



JOURNAL OF LEGAL STUDIES

<https://e-journal.uum.edu.my/index.php/jls>

How to cite this article:

Azhar Alam, Ririn Tri Ratnasari, Yusuf Wisnu Nugroho & Putri Melaniya Utami. (2024). Identifying problems and solutions of the e-court system of religious courts in Indonesia: An analytic network process study. *UUM Journal of Legal Studies*, 15(2), 645-674. <https://doi.org/10.32890/uumjls2024.15.2.10>

**IDENTIFYING PROBLEMS AND SOLUTIONS OF
THE E-COURT SYSTEM OF RELIGIOUS COURTS IN
INDONESIA: AN ANALYTIC NETWORK
PROCESS STUDY**

**¹Azhar Alam, ²Ririn Tri Ratnasari, ³Yusuf Wisnu Nugroho
& ⁴Putri Melaniya Utami**

^{1,3&4}Universitas Muhammadiyah Surakarta, Indonesia

²Universitas Airlangga, Indonesia

¹Corresponding author: aa123@ums.ac.id

Received: 17/2/2023 Revised: 21/1/2024 Accepted: 20/2/2024 Published: 30/7/2024

ABSTRACT

Many nations are creating E-courts to simplify court operations. However, religious e-Courts take more work to execute. This study has identified religious court e-Court implementation issues and solutions using Delphi and ANP. It first employed Delphi and a literature review to interview experts face-to-face. Eight judges, I.T. workers, and attorneys from three religious court districts analysed the model using a priority scale with an Analytic Network Process (ANP). The study found that infrastructure or equipment from the application of the e-Court system is the main issue, with a geometric mean of 0.306, followed by Human Resources (0.262), the system (0.219), and regulation (0.213). Improving e-Court system regulation (0.850) and infrastructure were the primary solutions (0.770). This paper

details cluster priority solutions and issues. This study suggests that the highest religious court authority focuses on infrastructure, human resources, e-Court operational systems, and associated legislations. The government must adopt the e-Court system and registration laws to encourage more active socialising. The study prioritises e-Court implementation issues in the religious courts of Indonesia.

Keywords: Issues, alternative solutions, e-court, analytic network process.

INTRODUCTION

Contemporary society is heavily reliant on sophisticated technologies. The unrestricted nature of technological growth yields both advantages and disadvantages. This technology is employed by both individuals and government institutions, including the administrative body at the level of the Supreme Court (Shidiq et al., 2019). For example, an online cross-examination of witnesses without them having to come physically to the relevant court is beneficial for a faster and more efficient trial (Sari, 2019). The Indonesian Supreme Court has innovated its operations by combining information technology and the relevant procedural laws. In Indonesia, in place of manual administrative processes, e-Courts are replacing paper courts (Burhanuddin et al., 2022). The Indonesian Supreme Court upholds the principle of simple, fast, and low cost, which can be implemented at any time in the e-Court system (Saputra, 2018) to provide justice and legal certainty (Iqbal et al., 2015). Speeding up the court trial is a universal principle that courts worldwide have adopted (Kurnia, 2019). Therefore, to realize these principles, it is necessary to reform and overcome obstacles using the tools of technology available in modern times.

The e-Court can be defined as a judicial instrument to provide a service to the community, ranging from online-based registration to electronic-based down-payment estimates, to summons and to online-based trials (Indonesian Supreme Court, 2019). The Supreme Court explained that the e-Court system does not abolish or annul the existing norms, but only added to and perfected the previous regulations (Fatwah & Umar, 2020). Islam considers the modernising of the courts to be legally permissible. Islam does not pose obstacles to mankind as long as the policies established align with the principles

of Islamic teachings and offer advantages to individuals in pursuit of justice (Atikah, 2018). In Indonesia, religious courts have the authority to handle sharia economic conflicts and disputes (Dzatihanani & Rosyadi, 2019; Musjtari et al., 2022; Wardiono & Yuspin, 2019; Yuspin & Hatinuraya, 2015).

Although many sources have confirmed support for the implementation of the e-Court (Ahmed et al., 2021; Alona, 2021a; Susanto et al., 2020; Wallace & Laster, 2021), the actualisation of the operational implementation of the e-Court system still finds many obstacles and needs a comprehensive solution. Several factors influence e-Court implementation, such as the system's reliability and competence. The court's infrastructure also plays a role in supporting e-Court implementation. In addition, there are factors which can be attributed to community stakeholders, that is whether they have been able to apply the rules as expected in the e-Court system (Pebrianto et al., 2021). For instance, the e-Court system is said to be effective only if the public can apply the rules that have been made because these rules are considered to be a burden on the public. This study attempts to identify and elaborate problems and solutions to the implementation of the e-Court system in the religious court environment. Identification of problems and solutions will be complemented by a priority scale so that it becomes valuable advice for stakeholders, especially religious court managers. This study is expected to be one of the resources used by stakeholders to improve the effectiveness of e-Court implementation.

E-COURT SYSTEM OF RELIGIOUS COURTS

Development in technology has now impacted the judicial world. Nonetheless, many studies are needed to support the use of technology in the judiciary, as in the implementation of an e-Court system. The electronic court system has been adopted in many nations worldwide (Adeleye et al., 2022; Saman & Haider, 2013). The use of technology in the judicial system can be regarded as part of keeping in step with the times and is not intended to replace the function of judges in making decisions (Potter et al., 2008). Despite the technology-based application of the e-Court system, the judicial system must still maintain its integrity (May & Burdon, 2006). The e-Court system digitally governs the court's electronic data and records (Soundari et al., 2022). The encouragement to use the e-Court is to prevent disease

transmission and its use has increased significantly amid the Covid-19 pandemic (Syarifuddin, 2020; Wahab et al., 2022).

Furthermore, Wallace and Laster (2021) predicted that this e-Court system would continue to be used considering the advantages and benefits that it affords. People do not need to appear in court, the whole judicial proceeding is relatively quick and easy (Helmi, 2019). This e-court approach improves judicial delivery. Kurniati (2019) argued that an e-Court system is an application based on information technology to minimise potential violations, such as offers of gratification for judges and court officials in a dispute resolution process. Besides, the e-Court system also aims to form a clean judicial image by minimising the opportunity for people to commit fraud in the litigation process. Djatmiko (2019) in a study discussed the implementation of the e-Court system regarding case administration. The application of the e-Court system is a form of improvement and innovation in courts that can assist judges in deciding a case (Ahmed et al., 2021). Furthermore, this e-Court system can be more straightforward, faster, and cheaper, ultimately creating a modern court in Indonesia (Alona, 2021b). The implementation of e-Court systems has the potential to mitigate superfluous expenditures through the increased utilisation of electronic procedures (Susanto et al., 2020).

However, Berutu (2020) pointed out the difficulties in accessing the e-Court system server, prolonged file uploading times, and delays in court staff's account verification process. Paridah (2020) also mentioned the inability to upload decision files and the continued requirement for the parties involved in a dispute to physically meet in person. Furthermore, Zernik (2018)ECDG2017 has discovered instances of an unauthorised and invalid e-Court system.

