

Adoption and Challenges of ICTs for Sharing Records of Legal Proceedings in *Katsina State High Court of Justice, Nigeria*

¹SANUSI MAMMAN, ²ABUBAKAR MUHAMMAD SADAUKI, ³BAKURA BULAU, ²YUSUF BAKO, ⁵MUSA UMAR HASSAN

Corresponding author: mammansanusi4@gmail.com, 08066252428

¹Dept. of Library & Information Science, WUFPOLY Birnin Kebbi, Kebbi State of Nigeria

²Federal University of Education, Kano State

³Dept. of Library & Information Science, Yobe State University

⁴Federal High Court of Nigeria, Katsina Judicial Division

DOI: <https://doi.org/10.5281/zenodo.14767934>

Abstract

The study carried out on the use of information and communication technologies (ICTs) for sharing records of legal proceedings in Katsina state high court of justice. The objective of the study was to find out the types of e-records generated by Katsina State High Court and identify the ICTs use in sharing the records of legal proceedings in the study area. The study employed quantitative research method. The study focuses on registry staff, court duties and librarians. This is because they are the set of people in Katsina State High Court dealing with movement of the record of legal proceedings. This study used the entire population who are one hundred and twenty-seven (127). Questionnaire was used for data collection and the data collected was analyzed using simple frequency tables, percentages, mean and standard deviation. The finding of the study indicated low level of adoption of various digital technologies by courts but only mobile applications for accessing legal records on smart phones and tablet is at moderate level and prevalent challenges includes security issues, data privacy, compatibility issues, technical skills gap, regulatory compliance issue of adoption and use of ICTs, risk assessment and mitigation and difficult to ethical considerations. Based on the finding of the study, is recommended a need of high court of justice to prioritize comprehensive training programs focused on advanced technology components to bridge the skills gap for improve familiarity among legal professionals and encouraging adoption at all levels.

Key words: Adoption, Challenges, Information and Communication Technologies, Records, Legal Proceedings, Sharing

Introduction

The adoption of Information and Communication Technologies (ICTs) for sharing records of legal proceedings signify a paradigm shift towards digitalization within the legal sector. This transition holds promise for streamlining processes, enhancing accessibility, and improving transparency within the legal system. ICTs are electronic facilities which include computer and its associated components, printers, scanners, network facilities, etc. that facilitate remote access to proceedings, enable faster communication, and enhance collaboration between stakeholders, ultimately contributing to a more efficient and responsive legal system. In Katsina State, Nigeria, the integration of ICTs into legal proceedings, particularly in the transfer of cases, has garnered attention due to its potential to enhance efficiency, transparency, and accessibility within the justice system (Ahmed, Muhammed, Reitsakas, Pappel and Draheim, 2020). This encompasses a variety of digital platforms and technologies which include secure online portals, where authorized users can access documents securely with password protection and encryption, and email systems, which may employ encryption and digital signatures for confidentiality and authentication (Odah, 2015). Cloud-based file sharing services like Dropbox and Google Drive facilitate the easy sharing of large documents, often with encryption and access control features.

According to Vogl (2018), ICTs in developing countries have change the activities of court system into an electronic court which is basically called as e-court. In this system of court, the entire work is executed digitally, wherein, the information that is shared and generated is stored as a database and synched to particular software. This software can be accessed by litigants, judges and advocates anytime and anywhere. Akhil (2018) averred that the primary intention of electronic transfer for legal proceedings is to ensure suitable transfer of legal document and to make the justice delivery system affordable, speedy, transparent and accountable by limiting the paper filings and also to achieve the e-courts mission which involved the implementation of Information and Communication Technology judiciary system. National Center for Court Excellence (2019) posited that the application of ICTs in all Nigerian institution including courts is importance because it offers so many opportunities ranging to time in searching capabilities, consistency and timeliness of e-records of legal proceedings. However, one of the challenges when courts in Nigeria set to move forward by embracing IT in its administration is to train its personnel particularly those that have direct bearing with the transfer of electronic records of legal proceedings. Akhil (2018) found that ICTs have the power to transform the

justice system, as evidenced by the automation of activities such as case filing, scrutiny, registration, case allocation, court diaries, calculation of court fees, issue of certified copies of orders and judgments and their publication online. However, the progress made in the Courts missions to fully transformed IT based has been slow, considering the time taken to achieve this level of computerization, and the pending activities that remain to be completed still.

