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**RESEARCH ARTICLE**

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Towards e-judicial services in Malawi: Implications for justice delivery

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Abstract

In Malawi, the judiciary rolled out an electronic case management system in 2015 in response to the ongoing public sector reforms being championed by the Malawi Government. In this study, we employed the information systems (IS) success model to systematically investigate the benefits that an electronic case management system has brought about to the judiciary of Malawi. Specifically, three themes are pursued as follows: the services offered through an electronic case management system in the judiciary of Malawi; benefits of an electronic case management system; and challenges affecting the use of an electronic case management system in the judiciary of Malawi. Methodologically, the study is guided by a survey design and a questionnaire was used to collect data from various staff in the judiciary including judges, court clerks, court registrars, and information technology personnel. The study reveals that the implementation of an electronic case management system has impacted positively on the security of court files by easing the tracking and retrieving of case files thereby contributing to efficiency in justice delivery. However, the implementation of an electronic case management system has not been spared from challenges, which include frequent loss of network and poor Internet connection.

KEYWORDS

courts, electronic case management system, judiciary

1 | INTRODUCTION

In response to the high-paced developments that information and communications technology (ICT) is bringing into the 21st century, many sectors have embraced and invested heavily in these ICTs and are reaping various benefits. Various government agencies have, for example, embraced the Internet as a key ICT tool in the delivery of services to the citizenry. Judiciaries in various countries have not resisted the lure of ICTs and their adoption in the delivery of services. It is understood that systematic, efficient, and organised case records provide comprehensive information for courts to guarantee unbiased decisions, which are transparent and fair. New technologies continue to make inroads into the legal world, and the development of computerised systems is becoming inevitable in this paradigm shift (Gomes, Alves & Silva, 2018). Smith (2010, p. 14) states that the courts can now offer extensive information about their activities and information that citizens seem to value using emerging technologies. In this study, we established the extent to which the deployment of an online information system is helping to enhance justice delivery in one of the world's least developed countries where ICTs are beginning to flourish. Our particular interest is on the services offered, benefits accrued, and challenges encountered in the use and operation of an electronic case management system (ECMS). We then propose various recommendations and insights that are necessary for the smooth operation of the system in a country under study.

1.1 | Unpacking the role of ICTs in the judiciary

Most governments worldwide have over the past decades turned to ICT, particularly the Internet, to offer access to information and services; these initiatives have been received positively by the citizens. New ICTs provide possibilities for administration and delivery of justice (Gomes et al., 2018; Freitas & Medeiros, 2015; Friedman, 2007), thereby improving the quality and delivery of justice (Bhattacharjee, 2012). Studies on the intersection of ICTs and the judiciary have shown that ICT has a great role to play in upholding democracy in both developed and developing countries (Gomes et al., 2018; Louro, Santos, & Filho, 2017; Freitas & Medeiros, 2015; Rosa, Teixeira, & Pinto, 2013; Andrade & Joia, 2012; Hindman, 2009; Foot & Schneider, 2006; Reiling, 2006). In developing countries, these ICTs are portrayed as innovative tools that offer opportunities to increase the quality, efficiency, and transparency of court proceedings while at the same time granting more equitable access to justice (Amare, 2015; Egonda-Ntende, 2005; Hunter, 2012; Kagucia, 2010).

Some authors have warned that failure by courts to adopt ICTs can lead to poor justice delivery. Fairchild, Vuyst, and Azran (2006) note that failure to embrace ICTs can result in a judicial digital divide, which is defined as the inability by the courts to take advantage of the ICT, inability of the judiciary to serve the citizens and business entities through ICT, and inability to employ ICT tools for solving legal information problems. These ICTs have been applied differently in different sectors of the judicial system, and their implementation has varied extensively with respect to the country's legal culture and needs (Procopiuck, 2018). It has been noted that while ICTs have been embraced in some courts in a few countries, some kinds of technologies are encouraged, whereas others are banned or not accepted by legislation (Hunter, 2012). ICT solutions in courts range from the use of simple videoconferencing (Gomes et al., 2018; Dumoulin & Licoppe, 2016) to cyber courts and simple electronic controls for creating and locating documents as well as fully electronic processes and judgments (Freeman, 2005).

One ICT area in which the judiciary has heavily invested is the automation of its services through the introduction of what is commonly called an ECMS. Such types of systems have been hailed as key in deterring misuse of power or corruption, case postponement, and delayed decisions in courts (Saman & Haider, 2012). An ECMS can also reflect the good image of a judicial system and uphold the rights of individuals and society at large. Watson (2014) observed that ECMS is intended to form a baseline for daily support of the judiciary's business operations, thus enhancing the sector and improving the country's justice system, in particular on access to justice for all. The system is also intended to promote speedy dispensation of justice by making it easier in following up case progress because documents are filed and issued electronically to the courts registrars, thereby reducing the time and the process for processing these files. More importantly, the ECMS reduces the notorious untraceable and missing of files, which are prevalent in traditional or manual records management systems. Furthermore, the ECMS helps in clearing the backlog of trials that are ready for hearing and clearing partly heard matters; and it avoids creation of a fresh backlog of cases and outstanding judgments (Molomo, 2013). Open access to the court services is critical, as it is "a fundamental principle of any legal system, and courts should aspire to be as transparent and informative as possible to ensure their legitimacy" (Parkin & Wedeking, 2017, p. 22).

