Research Article

READINESS ON INFORMATION SYSTEM MANAGEMENT: ITS RELATIONSHIP ON RECORDS MANAGEMENT IN SCHOOLS

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ABSTRACT

This study determined the level of institutional readiness for information system management within public secondary schools and its correlation with records management practices. The research addressed specific inquiries related to institutional readiness, encompassing human resources, technological facilities, and management support. Additionally, it determined record management across dimensions such as data collection and retrieval, data banking, data management, and data control. The study aimed to identify any significant differences among various aspects of institutional readiness and record management. Furthermore, it explored potential relationships between the level of institutional readiness and record management. The findings of this research have implications for informing the development of strategic plans aimed at enhancing information system management and records practices in public secondary schools. This Study employed a descriptive-evaluative-correlational methodology, the research comprehensively assesses the current state of ISM readiness in schools, scrutinizing technological infrastructure, digital literacy levels, and overall technological preparedness. Simultaneously, the evaluative phase delves into the effectiveness of existing RM practices, evaluating policies, procedures, and the integration of technology in record-keeping processes. The correlational aspect establishes meaningful connections between ISM readiness levels and the efficiency of records management through statistical analyses, unveiling patterns and relationships. Stakeholder perspectives, gathered through surveys, interviews, and document analysis, provide valuable insights into the challenges and opportunities at the intersection of ISM and RM in educational settings. Questionnaire was used to gather data which were statistically treated through frequency, percentage, weighted mean, and Pearson's-r. Major **conclusions:** (1) the institutional readiness to information system along human resources was interpreted as poor.; (2) the level of record management system in the institution was interpreted as very high; (3) The differences among aspects of institutional readiness and record management were not significant; (4) the effect of institutional readiness on information system management to record management was not significant.

Keywords: Learners' Information System, Enhanced Records Management,.

INTRODUCTION

The Department of Education (DepEd), with a considerable demographic, serves as the home to a vast student body within the basic education sector, encompassing both elementary and secondary levels. Alongside students, the educational framework also supports a sizable workforce consisting of a diverse range of educators, administrators, and support staff, all united in their commitment to fostering the growth and development of the nation's youth. In the pursuit of heightened organizational efficiency and competitive advantage, schools are increasingly adopting Institutional Information Management Systems (IMS). However, a pivotal concern revolves around the institution's readiness to implement such a system. Evaluating readiness involves assessing human resources, procedures, processes, and available technologies to ensure sustained operational success.

Most educational institutions grapple with maintaining extensive records encompassing student data, educator information, and interactions with development partners. Historically, record management relied on manual processes, resulting in time-consuming efforts to retrieve essential information. For instance, the institution adhered to traditional data management methods before adopting the Learners' Information System (LIS). This transition alleviated the tedious and sluggish preparation of required reports

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and documentary transactions, replacing the manual collection and storage of data with a more streamlined approach. In 2013, DepEd Order No. 33 provides for the Data cleanup and implementation for the Learner Information System (LIS) for the 2013-2014 school year. It states that:

> "The Learner Information System (LIS) was implemented in government schools and Community Learning Centers (CLCs) in September 2012 through DepEd Order Nos. 67, s. 2011 and 22, s. 2012. The implementation directed the issuance of a unique Learner Reference Number (LRN) to learners enrolled in public schools and Alternative Learning System (ALS) learners in CLCs for School Year (SY) 2012-2013. It also enabled the establishment of a centralized "Learner Registry" where basic learner information is captured, stored and accessed through a secured facility to enhance tracking and decision-making on learners at various levels of DepEd management.

Moreover, it was stated in the said DepEd Order No. 33 that the as much as possible, LIS will be protected using the most appropriate standard mandated by the information and communications technology sector. The most relevant standard required by the information and communications technology industry shall be used to protect the LIS, to the extent possible.

> *The Class Adviser shall be responsible for collecting and updating information on learners in the formal school, ensuring that data captured is supported by appropriate legal documents; The ALS Facilitator shall be responsible for collecting and updating information on learners in ALS,*

ensuring that data captured is supported by appropriate legal documents and that sensitive learner information are protected from unauthorized access or disclosure; The School Head shall be responsible for implementing necessary policies and procedures in his/her school to ensure that the collection and processing of learner information is carried out in accordance with the guidelines provided in this Order and that sensitive learner information are protected from unauthorized access or disclosure."

As part of global collaborations with education ministries, Trucano (2013) provided Listings of nations deemed to be leading examples of ICT use in education. The list is to help point people in some useful directions, in case doing so might be of any interest. It may be most practical to recommend countries with a lot of experience with any form of practice, it may not be ideal but tends to produce better outcomes. There appears to be a natural learning curve associated with large-scale adoption of ICTs in the education sector in many nations, as well as an important aspect of learning by doing.

A Student Information System, or SIS, is a web-based platform that enables schools and institutions take data online for simpler management and clarity, according to Edwards (2020). That is all there is to it. Teachers, parents, students, and administrators can readily access data collected by the SIS system because it is accessible online. This covers test results, attendance, evaluation results, and much more. Essentially, a SIS allows the school to collect data from a variety of sources in one location, making it easier to track growth and performance. One of the most essential characteristics of technology in education, according to United States Secretary of Education, John King (2017), is its capacity to level the playing field for students. It can help educators and students strengthen and advance their bonds.

The National Educational Technology Plan as declared by South (2017) saw fundamental parts of the educational technology landscape are rapidly changing across the country. These changes include the number of schools that have access to broadband in their classrooms. Also, the sorts of technology available to schools and their costs. An evolution in the approach of leaders to the procurement of ed- tech solutions as well as a greater emphasis on data security and digital citizenship. New study on early learners' use of technology, as well as a greater emphasis on educating instructors to lead with technology before they enter the classroom.

In the Philippines, Matias and Timosan (2021) described however, in order to develop the system's capabilities and cater to teachers and learners' growing needs, it is necessary to study the users' actual use, attitude, and behavior toward the system, as well as to understand the elements affecting its successful implementation. Prior to that, Luistro (2014) explained that the Learning Information System (LIS) is a technological solution, it is also a community-driven process that survives thanks to the active engagement and participation of all teachers, principals, planning officers, and other DepEd workers across the Philippines.

