Revolution, (Politburo Bureau, 2019). Decision No. 749/QD-TTg of the Prime Minister issued on 3 June 2020 approving the National Program on Digital Transformation by 2025 and orientation to 2030 (Prime Minister of Vietnam, 2020). All government agencies involving the courts are transferred to the digital space because of these important polices as a solid foundation. Particularly, Resolution 27-NQ/TW dated 9 November 2022 on continuing to build and perfect the Socialist the rule of law State of Vietnam in the new period for the first time mentions "building e-courts", considering this as one of the tasks of court reform from now to 2030 (Politburo Bureau, 2022). In 2021, the Supreme People's Court of Vietnam developed and promulgated Plan No. 76/KH-BCD-TANDTC on building e-courts in Vietnam to meet the requirements of judicial reform by 2030, with a vision to 2045 (Supreme People's Court of Vietnam, 2021a).

The master plan sets out the direction of building an e-court system in Vietnam with three pillars: legal infrastructure, technological infrastructure and human resources (Nguyen, 2022b). From the perspective of digital transformation and building e-courts, Vietnam has strongly promoted the spirit of “5 promotions”: Promoting the improvement of legal aspect, institution, mechanism and policies to develop the People’s Court, including the legal basis for digital transformation and the e-court construction. Promoting the development of digital infrastructure and digital platforms, creating an important premise in building e-courts and ensuring cyber security and information safety under all circumstances. Promoting the creation of digital data, integration, connection, interconnection, and sharing continuously, smoothly and synchronously in order to improve the governance and enforcement capacity of the Court on the digital platform. Promoting the development of digital human resources, digital skills and professional training to meet the requirements of developing e-courts. Promoting extensive propaganda in the People’s Court so that all cadres, civil servants and judges unanimously respond to take part in the process of digital transformation and building e-courts (Giang, 2024). The aim of building e-courts in Vietnam is to improve the governance and efficiency of the courts so as to solve the backlog of cases, enhance the access to justice and public legal services for civils, improve the quality and efficiency of judges’ work, improve the court’s transparency and publicity, thereby contributing to the overall digital transformation of the government, economy and society of Vietnam (Nguyen, 2022b).

On the basis of these policies, over the years, Vietnam has gradually perfected the legal framework for the e-court construction. The application of information technology in the process of proceedings has been recorded for the first time in major procedural codes and laws such as Civil Procedure Code 2015, Criminal Procedure Code 2015, and Administrative Procedure Law 2015. Accordingly, the sending and receiving lawsuit petitions and enclosed documents and evidences by electronic means are recorded; issuing, serving and notifying procedural documents, apart from the methods of serving directly and sending via postal services, the method of serving by electronic means is supplemented; stipulating that legally effective judgments and decisions must be publicly announced on the court’s web portal. Afterwards, the Council of Judges of the Supreme People’s Court issued Resolution No. 04/2016 NQ-HDTP dated 30 December 2016 guiding the implementation of several provisions of Civil Procedure Code, Administrative Procedures Law on sending and receiving petitions, documents and evidences; issuing, serving and notifying documents by electronic means. These regulations are not only a new point with the aim of modernizing the operation of the courts and creating every favorable condition for petitioners but also the basis for administrative reform at the courts (Nguyen, 2022a).

Up to now, the court system has gradually implemented the application of information technology, creating a great change in court activities. The court system has implemented the publicity of the court’s judgments and decisions as well as case laws on the website of the Supreme People’s Court. The software for managing applications for cassation and retrial has been put into use, initially helping the Supreme People’s Court build a unified database system on the settlement of applications for cassation and retrial; the assignment of Judges is carried out in an automatic manner; Judges and leaders of the Supreme People’s Court can easily

monitor the workload and process of settling applications of each examiner and unit; The online public service of registering copies of judgments and documents in case files helps agencies, organizations and civils register for copies of judgments and documents in case files at any time and at any place without having to go to the Court's headquarters (Vietnam News Agency, 2021).