1.2 | The judiciary of Malawi: Some brief facts

In Malawi, the judiciary is established under Chapter 9 of the Constitution of the Republic of Malawi 2004 revised (Malawi Government, 2004). It is independent from other government functions as stipulated under Section 103 Subsection one of the Malawi Constitution. The judiciary provides a forum for the just resolution of disputes in order to preserve the rule of law and to protect the rights and liberties guaranteed by the Constitution of Malawi. The judiciary of Malawi is headed by the Chief Justice, who is also one of the justices at the Supreme Court of Appeal. The Malawi courts are categorised into three: the Supreme Court of Appeal, the High Court, and the subordinate Court (Magistrate Court).

The judiciary of Malawi has embraced and deployed ICT in order to smoothen its operations. However, one landmark form of ICT introduced by the judiciary of Malawi is an ECMS. The system was introduced in 2015 in response to the reforms orchestrated by the Malawi Government, which demanded that all government departments and agencies start doing their businesses in a more efficient way. The system is deployed in the High Court and Supreme Court of Appeal of Malawi. The idea was to replace the tedious and inefficient manual court management system, which has been used by the judiciary since its establishment many decades ago. The system was funded by the European Union (Kasalika, 2016).

2 | STATEMENT OF THE PROBLEM

Prior research has confirmed that access to the legal system is critical in any democracy (Parkin & Wedeking, 2017). It is, therefore, fundamental that the legal system of any country should strive to have its courts transparent and open to the citizenry. Legal scholars have documented various challenges that undermine efforts by the courts to execute and deliver quality justice to its users. For instance, most courts including those in developed economies are grappling with making courts services easily accessible by the users (Parkin & Wedeking, 2017; Rhode, 2004). In the same vein, researchers in the legal profession have channelled their energy in uncovering solutions to challenges confronting the legal system. One solution widely hailed in the legal literature as having a potential to solve existing problems in the courts is the appropriation of ICTs. For instance, advancements of the Internet (Freitas & Medeiros, 2015; Friedman, 2007; Gomes et al., 2018; Parkin & Wedeking, 2017; Schmidt & Cohen, 2013) imply that courts can deploy their services online where users can access using various applications such as mobile technologies in

the comfort of their homes and anywhere and at any time (Smith, 2010). In fact, deploying court services online helps to enhance the legitimacy and transparency of the courts (Dijk & Dumbrava, 2013; Hunter, 2012; Parkin & Wedeking, 2017). It is therefore not puzzling that courts across the world have strengthened their efforts in embracing ICTs to enhance service delivery to their users through the development, adoption, and deployment of ECMS (Bhattacharjee, 2012; Gomes et al., 2018; Watson, 2014; Molomo, 2013).

The unparalleled impact of ICT has not spared Malawi. Government agencies including the judiciary have doubled their efforts to incorporate ICTs in their business operations. For instance, the judiciary of Malawi introduced an ICT-based system called the ECMS in 2015 with the aim to harness the power of ICT in handling and managing cases that it handles on daily basis. Among other specific aims, the ECMS was aimed at helping in clearing backlog and tracking of trials that are ready for hearing, clearing partly heard matters, tracking and communicating judgments, and to reducing duplications of files. However, one of the authors, who works as a Senior Court Clerk in the judiciary of Malawi, has observed that despite the deployment of the ECMS, there are seemingly still some backlogs of unprocessed cases in most court registries. A question arises as to what is contributing to the current perceivable unfavourable situation of backlog of cases given the expectation that it could be a forgotten history with the deployment of the ECMS. More so, since the inception of ECMS in the judiciary of Malawi in 2015, no study has been conducted to assess if the ECMS is delivering the intended purpose of efficient handling and administration of cases. The aim of the study is to evaluate the ECMS success in the Malawian judicial system. As such, the researchers in the current study evaluate the ECMS by looking at services, benefits, and challenges associated with the use of ECMS in the judiciary of Malawi. The problem is investigated by achieving the following research objectives:

- to identify the services offered by the ECMS in the judiciary of Malawi;
- to determine benefits accrued from the deployment of the ECMS in the judiciary of Malawi; and
- to ascertain the factors that affect the operations of the ECMS in the judiciary of Malawi.

3 | LITERATURE REVIEW

Courts have adopted ICTs on a large scale as a solution to various challenges they are facing “such as limited access to justice services, high levels of congestion in courts and delays in the adjudication of lawsuits” (Gomes et al., 2018, p. 1). Gartner Consulting (2009) and Mbugua (2012) mention a number of ECMS services, which include case initiation; case management; calendaring; filing judicial notices; monitoring of cases, rulings, and judgments; delivering probate notes; hearings/courtroom events; exhibiting storage; registering of actions on each file; appeals and cases disposition. Deployment of ECMS is reported to come along with various benefits to the courts. Loewer (2015) reports that an ECMS enables users to easily accomplish the work of the courts through its architecture that encompasses web and mobile based user interfaces, flexible workflow, comprehensive definition of business rules, and robust security features. It also enables electronic filing, electronic forms, and document management functionality and ease interaction with the courts for all participants (Loewer, 2015). The ECMS is also hailed for its ability to provide greater support for the electronic interchange of information between the courts and external stakeholders and greater access to accurate and timely judicial information. This is in addition to its provision of an increase in accessibility to judicial defence for society by means of simplifying court filing procedures, simplifying legal assistance in simple standard cases, and facilitating the understandability of the judicial decisions (Mbugua, 2012). The adoption of ICTs by the judiciary has been hailed further as a successful strategy to accelerate execution of justice to the seekers of justice (Gomes et al., 2018; Louro et al., 2017; Freitas & Medeiros, 2015; Rosa et al., 2013; Andrade & Joia, 2012; Hindman, 2009; Foot & Schneider, 2006; Reiling, 2006). In fact, much time is saved when ICTs are used in the delivery of court services, thereby accelerating the administrative activities of the courts (Hunter, 2012).