Recognizing the pivotal role of a well-managed information system, the researcher acknowledges its significance in enhancing management's understanding of organizational members' needs, abilities, and strengths. The integration of automated systems not only facilitates employee engagement with modernization but also leverages technological advancements to streamline the storing and retrieving processes. Ensuring the proper encoding of data into the system is crucial, establishing it as a reliable source of information for learners and school stakeholders alike.

Statement of the Problem

This study determined the level of institutional readiness to information system management of public secondary schools and its relationship to records management.

Specifically, it answered the following questions:

1. What is the level of institutional readiness to information system management along:
    a. Human resources.
    b. Technological facilities; and
    c. Management support?
2. What is the level of record management along:
    a. Data collection and retrieval.
    b. Data banking.
    c. Data management; and
    d. Data control?
3. Are there significant differences among aspects of institutional readiness and record management?
4. Is there a significant relationship between the level of institutional readiness and the level of record management?
5. What development plan may be proposed based from the results of the study?

SCOPE AND DELIMITATION OF THE STUDY

This study focused on the institutional readiness on information system management to record management system. Moreover, the study determined the institutional readiness to information system management along human resources, technological facilities, and management support. Likewise, the level of record management along data collection and retrieval, data banking, data management, and data control was examined.

Furthermore, the study looked into the readiness information system management to record management, including the significant differences among aspects of institutional readiness and record management, and proposed recommendations based on the results of the study. The participants in the research include both teaching and non-teaching staff. There are 81 teaching personnel, with 61 teaching at the Junior High School level and 20 at the Senior High School level. Additionally, there are 20 non-teaching personnel, comprising 4 in Junior High School, 3 in Senior High School, 8 involved in School Maintenance and Other Operating Expenses (MOOE) budget, and 5 from the Education, Scholarships, and Sports Office (ESSO).were considered the school functionaries that should be managing the Information System Management (ISM) of the School. As the implementers, they were expected to be well-equipped with the knowledge like the Learners Information System (LIS) and skills in managing ISM and must be directly involved in controlling the system to support and sustain educational and administrative services of the school. Parents, students, and stakeholders of the institution who availed the information system were identified and included as respondents in this study. The study encountered limitations primarily arising from a constrained time frame and a specific geographical location where data was collected. Consequently, the generalizability and applicability of the findings were potentially subject to temporal and spatial variations. Additionally, the research predominantly focused on gathering insights from various stakeholders within the specific institution, raising questions about its transferability to other secondary schools. To comprehensively grasp institutional readiness and records management systems, a more extensive data collection and analysis approach could have provided deeper insights. Geographical limitations further surfaced, as the study exclusively focused on the

institution's stakeholders, implying that the results might not have been universally applicable across diverse educational settings.

That is why the results of this study are applicable to the institution but may be considered by other organizations as they may deem appropriate and relevant to their needs. Other stakeholders of the institution who were not engaged or did not avail of the information system and those outside the territorial jurisdiction of the area where the institution is located were not included. Only those within the service areas were identified as respondents to facilitate better access and were more accustomed to the challenges of the institution educational and administrative services, particularly on information system management.

SIGNIFICANCE OF THE STUDY

The findings of this study can serve as a valuable resource for the institution as an educational institution and management. By implementing the recommendations, the institution can achieve more efficient management of its information system, enhancing services and ensuring that records and information are properly controlled, managed, and protected in the best interest of stakeholders.

Not only will the Teachers-Students-Parent Association of the institution benefit from this study, but other schools can also draw insights from its proposals. Implementing these findings can influence schools to manage their learners' information systems more effectively, benefiting both the schools and the wider community. Administrative Assistants (ADAs) will find the results useful for establishing a well-organized records management system focused on learners' information systems, compliant with data privacy laws. Controlled access and well-managed information systems under administrative services can be achieved by following the recommendations of this study.

The Department of Education can leverage this study to formulate policies and guidelines, strengthening the management of learners' information systems to support curricular, co-curricular, and other activities. The study's recommendations and action plan can contribute to an enhanced records management system, thereby boosting the effectiveness of educational programs and services. Beyond the immediate scope, the study's results can benefit the wider academic community by providing additional insights into information system management. the institution 's success in managing learners' information systems, driven by a human-centered organizational approach, can serve as a reference for sustainable, economical, and efficient services. This study also creates a foundation for future research, contributing new data for investigation and comprehension.

Moreover, the study is not only a standalone contribution but also an inspiration for further research. It encourages other researchers to explore information system management in different schools, emphasizing the importance of data privacy, information protection, and control for sustained school-administrative services.

Level of Institutional Readiness to Information System

The part of this paper presents the institutional readiness to information systems along human resources, technological facilities, and management support. Table 1 presents the respondent's assessment of institutional readiness for information systems along human resources which is an important asset in every organization.

Table 1 Institutional Readiness for Information Systems along Human Resources

INDICATORS	Mean	Interpretation
There are updates routinely made to the information system in my assigned area and policies are based on user feedback	2.18	Low
Submit feedback and suggestions for improvements to the information system in my area of assignment.	2.16	Low
There is a routine review of the information system and/ or policies for all employees	2.08	Low
Received formal training in my area of Information System installed in my area of work assignment.	1.94	Very Low
There is a manual or handbook on my area of information system or policies	1.89	Very Low
Mean	2.05	Poor

Very High (3.26-4.00), High (2.51-3.25), Low (1.76-2.50),
Very Low (1.00-1.75)

It consists of updates routinely made to the information system in my assigned area and policies are based on user feedback; submission feedback and suggestions for improvements to the information system in my area of assignment; a routine review of the information system and/ or policies for all employees; receive formal training on my area of Information System installed in my area of work assignment; and a manual or handbook on my area of information system or policies. Examining the results in Table 1, the indicator implying routine updates to the information system in my assigned area and policies being based on user feedback obtains the highest mean score of 2.18, ranking first, though it is interpreted as low. Following closely is the action of submitting feedback and suggestions for improvements to the information system in my area of assignment, with a mean score of 2.16, ranking second and also considered low. The third position goes to the existence of a routine review of the information system and/or policies for all employees, receiving a mean score of 2.08 and being categorized as low as well. Moving down the scale, receiving formal training in my area of the Information System installed in my work assignment area attains a mean score of 1.94, ranking fourth and defined as very low. Lastly, the lowest score is associated with the presence of a manual or handbook on my area of information system or policies, obtaining a mean score of 1.89, ranking fifth and labeled as very low.