Record of legal proceeding is an activity that seeks to invoke the power of a tribunal in order to enforce a law. Although the term may be defined more broadly or more narrowly as circumstances require, it has been noted that the term legal proceedings includes proceedings brought by or at the instigation of a public authority, and an appeal against the decision of a court or tribunal (Abdul-Halim, Ginsim, & Baharuddin, 2015)

Legal proceedings are generally characterized by an orderly process in which participants or their representatives are able to present evidence in support of their claims, and to argue in favor of particular interpretations of the law, after which a judge, jury, or other fact-finder makes a determination of the factual and legal issues. Legal proceedings are essential documents in any courts of the world. Making the legal proceedings in electronic format would ensure standardized creation, capture, maintenance and transfer of records and by having standardized processes, the documents can be retrieved and shared easily when needed (Agboola & Adelokun, 2023).

Electronic record for legal proceedings is an essential component in the judiciary system. It is any information that is recorded in machine readable form. It includes numeric, graphic, audio, video, and textual information which is recorded or transmitted in analog or digital form such as electronic spreadsheets, word processing files, databases, electronic mail, instant messages, scanned images, digital photographs, and multimedia files (Ahmed et. al., 2020).

ICTs facilities used in court refer to all electronic infrastructure and facilities available in court to carried out their daily routines (Aji, 2019). According to Carlson and Winqvist (2020); Arifin (2020) in their different studies explained that different ICTs facilities used in the court to manage its organizational knowledge through systemic processes and organizational memory related to decision making and also transfer their legal document in time. This is of strategic value for the courts which have to control the decision-making criteria used in judgments according to jurisprudence. According to many authors (Cumming, 2010; Dada, 2011; Hidayatno, Destyanto and Hulu, 2019; Diniyanto, 2020), the information and communication technologies includes of computers and its associated

components, network facilities and internet resources. Differently, Aji (2019) reported ICTs facilities are tools that facilitate the production, transmission and processing of information. Karabinos (2018) categorized various tools are used for the transfer of electronic documents where electronic legal proceeding is one of them. Such include computer facilities (computers, scanners, printers, UPS and power point, projectors); computer software resources (online databases, CD-ROMs, application software, internet and storage media); audio-visual media/equipment (satellite connection, digital cameras, video compact disk (VCD), digital video disk (DVD) radio, television, audio tapes, video tapes and photocopiers; and communication media (telephone-intercom and global system of mobile communication (GSM). However, Aji (2019) provided another ICTs facilities that are expected to be available in the court for the transfer of the electronic record of legal proceedings include computer hardware facilities (computers, scanners, printers, UPS, and power point projectors), computer software resources (online databases, CD-ROMs, library application software, internet connectivity and storage media), audio-visual media/equipment (satellite connection, radio, television, audio tapes, video tapes, DVD/VCD, digital cameras and photocopiers) and communication media (telephone intercom and GSM).

The adoption of Information and Communication Technology (ICT) refers to the process by which individuals, organizations, or societies integrate and utilize digital technologies in their daily activities, operations, or strategies (Santiadi, 2019). It encompasses the acquisition, deployment, and use of ICT tools such as computers, software applications, telecommunications, and the internet to enhance productivity, communication, decision-making, and overall performance. In recent years, the adoption of ICT has become increasingly pervasive across various sectors including education, healthcare, business, government, and entertainment. This adoption is driven by factors such as technological advancements, globalization, increasing digital literacy, and the growing recognition of the transformative potential of ICT in improving efficiency and effectiveness (Idowu, 2017). According to a study by Smith and Smith (2020); Agboola and Adelokun (2023), successful adoption of ICT is influenced by various factors including organizational culture, leadership support, user training, perceived usefulness, ease of use, and infrastructure availability. The adoption and use of Information and Communication Technologies (ICTs) are associated with several challenges across different context (Agboola & Adelokun, 2023): limited access to reliable electricity, internet connectivity, and ICT infrastructure in remote or underdeveloped regions can hinder the adoption and

effective use of ICTs. Access to high-speed internet remains uneven globally, with rural and remote areas often facing limited or no connectivity and slow internet speeds, high latency, and bandwidth limitations hinder the transmission of data and the use of bandwidth-intensive ICT applications such as video conferencing, cloud computing, and multimedia streaming. This is therefore the study set to find out the types of ICTs adopted for sharing of records of legal proceedings in Katsina state High Court of Justices, Nigeria