Regardless of the many benefits brought about by the deployment of ICTs such as ECMS in courts, there are a number of challenges that continue to limit greater utilisation of these systems. One such challenge is that, commonly, the ECMS tends to operate in parallel with the traditional paper-based filing system. Although such an arrangement is acceptable and encouraged, the unfortunate result is that the level of effort required from the court registry clerks is duplicated, as they are supposed to handle the paper-based and electronic files by themselves (Mbugua, 2012). Another challenge is lack of computer skills on the part of judiciary staff and potential users. For example, Loewer (2015) found that in most courts in Lesotho, the ECMS was being used for the first time; as such, court staff were computerising their business processes for the first time, and many of the civil and criminal registry clerks lacked computer skills. The key reason for such poor skills in use of the electronic systems according to Watson (2014) is that courts of most countries in Africa have just recently computerised their business processes, and many of the civil and criminal registry clerks are using the systems for the first time, hence the problems.

3.1 | Examples of electronic management systems

There are many countries where the judiciary has embraced ICTs in the delivery of justice. Herewith, we examine three countries: Brazil, Australia, and Kenya.

3.1.1 | Brazil

In Brazil, the judicial information is now accessed via online portals, a departure from the tedious and somewhat bureaucratic traditional system. Before the introduction of the online portal, users of the Brazilian courts had to physically visit the courts for any queries, and this could lead to clients' missing important information such as hearing and judgment dates. However, with the deployment of computerised systems in the courts, all the horrors that Brazilian citizens used to go through in accessing justice are now history, as all the previous challenges have been decisively eliminated (Oskamp, Lodder, & Apistola, 2004; Veronese, Fontainha, & Fragale, 2006). The general public, the private practising lawyers, and public bodies are connected to the courts' web portals (Veronese et al., 2006), where they access various services of interest (Gomes et al., 2018; Bar-der, 2006).

3.1.2 | Australia

Historically, Australia is one of the countries that has used ICT in courts for decades, dating back to 1980 (Federal Court of Australia, 2009). Its web-based system offers various services to its citizens and other stakeholders. These services and functions include litigation support, evidence presentation, electronic courtrooms, knowledge management, electronic filing, electronic search, e-courts, and integrated justice (Federal Court of Australia, 2009).

3.1.3 | Kenya

In order to transform its image and restore confidence to the general public, the Kenyan judiciary resorted to introducing ICTs to improve its service delivery; one such technology is the introduction of the ECMS at the Eldoret Court in 2011 (Mbugua, 2012). Since the ECMS was implemented, various benefits have been realised in terms of service delivery to the general public. The system has led to the reduction in operational costs: The information is now available at a click of a button. It has also boosted the morale of staff, thereby leading to job satisfaction. Finally, it has enhanced the security of court documents, while levels of fraud or corruption are significantly reduced (Mbugua, 2012). The only unfortunate part however is that not all courts in Kenya have implemented the ECMS.

We further present in Table 1 a summary of how some different countries are utilising ICTs for internal operations and engagement with the general public as part of the implementation of the concept of e-justice.

4 | THEORETICAL FRAMEWORK: THE INFORMATION SYSTEMS SUCCESS MODEL

There are a number of models that are used to understand adoption of new technologies or innovations. One such model is the information systems success model (ISSM) (DeLone & McLean, 2003), which underpins this study. According to the ISSM, the measurement of an IS favourable outcome or efficacy is a requisite to an appreciation of the worth and success of IS management actions and investments. The ISSM is a multi-dimensional and correlational model made up of the process model and causal model, which focuses on the interconnection among the variables. In expounding their model, DeLone and McLean (2003) suggest that IS was first designed containing mixed features displaying different levels of system quality such as usability, reliability, adaptability, and response time. When the systems are implemented and operational, managers and users encounter these attributes by using the system, and they could be either satisfied or dissatisfied. Causes of satisfaction or dissatisfaction emanate from the systems' level of personalisation of the web content, relevance, completeness, easiness of understanding, and security (DeLone & McLean, 2003).

The use of the system and the information products it offers will impact on the individual user in the conduct of their work, which will eventually translate the impact of the results into the organization as a whole. Usage focuses on measuring aspects such as visits of the system's website or portal, its navigation, retrieval of the needed information, and execution of transactions (DeLone and McLean (2003). In the context of the judiciary, user satisfaction is key in measuring the efficiency of the IS, which has an impact on justice dispensation and which eventually affects satisfaction from clients' point of view. The ISSM emphasises that the success of innovation is measured by the benefits it brings to the diverse stakeholders it serves. In this case, the question is what benefits does the ECMS bring to court's stakeholders such as clients, suppliers, employees, organisations, and the societies at large? DeLone and McLean (2003) theorise that the causal model measures the strength of the success elements to prove if there exists a causal relationship among them. For instance, higher system quality is envisioned to lead to higher user satisfaction and use, thereby leading to positive net benefits on individual productivity, which ultimately, translates into organisational productivity enhancements.