The mean of 2.05 confirms that the institutional readiness for information systems among human resources is low. This implies that the institutions, through the actions of school administrators and leaders, need to enhance its ability to implement planned changes. With this improvement, the proximal outcome of organizational readiness will likely lead to increased efficiencies and productivity through the management of information systems. Beyond the scope of human resources, the statement suggests that the entire organization lacks sufficient readiness for proficient information system management. This broader viewpoint indicates possible limitations in organizational structure, policies, and overall strategy concerning information systems. Additionally, the study highlights a lack of preparedness in the human resources of institutions, where human resources encompass individuals responsible for managing and implementing information systems, such as IT professionals, administrators, and other personnel overseeing the organization's technological infrastructure. The evolution of technology has encouraged organizations to use human resource information systems (HRIS). HRIS is perceived to contribute to the effectiveness of manpower activities (human resources planning) in organizations. Another study found relevant to the findings in this study is "The Role

of Human Resource Information System in the Process of Manpower Activities" by Karikari, Boateng and Ocansey (2015) where they interviewed two HRIS managers in the hospitality industry in Greater Region (Ghana) to identify the benefits, contributions and the challenges of HRIS. It was revealed that HRIS identified unfilled positions, accurately analyzed each job position and its job title in the organization, provided insight into organizational training needs, selected the right persons to be trained at the right time, evaluated the effectiveness of training programs and made faster and better decisions about successor ranking. It was therefore concluded that HRIS played a major role in the management of human resources. Organizations should integrate HRIS with other organizational systems to facilitate the speedy sharing of information and decision-making. This will serve as an inspiration to the institutions to consider information system management for better organizational functions and productivity.

Moreover, individuals or groups of people engaged in the production functions are composite characteristics of the workers with the characteristics of a productive person in terms of experience, intelligence, expertise, caliber, job ability, and other skills, etc. Workforce care was like a product in ancient times, but the workforce is now seen as a business tool in a strategic human resources management era. The transition from the commodities paradigm to the human asset or human capital structure provides broad space for accurate and efficient management of people within the enterprise, and in this sense, the present thesis tries to explore the implementation of information system management in the management of human resources, i. e. the information system on human resources. The present research focuses on the human resources information system's philosophical structure like nature, advantages, and HRIS, Strategic Human Resource Planning and HRIS, and Productive HRIS. Both main and secondary details are dependent on the analysis (Singh, 2021).

The Theory of Organizational Readiness for Change (Weiner, 2020) posits that organizational readiness involves members' psychological and behavioral readiness for change, including change commitment and change efficacy. High readiness leads to increased initiation, persistence, and supportive behavior during change implementation. Conditions influencing readiness, such as change valence and informational assessment, are crucial for testing the theory's relevance. Approaches for measuring organizational readiness are also addressed. This is necessary for the institutions to look intoits organizational readiness. The change to be implemented through the information system is a management concept that will help dealings, productions, and organizations build and achieve new goals effectively. By assessing the school's readiness, one can put strategies into place that make it possible to see the desired changes quickly and easily.

Table 2 presents the institutional readiness for information systems along technological facilities where it talks about awareness of the importance of the use of technology to have more than one value at any time needed; and provides appropriate and adequate information about the records generated from data collection using technology; the presence of information security, database and network management system made available with latest amenities and conveniences; qualifies computer technical support, and industry software maintenance and development; and ensures availability of tools, equipment, gadgets and services. Technological facilities empower facility managers, supervisors, employees, and staff in many ways, including managing work process flows, tracking physical assets, and supervising building facilities. Mobile technology helps facilities managers to communicate, collaborate, and manage workloads more efficiently. In this regard, institutional readiness for

the information system of the institutions along technological facilities was revealed as poor.

Table 2 Institutional Readiness to Information Systems Along Technological Facilities

INDICATORS	Mean	Interpretation
Awareness of the importance of the use of technology to have more than one value at any time is needed	2.35	Low
Provide appropriate and adequate information about the records generated from data collection using technology	2.23	Low
The presence of information security, database, and network management system made available with the latest amenities and conveniences	2.16	Low
Qualifies in computer technical support, and industry software maintenance and development	2.11	Low
Ensures availability of tools, equipment, gadgets, and services.	1.98	Very Low
Mean	2.17	Low

Very High (3.26-4.00), High (2.51-3.25), Low (1.76-2.50), Very Low (1.00-1.75)

Awareness of the importance of utilizing technology to have more than one value at any time secures the highest mean score of 2.35, ranking first, but it is interpreted as poor. Following closely is the provision of appropriate and adequate information about the records generated from data collection using technology, with a mean score of 2.23, ranking second and marked as poor as well. The third position is held by the presence of information security, database, and network management systems made available with the latest amenities and conveniences, attaining a mean score of 2.16 and being noted as poor too. Qualifying computer technical support, industry software maintenance, and development follow in the fourth position with a mean score of 2.11, categorized as poor as well. The lowest score is associated with ensuring the availability of tools, equipment, gadgets, and services, with a mean score of 1.98, ranking fifth and interpreted as very poor. The weighted average mean of 2.17 characterizes institutional readiness for information systems along technological facilities as poor. This suggests that the school lacks support for ICT infrastructure development, making the institutions face challenges such as inadequate funding, insufficient power supply, high costs associated with purchasing, installing, and maintaining ICT equipment, lack of capacity, limited access to the internet, absence of political will, and a poorly coordinated supervision mechanism.