In 2021, due to the severe COVID-19 epidemic situation, the whole country had to implement social distancing, therefore, courts in Vietnam were forced to switch the in-person trial to online one. Having an official legal basis for the court to conduct the trial online is essential. In the context of the pandemic, Vietnam cannot immediately amend Civil Procedure Code 2015 to recognize online trials. (National Assembly of Vietnam, 2015) Hence, in November 2021, the National Assembly quickly issued Resolution No. 33/2021/QH15 on organizing online trials (National Assembly of Vietnam, 2021). According to this Resolution, the People's Court may organize online court hearings for first-instance and appellate trials of criminal, civil and administrative cases. Cases which are eligible to hold online court hearings must be simple cases with clear evidence. So as to implement this Resolution, on 15 December 2021, Joint Circular No. 05/2021/TTLT-TANDTCVKSNDTC-BCA-BQP-BTP of the Supreme People's Court, the Supreme People's Procuracy, the Ministry of Public Security, the Ministry of National Defense and the Ministry of Justice regulating in details and guiding the implementation of online trials was issued. With the Resolution of the National Assembly and the Joint Circular, courts in Vietnam have a solid legal basis to conduct online trials. It can be said that the political and legal framework for the e-court construction in Vietnam is ready, creating a premise for the implementation of e-courts in practice (Supreme People's Court of Vietnam et al., 2021).

Implementing the plan to build an e-court, the Supreme People's Court has put into use many advanced information technology systems such as:

Firstly, the web portal and 67 websites of the People's Courts at all levels have been developed and put into practice by the Supreme People's Court (Nguyen, 2023a). The website announcing court judgments and decisions has published more than one million judgments, decisions and 69 case laws. This website is also an information platform to discuss the construction and development of case laws. Initially, these information platforms have created an electronic communication environment, facilitated people's access to information; and strengthened the supervision of agencies, organizations and individuals over the Court's adjudication activities. According to statistics, on average, about 20 thousand people a day access the Court's web portal and websites to exploit information (Nguyen, 2023a).

Secondly, the Supreme People's Court put into use and integrated three level 4 public justice services, and integrated them on the National Public Service Portal, including registering to receive copies of judgments and documents in case files; sending and receiving lawsuit petitions as well as documents and evidences; issuing, serving and notifying procedural documents of the Court by electronic means; collecting and paying court fee advance. These online services have made people easily access to justice at the Court anytime and anywhere without having to go to the Court in person (Nguyen, 2023a).

Thirdly, the Supreme People's Court has built the People's Court Data Center, the Center for Supervision and Administration of Court Operations, WAN network

infrastructure, etc., which initially meets the requirements of calculation and processing and simultaneously ensure level 3 information security.

Fourthly, organizing an online video conference system of people's courts with a scale of more than 800 bridge points, connecting with courts at all levels, and helping to form a working flat space and interaction between courts is no longer hindered by geographical distance. Through this system, courts can organize online meetings, training sessions and seminars with units inside or outside the Court or with courts at any time, which is special useful in exchanging and improving professional qualifications. On average, this video conferencing system serves more than 1200 sessions per year, saving tens of billions of VND for the state budget (Nguyen, 2023a).

Fifthly, the case management system has been implemented so as to help the court manage and monitor the entire process of accepting and settling judicial applications and cases from the beginning to the end; supervise the situation of accepting and settling cases to each judge in order to ensure that the requests of the people, acts of law violations and crimes are resolved quickly and in accordance with the law. Additionally, The Supreme People's Court has also put into use many internal management software to improve labor efficiency and work efficiency of the Courts such as: electronic document management and executive direction software; human resource management and civil servant evaluation software; public property management software; main financial management software and case statistics software (Nguyen, 2023a).