Thus, in order to measure the success and effectiveness of the ECMS in Malawi, the ISSM underpinned this study to examine: the system quality, namely, availability and usability of the ECMS in Malawi; information quality such as the ease of understanding, relevancy, and security of the information quality; service quality mostly responsiveness; use such as nature of use, navigation patterns; user satisfaction, namely, repeat visits; and net benefits such as reduced search costs and time savings. In selection of the aforementioned IS success dimensions and measures,

TABLE 1 Use of ICTs in courts in some selected countries

Country	Application of ICTS in Courts
United States	Public access to court electronic records PACER Case Locator (PCL) PACER fee waiver
Australia	eSearch—for public to search cases e-Filing—electronic document lodgement eCourtroom—virtual courtroom for pre-trial matters eCase administration—for legal practitioners and parties to communicate with court Chamber staff securely Commonwealth courts portal
Singapore	eAlternative dispute resolution (e@dr) eJustice judges' corridor Justice online—a global forum and virtual think-tank for judges Electronic File System, which includes electronic filing service, electronic extract service, electronic service of documents facility, and electronic information service Small claims tribunals—forum for the resolution of small claims Automated traffic offence management system: an eService which allows the public to enquire on their traffic police, urban redevelopment authority, land transport authority and housing development board court fines, plead guilty to the offences and make payments electronically
Canada	e-Filing—available in English and French, allows a party or the party's legal representative to file documents electronically with the Federal Court via a secure, Internet-based system, in all areas of the court's jurisdiction Electronic legal service—electronic legal service allows a party or the party's legal representative to serve documents electronically pursuant to rule 147 of the federal courts rules
UK	Money claim online for small claim Payment of fine online Possession claim online (PCOL): aims at managing property ownership claims online when tenants fail to pay rent XHIBIT: provide information case hearing
India	e-Filing, includes Case filing via the Internet Payment of court fees online by credit or debit card Online case registration Online document delivery Serve notice via e-mail Online dispute resolution mechanism

Source: Saman and Haider (2013, p. 260).

the researchers were cognisant of the objectives and context of the study. Malawi is a developing country whose ICT infrastructure is at developmental stage. Despite the multidimensionality and contingent measure of the IS, an attempt has been made to reduce significantly the number of measures used to measure IS success of the ECMS in Malawi. The study has also applied existing validated measures as advised by DeLone and McLean (2003). The ISSM is presented in Figure 1.

5 | METHODOLOGY

The study took place in the judiciary of Malawi targeting two categories of courts, namely, courts under the High Court and the Supreme Court of Appeal. There are four courts under the High Court, and they are located in Blantyre, Lilongwe, Mzuzu, and Zomba. These courts hear cases with unlimited jurisdiction (cases of any nature). The High Court is superior to the Magistrate Courts, meaning it hears cases that come to its attention from the Magistrate Court (subordinate courts) by way of appeal, review, committal, transfer, and confirmation. Apart from hearing cases, the High Court has original jurisdiction to review any law and any action or decision of the government. The Supreme Court of Appeal is only located in Blantyre, and it is the appellate court and has jurisdiction to hear cases from the High Court and such other courts or tribunals that are prescribed by the Act of Parliament, and it is composed of justices of appeal. This means that it is the most superior court in Malawi; the judgments it delivers are final on the land of Malawi. The study took place at the High Court and at the Supreme Court of Appeal, because it is at these courts where the ECMS was deployed and fully operational at the time the study took place.

The study purposively targeted judges, court registrars, court clerks, and information technology (IT) staff for inclusion in the study. Kumar (2011) states that the primary consideration in purposive sampling is the researchers' judgment as to who can provide the best information to achieve the objectives of a study. The researchers deliberately choose these respondents because they could provide required information for answering the research problem. Judges were included because they use the ECMS in communicating about rulings and judgments they make.

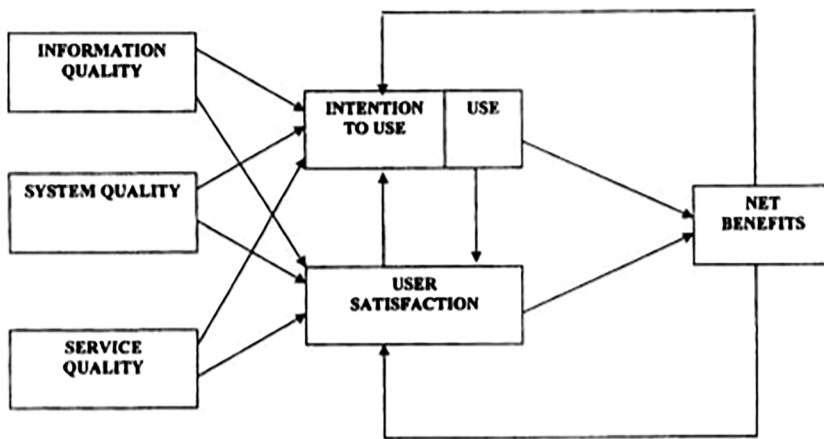


FIGURE 1 Information systems success model (ISSM) (DeLone & McLean, 2003)

Court registrars were also included because they use the system to issue electronic documents filed to their offices. Court clerks are managers of the court registries, and they use the system in adding various forms of information; they are assistants to the judges, registrars, and magistrates. IT staff were included in the study because their department is responsible for the general maintenance of the system.

A positivist paradigm guided this study. A survey through the use of a questionnaire was used to collect data from judges, court registrars, court clerks, and IT staff. The questionnaire largely contained closed-ended questions with an allowance of open-ended questions (Onyango, 2002). The survey questionnaire items (see Appendix A) used for this study were adapted from previous related studies (Gomes et al., 2018; Hunter, 2012; Mbugua, 2012; Oskamp et al., 2004; Veronese et al., 2006). The ISSM (2003) also guided the researchers in developing the questionnaire.

As issues of ethics are paramount in any research, the researchers adhered to all ethical requirements. Prior to commencement of the study, the researchers sought and were granted permission by the Chief Justice of Malawi to collect data from the courts. To guarantee confidentiality and anonymity of respondents, the participants were not allowed to indicate any information identifying them as respondents. Respondents were further assured that information collected was used for the purpose of the study only.

6 | RESULTS

We sent questionnaires to 84 participants of whom 56 (67%) responded. In terms of gender, 28 (50%) respondents were males whereas 28 (50%) were females. The results suggest that there is even distribution of staff in terms of gender in the courts of Malawi.