Retnaningsih et al. (2020) expressed obstacles to the e-Court system in district courts, such as court officials and their lawyers who were not accustomed to using the e-Court system. There were still quite a number of lawyers and related users who did not master the technology (Dinar et al., 2021; Latifiani et al., 2020). Due to the inability of the parties involved in e-Court proceedings to deliver legal services with consistency and integrity, Indonesia's e-Court judicial system has yet to perform as expected (Putra, 2020). In addition, facilities and infrastructures such as computers, projectors, and audiovisuals still need to be improved in the courtroom (Frade et al., 2020). However, Retnaningsih et al. (2020) provided recommendations to overcome these obstacles, namely improving the quality of human resources in

technology and the technical infrastructure. Inshakova and Rusakova (2021) highlighted the significance of the involvement of industrial engineering and manufacturing elements in the e-Court system's digital legal operations. Schmitz (2019) explored e-Court initiatives such as the utilisation of virtual courthouses, artificial intelligence (AI), and algorithmic analysis to guarantee efficiency in public dispute resolution, fairness, due process, and transparency.

Pebrianto et al. (2021) concluded that applying the e-Court system in resolving disputes has been implemented and being practiced by religious courts, but the e-Court system still needs to be improved due to the numerous impediments encountered. Budirahmadi and Maharani (2021) found that e-Court and e-Litigation have yet to be fully implemented because of obstacles, such as the implementation of e-Litigation and the agreement of the parties in the process, issues related to network and server infrastructure, human resources management, and limited opportunities for socialisation. The current regulations governing the use of e-Litigation in the Indonesian e-Court system continue to be predicated on the principle of the consensual agreement of the parties involved, which states that the parties are not explicitly compelled to employ this electronic trial procedure (Budirahmadi & Maharani, 2021). However, e-Court and e-Litigation have several advantages (Al-Naimat et al., 2021). The e-Court system has been utilised optimally, but the e-litigation system has yet to be in the context of Indonesia (Kharlie & Cholil, 2020).

Fita (2021) argued that the religious court may have implemented an e-court system that complies with government regulations. However, it is only mandatory for parties familiar with the technology and law. The effect of the application of the e-Court system on the low-cost principle is that there is a 50 percent reduction in the case of down payment fees. In contrast, on the simple principle, it is only used in emails or links, and the last is a fast principle, namely the creation of an e-Calendar (Shuldborg, 1997). A study by Ahyani et al. (2021) highlighted the following obstacles to implementing the e-Court system at the Banjar Religious Court Indonesia, namely human resources, the error system, and time constraints. Because of time constraints, the court cannot examine all the information that the plaintiff, defendant, and witnesses will be submitting.

In addition to Indonesia, it has been observed that the sharia or religious courts in Malaysia have begun to acknowledge the admissibility of digital documents as electronic court evidence, hence

facilitating the implementation of e-courts (Wan Ismail et al., 2021). The utilisation of e-Court systems in religious courts in many nations serves as evidence of the international community's involvement in the development of the e-Court (Alam et al., 2021). This project demonstrates the potential for the incorporation of e-Court systems in Religious Courts in Indonesia, drawing inspiration from the successful implementation of such systems in religious courts of other nations, such as in Malaysia.

Previous studies that discussed the implementation of the e-Court system were still partial. Many studies have critically examined the effectiveness of the implementation of the e-Court system (Alam et al., 2021; Aulawi & Asmawi, 2020; Hidayat & Asni, 2020; Himayasari et al., 2022; Iqbal et al., 2015; Muhammad, 2020). Studies of the e-Court system also still highlighted the idealism and normative values that must exist (Adeleye et al., 2022; May & Burdon, 2006; Saman & Haider, 2013). Nevertheless, many studies have found problems associated with the implementation of the e-Court system, including the Implementation of e-Litigation and parties' agreement procedure (Budirahmadi & Maharani, 2021; Kharlie & Cholil, 2020; Latifiani et al., 2020), network and server infrastructure challenges (Budirahmadi & Maharani, 2021; Dinar et al., 2021; Hidayat & Asni, 2020; Pebrianto et al., 2021; Retnaningsih et al., 2020), human resources knowledge management (Budirahmadi & Maharani, 2021; Dinar et al., 2021; Pebrianto et al., 2021; Retnaningsih et al., 2020), and restricted socialisation chances (Budirahmadi & Maharani, 2021; Pebrianto et al., 2021), and new problems that require constant attention (Frade et al., 2020).

This research is intended to fill the research gap related to the modeling problems and solutions in the implementation of the e-Court system. The study of the e-Court system is significant considering the development of technology in the world of justice, including in the environment of religious courts. This research used a decision-making approach, specifically the use of the Analytic Network Process (henceforth ANP) method as the theoretical framework to understand the relationship between complex criteria and decisions.

METHODOLOGY

The data collected was qualitative as it was obtained from the Delphi sessions with the study participants, namely expert judges, clerks, and

lawyers. The next step, as part of the mixed method in ANP, this study then collects quantitative data in the form of priority assessments of dimensions or clusters and sub-clusters made based on the Delphi method that has been done previously. The ANP method was selected for this study in light of the objectives of the priority scale analysis of the problems and solutions for implementing the e-Court system. In addition, this study discusses decision-making, which is a necessary process in daily life (Yang et al., 2021). Based on these considerations, this study uses a Delphi-Method ANP in order to propose a model of problems and solutions in implementing the e-Court system.

In using the ANP method, study data were collected from the interviews with and responses from the questionnaires answered by experts and practitioners who understand and have skills about the problems discussed (Athief et al., 2020). According to Saaty and Vargas (2006), the ANP method is based on a general theory used to measure the relative priority ratio of the composite from a particular individual ratio scale. These measurements reflect the relative effects of interacting or interrelated elements. This method presents several advantages over other methods of decision-making analysis. Peniwati (2007) concluded that the ANP method was superior to other decision-making methods. It is based on several criteria, such as problem abstraction, structure width, structure depth, scientific basis, and validity of the results.

In using multi-criteria decision analysis, the nature of the ANP is more general and objective, and the results are more accurate than the Analytic Hierarchy Process (AHP) (Zulkifli et al., 2018). The criteria used in selecting respondents in this study were carried out through purposive sampling, which was based on the respondents' knowledge and expertise in using the e-Court system.

First, a Delphi-based ANP net model was created. Dalkey and Helmer (1962) established the Delphi approach for program planning, requirements assessment, policy decision, and resource use. Hsu and Sandford (2007) stated that the Delphi technique explores assumptions or fundamental knowledge and determines linkages between issues in different domains. The Delphi method aims to enhance the panel approach by criticising expert ideas without face-to-face confrontation and creating unified opinions and reasons to support them (Withanaarachchi et al., 2015). The Delphi technique will be combined with Kendall's W and P-values to determine the respondents' consensus.

The questions in the ANP questionnaire were in the form of comparisons between elements in one cluster to determine the extent to which the comparisons have a more significant influence. In this comparison, a numerical scale between 1 and 9 is used to describe the translation of the verbal assessment. In filling out the questionnaire, the respondents were assisted by the researchers to maintain the answers' consistency. In using the ANP method, this study adapted the steps that have been carried out by Ascarya and Sakti (2022), Ascarya et al. (2022), and Ascarya et al. (2018). First, model construction can be done by reading an in-depth literature review regarding using the e-Court system in religious courts. The model construction of the ANP system was compiled based on empirical and theoretical literature reviews, and through feedback from questionnaires answered by experts. This series of questionnaires will be interspersed with feedback from the respondents, who are also asked to provide reasons for their opinions.

