

Digital justice delivery in Zimbabwe: Integrated electronic case management system adoption

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Background: Judiciary institutions are transforming their operations from analogue to digital intending to expedite justice delivery globally. In Zimbabwe, the Judicial Service Commission (JCS) adopted the Integrated Electronic Case Management System (IECMS) in February 2022 as an online platform designed to digitalise the litigation process. However, the anticipated benefits, potential challenges and prospects of the IECMS as a digital justice delivery innovation in Zimbabwe are yet to be evaluated.

Objectives: The purpose of this article is to evaluate Zimbabwe's IECMS with the view to establishing its viability in bringing expediency in justice delivery by the country's courts.

Method: The study employs a qualitative desk research methodology to collect data from secondary sources such as research papers and newspaper articles focusing on the implementation of the IECMS in Zimbabwe. Data were analysed using qualitative content analysis.

Results: The findings of this study revealed that the IECMS has the potential to revamp the judiciary in Zimbabwe. However, its successful implementation in courts could be challenged by resistance to change, technological resource constraints, the lack of public awareness, technological illiteracy by users and poor Internet connectivity in Zimbabwe.

Conclusion: The study concludes that while the IECMS seems to be a major transformation in the judicial sector in Zimbabwe, its successful adoption must be preceded by investments in technology to ensure uninterrupted Internet connectivity by litigants and their representatives.

Contribution: This article provides a critical appraisal of the viability of adopting digitalisation in the judiciary in the context of developing countries.

Keywords: digital justice delivery; judiciary transparency; judiciary efficiency; virtual court; digitalisation.

Introduction

The digitalisation of public institutions is a dominant global orthodox in contemporary public management. In this regard, public sector departments in different parts of the world have 'gone digital', a process that entails the adoption of smart information and communication technologies (ICTs) and the Internet to expedite service delivery. Like other sectors of public governance, modern justice delivery systems such as courts are transforming their operations from analogue to digital as they submit to the dictates of the digital era of governance. The digitalisation of the justice delivery systems is an initiative being implemented by governments around the world to eliminate delays in managing court cases (Addadzi-Koom & Bediako 2019). According to Filho (2009), what triggers the digitalisation of courts is that in many contexts, justice delivery systems are often criticised for being sluggish in processing court cases and in disposing of judgements, which often leads to delayed justice. The manual handling of court documents causes this sluggishness. The high number of cases at the various stages of the judicial review process makes it difficult for courts to efficiently manage caseloads manually (Archibong & Onyeulor 2022; Munir 2005).

Delays in the disposal of court cases often create problems such as prison overcrowding, high rates of recidivism, increased opportunities for corruption and a general loss of confidence in the justice delivery system of a country (Hasan & Rupa 2021). Reducing delays in the administration of justice is a priority for many contemporary judicial systems (Kondylis & Stein 2018). In this

regard, the maxim 'justice delayed is justice denied', which is celebrated by judicial systems worldwide, informs the digitalisation of courts (Benyekhlef, Amar & Callipel 2015). This maxim implies that justice delivery institutions should always thrive to ensure that judgements on disputes submitted by litigants are disposed expeditiously (Katsh & Rabinovich-Einy 2017). Governments in different parts of the world have made innovative strides to digitalise their courts to improve their operations. In contemporary judicial systems, technology is enabling litigants to process their cases online, in a manner that promotes confidence in the justice system as well as reducing impartiality and human error in processing court cases (Nakad-Weststrate et al. 2015). The digital transformation of judiciary systems in different countries around the world stems from the Fourth Industrial Revolution (4IR), which emphasises the adoption of advanced technologies to revamp institutional operations (Liao et al. 2018). In the 4IR era, technology is considered the nucleus of the management process in both private and public spheres.

The digitalisation of justice delivery has been ushered in platforms such as the Integrated Electronic Case Management System (IECMS), which enables courts to deploy several Internet-based, remote and virtual space justice delivery options and platforms (Jamila, Rompegading & Hidayat 2021). In Zimbabwe, the Judicial Service Commission (JSC) adopted and started implementing the IECMS (ZimIECMS) in February 2022 as a digital innovation for improving justice delivery in the country. The digitalisation of courts through the IECMS is aimed at making them efficient and transparent in advancing national justice. This is because courts are the pivot of national cohesion as they help to maintain peace in any country. In Zimbabwe, Chapter 8 (Section 162–193) of the National Constitution (Amendment number 20 of 2013) establishes the various courts in the country. These courts are established to adjudicate disputes (Madhuku 2010). Depending on the nature of the dispute, the jurisdiction to adjudicate disputes in Zimbabwe is vested in courts such as the Supreme Court, High Court, Constitutional Court, Labour Court, Commercial Court of the High Court, Administrative Court and Magistrates Court (Verheul 2020). These courts have the mandate of applying facts and the law in passing judgements on cases before them. Therefore, infusing technology in court operations through the IECMS in Zimbabwe raises hopes for a robust and expedient judiciary system.

The expectation is that when the IECMS becomes fully operational in Zimbabwean courts, the processing of court cases and disposal of judgements will be done expeditiously to avoid suppression of justice (Malaba 2022a). Litigants now expect the courts to resolve their disputes within a reasonable time because of the digitalisation of court processes. In light of these developments, it is the focus of this article to evaluate the potential of the IECMS as an innovative digital justice delivery system being implemented in Zimbabwean courts. The article also analyses the capacity of Zimbabwean courts to propel the intended objectives of the IECMS given the

country's social, technological, economic and political context.