In terms of designation, as can be seen in Table 2, the study found that there were more court clerks followed by ICT personnel and judges. The least represented group was that of registrars and reporters. The results suggest that there are many court clerks compared to other categories of ECMS users in the courts of Malawi. This is the case because court clerks are responsible for serving all court categories (Magistrate, High Court, and Supreme Court of Appeal) and are, therefore, recruited in large numbers.

6.1 | Usage of the system

In terms of usage, the ISSM emphasises on the need to measure various aspects of the system such as visits to the web portal, navigation within the web portal or website, retrieval of information, and execution of tasks. In this study, inspired by the ISSM (DeLone & McLean, 2003), we attempted to investigate the services offered and used by the ECMS. These information services are commonly called information products. The study found that the ECMS offers various services. According to the findings, 41 (73.2%) respondents mentioned that they used the system to register new court files; 33 (58.9%) respondents used the ECMS to file case documents, and 24 (42.9%) respondents mentioned that they used the ECMS to retrieve case files. In addition, the results showed that the system is used to view case files; to exchange work-related information;

TABLE 2 Respondents by designation (n = 56)

Designation	f	%
Court clerks	37	66.1
ICT personnel	9	16.1
Judges	5	8.9
Registrars	3	5.4
Court reporters	2	3.5

to issue notices of court hearing and to communicate judgments; and to process appeals and disposition of cases with scores of 27 (48.2%), 31 (37.5%), 17 (30.4%), and four (25%), respectively. To perform these activities or tasks, users had to access the system through its web portal or website, suggesting that the usage of the system is high. To access the system, all users (100%) used laptops, and some used desktop computers (42.2%), smartphones (17.9%), tablets 5.4%, and iPads (1.8%). Laptops were mostly used because they are supplied by the courts as part of the ECMS project.

According to the ISSM, the success of a system is among other aspects measured by its usage by its target users. In this case, it can be concluded that the system is achieving its goal of its implementation. In summary, the findings suggest that as envisioned by the ISSM, the ECMS in the judiciary of Malawi offers various products, which are accessed by users. The results of this study are in line with the results by the Gartner Consulting (2009), which also found that staff in the California courts used the ECMS to provide services such as registering new cases; case initiation/commencement dates; filings; calendaring/issuing of electronic notice of hearing; delivering of rulings; and storage of exhibits, appeals, and disposition.

6.2 | System quality

According to the ISSM, it is important to take into consideration the aspects of reliability of the Internet, usability of the system, availability, and response rate or download time. Performance in relation to these aspects can inspire the user to either shun or use the system. We, therefore, attempted to find out how these aspects affected the operation and use of the ECMS, thereby helping to ascertain its quality. The findings are depicted in Table 3, where it is observable that the majority of the respondents acknowledged that frequent loss of network, slow Internet access speed, shortage of staff in the registry, frequent blackout or power outages, and lack of ICT operational skills are the most common challenges. The findings imply that the quality of the system is not up to standard because it fails to conform to the thresholds of the ISSM, which are characterised by reliable Internet, availability, reliability, and response time or download (DeLone & McLean, 2003, p. 25).

One aspect not inspired by the ISSM came out during the study as a challenge: the shortage of staff. Shortage of staff in the registry has led to extra work for the registry clerks, as they have to handle the paper-based filing system and the ECMS by themselves because the paper-based system is still maintained alongside the ECMS. However, the number of staff in the registry is still the same. In other words, despite introducing the new system, no efforts were made to recruit more staff. For instance, when the study was being conducted, court registries at the high courts of Mzuzu and Zomba had four court clerks each who handle both civil and criminal work. This in return has led to some implication on justice delivery by the courts, as this implies that there is increased waiting time for clients to be served in the registry.

6.3 | Service quality

This element of the ISSM focuses on the overall support the service offers to the users. In this study, the support was envisaged to come from the ICT department of the courts. The study found that quality of the services was satisfying considering that according to the findings presented in Table 3, only a small number of users complained about lack of skills to operate the system and the complexity of the system. This support was achieved through training in form of orientation by the judiciary ICT department that ranged from 1 week to a month. Specifically, 26 (46.4%) respondents were oriented for 1 week, while 16 (28.6%) were oriented for 1 month. Other means of support included from colleagues (nine or 16.1%) and other means (five or 8.9%). The results suggest that the ICT department in the judiciary of Malawi provides enough support in form of training on how to use the system, hence conforming to the service quality aspect of the ISSM.

TABLE 3 Challenges experienced when using ECMS

Challenge	f	%
Frequent loss of network	52	92.9
Slow Internet access speed	47	83.9
Shortage of staff in the registry	29	51.8
Frequent blackout or power outages	23	41.1
Lack of adequate operational skills	20	35.7
Pressure from legal firms and other clients	19	33.9
The system is too complicated to use	4	7.1

Note. Multiple responses were allowed.

6.4 | Information quality

According to the ISSM, information quality is about how web content is personalised, complete, relevant, easy to understand, and secure (DeLone & McLean, 2003). According to the findings of the study, the system adhered to security issues, which are the aspects of systems quality; the study showed that 30 (53.6%) respondents said that the system is used to secure case files. Files captured and stored in the system could not be misplaced or damaged. The system has therefore made the work of users easier who indicated that before the ECMS was implemented, cases of missing files due to misfiling and damage were inevitable. More importantly, the quality of the information cannot be questioned considering that respondents indicated that they did not have problems in using the content that they accessed via the system's web portal, implying that the information was easy to understand and use.