The findings in this study indicate that the functionality, comfort, safety, sustainability, and efficiency of the built environment in terms of the readiness of the institutions was low along technological facilities. This meant that the institution lacked the required amenities and services on the use of technology, lacked provisions for appropriate and adequate information on records generated using technology, no information security database, and a network management system. Likewise, they lack tools, equipment gadgets, and services in this aspect, hence, it was discovered as low by the respondents. The study of Mukhtar, *et al.,* (2020) can be linked to the present study which expresses the experiences, ideas, needs, and the use of information technology for the development of management information systems in a higher education institution. The results presented the analysis of the management information system based on tacit and explicit knowledge through the process of exchanging experience, ideas, and initiative, the management information system design based on the needs analysis, and the

development of the management information system using information technology. This implies that the use of information technology is necessary for an institution to be ready for an information management system which is required, but in the case of the institutions, the assessment was low.

Moreover, in another study by Burmansah, *et al.,* (2019), they examine the influence of work-life quality and job involvement perceived by teachers on their affective commitment so that they feel a strong emotional bond to their work and school organization, are able to identify the goals and values of the school organization well, and really want to be there. The result of the study reveals that first, there is a positive effect between the quality of work life and the affective commitment of the teachers in school. Second, there is a positive effect between job involvement and the affective commitment of teachers in school. Third, there is a positive effect between quality of work life and job involvement teachers in school. In like manner institutional readiness for information systems along technological facilities requires a positive effect on the quality of work life and the commitment of teachers, however, it was noted as low in the institutions.

Furthermore, managerial decisions on the adoption of innovative technologies by a firm are made under conditions of uncertainty and must account for network externalities that imply the benefit of technology is received not only from its intrinsic payoff but also from the size of the network of other adopters. The theoretical model presented in this study by Chulkov (2017) demonstrates that for firms evaluating information technology investment with network effects key determinants of the technology selection pattern are adoption reversibility and switching costs. If switching costs are sufficiently high to make technology adoption irreversible then safer established technologies have an advantage as choosing a riskier untested technology opens the firm to the risk of being stranded without a network of followers. With lower switching costs, the technology adoption decision is reversible which provides an advantage to riskier untested technologies. A discussion of empirical evidence on adoption patterns in information technology provides an application for the theoretical model.

Similarly, in the institutions, school leaders must be mindful in the adoption and implementation of the information system management such will include the areas of awareness, the mindfulness of philosophical, psychological, social, cultural, political, economic, ethical, technological, and internal organizations and the external environment. Leadership in education occurs when leaders take the initiative to facilitate existing conditions with the aim of implementing changes in teaching and learning. They must create opportunities to enable followers to develop personal understanding and to form social groups to enable mutual support during the process of change. In this case, the information system management of the school is at its high time to be adopted and implemented.

Table 3 Institutional Readiness to Information System Management along Management Support

INDICATORS	Mean	Interpretation
Release of records through accomplished request forms only	2.48	Low
Identifying, classifying, and storing records are well coordinated with secured access.	2.35	Low
Maintaining records, including security, storage, and handling.	2.31	Low
Established records retention and disposition through adopted policies and procedures	2.26	Low
Has a well-defined active and inactive records management system	2.11	Low
Mean	2.30	Low

Very High (3.26-4.00), High (2.51-3.25), Low (1.76-2.50), Very Low (1.00-1.75)

Regarding management support, the highest mean score of 2.48 is associated with releasing records through accomplished request forms only, described as poor. On the other hand, the lowest score is linked to having a well-defined active and inactive records management system, with a mean score of 2.11, defined as poor as well. The weighted average mean of 2.30 concludes that institutional readiness for information system management along management support is poor. This suggests that the institutions exhibits low management support in establishing information system management. Consequently, this indicates that the management has low engagement, which may lead to declining productivity, disinterest among members of the organization, and a sense of discouragement to work.

According to Lavoie (2016), poor management skills carry long-lasting effects and may infect an entire organization. The results of toxic, misguided leadership reach far and wide. They can even affect employee retention. In Gallup's 2015 State of the American Manager report, one out of two professionals surveyed said they had quit a job at some point in their career to "get away" from their boss. This meant that in every organization leadership is an essential factor in the implementation of programs and projects such as in the institutions its institutional readiness for information systems management required a strong leadership to achieve it. On the other hand, strong leaders who use good management skills positively impact a company in various ways, like reducing turnover, improving morale, and empowering employees to be more productive. Management needs to lead by example and create a positive working environment for employees to perform at their best capacity. However, at the institutions the evaluation made by the respondents resulted in low management support.

Table 4 contains the respondents' assessment of the institutional readiness for information system management at the institutions. Institutional readiness for information system management or the preparedness of an organization to establish a technology-based system used to collect, store, process, and analyze data from various concerns, particularly information or data of teachers, students, and education stakeholders of the institutions. Relative to this, it will include customer relationship management systems (CRM), learning resource planning and management systems (LRPMS), and data banking systems (DBS). This will be a response to the changes in the use of advanced technology and adapt to new ways of doing things which determines to a great extent how effectively an organization such as a school can deliver better services supported by a mix of robust processes, the right people, facilities and infrastructure.

Table 4 Summary of Overall Institutional Readiness to Information System Management

Institutional Readiness	Mean Score	Interpretation
Management Support	2.30	Low
Technological facilities	2.17	Low
Human Resources	2.05	Low
Overall Service Quality	2.17	Low

Very High (3.26-4.00), High (2.51-3.25), Low (1.76-2.50), Very Low (1.00-1.75)

The findings from the study reveal that institutional readiness for information system management is highest in terms of management support, with an average weighted mean of 2.30. This places management support as the major contributing element to the readiness of the institutions in managing information systems. Following closely is technological facilities, with an average weighted mean of 2.17, and human resources with 2.05. The study indicates that the high ranking of management support implies that school leaders, including the school head or principal, area coordinators, or program chairs, have devoted some time to consider adopting the system and express a willingness to establish it, even though the level of commitment is perceived as low. Therefore, there is a need for increased attention and focus to appreciate the importance and necessity of having an information system management.

In terms of technological facilities, being ranked second with an average weighted mean of 2.17 signifies that the institution slacks the necessary facilities and infrastructure for effective information system management, and it is interpreted as poor. The lowest ranking is in human resources, with an average weighted mean of 2.05, indicating that employees and staff lack the appreciation to adapt and implement information system management. While some possess the capacity, knowledge, and expertise to manage the system, they are reluctant to embrace it in the school. This suggests that there is a lack of attention to the importance of providing better services to stakeholders. The study observes a tendency for individuals to be submissive and comfortable with traditional practices, rarely considering changes for the improvement of information system management that could offer fast, accurate, and responsive services to the school's stakeholders.