Research problem and question

The research problem explored concerns the prospects of the IECMS given some technical and internal organisational challenges such as the shortage of advanced technology and resistance to change by current judicial officers that may hinder its adoption. The IECMS was introduced in Zimbabwean courts on 01 May 2022 to bring transparency and expediency in justice delivery (Malaba 2022a), but the implementation of the system has been slow with the system yet to be fully operational. The persisting Internet connectivity challenges in the country limit some people from participating in virtual court proceedings (Harris 2023). In addition, the digital divide affects the implementation of the IECMS as some people in remote rural areas in Zimbabwe may not have the requisite electronic devices to access the system (Gatsi 2022). The challenge of underdeveloped ICT infrastructure in Zimbabwe can also militate against the successful implementation of the IECMS because the system depends highly on advanced ICT infrastructure. Underdeveloped ICT infrastructure has already impacted negatively on the implementation of online learning systems in Zimbabwean universities (Chigora, Poshai & Mcilo 2022), and the IECMS can be affected in a similar way.

The article asks the question: Will the IECMS become a viable innovation for transforming justice delivery institutions in the Zimbabwean context? This question brews from the realisation that while the digitalisation of judiciary systems requires substantive investments towards developing modern ICT infrastructure to enable majority access to the Internet network connectivity (Kumar, Kumar & Joshi 2023), Zimbabwe ranked 118 out of the 131 countries surveyed by the Portulans Institute (2022). Rwanda successfully implemented the IECMS in 2016 after investing heavily in ICT infrastructure development (Watson, Rukundakuvuga & Matevosyan 2017). In Botswana, the implementation of an Electronic Case Records Management System (CRMS) has been affected by challenges such as inadequate bandwidth and shortage of computers in courts (Mosweu & Kenosi 2018). Zimbabwe can draw lessons from both Rwanda and Botswana as it implements its IECMS. This article explores some of the perceived benefits that the IECMS can bring to the judicial sector in Zimbabwe and further examines possible challenges to the system's successful adoption. Based on the case study analysis of Rwanda, Kenya and Nigeria where the IECMS has also been implemented, the article proposes some fundamental requirements that should be put in place for the successful adoption of the IECMS in Zimbabwe given the perceived challenges.

Research methods and design

This article adopts a qualitative research approach, in which the document review method was used in collecting the data. In this regard, the researchers used desktop review to analyse

secondary sources of data such as journal articles, newspaper articles, conference papers, books and Internet websites. For example, reflections on IECMS implementation in countries such as Rwanda and Kenya were obtained from journal articles by Watson et al. (2017) and Murungi (2011), respectively. Data of the implementation of the IECMS in Zimbabwe were mainly obtained from articles in Zimbabwean newspapers such as *The Herald*, *The Sunday News* and *Newsday*, among others. International conference papers (Jamila et al. 2021) focusing on the effectiveness of virtual court system, which is part of the IECMS, were also reviewed to provide useful insights into the implementation of digital governance in the judiciary sector from a global perspective. Internet websites such as Veritaszi.net also provide useful data on the State of the Judiciary Address (SOJA) made by the Chief Justice (CJ) of Zimbabwe in 2022. In the SOJA, the CJ of Zimbabwe provided a detailed overview of the features, functions and implementation roadmap for the IECMS.

Given the diverse nature of the secondary sources, the researchers used purposive sampling to select relevant documents for both analysis and argument building. The adoption of purposive sampling in selecting relevant secondary sources was guided by the argument by Flick (2018), that researchers using document review and desktop research should purposefully select only those documents that focus on the subject matter under discussion guided by predetermined criterion. In selecting the sources of data for this article, the researchers had to set some mutually reinforcing criteria to determine the suitability of any document for analysis. The first criterion used in selecting all documents was a pre-content check, in which case the researchers perused the document to verify if its content covered the subject matter on digitalisation of justice delivery systems. This was achieved through a perusal of the title and abstract (in the case of journal articles), reading of the introduction in the case of books and checking the title in the case of newspaper articles. This criterion enabled the researchers to screen out irrelevant documents and remain with those focusing on digitalisation of the judiciary systems in general and the implementation of the IECMS in particular. This criterion enabled the researchers to analyse high-quality documents and avoid the use of information from elusive sources.

The second selection criterion was based on checking the dates of publication for the documents. Preference was given to recent sources as the aim was to ensure that the discussion in the article is up to date with contemporary debates on the digitalisation of judiciary systems. In particular, the selection of newspaper articles, online website sources, discussion papers and opinion papers were primarily based on their recency as this enabled the researchers to capture topical scenarios, examples and critical analyses of the implementation of the IECMS. This selection criteria enabled the researchers to include and exclude selected documents in the content analysis, leaving the researchers with documents that were relevant in responding to the research problem. Thus, the selection of

these sources was also guided by the argument by Bowen (2009) that researchers using document analysis must check whether the selected documents to be analysed are accurate, credible, authentic, representative and relevant to the research problem, as this helps to ascertain whether the contents and the document are attuned to the purpose of the study. From this screening process, the researchers compiled a robust collection of books, journal articles, newspaper articles and online sources of information that were analysed through content analysis. Electronic formats of the research papers used in this study were purposefully selected from databases such as Google Scholar, Scopus, ScienceDirect and Journal Storage (JSTOR) while extracts of newspaper articles were reviewed on the websites of the selected newspapers.