6.4.1 | User satisfaction

User satisfaction remains a key strategy in determining users' opinions about any e-system covering overall customer experiences in terms of all online transactions. In this study, user satisfaction was measured by asking respondents to rate the performance of system using the Likert scale with four statements, namely, very good, good, poor, and very poor. Findings show that the majority of respondents were satisfied with the performance of the system, with 40 (71.4%), 15 (26.8%), and one (1.8%) rating the system as good, very good, and poor, respectively. None of the respondents rated the system to be very poor.

6.4.2 | Net benefits

According to the ISSM, the success of an IS is measured by the overall benefits it brings to the users and the organisation as a whole (DeLone & McLean, 2003). Because the study is informed by the ISSM, we found it necessary to investigate the benefits brought about by the ECMS in the judiciary of Malawi. This was necessary to better determine the balance of positive and shortfalls of the system. If challenges eclipse benefits, the system could be viewed as unnecessary burden, argues DeLone and McLean (2003).

Generally, the study revealed that the ECMS has brought a number of benefits in the courts of Malawi especially in handling and managing court cases. It is worth mentioning that access to the ECMS is restricted to members of staff in the courts; users such as lawyers and clients do not have access rights to the system. Thus, as explained in Section 5, the findings are based on the data collected from the staff under the courts in Malawi. As can be seen in Table 4, respondents indicated that the system has helped to improve security of case files or documents because cases of missing or loss of case documents no longer exist. Because the system is web based, it is not possible to lose documents uploaded on it. To ensure that all files are uploaded, that is, to minimise human errors, counterchecks are conducted. Once the files have been entered, they can only be deleted by systems administrators through formal request; the system keeps track of all deleted documents. More importantly, because regular backups are made, the information stored in the system is secure. The system has enhanced the process of tracking and retrieving of court files. This is made possible because being a web-based system, it is easier to search and retrieve the documents.

According to the findings, easy searching, tracing, and retrieving of documents have led to improved service delivery. According to the findings, improved service delivery is noticed in various ways; namely, there is faster delivery of judgments because judges can easily find all necessary documentation in the system, it has facilitated communication about judgments or rulings because judges upload judgments on the systems as soon as they are made, and court clerks access them immediately and communicate to users such as lawyers and their clients. Findings show further that the system has improved sharing of information between the courts and the office of the Director of Public Prosecution (DPP). The DPP is a government agency or department charged with the duties to investigate and prosecute any criminal case on behalf of the government. The office of the DPP is able to access information and view case progress at the court, right away from its offices, thereby leading to expedited exchange

TABLE 4 Benefits of ECMS (n = 56)

Benefit	f	%
Improved security of case files	42	75.0
Easy to track and retrieve case files	40	71.4
Improved service delivery by the courts	35	62.5
Efficiency in the administration of cases	35	62.5
Intelligent case allocation	25	44.6
Increased access to court files by users (lawyers and clients)	25	44.6
Integration and improved information sharing between the courts and the DPP	24	42.9
Easy sharing of information exchange between courts	20	35.7

Note. Multiple responses were allowed.

of information with the courts. Thus, when interpreted through the lens of the ISSM, the users in this context are staff in the courts and from the office of DPP. Based on these findings, it is safe to conclude that the ECMS is a milestone towards achieving a more efficient, transparent, and accountable service delivery and administration in the judiciary of Malawi. The findings conform to the element of net benefits as advanced by the ISSM (DeLone & McLean, 2003), which underpins this study.

7 | DISCUSSION

7.1 | Usage

We found that the users of the system were members of staff in the Malawian judiciary. The system was used for various purposes including registering new court cases and issuing notices for court hearing and appeals. Generally, the usage of the system is high, and this can be attributed to the fact that judicial members of staff are compelled to use the system—it is a requirement. In this case, the ECMS has helped to reduce information search, thereby saving time in retrieving information and executing activities, which are key characteristics of a good system as proposed by the ISSM. Previously, finding information required the judicial staff flipping back and forth in a pile or stack of files in order to retrieve relevant information, and this was tedious and time-consuming. The findings are similar to those reported by Hunter (2012), who found that countries such as the United States, Canada, Australia, and Singapore have adopted various forms of ICTs that their courts are using for online consultation and registration, and filing and digital exchange of legal documents.

Unfortunately, this study found that other key stakeholders of the courts; namely, private practising lawyers, police, and prison officers who are critical in the loop of justice delivery have not been granted rights to access the system. The fact that only court staff have access to the system suggests that millions of users bank their hope on their lawyers to track the progress and outcomes of their court cases. Worse still, private practising lawyers and government legal entities are also themselves dependent on the information available in the system; they too pile pressure on the few court clerks who have access to the system. This implies that there is a gap between the courts and the actual users, particularly, the citizenry. The gap is created by the current set up of the ECMS whereby the client has to approach the lawyer who then approaches the court clerks to find out the progress or official outcome of the case or queries. Based on this development, it can be concluded that the system is at best only partially implemented. To conform to the ISSM (DeLone & McLean, 2003), the court authorities and concerned stakeholders are challenged to extend access to the system by opening its web portal or website to the public so that all potential users can access the system and its services. Parkin and Wedeking (2017, p. 22) propose that “connecting to one’s state court system via the Internet is a crucial link for citizens in the twenty-first century.” When citizens have direct access to the system and do not have to depend on their physical contact with their lawyers or court clerks to track their cases or queries, the notion of “open justice” (Sandoval-Almazan & Gil-Garcia, 2018) will have been achieved.