Additionally, Subiyakto, *et al.,* (2016) declared that the universities in developing countries that have a vision and purposes, consciously need to grow and have competitive advantages. The role of information technology (IT) in achieving the vision and objectives of the organizations is very significant. The existing conditions of IT at universities in developing countries have not run well because of high cost, and IT literacy issues, and IT is used only as a tool of the organizational population, not as a strategy to achieve the vision. On the other hand, the previous studies show that the success of IT development projects still tends to be unsatisfactory. In the same way, at institutions it was noted that institutional readiness for information systems management was low, thus it requires enhanced awareness of the importance of the system for the benefit of the educational institution as above-mentioned. Equally important was the declaration by Marcel (2017) that the Research on ISSP which is mostly done by academics and practitioners, especially about the readiness of ISSP implementation in universities or companies is still limited. This shows that research on this topic will contribute to higher education to measure the readiness of IT/SI implementation in universities. Based on factors related to readiness in ISSP implementation, process and technology are the most dominant factors to measure the readiness of ISSP implementation in organizations, while some research articles do not include the people factor as the influencing factor for the ISSP implementation on the organizations. In order to produce a readiness model for the implementation of ISSP at universities comprehensively, future research needs to add a readiness factor that can improve the role of the people factor by adding the factor of policy (ZEN Framework) to measure the readiness of universities to implement and adopt ISSP.

LEVEL OF RECORD MANAGEMENT

The part of this paper presents the level of record management as exhibited in Tables 5-6 along data collection and retrieval, data banking, data management, and data control. Displayed in Table 5 is

the level of record management along data collection and retrieval based on records are authentic/reliable and filled with transactions, activities, and facts; awareness on the importance of records to have more than one value at any time is needed; ADAS/ Person in-charge create an individual and group file properly organized with heading and labeled for easy access and retrieval; consolidated and review, and provide adequate information about the records generated from data collection; and capture information, make sure it is complete and correct, then record and save it. The necessity for enhanced awareness regarding the multifaceted value of records. Designated personnel, such as ADAS or assigned individuals, are responsible for meticulously organizing individual and group files with clear headings and labels to facilitate easy access and retrieval. Records undergo thorough consolidation, review, and documentation to ensure comprehensive information dissemination. Special emphasis is placed on capturing and verifying complete and accurate information prior to recording and securely storing it.

Table 5 Level of Record Management along Data Collection and Retrieval

INDICATORS	Mean	Interpretation
Records are authentic/reliable and filled with transactions, activities and facts	3.38	Very High
Awareness on the importance of records to have more than one value at any time is needed	3.35	Very High
ADAS/ Person in-charge create an individual and group file properly organized with heading and labelled for easy access and retrieval	3.34	Very High
Consolidated and review, and provide adequate information about the records generated from data collection	3.31	Very High
Capture information, make sure it is complete and correct, then record and save it.	3.29	Very High
Mean	3.33	Very High

Very High (3.26-4.00), High (2.51-3.25), Low (1.76-2.50),
Very Low (1.00-1.75)

The results presented in Table 5 highlight that the aspect of records being authentic and reliable, filled with transactions, activities, and facts, received the highest mean score of 3.38, ranking first and interpreted as very high. On the other hand, the lowest score was associated with capturing information, ensuring its completeness and correctness, and then recording and saving it, attaining a mean score of 3.29, ranking fifth but also interpreted as very high. The weighted average mean of 3.33 establishes that the level of record management along data collection and retrieval is deemed very high. This suggests that the institutions needs a clear process to ensure that data collection is clean, consistent, and reliable. Furthermore, it implies that data collection and retrieval are ongoing practices that serve as the foundation for decision-making, planning, and financial management. Additionally, the focus of data collection extends to human resources management. The process involves seeking or collecting and synthesizing information from a variety of stakeholders and sources in an objective, unbiased manner to reach conclusions, goals, or judgments. This comprehensive approach enables strategic and leadership decision-making within the institution.

Moreover, collecting data and retrieval in the school setting is crucial for educators and other school administrative staff as mentioned by Westminster (2020). As a teacher, it is important to assess the student's level of understanding of the given concept as well as to teach the students in an effective manner that meets their various learning styles. Data collection is also needed for students with an Individualized Education Plan (IEP) since documentation of progress is mandated. In the Philippines it is authorized and directed by DepEd

in all schools as it is the source of all the information about the students and teachers from the start, they joined the school until their last day in the institution. A cross-disciplinary examination was conducted by Gregory, et al. (2019) on the user behaviors involved in seeking and evaluating data. It was surprisingly absent from the research data discussion. The review explores the data retrieval literature to identify commonalities in how users search for and evaluate observational research data in selected disciplines. Two analytical frameworks, rooted in information retrieval and science and technology studies, are used to identify key similarities in practices as a first step toward developing a model describing data retrieval. In this regard, institutions data collection and retrieval was found to be very high in all aspects which means the human resources in charge of the information systems management are ready for this purpose.

Accordingly, facilitating data discovery relies on developing underlying infrastructures, support systems, and data supplies (Borgman, 2015). It is equally important to understand the behaviors involved in data retrieval, but a user-focused, cross-disciplinary analysis of data retrieval practices is lacking. This review explores the existing data retrieval literature and identifies commonalities in documented practices among users of observational data as a first step toward creating a model describing how users search for and evaluate research data. In like manner, although information retrieval (IR) has been extensively studied for over 60 years, data retrieval is a nascent field. Recent studies surrounding the issue examine how data are made available via data sharing (Tenopir *et al.,* 2015), how researchers reuse data (Faniel, Kriesberg, and Yakel, 2016; Pasquetto, Randles, and Borgman, 2017), and how systems are designed to optimize data discoverability and retrieval. Information documenting data retrieval behaviors is buried throughout other disciplinary and data-related literature and is not easy to identify (Gregory, Cousijn, Groth, Scharnhorst, and Wyatt, 2018).