Second, the model quantification stage compares the elements in a cluster based on a questionnaire to determine which of the two has the most significant influence and how big the difference is. The third step is the data analysis stage, where the data collected from the questionnaire questions given to the respondents is collected and analysed to obtain findings. This quantification stage was used in data collection through ANP questionnaires in pairwise comparisons between elements and clusters. It determines which influence is more dominant and how big the difference is, through a scale of 1-9 (Rusydiaana & Devi, 2013). The data that has been collected is then processed using a super decision application to find out the output results.

Table 1

Expert Panel Interviews

Expert Panel Interviews	Number
Judge	2
Lawyer	3
IT staff	3

Note. ANP Research Data

Primary data was collected through a questionnaire distributed to three groups according to their respective professions. This study

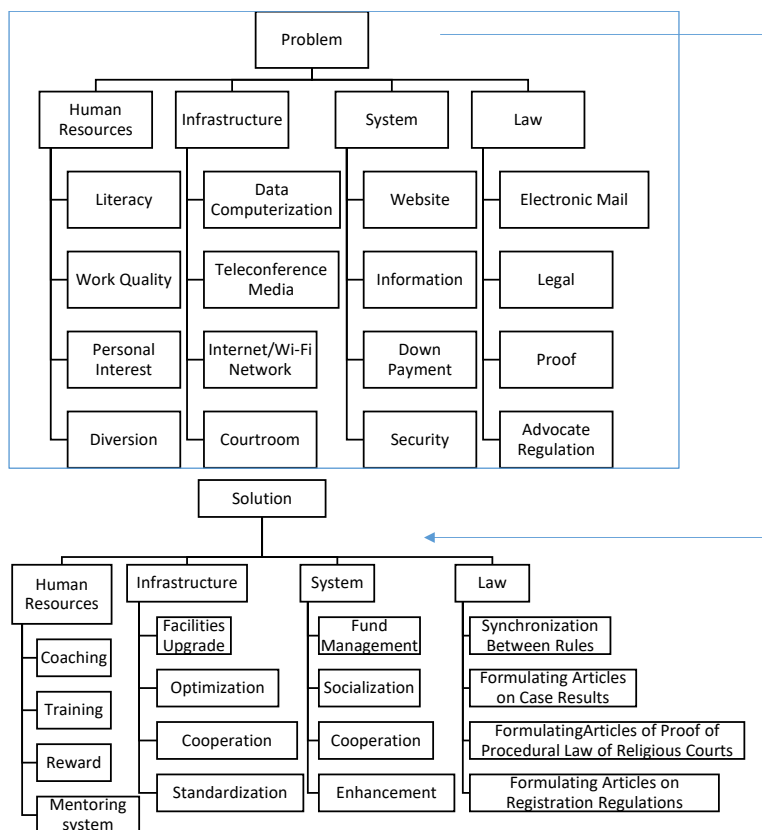
interviewed eight experts in the e-Court system of religious courts in Indonesia. These experts were judges, e-Court administrators, and lawyers experienced in running e-court systems. The basis for the selection of the three expert panel groups is their respective fundamental roles in the implementation of the e-Court system in Indonesian religious courts. The role of the judge is very decisive in making the final decision of the case (Ahyani et al., 2021), while the lawyer is the party representing the parties to the dispute (Ramly et al., 2015). Meanwhile, the IT staff has an important role in ensuring the availability of technical facilities and networks important to the e-Court system.

RESULTS

The main objective of this study is to model problems and solutions in implementing the e-Court system in the religious courts of Indonesia. After a literature review process and repeated consultations with experts through the Delphi method, modeling was formulated as has been depicted in Figure 1. Figure 1 is the result of stage 1 of the model construction. The problems and solutions in the e-Court system were as follows: (1) Human resources (insights, work quality, personal interest, fraud). (2) Infrastructure (data computerisation, teleconference media, internet network, online courtroom). (3) System (website, information system, financing, security). (4) Law (electronic mail, legal certainty, proof, regulation on the registration of lawyers). The solutions were as follows: (1) Human resources (coaching, training, reward, monitoring system). (2) Infrastructure (facilities upgrade, optimisation, cooperation, standardisation). (3) System (data management, socialisation, optimisation, improvement). (4) Law (synchronisation between regulations, selection of case results from articles, formulating articles on proving the Religious Court procedural law).

Figure 1

The ANP Network Model of the e-Court System in a Religious Court



The role of human resources is vital as it is a central concern of e-Court system users. The limited insight of practitioners and users of the e-court system was a significant problem. As an illustration, many practitioners of the e-court system still needed to better understand how the e-court system actually functions. In addition to the limited insight among stakeholders, there were many other problems, including the quality of work, and the willingness and ability to adapt to the new system. In addition, there was the problem of the practice of non-compliance with system regulations in the form of misappropriation in the e-Court system.

Technically, the implementation of the e-Court system still needs to improve in its availability of supporting tools. This obstacle relates

to the unavailability of supporting equipment for the e-court system, such as computerised data and database storage that each court still needs in order to function properly and fully. In addition, the problem in using the e-Court system also included the availability and quality of the teleconference media, which is routinely used in every online trial. The quality of a stable internet connection is also part of the problem, apart from the absence of a special room as a place for online trials.

Another problem in implementing the e-Court system is the information system that will function as part of the processing, storing, and disseminating process. In running the e-Court system, an optimal system is needed, including the website to support public information disclosure. In addition to information disclosure on the website, religious courts need to carry out the e-Court system socialisation process for stakeholders and the community (Maryam, 2019).

The third problem is the system. The electronic system can be interpreted as processing, storing, and disseminating information. Therefore, in operating the e-Court system, it is necessary to have a fully functioning system, such as a stable e-Court website. The other system problem is the need for an information system; even though the Indonesian Supreme Court has disclosed public information in the Supreme Court Decree, the religious court must also conduct direct socialisation with the community (Maryam, 2019).

The fourth problem is legal in nature, in other words a law problem in implementing the e-Court system. The legal problem in the application of the e-Court system is about the issue of legal requirements. Compliance with legal provisions can prevent the e-Court process from becoming invalid. For example, there are legal disagreements, such as the old rules governing the submission of follow-up trial results, which must be submitted directly to the litigant. However, e-Court regulations require that summons be submitted electronically without in-person submission (Indonesian Supreme Court, 2019). Another legal problem is the possibility of false documents being tendered to the court.

Furthermore, regarding evidence, there still needs to be more clarity in determining its validity because the process of checking evidence is still being carried out twice, so it is deemed less effective in its implementation. This provision means that presenting evidence in

the e-Court system still requires offline validation, which causes inefficiencies. Moreover, the last problem is related to regulating the registration of lawyers. This problem is the biggest obstacle to using the e-Court system. Litigants cannot directly register in the e-Court system but must go through a lawyer, so ordinary people will find it challenging to understand the e-Court system. Four alternative solutions can be applied.

The first solution to the problem of human resources is the development of the understanding and proficiency of practitioners and users of the e-Court. This guidance involves all relevant employees in the religious court environment to have the basic knowledge to explain the e-Court to the community. The next solution is training on the use of the e-Court system to improve and maintain the quality of performance. Another solution is to offer a reward as an appreciation of the employees who excel in the implementation of the e-Court system. The last solution in handling human resource problems is the need for monitoring and supervision in the process of running the e-Court system.

The second solution is building infrastructure. There are four infrastructure solutions. First is the need for hardware to support the smooth running of the e-Court system. The second is optimising the software installed and its standardisation by the Supreme Court. The third is the cooperation in performance relations between internet service providers and the relevant courts. Finally, there is a need to standardise the provision of a conducive room specifically for online trials.