7.2 | System quality

Generally, the study found that the system under study failed to conform to most aspects of system quality as propounded by the ISSM (DeLone & McLean, 2003). The network frustrated the users as it was only haphazardly available, implying it affected the efficiency of service delivery. The cause of the system’s intermittent network could be attributed to unreliable Internet connectivity and provision. It is worth mentioning that the judiciary of Malawi is a public institution. Because of financial constraints, it is sometimes difficult to afford high-speed Internet, which is generally expensive. Hence, the authority ends up buying limited download bundles from Internet service providers. The problem of the Internet in Malawi is not new because many other studies (Chawinga & Majawa, 2018; Nyasulu & Chawinga, 2019; Zozie & Chawinga, 2018) have reported that recurrent Internet problems affect other public sectors such as education. Again, both the system’s network failings and Internet outages can further be attributed to electricity blackouts, which are prevalent in Malawi, thereby affecting operations of ICT equipment such as computers and servers. Electricity outages are chronic in Malawi as reported by various scholars (Chawinga, 2017; Chawinga & Zinn, 2015; Chawinga & Zinn, 2016). To improve the system quality, it is necessary for the court authorities and stakeholders to ensure that the Internet is improved through identifying reliable Internet service providers and making sure that alternative sources of power supply such as solar and generators are procured to supply power when electricity from the national grid is cut off. Systems quality is fundamental in any system (DeLone & McLean, 2003); in this study, therefore, poor Internet connection led to poor responsiveness of the system, which eventually led to dissatisfaction among some users.

Personnel are key in running the system. In the current study, the problem was that the number of staff was inadequate because the current system was run in parallel with the paper-based one. This arrangement puts pressure on the limited number of staff assigned to this duty. As already highlighted, the system is not yet extended to the law firms. As a result, lawyers and other court users bring large volumes of hard copy documents to court instead of soft copies. This requires the clerks in the registry to open hard copy files in which such hard copies are kept after the scanning is made and the same are uploaded as soft copies in the ECMS. These findings are similar to those from a study by Mbugua (2012) in Kenya, who found that the paper-based system had to be maintained in parallel with the electronic record, thereby duplicating work and placing unprecedented work pressure on court clerks.

7.3 | Service quality

It has to be restated that we noted that the judiciary of Malawi has an ICT department that ensures the smooth running of the system. It was therefore not surprising that most users were able to use the system without any problem having received adequate training or orientation on how to use the system. Actually, most users did not find the system to be complicated. We suggest that the users are able execute various activities without any problem. We believe that the users are encouraged to use the system because of the support they receive from the ICT personnel. In line with the ISSM (DeLone & McLean, 2003), the problems that the system poses to users can lead to dissatisfaction among users. In this study, however, only a few users lacked the skills for operating the system. These findings are in contrast to those reported by Watson (2014) who found that lack of user skills affected the use of the ECMS in the High Court of Lesotho.

7.4 | Information quality

The study proved that the system is secure in the sense that issues of file misplacement and loss no longer occur. The system permanently keeps track of all files that have been deleted. The implication is that the system cannot be abused by systems' administrators, thereby enhancing transparency and accountability of the justice delivery to the Malawian citizenry.

7.5 | User satisfaction

Generally, users were satisfied with the system. Satisfaction in this case can be attributed to the fact that previously, users were using a manual system (paper based), which was tedious and time-consuming, while the new system has made users' work efficient by saving time and minimising filing and loss of documents. User satisfaction in this study could as well be attributed to the fact that users received enough support (service quality) from the ICT personnel; if the system was difficult to use, users could have been frustrated and may have inevitably rated the system as poor and unsatisfactory.

7.6 | Net benefits

According to the findings, the system has to some extent enhanced the delivery of justice to the Malawian citizenry. In particular, the deployment of the system has helped to remove geographical barriers blocking the communication and sharing of information among court employees themselves, with the office of the DPP, and with other legal stakeholders. Improved communication between the courts and the DPP is a great landmark worth acknowledging and celebrating towards justice delivery in Malawi. Previously, communication between the two institutions was performed using what can be described as time-consuming communication channels such as making telephone calls, fax, and face-to-face (through the use of messengers and courier services). For instance, the system allows the judges to upload judgments immediately when they are delivered; this is seen as one way of removing communication bottlenecks within the judiciary of Malawi. Considering that the system has simplified search, retrieval, and exchange of information among the courts within the judiciary of Malawi is a testimony that the system has brought about efficiency in the delivery of justice in Malawi. These findings suggest that the system conforms to the systems requirement as proposed by ISSM (DeLone & McLean, 2003), which mentions that a good system has to facilitate navigation, retrieval of the needed information, and execution of transactions. In other words, the system delivers benefits to the judiciary of Malawi. Similar results are reported in Turkey by Ergin (2010), who noted that the deployment of web-based systems in courts has helped to improve justice delivery by simplifying court processes and understandability of the judicial decisions by the communities, thereby blurring the gap between the legal system and the public. In fact, our study findings echo the notion that courts that invest in technologies commonly reap best outcomes "in terms of efficiency and productivity" (Gomes et al., 2018, p. 483) resulting from improved communication between courts and the public through the use of electronic portals (Velicogna, 2007).

Another benefit worth mentioning is security of files or documents. The fact that the files are kept online with appropriate backup implies that court clients are assured of the safety of the documents they file with the courts. Safety of the documents means that no matter how long the court case may take to be concluded, none of the documents can be misplaced, lost, or altered. These documents can be archived, thereby remaining available and accessible long after the court cases have been concluded or discontinued.