In 2021, to accelerate the construction of e-courts to meet the requirements of judicial reform in the new situation, the Supreme People's Court has increased the use of information technology and artificial intelligence to support judges, resolve cases accurately and reduce work pressure in the context of the increasing number of cases to be resolved; adjudicate quickly and promptly; ensure the lawful rights and interests of the accused, defendants, parties, relevant organizations and individuals; minimize the time for civils, agencies and organizations participating in court hearings, thereby saving social costs The Supreme People's Court has used the online trial system to implement the National Assembly's Resolution No. 33/2021/QH15 on organizing online court hearings. This is considered as a breakthrough in judicial reform, limiting the gathering of large numbers of people in a courtroom, ensuring safety in epidemic prevention and control during the complicated development of the COVID-19 epidemic; allowing civils to easily have access to justice; minimizing the cost and time of conducting proceedings and participating in proceedings, as well as other social costs (Anh, 2023b). The online trial is of special significance for cases of sexual abuse, economy, corruption, and position; cases with a lot of people participating in the proceedings, etc.; allowing victims, witnesses, lawyers and other participants in the proceedings to join court hearings at different locations, thereby contributing to the better and more effective protection of human rights, legitimate rights and interests of organizations and individuals, limiting court hearings postponed many times or trial in absentia (Anh, 2023b). According to the statistics, from the beginning of 2022 until now, people's courts at all levels have organized online trials of nearly 20 thousand cases. The "Virtual Assistant" software of the People's Court interacts with Judges in spoken or written language through the application of mobile phones, on personal computers, assisting Judges: looking up legal documents, referring to similar legal

situations summarized by the SPC Judges' Council, referring to similar judgments that have taken legal effect, making plans for solving cases and managing electronic case files and draft procedural documents. Up to now, over 168 thousand documents, over 1.4 million judgments, over 24 thousand questions answering the legal situation have been integrated; Up to now, there have been over 5.7 million questions and answers, an average of 10–15 thousand times a day (Giang, 2024).

4.2. The effectiveness of building e-courts in the operation of courts in Vietnam during the past

The introduction of the above-mentioned IT systems has helped improve operational efficiency and enhance the Court's professionalism, publicity and transparency. This affirms the positive benefits of e-court building activities in Vietnam for the performance of the Court's functions and the quality of service to the people and society such as:

Firstly, helping increase efficiency. The e-court is a quite new court administrative management system. The implementation of processes in the application of the e-court model aims to minimize human intervention, eliminate unnecessary administrative procedures, use algorithms to improve the productivity of sorting and processing documents on the electronic system to help simplify compared to the traditional trial model. The implementation of this model saves time and money for the court, lawyers and parties (Phan and Nguyen, 2019). The e-court with an electronic file management system, audio and video recording will help the parties and the trial panel concentrate on expertise and the procedural process rather than technical matters (Phan and Nguyen, 2019). In addition to ensuring the principles of "judicial independence" and "fair trial", the e-court must also ensure some other equally important principles, namely that the trial process must be simple, fast and inexpensive (Bui et al., 2021). The e-court's legal process is not too complicated and easy to understand for people to follow. Even those who are less legally literate do not lose rights to access justice. Requests are handled efficiently, without taking much time, without being prolonged, based on predefined deadlines (Duong, 2023a). Requesters can determine the status and legality of the court's decisions. The proceedings carried out on the electronic platform will save travel and accommodation costs of the parties due to geographical distance, especially in commercial disputes with foreign elements (Duong, 2023b). According to the calculations of international experts, each set of online documents saves 200 USD for civils and enterprises. Judges can handle 3000 cases a year thanks to the support of technology (Pham, 2021). The Virtual Assistant Software of the People's Court interacts with Judges in spoken or written language through the application of mobile phones, on personal computers, assisting Judges: looking up legal documents, referring to similar legal situations that have been summarized by the SPC Judges' Council, referring to similar judgments that have taken legal effect, making plans for settlement of cases and managing electronic case files, drafting procedural documents. Up to now, there have been 11 thousand accounts granted to Judges, Verifiers and Clerks and on average there are more than 10 thousand visits/day (Nguyen, 2023a).

With the implementation of the e-court platform, the receipt of electronic records

will be standardized right from the receiving stage for long-term storage and use, throughout the case in the system. For the automatic assessment of the completeness and validity of case files, in the past, judges and clerks had to study the dossier and then made a decision. In many cases, they had to request the parties to provide more evidence and prolonged the time for handling the case (Phan and Nguyen, 2019). The e-court with algorithmic tools using artificial intelligence will help judges and court clerks process documents faster, give suggestions on whether the records have sufficient processes, procedures, and sufficient grounds. The platform also supports judges to automatically search for cases with similar legal acts and relevant case laws. The application of the social network monitoring and listening system helps the Court have more sources of information from public opinion related to the case which is being handled. Additionally, the e-court also supports the Court to organize online mediation, has an electronic courtroom, optimizes the Court's activities with relevant agencies and optimizes internal activities (Pham, 2021b).