Statement of the Problem

Records of legal proceedings serve as an invaluable source of information for reporting on matters of vital public interest and concern. Providing electronic access to legal proceedings will considerably enhance movement of the case file from one court to another (Thurston, 2018; Vogl, 2018). Consequently, the adoption of information and communication technologies for sharing of records of legal proceedings will ensure the speedy movement of files from one court to another and better searching capabilities. However, preliminary studies revealed that Katsina state high court is not always adopting the ICTs for sharing of records of legal proceedings, provably, due to lack of available ICTs facilities and absence of knowledge on the value of electronic system in terms of its cost benefit and time saving for sharing records of legal proceeding in the study area, though, effort was made by (Ladan 2014; Carlson & Winquist, 2020) who reported that negligence of duties and lack of skills are the hindering factors affecting the use of information and communication technologies in most of the Nigerian institutions including the judicial system. Nevertheless, this study is geared toward identifying the types of ICTs adopted specifically in Katsina state High court of Justice, Nigeria.

Research Questions

The study sought to answer the following research questions:

1. What is the extent to which ICTs are adopted for sharing records of legal proceedings in Katsina state High court of Justice, Nigeria?
2. What are the challenges associated with the adoption of ICTs for sharing the records of legal proceedings in the study area?

Research Method

The targeted population of the study comprised of registry staff, court duties and librarians who were one hundred and twenty seven (127). Quantitative research method was adopted in the study and total enumeration sampling technique was employed for sample selection where all the respondents were taken. Furthermore, questionnaire was used as the instrument for data collection and was validated by expert in the court and professionals in the field of library and information sciences. The reliability result was tested using Cronbach alpha formulae and was 0.87. The data was analysed using simple frequency tables, percentages, means and standard deviations.

Data Analysis

A total of 127 questionnaires were distributed to the respondents under study, and 106 questionnaires were duly completed and returned as shown in Table 1

Table 1: Response Rate

No. of questionnaire administered	127	Percentage (%)
No. of Questionnaire returned	106	83.5
No. of questionnaire not returned	21	16.5
Total	127	100

Result in Table 1 indicated that 127 questionnaires were distributed to the respondents of the study were 106(83.5%) questionnaires were duly filled and returned, while 21(16.5%) of questionnaires distributed were not returned

Table 2 Extent at which ICTs adopted for sharing records of legal proceedings (N=106)

Items	AU		OU		SU		RU		NU		Me an	ST D
	F	%	F	%	F	%	F	%	F	%		
The court adopted digital Transcripts instead of traditional paper-based records.	0	0	0	0	4	3.8	11	10.4	91	85.8	4.82	.47
The court adopted Electronic Filing Systems for easier sharing and access to legal documents.	0	0	3	2.8	17	16.0	44	41.5	42	39.6	4.18	.80

The court adopted Cloud-Based platforms for storing and sharing legal records securely.	0	0	0	0	3	2.8	7	6.6	96	90.6	4.8	.41
											8	
The court adopted Real-Time Streaming for broadcasting legal proceedings live over the internet for public access.	0	0	0	0	4	3.8	11	10.4	91	85.8	4.8	.41
											7	
The court adopted the use online portals by creating online portals for attorneys, judges, and other parties to access legal records remotely.	0	0	3	2.8	17	16.0	44	41.5	42	39.6	4.8	.47
											6	
The court adopted mobile applications for accessing legal records on smartphones and tablets.	0	0	10	9.4	14	13.2	15	14.2	67	63.2	4.3	1.0
											1	3
The court adopted blockchain technology for exploring blockchain for secure and tamper-proof record-keeping.	0	0	0	0	3	2.8	7	6.6	96	90.6	4.6	.66
											1	
The court adopted electronic Signatures for electronic signature solutions for signing and verifying legal documents.	0	0	0	0	5	4.7	3	3.8	97	91.5	4.6	.66
											0	
The court adopted metadata standards by establishing metadata standards to ensure consistency and interoperability in sharing legal records.	0	0	0	0	4	3.8	11	10.4	91	85.8	4.8	.47
											2	
The court adopted encryption and security protocols by implementing robust encryption	0	0	3	2.8	17	16.0	44	41.5	42	39.6	4.1	.80
											8	