Table 6 illustrates the level of record management along data banking, focusing on aspects such as handling confidential information securely, creating a computer-based capturing and storing system, compliance with privacy laws, manual capture and storage of data, and storing all records and information in a database. Among these, respondents declared that information being confidential and stored securely received the highest mean score of 3.28, ranking first and interpreted as very high. On the other hand, the lowest score was associated with all records and information being stored in a database, with a mean score of 3.22, ranking fifth but still interpreted as high. The weighted average mean of 3.25 indicates that the level of record management along data banking is considered high. Based on these findings, it can be deduced that the institutions actively engages in the practice of data banking. This approach allows those in charge to utilize data from primary sources, such as teachers' and students' profiles, as a crucial resource for providing basic services within the school. Additionally, it enables service providers or administrative assistants to competently respond to requests for financial services and personalized assistance, thereby improving efficiency and ultimately increasing effectiveness. The impact of data banking extends to various aspects, including operational costs, staffing strategies, customer experience, and other services in human resource management.

Table 6 Level of Record Management along Data Banking

INDICATORS	Mean	Interpretation
Information is confidential and must be stored securely	3.28	Very High
Created a computer-based capturing and storing system	3.27	Very High
Compliant and observant of privacy law for the protection of information	3.26	Very High
Data are captured and stored manually	3.24	High
All records and information are stored in a database	3.22	High
Mean	3.25	High

Very High (3.26-4.00), High (2.51-3.25), Poor (1.76-2.50),
Very Poor (1.00-1.75)

Data banking involves the storage of records and information of stakeholders, serving as a repository of data on a specific topic, often compiled from multiple databases and accessible by many users. In the case of the institutions, data banking provides a convenient and rapid way to access collections of data related to students, teachers, and other stakeholders, along with relevant information about the school, such as reports. It's worth noting that, in this context, the data banking process is not yet fully technology-driven. Data banking plays a crucial role in school administration as it significantly impacts various aspects of school life, including planning, budgeting, staffing, facilities management, and discipline. School records, maintained through data banking, serve as documents of customs and traditions that guide teachers and school heads over time. Furthermore, these records contribute to providing and enhancing better services to students, parents, community members, and other development partners. In essence, data banking in school administration is integral to maintaining organized and accessible information that supports effective decision-making and overall school development.

Relative to this, the study of Amanchukwu and Ololube (2015) shared about school records including books, documents, diskettes, and files that contain information on what goes on in school as well as other relevant information pertaining to the growth and development of the school. It theoretically debated the role of school record to effective educational management, the importance of keeping records in school, types of school records, and characteristics of good record management in schools. It aims to offer an excellent package to support stakeholders in educational management and/or administration. It is comprehensive and thorough, yet flexible and encompassing. Stakeholders can both learn about and develop skills in school record-keeping aimed at enhancing school management, planning, and supervision. It was concluded poor records management results in difficulties in administering, developing, and supervising educational systems. In fact, poor school records management and the lack of staff development with regard to the entire information cycle are responsible for a number of management and policy implementation problems in schools. Similarly, this scenario can be associated with the data banking system at the institutions. On the part of Adeniyi and Oyiza (2022), they determined how students' records are organized, preserved, managed, and retrieved, and the challenges encountered. Also, assessed students' records management systems and preservation as a determinant for the effective retrieval and dissemination of information in tertiary institutions. The major findings revealed the ineffectiveness of students' record management system, incompetent personnel, inadequate infrastructural facilities, constant power failure, minimal ICT facilities, and inadequate space and preservation facilities. Based on these, efforts should be made for the provision of standby generators/inverters/Solar energies as an alternative to power supply, training of staff especially on ICTs, digitalization of their records, provision of adequate funding, enough infrastructural facilities such as storage facilities including electronic storage devices and adequate preservation apparatus. However, on the part of institutions, facilities, knowledge, and skills of human resources were rated very high and

high. This meant that the school was ready for information systems management.

In this light, information plays a vital role in school governance as it is a primary basis for policy planning and development. According to Mella and Pena (2019) the Department of Education recognizes this significance as it launched its own management information system known as EBEIS (Electronic Basic Education Information Systems). At the school level, however, technology and resources for information management remain a challenge. To address this concern, they examined the data management practices and challenges in a local public secondary school in the Philippines to develop a school-based online information management system. The existing information management process involves data gathering and receiving of reports, filing, and storage, and retrieval of data. Time consumed in the filing and retrieval of data; unorganized storage of paper-based documents; and absence of school policy on information management were observed as primary challenges of the existing process. Hence, project GEARS (GEANHS' Electronic Archiving & Retrieval System) was developed and introduced for pilot testing. The system is an online archive of school data, utilizing a free-hosting website and a cloud storage application to remain economical for a public school. Implications of the new system were positive and were observed as efficient, accessible, organized, and secure. The new system can be modified for the information management needs of both local secondary and elementary public schools. On the part of institutions the proponent of the information systems management supports and recognizes the DepEd program to develop a school-based information management system.

In the modern world, the amount of information stored in modern technology has been exponentially increasing. Access to vast amounts of information has changed how governments, institutions, organizations, and individuals conduct their business and record keeping. The increased use of cloud computing in conjunction with information and communication technologies (ICT), office automation, and digitalization has altered how electronic records are generated. Organizations should embrace this emerging environment to ensure competent operations and regulatory compliance well into the future. The absence of a framework makes it difficult to implement the Electronic Records Management System (ERMS). Thus, the study by Mukred, *et al.,* (2021) proposed a framework for ERMS implementation and identified the most critical factors that are related to the ERMS characteristics and cloud characteristics. Its implementation will improve Yemeni public sector educational institution competency and such implementation will be facilitated by the proposed framework. All the identified factors were found to be essential and have a significant relationship with the behavioral intention to implement ERMS. The findings also revealed that ERMS plays a substantial and vital role in the competency of educational organizations. In other words, the study results demonstrated the importance of ERMS and Cloud dimension to ERMS implementation as well as the significant effect of ERMS implementation on public sector educational competency. These findings can be linked to the present study as the institutions is determined to have its own framework related to electronic records management systems through information systems management. On the other hand, cloud computing allows education institutions to outsource the provision of digital services, resources, and IT infrastructure, allowing them to focus on teaching instead of IT configuration and management (Mohammed, et al., 2016). Cloud computing can reduce IT costs by transforming hardware costs such as disk storage and processing cycles into operating expense that uses cheap and abundant digital resources (Almazroi, *et al.,* 2018).