Secondly, improving transparency and accountability. Electronic records can bring peace of mind and comfort to civils because they have a basis to believe in the legality of the proceedings. Every abnormal behavior will be recorded and there will be evidence. Appellate courts may use recordings to examine the legality of lower courts' proceedings and ensure procedural integrity, especially in cases relying on visual or oral cues (Nguyen, 2023a).

Case information can be accessed at once and anywhere. In particular, the accumulated information will support the activities of judges and court clerks effectively as well as minimize mistrials.

Thirdly, preventing procedural abuse or corruption. Electronic recordings cannot prevent crimes from happening outside the courtroom, but with strict control of the public, they can have the effect of reducing the rate of corruption or procedural abuse of judges and court officials. This system is important in addition to rationalizing the process of handling cases of justice seekers, as well as minimizing the direct interaction of administrative staff with justice seekers to avoid potential judicial corruption.

Fourthly, humanely handling special situations of proceedings. The e-court creates conditions for parties, witnesses and lawyers for various reasons such as epidemics, diseases, living far away and economic difficulties who cannot be directly present at the Court's headquarters but can still participate in the court session. Specially, for child sexual abuse cases, they will not summon children to the courtroom. All their declarations will be conducted online in order to avoid direct contact with the defendant, ensuring the confidentiality of their private life and avoiding them further damage of psychology, personality and honor.

Fifthly, increasing the access to justice. E-courts have the potential to increase the access to justice in general, especially for vulnerable groups. Barriers to disadvantaged groups can be eliminated or mitigated through technology such as removing geographical barriers; people who are visually or hearing impaired can also join through speech recognition software; people with language difficulties through translation software; Courts can assist people with hearing impairments during trials by transcribing or amplifying audio in real-time and improving the quality of translation and interpretation, providing a more welcoming environment for

vulnerable victims and defendants because they can take place outside of the courtroom.

Sixthly, increasing the capacity of management and supervision in the Court system. The e-court will effectively support the management and direction of the Supreme People's Court for the entire Court system, of the Superior Court for the Lower Court. Particularly, it efficiently contributes to increasing the capacity to monitor the progress of case acceptance inside the Court system, increasing transparency and preventing negatives.

4.3. Difficulties and inadequacies in the process of building e-courts in Vietnam

One of the core contents of building e-courts is digital transformation of procedural activities (Nguyen, 2023a; Phan and Nguyen, 2019). The project to build e-courts in Vietnam that meets the requirements of judicial reform by 2030, orientation to 2045 developed by the Supreme People's Court, has concretized the policy of digital transformation of procedural procedures, with the view that digital transformation of court activities to a digital platform is compulsory, by default, considering civils and enterprises as the center and adjudication activities as the focus of the court's digital transformation (Supreme People's Court of Vietnam, 2022b). According to the roadmap for implementing the project, from now to 2025, procedural legal provisions will have to be completed and supplemented in the direction of allowing online proceedings to be conducted, promote and encourage civils to choose online proceedings to solve work at the court (Supreme People's Court of Vietnam, 2022b). However, Vietnam's procedural law is still mainly built on the direct procedure method. Now, Vietnam is still in the first stage of the process of digital transformation of procedural activities and building e-courts, so it still has to make a lot of efforts to achieve the goal of completing the e-court construction by 2025.

The institutionalization of the Party's guidelines and the realization of judicial reform policies in the direction of openness, transparency and convenience in practice are still slow. Vietnam's current procedural procedures are still mainly built on the traditional method having direct human interaction. It will take 10 years after the promulgation of the Judicial Reform Strategy as well as 10 years after Law on Electronic Transactions 2005 and Civil Procedure Code 2005 to officially record electronic data as a source of evidence and record several specific procedural activities carried out by electronic methods such as filing lawsuits, handing over documents and evidences; receiving and processing lawsuit petitions, issuing, serving and notifying by electronic means at the parties' request. Although Civil Procedure Code 2015 has officially recognized electronic data as a source of evidence and allowed some proceedings to be conducted electronically, it does not clearly recognize online court hearings and sessions or the collection of evidence remotely. In fact, regulations on online complaint filing, online evidence submission and electronic case processing services are hardly implemented due to the lack of adequate infrastructure.