Qualitative content analysis was used to extract the required data from the purposefully selected secondary sources. Qualitative content analysis is the process of organising information from a secondary source into thematic areas that are related to the central research question (Flick 2018). In this regard, the researchers reviewed the content of all the selected sources to develop an informative discussion on the global, continental and regional experiences on the digitalisation of the judiciary, with particular focus on the IECMS. These sources enabled an appreciation of the international experiences in the digitalisation of judiciary systems from a global perspective, through an extensive content analysis of the debates, claims and arguments raised by scholars on the digitalisation of justice delivery systems in Zimbabwe and other parts of the world. Thus, content analysis enabled the researchers to develop a comprehensive overview of the implementation of digital innovations in justice delivery systems.

This study has limitations in that it depends entirely on secondary data sources. The article could have been buttressed by primary data. The researchers also faced limitations in accessing research papers focusing specifically on the implementation of the IECMS in Zimbabwe, hence its dependence on many newspaper articles and Internet sources on this subject matter. The main reason for this limitation is that not much research has been conducted thus far, to assess the viability of the IECMS since its introduction in Zimbabwean courts in May 2022. As a result, the current study is groundbreaking as it provides a formative evaluation of a digital governance system, which is a year older in terms of its implementation progress. Despite this limitation, the study provides some useful insights into the contextual feasibility of adopting the IECMS in Zimbabwe. The study will therefore provide the analytical foundation and baseline for future research and summative evaluations of the implementation of the IECMS in Zimbabwe.

Literature review

This section of the article reviews literature on the digitalisation of justice delivery systems in selected countries around the world and further analyse how the coronavirus

disease 2019 (COVID-19) pandemic fast-tracked the digitalisation of the judiciary systems in Zimbabwe.

International perspectives and experiences on the digitalisation of judiciary systems

The digitalisation of judiciary systems is a worldwide phenomenon. Governments in different parts of the world are setting up online platforms such as virtual courts as they seek to reconfigure public trust in their judiciary systems (Dart et al. 2019). The creation of such virtual space interfaces is a technological revolution to expedite justice delivery. The deployment of technology in justice delivery offers several opportunities and possibilities such as enhanced judicial transparency and effective settlement of civil and criminal disputes (Prins 2018).

In addition, the adoption of technology by the judiciary transforms the landscape of justice delivery as it replaces the traditional manual and lethargic avenues of civil and criminal handling disputes (Katsh & Rabinovich-Einy 2017). In this regard, technology adoption in justice delivery systems is modernising access to justice through innovations such as electronic filing (e-filing) of cases and online tracking of court case progress in many countries (Sharmila 2020). Technologies such as virtual testimonies, litigation sciences videodisc systems, audio and video recordings are also used to gather evidence used to pass judgements in courts (Lederer 1994; Tomlinson 2019).

The Africa Judges and Jurists Forum (2021) stated that the effectiveness of digitalising justice delivery systems varies from country to country depending on the level of preparedness and investments in adopting such systems.

Nevertheless, the effectiveness of a digitalised justice delivery system is reflected through the use of technology from the registration of a court case to its adjudication and passing of a judgement through virtual court platforms (Liao et al. 2018). Effective digital justice delivery systems must therefore make the litigation process convenient by allowing litigants to register their case, view its progress and attend court proceedings online without the need to travel to a physical court site (Africa Judges and Jurists Forum 2021). However, challenges such as lack of user awareness, ICT illiteracy among system users, the digital divide, underdeveloped ICT infrastructure and resistance to change hinder the effective use of digital justice delivery systems (Munir 2005).

Worldwide, countries have adopted varying forms of technology as part of their deliberate efforts to digitalise judicial processes (Rosa, Teixeira & Pinto 2013). In England, for example, the most salient component of the judiciary digital reform agenda includes technological transformations and innovative court architectures such as virtual courtrooms created to enhance access to the court process by the litigants (Donoghue 2017; Wiggins 2006). In Belgium, an electronic justice system (e-justice) has also been adopted to expedite justice delivery (Fairchild, Vuyst & Azran 2006). Brazil has

also introduced ICTs in its courts to make them efficient in their operations (Filho 2009). While there are many digital innovations adopted in the judicial sector in different countries, in this article, our focus is on the IECMS, which has been adopted by the JCS of Zimbabwe.

In Africa, Rwanda successfully implemented a fully functional IECMS. In 2016, the Government of Rwanda won the best judiciary service award in Africa because of its successful adoption and effective use of this system. Rwanda's IECMS was developed and implemented by the Ministry of Justice from 2015 to 2016 to revamp the country's justice delivery system through the automation of the judicial processes (Nkusi 2017). The system aimed to curb justice delivery bottlenecks such as delays because of the misplacement of the case files in courts (Watson et al. 2017). The main objectives of the IECMS in Rwanda are to automate court documentation to prevent loss or physical damage of case files and enhance information accessibility by litigants (Dutton 2021). The system was also designed to eliminate duplication of case information (Nkusi 2017). The IECMS in Rwanda is designed to integrate five institutions of the justice sector in Rwanda, and these are the Judiciary, the Ministry of Justice, the National Public Prosecution Authority, the Criminal Investigation Department (Police) and the Rwanda Correctional Services (Nkusi 2017). The IECMS in Rwanda provides a constant interface between the judiciary and litigants through platforms such as e-filing and follow-up on the status of cases (Nkusi 2017). The IECMS allows for the timeous and convenient initiation, processing and adjudication of cases at reduced costs as there is no need for travelling as it is accessible on smartphones, tablets and computers as long as the user has Internet access. The system also provides automatic email, SMS and system reminders or notifications of deadlines on the important dates and status of an ongoing case (Watson et al. 2017). This prevents litigants from missing hearing dates, appeal information and summons information and notices for submitting required documents in time. Such a system calendar also enabled judicial officers to keep up with court schedules as it also provides notifications on the proceedings of cases (Dutton 2021).