The problem of e-Court information systems requires solutions in the form of procedures and effective and efficient data management. In addition, solutions to the problems of the e-Court information system also need to be realised in the form of the socialisation of the flow of e-Court system procedures to the user community (Supriyatni & Fariana, 2017). Furthermore, solutions in the form of payment system optimisation, such as case costs, are an important part of the administrative process. Finally, the solution is also realised in the form of increasing the data security of users of the e-Court system to avoid misuse in the event of data leakage.

The fourth solution is a legal or law arrangement for the e-court system. This legal solution includes the need for synchronisation

between related regulations regarding summons to the litigants. Besides, the need to select articles that follow the certainty of the case's outcome remains essential. The solution of legal problems in the implementation of the e-Court system needs to include the harmonisation of legal provisions in the case evidence process to prevent overlapping rules with other applicable legal provisions. Furthermore, solutions also need to be realised in the creation of new legal provisions regarding the registration of cases in the e-Court system.

Rater agreement (evaluator consensus) is a measure used to obtain the level of conformity of the respondents to a statement in the cluster (Hamdani et al., 2019). Table 2 shows the results of the rater agreement for the cluster on criteria issues from legal experts, lawyers, and IT staff. The results showed the following rater agreement: for human resources (0.277), infrastructure (0.203), systems (0.008), and law (0.268). These results show that the rater agreement had a reasonably high consistency, indicated by less than 1 percent inconsistency.

Table 2

Results of Rater Agreement for the Cluster on Criteria Issues

Cluster	Rater Agreement							
	Judge	P-Value	IT Staff	P-Value	Lawyer	P-Value	All	P-Value
Criteria Problems	1,000	0.111	0.061	0.907	0.066	0.896	0.773	0.602
Human Resources	0.550	0.347	0.644	0.121	0.816	0.061	0.277	0.091
Infrastructure	0.550	0.347	0.150	0.717	0.238	0.541	0.203	0.181
System	0.737	0.219	0.133	0.753	0.327	0.399	0.008	0.976
Law	0.200	0.753	0.311	0.423	0.283	0.466	0.268	0.091

Note. Rater agreement is a metric that quantifies the degree of consensus among respondents within a certain cluster regarding a problem or solution.

Table 3 shows the results of the ANP on the criteria problem cluster. The respondents agreed that the most critical problems in using the e-Court system were infrastructure problems (0.306) and human resources problems (0.262). These were followed by system problems (0.219), and the last problem was legal issues (0.213). The judges and

the staff shared the same view on the problems faced in implementing the e-Court system. Table 3 also shows that there was a consensus between judges and IT staff as they shared the same views regarding the problems faced in implementing the e-Court system. In contrast to the judges and IT staff, advocates had different preferences as they were of the view that legal issues were more important than infrastructure issues. However, the group of judges showed a high agreement rate with a consistency below five percent.

Table 3

ANP Results from the Criteria Problem Cluster

Criteria Problem	Respondent				Rank All
	Judge	IT Staff	Lawyer	All	
HR	0.276	0.317	0.193	0.262	2
Infrastructure	0.383	0.317	0.219	0.306	1
System	0.203	0.196	0.258	0.219	3
Law	0.137	0.171	0.330	0.213	4
Construction	0.000	0.017	0.000	0.004	
Kendall W	1,000	0.061	0.066	0.077	
X2	6,000	0.550	0.600	1,856	
P-Value	0.111	0.907	0.896	0.602	

In Table 4, the most critical factors in the criteria problem were problems regarding the regulation of lawyer registration (0.062) from the legal cluster and the problem of internet networks (0.062) from the infrastructure cluster. They were followed by the problem of computerisation of data (0.060) from the infrastructure cluster, as well as security issues (0.059) and the problem of financing (0.055) in the system cluster. From these results, it can be seen that the criteria problem had a high level of consistency, below ten percent. The respondents also had a high-level agreement, as Kendall W was below ten percent.

Table 4

Problem Criteria

Criteria Problem	Respondent				Rank All	
	Judge	IT Staff	Lawyer	All		
1 Insight	0.052	0.050	0.041	0.048	5	
2 Quality of Work	0.052	0.052	0.051	0.052		
3 Personal Interest	0.049	0.053	0.047	0.050		
4 Adults	0.046	0.046	0.042	0.045		
1 Data Computing	0.057	0.055	0.068	0.060	2	
2 Media Teleconference	0.044	0.052	0.048	0.048	1	
3 Network Internet/ Wifi	0.061	0.061	0.065	0.062		
4 Online Meeting Room	0.041	0.039	0.042	0.041		
1 Website	0.043	0.040	0.045	0.042		
2 Information System	0.043	0.043	0.042	0.043	4	
3 Financing	0.055	0.059	0.052	0.055		
4 Security	0.060	0.059	0.060	0.059		
1 Email	0.052	0.041	0.046	0.046		
2 Legal Certainty	0.038	0.035	0.037	0.036	3	
3 Proof	0.050	0.046	0.051	0.049		
4 Regulation of Lawyer	0.060	0.061	0.065	0.062		
Registration						
Consistency						
Kendall w						
x2	17,801	11,147	16,779	15,243	1	
p-value	0.273	0.742	0.332	0.449		

Note. ***significant at 1 percent level, **significant at 5 percent level, *significant at 10 percent level.

Meanwhile, the results of the ANP in the solution to the problems of implementing the e-court system are as shown in Table 5.

Table 5 shows that the rate agreement (evaluator consensus) is a measure used to obtain the level of conformity of the respondents to a statement in the cluster (Hamdani et al., 2019). Table 5 also shows the criteria solutions identified by the judges, lawyers, and IT staff and these were as follows: for human resources (0.414), infrastructure solution (0.064), system solution (0.925), and legal solution (0.049). From the results, the solution system that showed consensus was more important than the rater. The agreement regarding the solution

had a sufficiently high consistency as it showed less than one percent inconsistency.

Table 5

Rater Agreement on the Criteria Solution

Cluster	Rater Agreement							
	Judge	P-Value	IT Staff	P-Value	Lawyer	P-Value	All	P-Value
Solution								
Criteria	0.100	0.896	0.044	0.940	0.311	0.423	0.068	0.648
HR Solution	1,000	0.111	0.177	0.659	0.377	0.334	0.414	0.047
Infrastructure								
Solution	0.250	0.682	0.061	0.907	0.111	0.801	0.064	0.669
System								
Solution	1,000	0.111	0.911	0.042	1,000	0.029	0.925	0.000
Legal Solution	0.437	0.453	0.200	0.614	0.194	0.625	0.049	0.756

Table 6 shows the results of the ANP on the criterion solution cluster. This cluster showed that the most needed solutions in using the e-Court system were legal solution (0.850) and infrastructure solution (0.770). Followed by the solution about human resources (0.691) and the final solution, namely systems (0.689). However, there was a difference in opinion on law and infrastructure, where the judges and staff were more inclined to infrastructure solutions than legal ones. The ANP calculation results showed a high level of consistency, below 1 percent. Besides, the respondents had dealt with a significant Kendall W result.