On 22 October 2018, the Supreme People's Court officially launched the online service and record system for the pilot application in some courts and then was replicated nationwide. The pilot courts include the High People's Court, the People's

Court of Hanoi, the People's Court of Hai Phong City and the People's Court of Quang Ninh Province. The system has not been piloted in district-level people's courts. To the last month of 2018, only one lawsuit petition was sent electronically to the People's Court of Hai Phong city, but the faulty application was not received due to an error in the digital signature (Nguyen et al., 2020). The method of sending petitions, documents and evidence by electronic means is still difficult to implement because the requirements for electronic signatures are still difficult for individuals. The procedures and costs for obtaining electronic signatures are only suitable for enterprises. Some guidelines are not specific and require applicants to have an understanding of procedural law. The maximum size of uploaded documents is only 2 MB, limiting important evidence and documents with a larger capacity. Besides, people do not have the habit of sending lawsuits online. Online filing is not regulated by law as the default method of first priority compared to traditional methods such as filing in person in court or by post.

After more than 3 years since the launch of the pilot system, courts have not yet implemented public services in sending electronic petitions, handing over electronic evidence and documents as well as serving procedural documents by electronic means because of the lack of technological infrastructure (Nguyen, 2022a; Supreme People's Court of Vietnam, 2021b, 2022a). On 4 April 2022, the Prime Minister issued Decision No. 422 dated 4 April 2022 approving the list of online public services integrated and provided on the National Public Service Portal in 2022, including some public services of the court such as collecting and paying court fee advances, court fees, filing petitions, documents, evidence and receiving procedural notices. The deadline for completing the provision of these services is the 3rd quarter, 2022 (Vietnamese Government, 2022). Therefore, Vietnam still has to make a lot of efforts to achieve the goal of completing the e-court construction by 2025.

In terms of institutions for electronic procedures, Civil Procedure Code 2015 only regulates that it is allowed to file lawsuits and serve documents electronically, but there are no regulations on the use of video conferencing technology to conduct court hearings and online sessions as well as carrying out other online procedural activities such as online mediation, online evidence exchange, taking testimony of parties and witnesses remotely, etc. (Nguyen, 2022a). Direct trial has always been the only trial method for many years with court hearings held in the traditional form. Civil Procedure Code 2015 regulates that the principle of conducting court hearings is the principle of direct and verbal trial, requiring proceeding-conducting persons and proceeding participants to be present at the same time at the court session, and the trial activities take place in the courtroom under the chairmanship of the presiding judge (Vietnam's Civil Procedure Code 2015, Article 225). If a proceeding-conducting person or a proceeding participant is absent, depending on each case, the trial panel will decide to postpone the court session or try in absentia.

By the end of 2021, the legal basis for organizing online court hearings in Vietnam was developed one step further, demonstrating the adaptation of civil procedure law policies to the COVID-19 pandemic as well as to the fourth industrial revolution. On 12 November 2021, the National Assembly issued Resolution No. 33/2021/QH15 on organizing online court hearings, whereby people's courts are allowed to organize online court hearings for first-instance trials, appellate trials of

criminal, civil and administrative cases with simple circumstances and nature; clear documents and evidence in the case file. This is an important legal basis for organising an online trial when the epidemic is complicated and even after the pandemic has been controlled. The introduction of Resolution No. 33/2021/QH15 on organizing online court hearings that contributes to ensuring justice without delay, fast and timely trials; creates a favorable mechanism for parties, organizations and individuals to participate in court hearings; contributes to improving the efficiency of the Court's operational capacity and ensures each step professional, modern and suitable with international trends is an essential step for the e-court construction. The implementation of online trials still ensures the principles of being direct, public, continuous, verbal, witnessed by parties and ensures the procedural principles.