In terms of the day-to-day running of the court, the system enables the digital creation of personal tasks and reminders of pending tasks to keep court staff up to date with their duties. Court registrars can also assign cases to specific judges in the system and follow up on the tasks assigned to judicial officers through the IECMS (Watson et al. 2017). The IECMS also creates a platform for automatic case scheduling of trials, hearings, pronouncements and adjournments on the cases online (Dutton 2021). The system also allows for automatic case number generation, which enables easy search for cases in the future. There is also a platform to answer the questions posed by litigants online (Nkusi 2017). The system is also designed to dispatch information easily to litigants, allowing them to check whether the judgement is ready. Judges can also generate an automatic summary of judgements and dynamic generation reports on the system

(Watson et al. 2017). Rwanda's IECMS has a dashboard platform, which allows users and stakeholders to view court reports and judgements as well as to monitor and evaluate the court's performance (Dutton 2021).

In Kenya, the IECMS was adopted on 15 February 2011. The adoption of the IECMS in Kenya marked great potential for the partnership between ICT and justice delivery in Kenya and Africa at large (Murungi 2011). The system was designed to ensure that courts could electronically manage cases from the filing stage to the final passing of a judgement through a web-based platform coordinated through case management software. Kenya's IECMS also provides online updates to the litigants from case initiation and case finalisation (Murungi 2011). Some of the anticipated benefits from the IECMS in Kenya included improved security of case information, efficient handling of court cases, convenient processing and management of court information and reduced corruption in the delivery of court services (Content 2016).

In Nigeria, the e-judicial system has been adopted as a web-based court system, an online platform similar to the IECMS that provides litigants remote online access to case management records and information (Archibong & Onyeulor 2022). The system was established to provide a systematic, efficient and transparent case management platform that is free from corruption and the backlog of cases, which constituted major setbacks to justice delivery processes in Nigeria. Some of the main components of the e-judiciary system in Nigeria are e-registration, e-filing, e-scheduling, e-tracking and online publication of judgements. The e-judiciary system allows litigants to access legal documents in cyberspace (Jimoh 2020). It also enables the judiciary to deliver court decisions electronically without physical court sessions. This article appraises Zimbabwe's IECMS to ascertain its viability in bringing positive transformation in the operations of the judiciary as has been the case in Rwanda and other countries. The next section discusses how the COVID-19 pandemic fast-tracked the implementation of digital justice delivery systems in Zimbabwe.

The COVID-19 pandemic and its impact on the digitalisation of the judiciary in Zimbabwe

When COVID-19 pandemic emerged, governance systems worldwide were forced to adjust their operating systems, allowing more remote-based functionalities, and this triggered the need for virtual justice delivery systems (Madzianyike 2021). The COVID-19 pandemic exerted great pressure on the judicial sector to develop innovative ways to manage case backlogs within a short space of time. The pandemic halted the normal functioning of the judiciary as physical court case hearings were aborted (Munyoro 2022). In Zimbabwe, the abrupt closure of courts created delays in justice delivery, which in many cases became unconstitutional, as Section 165(b) of the Constitution of Zimbabwe (Amendment Number 20 of 2013) states that 'justice must not be delayed, but be delivered with reasonable promptness'. The closures of Zimbabwean courts because of the COVID-19 pandemic

created fundamental delays in the disposal of cases as court hearings were at a standstill (Nangara 2022).

The closure of courts was not unique to Zimbabwe as justice delivery systems around the world faced difficulties in executing their duties because of constant lockdowns and adopting digital justice delivery systems became of utmost importance (Taruvinga 2022). Because of COVID-19 pandemic, judiciary systems in different countries were faced with the need to ensure that justice delivery is digitalised to ensure that everyone has timeous access to justice (Kumar et al. 2023).

In Zimbabwe, the COVID-19 pandemic resulted in the suspension of the physical filing of new cases and pleadings (Munyoro 2022). As a result, all pending civil and criminal cases in different courts were postponed (Tshuma 2022). In particular, justice delivery processes in Zimbabwe during the COVID-19 pandemic were halted through the issuance of practice directions by the government through the JSC. For example, Practice Direction 1 of 2021 suspended all court operations while Practice Direction Number 2 of 2021 only allowed courts to provide limited services such as urgent hearings and bail applications (Malaba 2022a). In a few cases, hearings were held, but attendance was confined to parties directly involved in the case and their legal practitioners only (Taruvinga 2022).