Table 6

ANP Results for the Criteria Solution

Criteria Solution	Respondent				Rank All
	Judge	IT Staff	Lawyer	All	
HR	0.191	0.291	0.209	0.691	3
Infrastructure	0.270	0.291	0.209	0.770	2
System	0.270	0.209	0.209	0.689	4
Law	0.268	0.209	0.373	0.850	1
Continence	0.000	0.000	0.000	0.000	
Kendall W	0.100	0.044	0.311	0.068	
X2	0.600	0.400	2,800	1,650	
P-Value	0.896	0.940	0.423	0.648	

Table 7 shows the sub-cluster solution criteria. The results show that the most needed solution to the e-Court system is socialisation (0.097). The solution regarding the issue on socialisation was found in the system cluster, it was followed by the solution on selecting the regulation article on the registration of lawyers (0.089) from the legal cluster. With regard to the solution for the data management of the system cluster, it was (0.083) on the e-Court system application/website. Next was the solution regarding the selection of case results in articles (0.081) and the synchronisation between regulations (0.073). From these results, the criterion solution can be seen as having a high level of consistency because it was below ten percent, and the respondents also had the same agreement as indicated by Kendall W, which was below ten percent,

Table 7

ANP Results for the Criteria Solution

Criteria Solution		Judge	IT Staff	Respondent		Rank All
				Lawyer	All	
1 Coaching		0.010	0.009	0.010	0.010	
2 Training		0.014	0.013	0.014	0.014	
3 Reward		0.033	0.030	0.033	0.032	
4 Mentoring System		0.073	0.065	0.071	0.070	
1 Upgrade		0.027	0.027	0.026	0.027	
2 Optimisation		0.046	0.037	0.036	0.040	
3 Cooperation		0.039	0.037	0.032	0.036	
4 Standardisation		0.025	0.024	0.026	0.025	
1 Data Management		0.060	0.101	0.088	0.083	3
2 Socialisation		0.068	0.101	0.122	0.097	1
3 System Optimisation		0.080	0.063	0.065	0.069	
4 System Improvement		0.102	0.055	0.044	0.067	
1 Syncing Between Rules		0.065	0.093	0.061	0.073	5
2 Selection of Case Result Article		0.065	0.093	0.086	0.081	4
3 Selection of Articles of Proof Of The Procedural Law Of PA		0.065	0.067	0.086	0.073	
4 Election of Articles of Registration Regulation		0.116	0.067	0.085	0.089	2
Consistency		0.022**	0.067*	0.014**	0.027**	
Kendall W		0.630**	0.962***	0.865***	0.819*	
X2		18,903	43,286	38,926	33,705	
P-Value		0.218	0.000	0.001	0.073	

Note. ***significant at 1 percent level, **significant at 5 percent level, *significant at 10 percent level.

DISCUSSION

The results show that infrastructure is the priority issue, followed by aspects of human resources, the e-Court system, and legal regulations, according to the ANP respondents. This finding is reinforced by Retnaningsih et al. (2020), who state that the lack of facilities and infrastructure, such as computers, projectors, and audiovisuals in the courtroom, hinders court proceedings carried out within the e-Court system. Human resources constraints in the operational process are also alleged to be the second priority problem in an e-Court system and the current e-Court system being implemented (Budirahmadi & Maharani, 2021). Ahyani et al. (2021) found human resources and system errors to be obstacles in implementing the e-Court system in religious courts.

The results of the ANP analysis in the present study show that internet or Wi-Fi network problems and also regulations related to advocate registration are top priority issues. The next priority issue was with the problem of the inadequate preparation of computerised data in religious courts and the problem of electronic summons. The issue that occupies the next priority is the cost of the case. The problem of case costs lies in the different forms of cooperation between each religious court and partner banks or financial institutions. The next priority issue is the development of human resources in religious courts to improve the quality and competency of those tasked with operating the e-Court system.

From the list of problems presented, it can also be seen that there are other problems deemed to have a less significant influence on the application of the e-Court system. These are legal certainties regarding the results of online trials, the need for a particular courtroom, and the e-Court registration website, which is considered relatively easy to understand by lawyers. Therefore, from these findings, the practice of an e-Court system in religious courts still needs to be fully implemented, as Fita (2021) has found that the application of the e-Court system within the religious courts can only be recommended for those who are technology savvy.

Since its implementation, the e-Court system in Indonesia has not been able to run optimally because many problems still exist (Budirahmadi & Maharani, 2021; Dinar et al., 2021; Hidayat & Asni, 2020;

Kharlie & Cholil, 2020; Latifiani et al., 2020; Pebrianto et al., 2021; Retnaningsih et al., 2020). One response from a judge interviewed, had explained that the current development of the e-Court system had not been fully achieved in the context of requiring the litigants to be physically present to accept the verdict of the court. They must come to court to get the signatures of the clerks and judges. The signatures cannot be digital, and the e-Court registration system still needs to be simplified.

The results of the ANP analysis show that the solution to the criteria that is most prioritised is the improvement in the legal aspect, followed by infrastructure, human resources, and the e-Court system. The respondents believed that improving the regulation of the e-Court system in religious courts had to be a top priority solution. This is the phenomenon because the implementation of the e-Court system itself is still carried out in stages in several processes (Budirahmadi & Maharani, 2021). Moreover, in the statement from a Lawyer respondent, it was pointed out that there were several requirements for e-Court registration, including having a membership card verified by the Supreme Court, which was usually only owned by lawyers.

Likewise, respondents said that lawyers could only use the e-Court system because the account registration system still needed to be easier for the general public to understand. For example, if the e-Court system was simplified for e-court registration for the public, it might be more accessible. Respondents have also suggested that if the general public wants to use the e-Court system, the Supreme Court should simplify the account registration system.

The results of the ANP analysis also show that in the sub-clusters of the four main clusters, e-Court promotion is the leading priority solution. It was followed by formulating articles on the regulation of lawyer registration, data management, selection of articles on case results, and synchronisation of rules. According to the ANP respondents of this study, outreach activities are a priority solution because there are often problems in the operational system of the e-Court system. Besides, the issue of human resource readiness still needs to be addressed in the socialisation of best practices in managing and implementing the e-Court system. Comparatively, well-established and sound management is one of the keys to resolving disputes through the e-Court system in the Malaysian state court (Zakiyy &

Hassan, 2015). Therefore, the management and system of the e-Court within the religious courts in Indonesia can be improved by promoting socialisation and improving the infrastructure of the e-Court system.

Even though in the e-Court system there are events organized to promote the e-Court, such as the use of brochures and websites, much more effort is still needed to foster a better understanding for the many stakeholders in religious courts. The courts must also be more innovative in conducting socialisation, such as holding meetings of lawyers, at least local area lawyers, the community, and other users; as well as providing tutorials or training on using the entire aspects of the e-Court system (Purwantini et al., 2019). If those activities are implemented, it can advance the application of the e-Court system and increase the system's effectiveness. The Indonesian Subprime Court No. 1 of 2019, is aimed at facilitating the judiciary or parties seeking justice (Kurniawan, 2020). Previous legal provisions, such as the Indonesian Subprime Court No. 3 of 2018, has emphasised that electronic or e-Court case administration applies to civil cases, religious civil cases, military administrative cases, and state administrative cases (Sari, 2019).