Next, in order to implement Resolution No. 33/2021/QH15 of the National Assembly dated 15 December 2021, the Supreme People's Court, the Supreme People's Procuracy, the Ministry of Public Security, the Ministry of National Defense and the Ministry of Justice issued Joint Circular No. 05/2021 regulating in detail and guiding the implementation of the organization of online court hearings, including guiding the consideration of the decision to open court sessions online; requirements for online court hearings; responsibilities of competent agencies, organizations and people in organizing online court hearings; preparing for online court hearings, online court hearings. With the initial regulations on holding online court hearings, it can be seen that the high political determination of the leaders of the Party, the State and the Supreme People's Court in the digital transformation of procedural activities. Nevertheless, compared to the experience of organizing online trials in some countries, Vietnam's regulations on organizing online court hearings are still quite strict and limited in applicability, which has not created favorable conditions for parties in civil proceedings. For example, Resolution No. 33/2021/QH15 and the Circular guiding the restriction on the number of component bridge points (three bridge points) is inflexible. The party must be present at the court-designated local connection point in order to connect to the central point, rather than being able to participate from anywhere and connect to the court through his or her device. This requirement significantly reduces the attractiveness and effectiveness of online court hearings and explains why online court hearings in Vietnam mainly apply to criminal cases rather than civil cases although the number of civil cases is much higher than the number of criminal cases; The scope of civil cases that can be applied to direct trial is also very limited; The requirements for technical equipment for courtrooms and component bridge points seem to be quite complex and require large investments in technical technology infrastructure, which can lead to organising online court hearings even more expensive than in-person court hearings. A number of local courts, especially at the district level, cannot have enough technological infrastructure to organize online court hearings. Courts are required to use a separate online justice platform for online hearings developed by the Supreme People's Court instead of Zoom or other popular video conferencing platforms because of security concerns, but this online justice platform is not still fully developed and is not still available for the device mobile (Nguyen, 2022a).

In short, the current legal system has had provisions which are the legal basis for implementing the application of information technology to carry out procedural

procedures, however, there are still many inadequacies and limitations (Do and Pham, 2021; Pham and Ngo, 2022). Many other procedural procedures have not been allowed by law to apply online platforms to be carried out such as filing appeals, petitions, applications for cassation and reopening of cases, opening meetings to examine the handover, public access to evidence and conciliation; using electronic court records and electronic signatures to pay court costs and fees in advance, verify information, collect documents and evidence related to online cases; issuing copies of judgments and documents in case files and photocopies of online procedural records and documents, etc. These are basic procedural activities to ensure the implementation of e-proceedings. Moreover, the standardization of management professional processes for each field of work of the court has not been paid attention to implementation. Many current professional processes are only suitable with manual management methods, which has not facilitated digital transformation (Supreme People's Court, 2022b). Though electronic procedures have been legalized, the implementation in practice is still very slow and faces many difficulties and challenges in terms of awareness, human resources and facilities.

4.4. Some recommendations to contribute to building e-courts in Vietnam successfully

To build an e-court successfully, it is vital to have right awareness, high determination, synchronous solutions, necessary resources and drastic administration. Initially, Vietnam needs do several tasks as follows:

First, building an overall strategy on digital transformation in the court system. The Party and State of Vietnam advocate strengthening the development of science and technology, and consider this as an important driving force. In Resolution No. 52-NQ/TW dated 27 September 2019 of the Politburo Bureau "On some guidelines and policies to proactively participate in the fourth industrial revolution", the task of promoting the digital transformation process is specially emphasized. This is an important political basis for building and operating e-courts by 2025. Hence, the Supreme People's Court must urgently develop and implement the Overall Strategy on digital transformation in the court system by 2025, with a vision to 2030. The strategy must set specific goals, requirements and tasks; and must create full awareness in the court system about the importance of digital transformation and the e-court construction. This is both an inevitable trend of the national digital flow and an opportunity to develop the court. The strategy must clearly define the main orientations for building e-courts and the tasks that need to focus on implementing in the coming time; determine the roadmap and steps suitable for each stage, with economic conditions as well as technological level, etc. Because of the rapid development and change of technology every day, the development of the Strategy must have a long-term vision, and concurrently, must be flexible and adaptable to gain a head start by taking a shortcut, get ahead of technology, and save costs and time.