Moreover, the security of information systems is determined by upper management and influences every part of an organization. Currently, manufacturing, sales, financial, customer, and educational records have been digitized for easy access. Security is especially of concern for organizations such as banks, financial institutions, insurance companies, hospitals, and laboratories that provide confidential information over the Internet, where it can be difficult to tell if an entity requesting the information is authorized to access it (Khalilzadeh *et al.,* 2017). This is also one of the objectives of the information systems management at the institutions to keep all information secure. The information systems management of the institutions engages the use of technology. According to Chowdhury (2018), the technology industry is experiencing massive disruptions due to advances in cloud computing, big data, social media, mobile devices, IoT devices, AI, machine learning, and deep learning algorithms. These advances make it necessary to investigate the effects of changes in the current business environment to understand the effects of cloud computing ERMS implementation and society in general. The proponent has considered these challenges to keep safe the school's data which shall not be affected in any case through the different disruptions as mentioned.

Furthermore, Adu and Ngulube (2017) recognized that despite the benefits, ERMS implementation is frequently challenging and often fails due to the radical changes it requires organizations to adopt for its successful implementation. Previous studies have shown that ERMS implementation can be improved through the use of several frameworks. They included new factors and considered the competency enhancement upon successful implementation of ERMS. This allows for the development of an integrated framework that will enable organizations to implement, adopt, and use ERMS in the modern environment. In the same way, the information systems management of the institutions competency enhancement for successful implementation. Exhibited in Table 7 is the level of record management along data management. This aspect was based on achieving the cost of living with the current salary, fairness of wage in the area, saving money each month, ensuring finding affordable housing in your area and satisfying with the current cost of living.

Table 7 Level of Record Management along Data Management

INDICATORS	Mean	Interpretation
Confirmed/certified data to ensure all requirements are complied	3.40	Very High
Proper entry and proof-reading before recording and keeping	3.37	Very High
Checking of data for accuracy and quality before using, importing, or processing	3.36	Very High
Verify all information to be within the required quality parameter	3.28	Very High
Established monitoring and maintenance for the diversity of data	3.26	Very High
Mean	3.33	Very High

Very High (3.26-4.00), High (2.51-3.25), Poor(1.76-2.50),
Very Poor (1.00-1.75)

The table indicates that the highest mean score, with a value of 3.40, is associated with confirmed/certified data to ensure compliance with all requirements. This ranks first and is interpreted as very high. The second-highest mean score, with a value of 3.26, is linked to established monitoring and maintenance for a diversity of data. This ranking is fifth but is also interpreted as very high. The weighted average mean of 3.33 suggests that the level of record management along data management is very high. These findings affirm that the

institutions maintains a very high level of record management. It can be concluded that the school's records management programs play a crucial role in ongoing recordkeeping, offering various advantages such as increased productivity and cost savings. These programs contribute to ensuring compliance and facilitating quick access to the most-referenced files, highlighting the importance of effective record management in supporting the school's operational efficiency.

According to Gesmundo, *et al.,* (2022), they correlated records management strategies of the administrative staff at Laguna State Polytechnic University with their professional performance. The results of the study proved that there is a significant difference in the records management strategies when grouped according to age, gender, job tenure, and job position in the department. However, there was no significant difference among the professional performances when grouped according to age, gender, job tenure, and job position in the department. Also, it confirmed that records management strategies have a positive significant relation to professional performance. The findings can help improve the university policies, procedures, and strategies for managing records. It is recommended to provide training programs and improve the implementation of evaluation and assessment to the administrative staff to expand their professional proficiencies.

This declaration can provide insights for the institutions in relation to the very high and high results of this study. The need to provide training programs is also an important service that can be considered to further enhance the record management system of the school and be able to improve the capabilities of the person/s in charge manning the records section and the assigned personnel catering to this service. On the part of Glorioso, *et al.,* (2021), they determine the records management strategies and professional performance of administrative staff. The results of the study proved that there is a significant difference in the records management strategies when grouped according to age, gender, job tenure, and position in the department. It is also shown that there is no significant difference among the professional performance when grouped according to age, gender, job tenure, and position in the department. It also confirmed that records management strategies have a positive significant relation to professional performance. The results of the study can help to improve the university policies, procedures, and strategies in managing records. It is also recommended to provide ongoing training programs and improve the implementation of evaluation and assessment to the administrative staff to expand their professional proficiencies in the institution. For the institutions, the information systems management will also help improve the records management procedures of the school.

As regards the study by Odongo and Mwesigwa (2023) they determined the effect of record management practices on the performance of produce dealers in Lira City, Uganda. Specifically, the examined record filling, record retention, and record retrieval on the performance of produce dealers. The findings revealed a statistically significant positive relationship between record filling, record retrieval, and performance while an insignificant relationship was realized between record retention and performance. Further, it was revealed that record filling and record retrieval yield a significant effect on performance while record retention yields an insignificant effect on performance. In the case of the institutions, the assessment of these aspects yielded high and very high results for effective records management.

Table 8 outlines the level of record management along data control, focusing on ensuring compliance with the Data Privacy Act and related laws, employing state-of-the-art/database approaches to retrieve information, alphabetically arranging, color-coding, and well-

organizing filing, allowing disclosure of information to the public with adherence to principles of transparency, legitimate purpose, and proportionality, and permitting the processing of personal information subject to the approval of concerned personnel. This aspect of record management is crucial for the efficient and systematic control of the creation, receipt, maintenance, use, and disposition of records.