While the COVID-19 pandemic exposed the fragilities of the justice delivery systems, in Zimbabwe it also became an opportunity for the JSC to innovate new justice delivery methods such as a virtual court platform, which is part of the design features of the IECMS (Sibanda 2022). As argued by Madzianyike (2021), in Zimbabwe, the COVID-19 pandemic was a wake-up call as it enabled participants in the judicial sector to realise that technological advancements are critical in propelling efficient justice delivery in the country. Thus, in a way, the COVID-19 pandemic accelerated the digitalisation of justice delivery systems to ensure that justice is dispensed to concerned parties expeditiously (Malaba 2022b). Thus, the COVID-19 pandemic sparked new innovative ways of improving the timeous access to justice by all through digital systems.

The virtual court platform symbolises a technological revolution in the judicial delivery system in Zimbabwe (Munyoro 2022). On 06 February 2022, the JSC officially launched the virtual court system as part of online justice service delivery capabilities under the IECMS (Mtudzwa 2023). At this official launch, the Minister of Justice, Legal and Parliamentary Affairs confirmed that the required equipment to support the virtual court system had already been installed in different courts around the country (Chingarande 2022). The adoption of the virtual court is meant to speed up the registration and completion of court cases.

Before the adoption of the virtual court system, there were instances where the Zimbabwe Prisons and Correctional Services (ZPCS) would fail to ferry prisoners to court sessions

because of transportation challenges (Malaba 2022b). Because of the transport challenges, inmates could not appear before the courts for routine trials as scheduled and this was causing a backlog in the country's judicial system. Since 2020, this situation was worsened by government restrictions, which included court closures to combat the spread of COVID-19 as public gatherings were prohibited by the government-instituted lockdown measures making it difficult for courts to convene trial sessions (Munyoro 2022).

The adoption of the virtual court platform means that these prisoners do not need to turn up in court as they can attend the sessions online as long as there is Internet connectivity. The adoption of the virtual court platform was also a move by the JSC to ensure that the COVID-19 pandemic cannot disrupt the delivery of justice in the country (Munyoro 2022). For example, by April 2022, some courtrooms at the Commercial High Court had been connected to the Harare Remand Prison as efforts to kick-start the operations of the virtual court platform in Zimbabwe gathered momentum (Sibanda 2022).

The virtual court platform in Zimbabwe is anticipated to enable online bail applications making the justice delivery system in the country efficient (Malaba 2022a). The virtual court is, therefore, expected to be a cost-effective judicial delivery system as it allows litigants to participate in court cases remotely (Madzianyike 2021). The virtual court system is anticipated to enable the expeditious finalisation of court cases, which brings convenience to the courts and the litigants as the participants will no longer be required to appear physically in court (Chingarande 2022).

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Results and discussion

The implementation of the Integrated Electronic Case Management System in Zimbabwe

The IECMS was introduced by the JCS of Zimbabwe through Statutory Instruments 78, 79 and 80 of 2022 (Taruvunga 2022). The objective of the JSC is to digitalise all the courts in Zimbabwe; hence the IECMS was adopted to manage the judicial review processes in the country's courts using technological devices (Malaba 2022b). The IECMS enables litigants to submit their court case documentation online and track the progress of their cases over the Internet instead of going to court physically (Munyoro 2022). In adopting the IECMS, the JSC seeks to ensure that the judicial review process is open to litigants by ensuring that relevant information about their cases is made accessible to them without any barriers (Malaba 2022b). This system is a major tool adopted to improve the justice delivery system in the country by infusing technology into the management of court proceedings.

The JSC claims that the purpose of the IECMS is to expedite the delivery of justice transparently and cautiously, which prevents the physical damage or loss of case files (Chingarande 2022). The IECMS in Zimbabwe is a platform that allows electronic case filing through an online portal, an automatic case allocation to judicial officers, an electronic case tracking application and virtual court hearings (Taruvunga 2022). The adoption of the IECMS was meant to enable litigants to submit their court case documents and track the progress of their cases online. According to Munyoro (2022), the IECMS was launched by the CJ of Zimbabwe Mr Luke Malaba on 01 May 2022 during the SOJA. Before this official launch, the Zimbabwe Government Gazette notice of 22 April 2022 had indicated that the IECMS would introduce an electronic case filing platform to allow litigants to initiate their applications on the Internet (Taruvunga 2022).

The IECMS was designed through a partnership between the JSC and Synergy International Systems (SIS). Synergy International Systems has a good reputation of designing effective IECMS after successfully designing Rwanda's IECMS from 2015 to 2016 (Munyoro 2022). The IECMS seeks to connect all institutions in the justice delivery system and to transform all courts into paperless institutions. For example, the system seeks to link the Zimbabwe Republic Police, the ZPCS and the country's courts to enable the online transfer of information and documents on specific court cases from one source to the other (Taruvunga 2022). The IECMS also seeks to assist the integration of the court system in the country, that is, the Constitutional Court, the Commercial and High Court, the Supreme Court, the Labour Court, the Administrative Court and the Magistrate Court (Chingarande 2022; Nangara 2022). According to Mtudza (2023), the IECMS forms part of the efforts by the Government of Zimbabwe to attain a digital economy as enunciated in the National Development Strategy 1 (NDS 1).

In addition, the IECMS is expected to enable an automated allocation of cases to judicial officers (Malaba 2022a). The general idea behind the IECMS is to automate the case life cycle from the initial filing of a case through the review process until a judgement is passed without the possible delays caused by paperwork (Malaba 2022b). In the 2022 SOJA, the CJ revealed that the IECMS would be implemented starting with the Constitutional Court and the Commercial Division of the High Court (Court Watch 2022). In February 2023, the Labour Court and the Administrative Court in Zimbabwe were also digitalised under the IECMS as was the case with the Constitutional Court, the Supreme Court and the Commercial Court in 2022 (Machaya 2023).