On the other hand, the preparation of human resources and a better mechanism for the e-Court system are solutions that are no less important in overcoming the problems of implementing the e-Court system in the religious courts in Indonesia. If there are no well-trained human resources, the e-Court system cannot work. The Supreme Court/Religious Courts can conduct training to develop the knowledge of its officers, or provide a better understanding of the technology required to operate the e-Court system (Ibrahim, 2016). The relevant authorities can then carry out routine evaluations of these officers at least once a month (Ramadhan & Abubakar, 2021). The government can facilitate the improvement of all aspects of the system that are necessary and sufficient to implement the e-Court system (Wallace & Laster, 2021).

CONCLUSION

This study concluded that the main problem of implementing the e-Court system in religious courts is the availability of facilities and infrastructure. The next priority issue is the human resources side,

the e-Court system, and the regulations governing it. At the level of details of the facilities and infrastructure issues, internet networks and lawyer registration arrangements received the highest priority. In addition to priority issues, this study concludes that improving the regulation of the e-Court system is the top priority solution to the problem of implementing the e-Court system in Religious Courts. The second priority solution is to improve the operational infrastructure of the e-Court system. The implementation of the e-Court system in the religious court environment requires many improvements. Therefore, this study recommends to the highest authorities of religious courts and the government to pay attention to the priority of problems and solutions in the e-Court system. This study contributes to research in the form of priority scales of problems and solutions in the implementation of the e-Court system in religious courts in Indonesia. This research also suggests that further studies related to the literacy of human resources and users of the e-Court system, and the effectiveness of promotional activities for the implementation of the e-Court system be carried out in the near future.

ACKNOWLEDGMENT

This research did not receive any specific grants from any funding agency in the public, commercial, or not-for-profit sectors.

REFERENCES

- Adeleye, J. T., Ahmed, R. K., Nyman-Metcalf, K., & Draheim, D. (2022). E-court transition process: Identifying critical factors and recommendations for developing countries. In *8th International Conference on Electronic Governance and Open Society: Challenges in Eurasia, EGOSE 2021: Vol. 1529 CCIS* (pp. 305–317). Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1007/978-3-031-04238-6_23
- Ahmed, R. K., Muhammed, K. H., Pappel, I., & Draheim, D. (2021). Impact of e-court systems implementation: A case study. *Transforming Government: People, Process and Policy*, 15(1), 108–128. <https://doi.org/10.1108/TG-01-2020-0008>
- Ahyani, H., Makturidi, M. G., & Muharir, M. (2021). E-court civil case administration in Indonesia. *Batulis Civil Law Review*, 2(1), 56. <https://doi.org/10.47268/ballrev.v2i1.521>

- Al-Naimat, O., Al-Dabbas, N. A., & Maaqqbeh, M. M. F. (2021). Transition to e-litigation as a mechanism to activate e-court in Jordan: An analytical study. *Journal of Legal, Ethical and Regulatory Issues*, 24(1), 1–10. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85105153177&partnerID=40&md5=e25cd4848df8deccd08a769c6edac3dc>
- Alam, S., Aunuh, N., & Luthfi, M. (2021). E-court effectiveness of religious courts in Indonesia. *Proceedings of the 2nd International Conference on Law Reform (INCLAR 2021)*, 590(Inclar), 92–97. <https://www.atlantis-press.com/article/125962488.pdf>
- Alona, N. (2021a). E-evidence and e-court in the context of the covid-19 pandemic: A study from Ukraine. *Access to Justice in Eastern Europe*, 4(4), 163–181. <https://doi.org/10.33327/AJEE-18-4.4-n000091>
- Alona, N. (2021b). E-evidence and e-court in the context of the covid-19 pandemic: A study from Ukraine. *Access to Justice in Eastern Europe*, 4(4), 163–181. <https://doi.org/10.33327/AJEE-18-4.4-n000091>
- Ascarya, Rahmawati, S., & Tanjung, H. (2018). Design the roadmap of holistic financial inclusion for Baitul Maal wat Tamwil. *Tazkia Islamic Finance and Business Review*, 12(1), 1–32. <https://doi.org/10.30993/tifbr.v12i1.112>
- Ascarya, A., & Sakti, A. (2022). Designing micro-fintech models for Islamic micro financial institutions in Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 15(2), 236–254. <https://doi.org/10.1108/IMEFM-05-2020-0233>
- Ascarya, A., Suharto, U., & Husman, J. A. (2022). Proposed model of integrated Islamic commercial and social finance for Islamic bank in Indonesia. *Eurasian Economic Review*, 12(1), 115–138. <https://doi.org/10.1007/s40822-022-00201-z>
- Athief, F. H. N., Alam, A., & Inayati, N. L. (2020). Evaluation of community needs-based learning curriculum: Study in the Sharia economic law bachelor program. *Jurnal Pendidikan Agama Islam (Journal of Islamic Education Studies)*, 8(2), 213–234. <https://doi.org/10.15642/jpai.2020.8.2.213-234>
- Atikah, I. (2018). Implementation of e-court and its impact on advocates in the process of settlement of cases in Indonesia. *Proceeding Open Society Confrence*, 107–127. <http://repository.ut.ac.id/7957/1/ocs-2018-7.pdf.pdf>

- Aulawi, A., & Asmawi, M. (2020). *Effectiveness of e-court in improving service quality at Serang Religious Courts*. 410(Imcete 2019), 212–215. <https://doi.org/10.2991/assehr.k.200303.050>
- Berutu, L. (2020). Making justice simple, fast and low cost with e-court. *Jurnal Ilmiah Dunia Hukum*, 4(April), 70–94. <http://dx.doi.org/10.35973/jidh.v5i1.1552>
- Budirahmadi, A. K., & Maharani, S. (2021). E-court and e-litigation implementation in divorce case resolution process at the Surabaya Religious Court. *In-Prolegurit International Prosiding*, 1(1), 239–264. <http://in-prolegurit.upnjatim.ac.id/index.php/in-prolegurit/article/view/15>
- Burhanuddin, Fathonih, A., Rosadi, A., & Nuraeni, E. (2022). Implementation of electronic case services (e-court) during the Covid-19 pandemic its relationship with the principle of legal certainty. *Al-Ahwal Al-Syakhsiyyah: Jurnal Hukum Keluarga Dan Peradilan Islam*, 3(1), 49–66. <https://doi.org/10.15575/as.v3i1.17518>
- Dalkey, N., & Helmer, O. (1962). An experimental application of the Delphi method to the use of experts. *Management Science*, 9(3), 458–467. <https://doi.org/10.1287/mnsc.9.3.458>
- Dinar, I. G. A. A. G. P., Budiarta, I. N. P., Nurcholis, A., & Zarkasi, M. F. (2021). Effectiveness of the parties-written-approval requirement for conducting electronic litigation through the e-court system in Indonesia. *Journal of Legal, Ethical and Regulatory Issues*, 24(1), 1–5. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85105136691&partnerID=40&md5=f336211ac16a462f2d1c430d270dc0d2>
- Djatmiko, H. (2019). Implementation of electronic courts (e-court) after the law of perma number 3 of 2018 regarding electronic court administration. *Legalita*, 1(1), 23–32. <https://doi.org/10.47637/legalita.v1i1.28>
- Dzatihanani, R. S., & Rosyadi, I. (2019). Murabaha dispute settlement in a Sharia Rural Bank of Klaten. *Journal of Islamic Economic Laws*, 2(2), 212–233. <https://doi.org/10.23917/jisel.v2i2.8593>
- Fatwah, S., & Umar, K. (2020). Application of the e-court system in the Makassar State Administrative Court from the perspective of Siyasah Syar’Iyyah. *Siyasatuna*, 2(3), 582–593. <http://journal.uin-alaudhin.ac.id/index.php/siyasatuna/article/view/19536>
- Fita, R. A. (2021). *Analysis of Sharia Economic Settlement Based on E-Court in Religious Court Maybe in The Effort of Implementing The Principle of Fast, Simple and Low Cost Judgment* [IAIN Purwokerto]. <http://repository.iainpurwokerto.ac.id/9517/>