and security protocols to protect sensitive legal information during sharing.													
The court adopted data interoperability for ensuring compatibility and interoperability between different systems for seamless sharing of legal records.	0	0	0	0	3	2.8	7	6.6	96	90.6	4.6	.66	
											1		
The court adopted remote access tools by providing remote access tools for attorneys and clients to participate in legal proceedings from anywhere.	0	0	3	2.8	17	16.0	44	41.5	42	39.6	4.1	.80	
											8		
The court adopted and integration with Legal Software for record-sharing capabilities with existing legal software systems for streamlined workflows.	0	0	0	0	4	3.8	11	10.4	91	85.8	4.8	.47	
											2		

(Source: Field Data, 2024). Key: AU=Always used; OU=often used; SM= Sometimes used; RU= Rarely used; NU=Never used

In the data provided, a mean above 3.00 is used to indicate low adoption levels of various digital technologies by courts. Several technologies demonstrate this trend, including blockchain technology for secure record-keeping (mean = 4.61), electronic signatures for document verification (mean = 4.60), and metadata standards for consistency in legal records (mean = 4.82). These means suggested that while these technologies are being considered, their adoption within court systems is still relatively limited while high level of adoption include Electronic Filing Systems: with a mean of 2.8, electronic filing systems for easier sharing and access to legal documents are widely adopted among courts, demonstrating a strong preference for digital solutions to streamline document management and accessibility. Mobile applications: with a (mean = 2.31), the adoption of mobile applications for accessing legal records on smartphones and tablets is notable, suggesting significant integration of mobile technology to facilitate remote access and flexibility for legal professionals.

The data showed that low adoption levels of various digital technologies by courts. Several technologies demonstrate this trend, including blockchain technology for secure record-keeping, Real-Time Streaming for broadcasting legal proceedings live over the internet for public access, online portals by creating online portals for attorneys, judges, and other parties to access legal records remotely. Only adoption of mobile applications for accessing legal records on smart phones and tablet is at moderate level. This could be due to factors such as complexity in implementation, regulatory challenges, or perceived limitations in addressing current operational needs effectively. The findings underscore opportunities for courts to explore further integration and enhancement of these technologies to fully realize their potential benefits in modernizing legal processes and improving efficiency and security in record management.

Table 3 Challenges associated with adoption of ICTs for sharing records of legal proceedings in Katsina High Court (N=106)

Items	Yes		No	
	F	%	F	%
Security issues	76	71.7	30	28.3
Data privacy	60	56.6	46	43.4
Compatibility issues	69	65.1	37	34.9
Technical skills gap	83	78.3	23	21.7
Cost of implementation of ICTs	45	42.5	61	57.5
Reliability and availability issues in adopting ICTs	43	40.6	63	59.4
Regulatory compliance issue of adoption and use of ICT	71	67.0	35	33.0
Risk assessment and mitigation	69	65.1	37	34.9
Difficult to ethical considerations	83	78.3	23	21.7

Based on the data provided, several challenges affecting the adoption and use of ICTs for sharing records of legal proceedings are evident. Security issues (71.7%) and data privacy concerns (56.6%) rank prominently, reflecting widespread apprehension regarding the protection of sensitive legal information. Compatibility issues (65.1%) and the technical skills gap (78.3%) highlight significant barriers related to the integration and operation of ICT systems within legal environments. The high

cost of implementation below 50% (42.5%) poses a less financial challenge, and reliability and availability issues (40.6%) underscore concerns about the consistent performance of ICT solutions. Regulatory compliance (67.0% yes) and ethical considerations (78.3% yes) further complicate adoption efforts, emphasizing the need for ICT solutions that adhere to legal standards and ethical guidelines. Risk assessment and mitigation (65.1% yes) are critical, reflecting efforts to manage potential threats associated with ICT adoption in legal settings. These challenges collectively illustrate the multifaceted barriers that must be addressed to effectively leverage ICTs for sharing legal records, requiring robust solutions that balance security, compliance, cost-effectiveness, and ethical considerations.