The COVID-19 pandemic made the adoption of the IECMS in Zimbabwe an urgent matter because convening physical court sessions were suspended in March 2020. The IECMS in Zimbabwe seeks to introduce virtual hearings, which have become the cornerstone of justice delivery reform programmes in many countries because they bring convenience into the justice administration process (Dart et al. 2019). The shift from open air to virtual hearings has become a primary goal

for most countries, and by introducing the IECMS, the JSC is making moves to cope with the global digital transformations (Malaba 2022b). Thus, the expectation in adopting the IECMS in Zimbabwe is that it will create convenience through virtual court platforms that will eventually enhance efficiency in the judicial system by curbing the perennial delays and backlogs associated with the processing and finalisation of cases. Given the vagaries of the economic, social, technological and political context in which digital innovations are implemented, a formative evaluation of viability of implementing Zimbabwe's IECMS is important.

The design features of the Integrated Electronic Case Management System in Zimbabwe

The IECMS in Zimbabwe is an online platform that connects institutions and individuals involved in the judicial review process on the Internet (Nangara 2022). The JSC believes that the implementation of the IECMS will bring efficiency to the justice sector and expedite access and delivery of justice in the country (Dune-Matutu 2022). The move by courts to harness ICTs enables them to remain within their operational schedules in times of future unanticipated disasters (Malaba 2022b). The implementation of the IECMS is facilitated by SIS, which is an American software company that provides the JCS of Zimbabwe with a software solution that will integrate the country's courts under one tech umbrella (Synergy International Systems Inc 2021). The system integrates all the courts in Zimbabwe with participants in a court case. According to Malaba (2022b), the IECMS integrates five features in one platform, and these are the electronic filing of documents (e-filing), electronic payment of court fees (e-payment), virtual court hearing platform, the online tracking of court cases and Internet access to judgements.

The IECMS in Zimbabwe has five main design features that enable the efficient and expedient administration of court cases. Firstly, the IECMS enables electronic payments (e-payment) of all court fees through mobile money transfer platforms such as Ecocash, Zimswitch Instant Payment Interchange Technology (ZIPIT) and Visa cards (Munyoro 2022). These e-payment platforms are fast and convenient as they allow the litigants to pay for court fees anytime without needing to physically visit the court's account office.

In addition, the system has an e-filing platform, which allows electronically signed and stamped documents to be submitted electronically, allowing courts to dispense justice expeditiously (Malaba 2022b). The e-filing platform reduces the time spent and labour required to organise files manually. The function also reduces the possibilities of human error in organising court files, which makes the IECMS a reliable platform for managing court records.

The IECMS also offers a virtual court platform, which allows courts to hold hearings remotely as it creates a physical court setup in the virtual space (Sibanda 2022). The main advantage of virtual courts is that they allow remote adjudication of

court cases eliminating the need to travel and assemble in a physical courtroom (Madzianyike 2021). In this way, the virtual court saves both time and costs incurred in travelling to the court.

In addition, the IECMS also has an electronic calendar (e-calendar), which allows for the scheduling and tracking of all court events and tasks online (Malaba 2022b). The e-calendar is linked to one's emails and phone numbers to enable real-time online notification of case progress through SMS and email notifications enabling them to track the progress of their case online (Mtudza 2023). For one to create an IECMS account, they visit the website <http://zimiecms.org.zw>, which is managed by the JSC of Zimbabwe (Tshuma 2022). With an IECMS account, users can file a case at any of the active registries online (Sibanda 2022). The IECMS design features are important in ensuring that information is at the fingertips of users and stakeholders, which is critical in enhancing transparency, efficiency and convenience in justice delivery.

Information and communication technology training and development initiatives for Integrated Electronic Case Management System implementation in Zimbabwe

The adoption of the IECMS has created a high demand for ICT-competent personnel in the judicial sector and among the litigants (Mtudza 2023). Some of the new roles created by the innovations in the public sector (as the case with the IECMS) include information technology security specialists, cybersecurity officers, network specialists, hardware specialists, helpdesk officers, electronic filling officers, virtual centre officers, network engineers and system analysts (Vyas-Doorgapersad 2022). These specialists and officers require ICT skills to facilitate the virtual interactions that make the IECMS effective. Litigants and their representatives also need ICT competencies to navigate through the IECMS system. Therefore, the need for ICT training in the judicial sector in Zimbabwe has been heightened through the implementation of the IECMS (Mtudza 2023). Thus, since the introduction of the IECMS in January 2022, and as part of institutional capacity building, the JSC has facilitated the training of different stakeholders on how to use the platform (Munyoro 2022). Some of the beneficiaries in the training process include serving judicial officers, members of the ZPCS, the Zimbabwe Republic Police officers, legal practitioners, officers serving in the Attorney General department, members of the National Prosecuting Authority, members of the Zimbabwe Anti-Corruption Commission and personnel working in the Ministry of Justice, Legal and Parliamentary Affairs (Malaba 2022a). In line with the ICT training and development initiatives, the Judicial Training Institute of Zimbabwe (JTIZ) was introduced in 2022 as part of efforts to prepare judicial officers for the technological demands that came with the adoption of the IECMS (Munyoro 2022). The training centre will be responsible for facilitating and conducting capacity-building training programmes and workshops to improve

the ICT competencies of members of the judiciary and magistracy.