- Frade, C., Fernando, P., & Conceição, A. F. (2020). The performance of the courts in the digital era: The case of insolvency and restructuring proceedings. *International Insolvency Review*, 29(3), 346–359. <https://doi.org/10.1002/iir.1390>
- Hamdani, L., Nasution, M. Y., & Marpaung, M. (2019). Solutions to zakat problems at BAZNAS with the ANP method: A study on the implementation of zakat core principles. *Muqtasid*, 10(1), 40–56. <https://doi.org/10.18326/muqtasid.v10i1.40-56>
- Helmi, H. R. (2019). The existence of electronic courts (e-court) in realizing simple, fast and low-cost justice. *International Journal of Innovation, Creativity and Change*, 8(9), 270–278. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85077682417&partnerID=40&md5=be8e2542cc6cafeeff3489eebe8f3fb6>
- Hidayat, F. P., & Asni. (2020). The effectiveness of the application of e-court in the settlement of cases at the Makassar religious court. *Jurnal Ilmiah Mahasiswa Hukum Keluarga Islam*, 2(1), 104–118. <https://doi.org/10.24252/qadauna.v2i1.16648>
- Himayasari, N. D., Anshori, A. R., & Maulida, I. S. R. (2022). Legal effectiveness of the supreme court regulation on Sharia economic dispute settlement in West Java Religious Court. *Mizan: Journal of Islamic Law*, 6(1), 77. <https://doi.org/10.32507/mizan.v5i3.1072>
- Hsu, C.-C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research and Evaluation*, 12, 10. <https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1177&context=pars>
- Ibrahim, M. R. (2016). *Application of the e-court system at the Sarolangun Religious Court* (Issue July) [Universitas islam negeri Sulthan Thaha Saifuddin Jambi]. <http://repository.uinjambi.ac.id/id/eprint/10259>
- Indonesian Supreme Court. (2019). *E-court handbook*. https://pn-purwakarta.go.id/files/ecourt/ecourt_manual_full.pdf
- Inshakova, A. O., & Rusakova, E. P. (2021). Industrial and manufacturing engineering and its contribution to quality of digital legal proceedings in the Eaeu and Brics: From digital evidence to internet courts and e-court. *International Journal for Quality Research*, 15(4), 1027–1048. <https://doi.org/10.24874/IJQR15.04-01>
- Iqbal, M., Susanto, & Sutoro, M. (2015). E-court administration system effectiveness in an effort to support fast, simple and

- low cost administrative process in court. *Jurnal Ilmu Hukum: Fakultas Hukum Universitas Riau*, 53(9), 1689–1699. <http://dx.doi.org/10.30652/jih.v8i2.7286>
- Kharlie, A. T., & Cholil, A. (2020). E-court and e-litigation: The new face of civil court practices in Indonesia. *International Journal of Advanced Science and Technology*, 29(2), 2206–2213. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85082881188&partnerID=40&md5=06c0a6e8c7e8fad440bc48751766b938>
- Kurnia, M. R. (2019). *Implementation of the e-court and its impact on the settlement of cases at the Central Jakarta Religious Courts* [Universitas Islam Negeri Syarif Hidayatullah Jakarta]. <https://doi.org/10.15408/jf.v21i2.22335>
- Kurniati, I. A. (2019). Restoring the image of justice through e-court. *Conference on Communication and New Media Studies*, 1(2), 176–185. <https://proceeding.umn.ac.id/index.php/COMNEWS/article/view/1093>
- Kurniawan, M. B. (2020). Implementation of electronic trial (e-litigation) on the civil cases in Indonesia court as a legal renewal of civil procedural law. *Jurnal Hukum Dan Peradilan*, 9(1), 43. <https://doi.org/10.25216/jhp.9.1.2020.43-70>
- Latifiani, D., Widyawati, A., Fibrianti, N., & Ningsih, A. S. (2020). Advocate as law enforcer in the implementation of e-court. *International Journal of Innovation, Creativity and Change*, 4, 439–449. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081255617&partnerID=40&md5=b74da4cdcc0f7710afbcb10ec0a32bae9>
- Maryam, S. (2019). Settlement of Sharia economic disputes through mediation at the Jambi Class Ia Religious Court [Universita Islam Negeri Sulthan Thaha Saifuddin Jambi]. In *Thesis* (Vol. 1, Issue 1). http://repository.uinjambi.ac.id/1952/1/SHE162085_SITI_MARYAM_HES - Siti Maryam.pdf
- May, L., & Burdon, M. (2006). Information protection management structures in australian e-courts. *Journal of Theoretical and Applied Electronic Commerce Research*, 1(3), 58–67. <https://doi.org/10.3390/jtaer1030022>
- Muhammad, H. (2020). The effectiveness and efficiency of Sharia economic dispute resolution in the religious courts. *Jurnal Ilmiah Mizani: Wacana Hukum, Ekonomi Dan Keagamaan*, 7(1), 35. <https://doi.org/10.29300/mzn.v7i1.3192>
- Musjtari, D. N., Roro, F. S. R., & Setyowati, R. (2022). Islamic P2P lending as an alternative solution for the unfair conventional

- platform in indonesia. *UUM Journal of Legal Studies*, 13(1), 21–43. <https://doi.org/10.32890/uumjls2021.13.1.2>
- Paridah, B. (2020). Implementation and impact of e-court (electronics justice system) on advocates in the process of settlement of cases at the Selong District Court. *JURIDICA: Jurnal Fakultas Hukum Universitas Gunung Rinjani*, 2(1), 41–54. <https://doi.org/10.46601/juridica.v2i1.180>
- Pebrianto, R., Ikhwan, & Azwar, Z. (2021). Effectiveness of e-court implementation in case resolution (case study at the Painan Religious Court)). *Journal Al-Ahkam*, XXII(1), 181–197. <https://doi.org/10.15548/alahkam.v12i1>
- Peniwati, K. (2007). Criteria for evaluating group decision-making methods. *Mathematical and Computer Modelling*, 46(7–8), 935–947. <https://doi.org/10.1016/j.mcm.2007.03.005>
- Potter, S., Farrelly, P., & Begg, D. (2008). The e-court roadmap: Innovation and integration - An Australian case study. In *E-Justice: Information and Communication Technologies in the Court System* (pp. 165–185). IGI Global. <https://doi.org/10.4018/978-1-59904-998-4.ch011>
- Purwantini, N., Afandi, & Heriawanto, B. K. (2019). Application of E-Litigation on the Legality of Judges' Decisions in Religious Courts According to Supreme Court Regulation Number 1 of 2019 concerning Electronic Case Administration and Trial. *Jurnal Dinamika Hukum*, 27(8), 1116–1132. <http://riset.unisma.ac.id/index.php/jdh/article/viewFile/9429/7738>
- Putra, D. (2020). A modern judicial system in Indonesia: Legal breakthrough of e-court and e-legal proceeding. *Jurnal Hukum Dan Peradilan*, 9(2), 275. <https://doi.org/10.25216/jhp.9.2.2020.275-297>
- Ramadhan, R., & Abubakar, M. (2021). Effectiveness of the e-court service system in civil cases at the Banda Aceh District Court. *Jurnal Ilmiah Mahasiswa Bidang Hukum Keperdataan*, 5(2), 281–290. <https://jim.unsyiah.ac.id/perdata/article/download/20262/9339>
- Ramly, N., Said, M. F., Chong, C. W., & Rahman, S. A. (2015). Analysing factors that affect E-Syariah adoption by Shar'ie lawyers. *Jurnal Pengurusan*, 43, 89–96. <https://doi.org/10.17576/pengurusan-2015-43-08>
- Retnaningsih, S., Nasution, D. L. S., Velentina, R. A., & Manthovani, K. (2020). Implementation of e-court according to perma number 3 of 2018 concerning administration of cases in court