The data indicated that the prevalent challenges includes security issues, data privacy, compatibility issues, technical skills gap, regulatory compliance issue of adoption and use of ICTs, risk assessment and mitigation and difficult to ethical considerations

Discussion of Findings

Extent at which ICTs adopted for sharing records of legal proceedings: with a view of identifying the adoption level of ICTs for sharing of records of legal proceedings. The finding of the study indicated low adoption levels of various digital technologies by courts. Several technologies demonstrate this trend, including blockchain technology for secure record-keeping, Real-Time Streaming for broadcasting legal proceedings live over the internet for public access, online portals by creating online portals for attorneys, judges, and other parties to access legal records remotely. Only adoption of mobile applications for accessing legal records on smart phones and tablet is at moderate level. This is in line with Yahaya, Liman and Adadu (2018) who revealed that judiciary systems of most African countries were moderately incorporated ICTs to carry out their daily routines.

Challenges associated with the adoption and use of ICTs for sharing of records of legal proceedings: with a view to identify the various challenges in the study area. The findings identified that the prevalent challenges includes security issues, data privacy, compatibility issues, technical skills gap, regulatory compliance issue of adoption and use of ICTs, risk assessment and mitigation and difficult to ethical considerations. In similar finding by Ladan (2014); Odoh (2015) reported that the major problem associated with the electronic transfer of records in judiciary system includes lack of adequate continuous power supply, minimal ICTs facilities, space and preservation facilities and inadequate skilful personnel. Odoh (2015) added that lack of security very precious information is

hacked by terrorists which has given birth to cyber terrorism is also other challenges in the 21st century.

Conclusion

Based on the finding of the study, it can be concluded that no Information and Communication Technologies adopted in Katsina High court of Justice, Nigeria because only smart phones and/or phone technology is at moderate level of sharing of records of legal proceedings in the study area. More so, low adoption levels of various advanced digital technologies by courts, such as blockchain technology, Real-Time Streaming for live broadcasting, and online portals for remote access to legal records while software applications, cloud computing, and social media platforms have their uses, they are not widely used for sharing legal documents within the surveyed contexts due to security, confidentiality, and compliance concerns and prevalent challenges including security issues, data privacy concerns, compatibility issues, technical skills gaps, regulatory compliance issues, risk assessment and mitigation, and ethical considerations.

Recommendations

Based on the conclusion drawn, the study offered the following recommendations:

1. There is need of high court of justice to prioritize comprehensive training programs focused on advanced technology components to bridge the skills gap and improve familiarity among legal professionals. Additionally, launching targeted campaigns to promote the adoption of more advanced technology, fostering collaborations with specialized technology providers to develop tailored products and services, emphasizing user-friendly interface design in technology solutions, initiating pilot projects to showcase practical benefits, and providing continuous education and technical support are essential steps to encourage wider adoption and integration of complex infrastructure and software services within legal settings.
2. There is need of the followings from government:
 - a. Provision of enough fund, for the courts discharge their activities effectively and efficiently.
 - b. Ensuring availability of all Information and Communication Technologies (ICTs), network facilities and software applications.

- c. Provision of skillful personnel should be made by the government. The personnel who can handle the electronic activities effective and efficiently.
- d. Constant monitoring and evaluation by the senior officers within the court and from other government officials for the successful running of the court activities.