Second, completing legal documents. The operation of e-courts must have a complete and synchronous legal system, adapting to digital technology. The main legal infrastructure of e-courts includes: laws on e-procedures; laws on information technology, digital technology and artificial intelligence; laws on the organizational

apparatus of the Court and procedural agencies. Besides, there are also other relevant laws. The above-mentioned legal system must be completed in the direction of permitting online proceedings, regulations on electronic evidence; organization apparatus, functions, tasks and powers of subjects conducting e-proceedings, etc.

Third, developing modern digital infrastructure. Information technology and digital technology infrastructure plays a vital role in developing e-courts. The Supreme People's Court needs to develop a scheme to equip facilities for e-courts. The main contents of the Scheme are to equip the following areas: 1) Digital infrastructure including end-to-end digital devices, stable high-speed transmission lines, big data storage centers and operation centers; 2) Digital platforms for the court operation and "Virtual Assistants" applying artificial intelligence corresponding to each task and the court operation. 3) Training programs for management, operation and application of e-courts. This is a Scheme needing to be adequately invested in funding, thus, there must be an appropriate roadmap for both the short-term, medium-term and long-term depending on the potential of the economy and the level of technology development. Mobilizing a variety of resources—from the state budget, from international cooperation and from socialization. The investment in technological equipment must ensure requirements such as modernity, security, safety and convenience, and consider "gain a head start by taking a shortcut".

Fourth, developing information technology human resources. Human resources are an important factor determining the success of digital transformation and building e-courts (Nguyen, 2023a). Developing human resources so that the e-court can be implemented in practice must have synchronization in terms of human resources for management, operation and application of digital technology (Nguyen, 2023a). Accordingly, including a team of information technology and digital technology engineers; the contingent of judges, judicial titles and court staff at all levels; civils when there is a matter that needs settling by the court. Information technology engineers must have both up-to-date knowledge of digital technology and understanding of the law and court operations. At the same time, it is essential to form an organizational apparatus from the Supreme People's Court to provincial-level courts so as to operate the digital technology system. The remuneration regime is currently a bottleneck to attract this human resource, so innovating and having a suitable mechanism are needed (Nguyen, 2022c). Judges and court officials must be retrained to be fully aware of e-courts and change their working habits from the traditional environment to the cyber environment. The digital platform must become the common working platform of the whole system with nearly 800 courts; court officials not entering this platform will not be able to work. Only then will the e-court be truly successful.

Fifth, the use of the e-court platform should be regarded as the default choice, especially for court staff. Customarily, court staff and parties do not want to change the usual method of litigation (face-to-face) because they feel safer in their comfort zone. If there is an option available, they tend to choose the traditional method. Experience in e-commerce, banking and education shows that when online is considered as the default option, the rate of acceptance increases dramatically as users actually realize and enjoy the benefits of efficiency and convenience. There need to be certain incentives for parties to use the online platform in order to send complaints,

respond, receive notices and documents from the court as well as submit evidence. Once they are familiar with this platform and realize benefits, they will stick with it and may not want to go back to the in-person option (Nguyen, 2022a).

Sixth, the e-court system must be comprehensive and does not only focus on certain activities such as electronic filing, electronic services, or remote trials. An integrated platform providing comprehensive online services from start to finish is vital. However, this platform must be user-friendly and cannot cost the court and parties more than the direct litigation regime. Fewer onerous requirements for infrastructure, electronic signatures and identity identification by using and trusting digital technologies are needed.

5. Conclusion

This article studies the building process and the results achieved in the process of building e-courts in Vietnam as well as points out the difficulties and inadequacies on three issues, namely inadequacies arising from the lack of legal framework, inadequate and synchronous infrastructure, and inadequacies due to limited human resources. From pointing out those limitations, the article has proposed some solutions to successfully build e-courts in Vietnam in the near future.

This research also shows that accelerating the digital transformation process and completing the construction of e-courts in Vietnam must become the aspiration of the entire court system and of each officer and judge. This is an urgent task that needs to be specified in order to be decisively completed soon. This is an opportunity for the court to continue to enhance people's trust in justice, improve the efficiency of court operations and build a modern court as required in the Resolution of the 13th National Congress of the Party. It is certain that the digital transformation and construction of electronic courts will create great values, making an important contribution to the success of judicial reform, keeping up with the trend of progressive justice in the world.

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