The ICT training programmes being facilitated by the JSC are designed to equip participants with basic and advanced IT skills to navigate and effectively use the IECMS (Malaba 2022b). For example, the e-filing training programme ensures that litigants and their representatives could initiate a court case virtually from their respective detention centres and chambers (Malaba 2022a). In line with ICT training and development demands, the JSC has launched the electronic learning management system (e-LMS), which seeks to make it easier to deliver regular ICT to stakeholders in the justice delivery sector (Malaba 2022a). The e-LMS seeks to provide an efficient and user-friendly platform that allows self-paced ICT training towards accelerating the digitalisation of the country's judicial system in line with the JSC 2021–2025 Strategic Plan (Malaba 2022a).

The anticipated benefits emerging from the Integrated Electronic Case Management System implementation in Zimbabwe

The JSC anticipates that the IECMS will improve efficiency, expedition and disposition and deliver access to justice as it reduces further case backlog, prevents loss and physical damage of documents in case files, enhances information accessibility and modernises the operations of the judiciary system in the country (Machaya 2023). For example, the system will curb the loss of case files that contain evidence. The system is, therefore, an important instrument to guard against the injustice that may result from the loss of case files (Tshuma 2022). For courts to pass judgements effectively and fairly, they depend on evidence (Mtudzwa 2023). In situations where the disclosure of evidence is subverted after the loss of files, there is a possibility that improper judgements will be made (Huni & Dewah 2019). In addition, the IECMS is also predicted to improve transparency and clear audit trails in the management of court cases as digital record-keeping increases the openness of the justice delivery system (Sibanda 2022). The system is an online case manager that can monitor each step in the justice delivery process.

From the adage that 'justice delayed is justice denied', the IECMS is expected to ensure the justice delivery system in Zimbabwe is efficient, by removing all the operational bottlenecks such as loss of case files, corruption and failure to appear in court because of transportation challenges (Tshuma 2022). The system seeks to create convenience by connecting the JSC with all players in the justice delivery systems, such as the Office of the Attorney General, Magistrates, Judges, the Zimbabwe Anti-Corruption Commission, the Zimbabwe Republic Police, the ZPCS and legal practitioners (Malaba 2022b). Furthermore, the IECMS will create convenience in the filing of case documents by allowing litigants to submit their case applications online without having to physically visit the courts. As a result, the IECMS seeks to make justice accessible to all citizens. The IECMS is anticipated to improve communication between the judiciary and the litigants

(Machaya 2023). When the IECMS was launched, the CJ of Zimbabwe claimed that the system would guarantee efficiency and effectiveness in the courts of Zimbabwe as it builds a more accessible, responsive and resilient judiciary that is free from errors and oversights (Malaba 2022a). Chief Justice Malaba further indicated that the move to adopt the IECMS was a way of leveraging the power of technology in transforming how justice is delivered in the country (Nangara 2022).

The IECMS is designed to enhance transparency by reducing corruption in the litigation processes through removing the interface between litigants, their representatives and judicial officers (Mashundu 2022). The physical interaction between participants in the judicial review process often creates opportunities for corruption, which has damaging consequences in the administration of justice as it often leads to deficient litigation (Amagnya 2022; Oduntan 2017). For example, the bribery of judges by the accused can decrease public trust in justice, which weakens the capacity of judicial systems to fairly adjudicate cases, brought before the courts (Ayres 1996). The IECMS can reduce the possibility of bribery, as all the processes will be facilitated through technology. According to Article 11 of the United Nations Convention against Corruption, to discharge its role effectively, the judiciary must be free of corruption and its members must act with integrity (United Nations Office on Drugs and Crime 2017). Scholars have also argued that the digitalisation of justice systems enables courts to make decisions with prudence, which is an essential quality for the adjudication of court cases (Fortes 2020). Thus, it is anticipated that the IECMS will go a long way in reducing the chances of corruption in the judicial review process.

In addition, the IECMS is also anticipated to bring convenience to the justice delivery process as it will enable remands to be conducted from the office of the accused's lawyers if they are out on bail or from the remand prison if they have not been granted bail (Munyoro 2022). Through this online system, it is possible that a litigant's lawyer can initiate a virtual remand hearing in liaison with officers in charge at the police station of arrest as long as there is an Internet connection, making justice delivery convenient (Gatsi 2022). The IECMS is, therefore, part of a raft of measures to transform justice delivery in the country as it allows for the uploading of court cases in an electronic online database for easier tracking. The system makes justice administration convenient as it also enhances efficiency and the rule of law in the judiciary, confirmed the CJ of Zimbabwe in February 2022 (Munyoro 2022).

With reliable Internet connectivity, individuals can access justice delivery systems conveniently through multiple devices such as cell phones, tablets and computer devices. Furthermore, the IECMS also enables the diligent digital management of court records, which creates extra security for case records (Malaba 2022a). Court records are a vital source of information for the judicial system and the

information they contain must be safeguarded from possible loss or access by unauthorised users (Hamilton 2016; Martin 2008). In Zimbabwe, the IECMS is anticipated to enable the digital creation, management and preservation of court records, which will have a positive impact on the image of the judiciary system. The IECMS can also ensure proper and diligent court record management, which is important in promoting trust in the justice delivery system as the documents for decision-making and judgements are free from being tampered with by unauthorised people.