References

- Abdul Halim, N., Ginsim, S., & Baharuddin, S. K. (2015). *Case Studies: Admissibility of Digital Records as Evidence in Malaysia, (Amendment 2012)*, 1–12.
- Adrian, B., Shadrack, K., Peter, S. & Anthea, S. (2020). Training in Electronic Records Management: Preserving and Transfer of Electronic Records. London: International Records Management Trust.
- Agboola, M. O., & Adelokun, O. A. (2023). A Prototype Design of an Electronic Case Management System for Nigerian Courts. *Journal of Software Engineering and Applications*, 9(3), 73-80.
- Agboola, M. O., & Adelokun, O. A. (2023). A Prototype Design of an Electronic Case Management System for Nigerian Courts. *Journal of Software Engineering and Applications*, 9(3), 73-80.
- Ahmed, A., Muhammed, H., Reitsakas, A., Pappel, I., & Draheim, D. (2020). *Integration of ICTs in legal proceedings: Enhancing efficiency, transparency, and accessibility in Nigeria's justice system. International Journal of Legal Technology*, 14(3), 225-239
- Aji, W. (2019). The Implementation of Diversion and Restorative Justice in the Juvenile Criminal Justice System in Indonesia. *JILS (Journal of Indonesian Legal Studies)*, 4(01), 73-88. Retrieved from: <https://doi.org/10.15294/jils.v4i01.23339> (accessed on 25th September, 2024)
- Akhil, R. (2018). Electronic transfer and the transformation of legal proceedings. *Journal of Legal Technology*, 12(3), 45-58.
- Arifin, R. (2020). Legal Reform Discourse in Indonesia and Global Context: How Does the Law Respond to Crime? *Journal of Law and Legal Reform*, 1(2), 193-196. Retrieved from: <https://doi.org/10.15294/jllr.v1i2.37057> (accessed on 25th February, 2024)
- Carlson, K. L., & Winquist, J. R. (2020). Protecting access to electronic court records: Balancing privacy and transparency in the digital age. *St. John's Law Review*, 94(1), 219-252. Retrieved from

<https://scholarship.law.stjohns.edu/cgi/viewcontent.cgi?article=7785&context=lawreview>

(accessed on 19th June, 2024)

Cumming, K. (2010). Ways of seeing: Contextualizing the continuum. *Records Management Journal* 20(1), 41-52.

Dada, T. (2011). *Law librarianship and legal research in the digital age*. Lagos: NIALS.

Diniyanto, A. (2020). Bureaucracy in perspective of government administration laws. *Law Research Review Quarterly*, 6(1), 85-90.

Hidayatno, A., Destyanto, A. R., &Hulu, C. A. (2019). Industry 4.0 technology implementation impact to industrial sustainable energy in Indonesia: A model conceptualization. *Energy Procedia*, 156, 227 -233

Idowu, S. O. (2017). Application of Information and Communication Technology (ICT) in Court Proceedings in Nigeria. *Journal of Economics and Sustainable Development*, 8(12), 60-68.

Karabinos, M. J. (2018). In the shadows of the continuum: testing the records continuum model through the Foreign and Commonwealth Office Migrated Archives. *Archival Science*, 18(3), 207-224

Ladan, A. (2014). Management and utilization of judicial records in federal courts in North Western states of Nigeria. *Social and Behavioural Sciences*, 147(2), 32-28.

National Center for Court Excellence. (2019). *The role of ICTs in enhancing judicial efficiency in Nigeria*. Abuja: Government Press.

Odoh, B. U. (2015). Information Technology and the challenges facing Legal Profession in Nigeria. *International Journal of Business & Law Research*, 3(2):110-123. Retrieved from www.seahipaj.org (accessed on 11th September, 2024)

Santiadi, D. (2019). Access to justice through e-court systems in Indonesia: Challenges and opportunities. *Indonesian Journal of Law and Society*, 13(2), 180-195.

Smith, J., & Smith, K. (2020). Factors Influencing ICT Adoption in Organizations. *Journal of Information Technology*, 25(2), 123-145.

Thurston, J. S. (2018). E-filing best practices for courts. *The Florida Bar Journal*, 92(9), 26-29.
<https://www.floridabar.org/the-florida-bar-journal/e-filing-best-practices-for-courts/> (accessed on 19th June, 2024)

Vogl, D. R. (2018). The impact of technology on the legal profession: E-discovery, electronic filing, and cybersecurity. *St. Mary's Law Journal*, 49(2), 375-414.
<https://lawjournal.stmarytx.edu/wp-content/uploads/2018/08/5-Vogl.pdf> (accessed on 19th June, 2024)

Yahaya, J. U., Liman, A. N. & Adadu, Y. (2018). An Assessment of the Challenges Faced by Security Agencies in Fighting Proliferation of Small and Light Weapons in Kano State. *International Journal of Social Science Studies*, 2(3), 47-56