- electronic and e-litigation according to perma number 1 year 2019 concerning court administration and electronic trial. *Jurnal Hukum & Pembangunan*, 50(1), 124–144. <https://doi.org/10.21143/jhp.vol50.no1.2486>
- Rusydiana, A. S., & Devi, A. (2013). *Analytic network process: Pengantar teori dan aplikasi [Analytic network process: Introduction to theory and application]* (Pertama, Issue 1). Smart Publishing.
- Saaty, T. L., & Vargas, L. G. (2006). Decision making with the analytic network process. In *Omega* (Vol. 15, Issue 4). Springer Science+Business Media, LLC.
- Saman, W. S. W. M., & Haider, A. (2013). E-court: Technology diffusion in court management. *19th Americas Conference on Information Systems, AMCIS 2013*, 2, 1273–1284. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84893314087&partnerID=40&md5=fe5ae2e390b042ea157cae0d45852d05>
- Saputra, R. (2018). Application of case administration in courts electronically (e-court) towards the industrial revolution 4.0. *Scripta Jurnal Kebijakan Dan Hukum*, 1(1), 1–12. <http://repository.ubharajaya.ac.id/3031/>
- Sari, N. P. R. K. (2019). The existence of e-court to realize the principle of simple, fast, and low cost in the civil justice system in Indonesia. *Yustitia*, 13(1), 1–17. <https://www.ojs.unr.ac.id/index.php/yustitia/article/view/275>
- Schmitz, A. J. (2019). Expanding access to remedies through e-court initiatives. *Buffalo Law Review*, 67(1), 89–163. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066490451&partnerID=40&md5=fa29c6c04bdb0f93c240f22c55f86557>
- Shidiq, A. Z., Afandi, & Kaimuddin, A. (2019). E-court system as a form of simple, fast and low cost implementation of judicial principles. *Jurnal Ilmiah Ilmu Hukum*, 27(3), 331–349. <http://riset.unisma.ac.id/index.php/jdh/article/view/9400>
- Shuldborg, K. (1997). Digital influence: Technology and unpublished opinions in the federal courts of appeals. *California Law Review*, 85(2), 543. <https://doi.org/10.2307/3481076>
- Soundari, D. V, Pradheep, N., Praveen Raj, K. G., & Purna Chanduru, N. M. (2022). E-court management system. *8th International Conference on Advanced Computing and Communication Systems, ICACCS 2022*, 1118–1123. <https://doi.org/10.1109/ICACCS54159.2022.9785083>
- Supriyatni, R., & Fariana, A. (2017). Effective Islamic economic dispute resolution model linked to competence in religious courts in the

- context of national economic growth. *Jurnal Jurisprudence*, 7(1), 68–79. <https://doi.org/10.23917/jurisprudence.v7i1.4361>
- Susanto, Iqbal, M., & Supriyatna, W. (2020). Creating an efficient justice system with e-court system in state court and religious court of rights. *International Journal of Arts and Social Science*, 3(3), 354–361. <https://www.ijassjournal.com/2020/V3I3/41465751995.pdf>
- Syarifuddin, M. (2020). The role of the supreme court of the republic of Indonesia in regulating e-court during the new normal of Covid-19 pandemic. *Systematic Reviews in Pharmacy*, 11(11), 811–817. <https://doi.org/10.31838/srp.2020.11.119>
- Wahab, H. A., Razak, S. S. A., & Mahmud, N. A. K. N. (2022). Legal issues in working from home amid Covid-19 pandemic in Malaysia. *UUM Journal of Legal Studies*, 13(2), 163–186. <https://doi.org/10.32890/uumjls2022.13.2.7>
- Wallace, A., & Laster, K. (2021). Courts in Victoria, Australia, during COVID: Will digital innovation stick? *International Journal for Court Administration*, 12(2), 1–19. <https://doi.org/10.36745/IJCA.389>
- Wan Ismail, W. A. F., Baharuddin, A. S., Mutalib, L. A., & Aiman Alias, M. A. (2021). A systematic analysis on the admissibility of digital documents as evidence in Malaysian syariah courts. *Pertanika Journal of Social Sciences and Humanities*, 29(3), 1981–1996. <https://doi.org/10.47836/pjssh.29.3.26>
- Wardiono, K., & Yuspin, W. (2019). The sharia microfinance and the counter-hegemonic movement: Examining the legal norms regulating aspects of institutional and business activities in Surakarta. *Humanities and Social Sciences Reviews*, 7(3), 45–51. <https://doi.org/10.18510/hssr.2019.737>
- Withanaarachchi, A. S., Nanayakkara, J., & Pushpakumara, C. (2015). Delphi as a methodology for eliciting expert opinion -- important factors to be considered. *SSRN Electronic Journal*, July 2015. <https://doi.org/10.2139/ssrn.2632765>
- Yang, C. H., Chen, H. J., Lin, L. C., & Morrison, A. M. (2021). The analysis of critical success factors for in-town check-in in Taiwan. *Sustainability (Switzerland)*, 13(1), 1–20. <https://doi.org/10.3390/su13010200>
- Yuspin, W., & Hatnuraya, Y. P. (2015). Tinjauan yuridis penyelesaian sengketa perekonomian syariah pasca berlakunya undang-undang nomor 3 tahun 2006. *Jurnal Jurisprudence*, 6(1), 69. <https://doi.org/10.23917/jurisprudence.v6i1.3000>

- Zakiyy, N., & Hassan, K. H. (2015). Reviewing specific oversights in civil litigation reforms in Malaysia. *Mediterranean Journal of Social Sciences*, 6(6), 428–435. <https://doi.org/10.5901/mjss.2015.v6n6p428>
- Zernik, J. (2018). E-courts in Israel: Are judges permitted to deceive in imprisonment? In R. A.C. & B.-L. R. (Eds.), *18th European Conference on Digital Government, ECDG 2018* (Vols. 2018-Octob, pp. 257–266). Academic Conferences Limited. <https://www.proquest.com/openview/0c378f08515c6e941e0c0ccbb6d82bd2/1?pq-origsite=gscholar&cbl=1796415>
- Zulkifli, Z., Hamzah, Z., & Hamzah, H. (2018). Analysis of Baitul Maal Wat Tamwil (BMT) problems through the Analytical Network Process (ANP) approach. *Al-Hikmah: Jurnal Agama Dan Ilmu Pengetahuan*, 13(1), 18–29. [https://doi.org/10.25299/al-hikmah:jaip.2016.vol13\(1\).1162](https://doi.org/10.25299/al-hikmah:jaip.2016.vol13(1).1162)