The probable challenges to the implementation and use of the Integrated Electronic Case Management Systems in Zimbabwe

The first major threat to the success of the IECMS in Zimbabwe is poor Internet connectivity in the country. Many parts of the country, particularly rural areas and small towns, endure poor network connection to the Internet (Moyo-Nyede & Ndoma 2020). The Minister of ICT in Zimbabwe confirmed in November 2022 that 50% (around 8 million people) of Zimbabwe's population has no access to the Internet, while in neighbouring countries like South Africa, 80% of the population has access to the Internet (Karombo 2023). Zimbabwe has underdeveloped ICT infrastructure that leads to slow Internet bandwidth (Musarurwa 2017; Poshai 2017). This challenge can hinder the successful adoption of the IECMS in Zimbabwe. Some prisons and courts in Zimbabwe do not have stable Internet connection, and this can stall progress towards the adoption and use of virtual courts (Harris 2023).

This challenge is compounded by the shortage of digital devices such as smartphones and computers by the underprivileged sections of the population, which makes it difficult for them to make use of the IECMS capabilities. For example, to participate in a virtual court, litigants must, however, have smart electronic devices such as laptops, iPads or smartphones with Internet connectivity (Dune-Matutu 2022). However, because of the high unemployment and low-income earnings by the majority of the people in Zimbabwe, there are concerns some litigants will not be able to buy these smart devices, and this may hinder the successful implementation of the IECMS (Gatsi 2022). High Internet data tariffs in Zimbabwe may also make it difficult for some people to access the Internet and make use of the opportunities offered by the IECMS. The availability of relevant ICTs is a catalyst for the implementation of digitalisation programmes in the public sector (Phiri 2023). Thus, technological resource constraints such as the lack of requisite ICTs like computers and smart devices in some courts can also hinder the success of the IECMS.

The other perceived challenge to the implementation of the IECMS is resistance to change by users. Resistance to change and negative attitudes are considered as a major challenge to technological transformations in many organisations as employees want to hold on to the benefits of the previous systems (Mabhodha & Choga 2021), and this may apply to

serving judicial officers who may not be prepared to embrace the transformation brought about by the IECMS. Similarly, the general lack of the awareness of the IECMS and its use is another challenge that needs to be addressed if this system is to generate the anticipated transformation in the justice delivery sector.

Furthermore, ICT illiteracy and limited ICT competencies by some target users such as prisoners can also be another major challenge to the use of the IECMS in Zimbabwe. Some citizens in marginalised communities and some public sector employees in Zimbabwe have ICT skill gaps (Mutsagondo & Khumalo 2023). While the JCS conducted ICT training for its personnel in 2021, in preparation for the IECMS adoption (Manomano 2021), some members of the public such as people living with disabilities have not been included in the training although they are key stakeholders in the operations of the IECMS (Dune-Matutu 2022).

In addition, the persisting electricity cuts in the country can also limit the use of the IECMS as this system largely depends on devices that require electrical power. The major threat to the success of the virtual court system is the incessant power cuts in the country. Plans are therefore in place to install solar-powered virtual courtrooms to avert this problem (Malaba 2022b). Moreover, the fear of cyber victimisation can also hinder the use of the IECMS by targeted users. Some people may be reluctant to use the IECMS because of the fear of abuse on cyberspace.

Conclusions and recommendations

The IECMS is a major innovation, which can revamp the operations of all courts in Zimbabwe. The digital transformation of courts in Zimbabwe through the IECMS has the potential to make justice delivery more convenient, transparent and cost-effective. The system can also improve public trust in the judiciary and reduce all the lags in the processing of court cases and disposal of judgements. However, some contextual challenges can hinder its effectiveness. For example, not everyone can use this system. Thus, training all stakeholders on the use of the IECMS is vital for its successful adoption and use. Courts and support institutions such as prisons should also be capacitated with relevant modern technologies to enable full use of the IECMS. Resistance to change by service judicial officers is another challenge that needs to be confronted. Court staff and judges may be resistant to change because of the possibility of personal benefits from the manual system. There is a need to address resistance to change by explaining clearly the benefits presented by the new system to gain their support and buy-in. For example, not everyone in Zimbabwe knows about the IECMS. Hence, there is a need to conduct awareness campaigns to educate the citizens about the new IECMS. This can be done through local radio stations, national network televisions and local newspapers to educate litigants about the benefits of using the IECMS. Investing in stable Internet networks is therefore critical in ensuring that litigants willing to use the virtual court system do not face connectivity

challenges. In the same vein, there should be efforts to ensure that ICT infrastructures such as data servers, satellites, fibre optic cables and network boosters are fully developed across the country. Developing this ICT infrastructure can allow litigants and users in remote areas to easily connect to the Internet and benefit from the IECMS.

Future study recommendations

The limitation in this study is the use of secondary data sources only. Future research can use primary data collection methods such as interviews to interact with judicial officers, litigants, lawyers, policy makers, academics and analysts as well as digital governance experts and citizens, to gain an in-depth understanding of the practical and contextual challenges faced in the implementation of the IECMS in Zimbabwe. As this study is a formative evaluation of the implementation of the IECMS, future research can focus on a summative evaluation of the implementation of the IECMS in Zimbabwe.

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Disclaimer

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