8 | IMPLICATIONS OF THE FINDINGS FOR THE GLOBAL JUDICIARY

Although some studies provide evidence that in some cases, the adoption of ICTs in courts does not significantly impact on judicial performance (Procopiuck, 2018), our study proves otherwise. We find that although quick judicial service delivery depends substantially on the commitment of judges and their assistants (court clerks), the use of an ECMS allows these professionals "to have working conditions that favour improvement in

terms of production" (Gomes et al., 2018, p. 483). Judges use the system to make judgments communicated within the judiciary of Malawi at a distance and view court decisions by other judges across the country without necessarily needing to make calls or physical visits. We caution, however, that despite improving the functionality of the courts in various ways, new technologies cannot replace expert-related tasks that are beyond the capability of technologies. For example, we entirely agree with Gomes et al. (2018, p. 487) that "processing judgments, an essential element in the role of the courts, continues to be an activity exclusively for judges, which requires reflection and time for analysis, and, therefore, those judicial activities do not change substantially with the new technologies." This means that even if the global judiciary can invest hugely in ICTs, the judgment maybe a productive red tape that the new technologies cannot influence. In this regard, the most important recommendation we want to make to the global judiciary is that researchers and court administrators and other stakeholders should be steadfast in finding ways to deploy ICTs that can effectively provide better jurisdictional services. In other words, deployment of proper ICTs or any innovation in the legal systems only facilitates service delivery; it does not replace expert knowledge or skills.

9 | CONCLUSION AND RECOMMENDATIONS

Using the ISSM (DeLone & McLean, 2003), the study assessed the ECMS in the judiciary of Malawi focusing on the services it offers, and its benefits and challenges experienced. The key services offered by ECMS include registering new court files; filing case documents; securing court documents; viewing and retrieving case documents; exchanging information between courts and the DPP; storage of court documents; communication of court hearings, judgments and ruling delivery; and disposition of court cases. The study found that the ECMS has brought a number of benefits to the judiciary of Malawi including improved security of court documents; easy tracking and retrieval of court documents; and improved integration and information sharing between the courts and the DPP; and it has improved access to court files. The deployment of the ECMS has not been short of challenges according to the findings. They include shortage of staff in the registries, and slow Internet and frequent power outages, which jointly led to intermittent network. Generally, the study established that the system is a success because it has brought substantial net benefits to the judiciary of Malawi, thereby conforming to the key attribute of the ISSM (DeLone & McLean, 2003). We however reiterate that deployment of ICT alone will not be enough in satisfying the public on the performance of courts; instead, we recognise that the justice system goes far beyond the capability of ICTs.

Our study makes a unique contribution to the field of e-justice by providing empirical evidence about the role of an ECMS towards achievement of transparency and accountability in the delivery of justice in courts. We also highlight the limitations of the current system in the judiciary of Malawi, notably the failure to connect directly with main users such as the lawyers and the general public. We in turn use the findings to caution global judiciary stakeholders that the deployment of ICTs does not replace expert knowledge or skills; it only enhances justice delivery.

We hope that court administrators and stakeholders in Malawi could potentially use these findings to make the system more effective and rewarding to the judiciary of Malawi users and other stakeholders. Specifically, based on the findings, the study recommends that the judiciary of Malawi should improve Internet, which directly affects systems network by increasing network bandwidth. Another factor causing internment network is unreliable electricity, hence the need to purchase standby generators that should automatically power the ICT facilities in courts when electricity from the national grid goes off. Good network means there is no interruption of serviced delivery as also suggested by the ISSM (DeLone & McLean, 2003) on the attributes of systems quality, which impacts user satisfaction.

More importantly, the judiciary of Malawi should speed up the process of connecting the system to court users. This is necessary because it will then be easier to assist the general public in terms of providing legal assistance, facilitating the understandability of the judicial decisions, thereby lessening the divide between courts and the society the legal system is mandated to serve. In fact, Gomes et al. (2018, p. 489) warn that "new technology cannot be restricted to the internal management of the courts, it must also be aligned with the satisfaction of users and society in general." This notion is also advanced by the ISSM (DeLone & McLean, 2003).

Finally, we propose further the need for more research that aims at identifying mechanisms for improving penetration and access to the Internet, which is key in the delivery of e-justice to the general public. This research is particularly vital in developing countries where access to Internet remains a far-fetched dream to the majority of the population.

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APPENDIX A: 9.1 | Questionnaire

Instructions

- i. Please do not write your name on the questionnaire
- ii. Please put a tick to the questionnaire items
- iii. Use the blank spaces provided where necessary.
- iv. Information provided will be treated with total confidentiality.

Questions

Section A. Personal details.

1. What is your gender?

Male

Female

2. What is your designation?

Judge

Registrar

Court clerk

ICT personnel

Reporter

3. Which of the following forms of ICT equipment do you use to access services offered by this CMS? (You may tick more than one)

Desktop computers

Laptops

Smartphone

Tablets

iPads

Others (specify).....

4. How long were you trained on how to use the electronic case management system?

Just oriented on how to use the system for a week.

Oriented for one month.

Just learn from office mates.

Others (specify).....

5. For what purpose do you use CMS? (You may tick more than one)

Registering of new court files/case initiation

Filing of case documents

Retrieving of case files

Security of case files

Exchange of judicial information

Viewing case files simultaneously

Storage of case files and exhibits.

Electronic notice of hearing

Judgment and ruling delivery

Disposition of cases and Appeals

Others (specify).....

Which of the following are the benefits that the implementation and use ECMS has brought about? (You may tick more than one)

Brings about efficiency in the administration of case.

Improve service delivery by the courts.

Intelligent Case Allocation

Easy to track and retrieve case files.

Improved security of case files

Increased access to court files by users

Helps in the exchange and storage of key case information.

Improved integration and information sharing, between the judiciary and the Director of Public Prosecution (DPP).

6. How would you rate the use of Electronic Case Management System

(Tick only one item)

Good

Very Good

Poor

Very poor

7. What challenges or problems do you experience when using the electronic case management system? **(You may tick more than one)**

Frequent loss of network

Frequent black out/Power outages

Pressure from legal firms and other

Slow Internet access speed

The system is too complicated to use

Others (specify).....

Thank you for your time and participation in this study.