In terms of data control, the level of record management is perceived as very high, particularly in ensuring compliance with the Data Privacy Act and other related laws, with a mean score of 3.33, ranking first and interpreted as very high. On the other hand, allowing the processing of personal information subject to the approval of concerned personnel received the lowest mean score of 3.24, ranking fifth but still interpreted as high. The weighted average mean of 3.28 indicates that the level of record management along data control is very high. The findings from this study suggest that at the institutions, records management practices on data control ensure the identification and preservation of all institutional records of vital historical, fiscal, and legal value. Additionally, non-essential records are discarded in a timely manner according to established guidelines and legislation if necessary. The school establishes and controls records as evidence of conformity to requirements and to demonstrate the effective operation of the quality management system. The study emphasizes the importance of establishing documented procedures to define the controls needed for records and proper identification.

Table 8 Level of Record Management along Data Control

INDICATORS	Mean	Interpretation
Ensures compliance with the Data Privacy Act and other related laws	3.33	Very High
Employ state-of-the-art/database approaches to retrieve information	3.31	Very High
Files are alphabetically arranged, color-coded, and well-organized	3.28	Very High
Allows disclosure of information to the public and adherence to the principles of transparency, legitimate purpose, and proportionality.	3.25	High
Allows processing of personal informal subject to the approval of concerned personnel	3.24	High
Mean	3.28	Very High

Very High (3.26-4.00), High (2.51-3.25), Poor(1.76-2.50),
Very Poor (1.00-1.75)

Records management is indeed the systematic process of overseeing and controlling information throughout its entire lifecycle within an organization. This encompasses the creation, receipt, maintenance, storage, and eventual disposition of information, irrespective of its format. In essence, records management involves the effective management of an organization's information from its inception to its final disposition. To ensure proper records management, companies adhere to approved policies, follow records management procedures, and implement retention schedules. These practices guide the creation, maintenance, and sharing of information in a structured and compliant manner. By doing so, organizations can optimize their information resources, maintain legal and regulatory compliance, enhance operational efficiency, and ensure the accessibility and security of their records.

Consequently, the case study of Manikas (2015) focuses on the concept of Records Management (RM) and Electronic Records Management (ERM) and how the adoption of an Electronic Document Records Management System (EDRMS) affects a business setting. It is on the factors of perceived efficiency and on the costs that exist in

a company. It examined and presented the experiences and attitudes of individuals who are working in companies that possess an EDRMS. It examined how the perceived efficiency and the costs in a company are affected by a proper RM/ERM program. It showed that the specific individuals in the specific firms benefited from the EDRMS and that their work was improved. As to control, Garland (2019) emphasized that electronic records management (ERM) is the management of electronic files and documents as records. The key difference between ERM and the traditional records management of physical records is the focus. ERM captures records as part of a digital business process. One is preserving the original digital records, not paper copies that pile up in boxes in storerooms or warehouses. This enables to creation of efficiencies by improving the automation of business activities, providing accurate auditing, and applying your records schedules reliably. The information systems management of the institutions would be doing the same process of keeping electronic files and documents in digital format, which resulted in a very high rating from the respondents.

In like manner, the present study regards data control in records management it is essential that the institutions is engaged in data control which was rated by the respondents as very high. This meant it is the school's management oversight of information policies observing and reporting on how processes are working and managing issues as it describes the organization, storage, preservation, and sharing of data collected and used in a timely relevant manner responsive to the need of teachers, students and other stakeholders. Hence, it was revealed as very high. On the part of Henry and Njenga (2021), they investigated the effect of electronic record management practices in support of customer service delivery in public universities in Kenya. They ascertain the extent of its adoption in public universities, determine the effectiveness of existing practices in support of service delivery, identify challenges faced by public universities in managing electronic records, and suggest the best practice framework that could be adopted to enhance the management records in support of customer service delivery. Technology acceptance theory was used to inform the study. It established that electronic record management practices were embraced by public universities though to a small extent. It was also revealed that even though electronic record management practices had an influence on service delivery, to some extent challenges such as costs, employee resistance, and lack of management support were experienced. In the same way, the institutions through the proponent has experienced some challenges of almost the same extent.

Presented in Table 9 is the respondent's assessment of the overall level of record management

Table 9 Respondent's Assessment on Overall Level of Record Management

Record Management	Mean Score	Interpretation
Data Collection and Retrieval	3.33	Very High
Data Management	3.33	Very High
Data Control	3.28	Very High
Data Banking	3.25	High
Overall Level of Record Management	3.30	Very High

Very High (3.26-4.00), High (2.51-3.25), Poor (1.76-2.50),
Very Poor (1.00-1.75)

The respondents' assessments of the overall level of record management at the institutions indicate that data collection and retrieval, as well as data management, both achieved the highest average weighted mean of 3.33, interpreted as very high. Following

closely is data control, which obtained an average weighted mean of 3.28, ranked second, and also interpreted as very high. Data banking, with an average weighted mean of 3.25, ranked third and was interpreted as high. The overall level of record management achieved an average weighted mean of 3.30, interpreted as very high.

These results suggest that the institutions 's records management system is deemed very high. This indicates that the school, through the personnel in charge or the administrative assistant managing the records management office, successfully controls and maintains both digital and hard copy documentation of transactions and activities related to record-keeping. This encompasses the creation, identification, storage, retrieval, and disposition of such records. The high level of record management reflects effective practices in maintaining organized and accessible information within the institution.

Moreover, records management systems provide controls which support the creation, capture and management of authentic, accurate, complete, unaltered and useable records. It has the characteristics and functionalities that enable the creation and maintenance of accurate, authentic, and information-rich records. In the case of the institutions, it pertains to the records of teachers, students, non-teaching personnel and staff, other school records, and documents that are of great importance that will provide complete information of the school from its inception up to the present. All other records and information relative to its educational functions and in relation to the Department of Education and other development partners and stakeholders are also included.

The study by Romero (2021) assessed the practices of the Records Management System (RMS) of Local Government Units in the Province of Laguna, Phase 1 as the basis for the Standardization of the Records Management System in the Local Government Units in Laguna. It dealt with the parameters of RMS as; IRMS, Record management program, Regulatory Environment, Functionality and components of record system, Record management processes and control, ARMA, Filing Methods, Filing Procedures, and Indexing Rules and as being practice currently by the Local Government of Laguna. The result was very satisfactory in the nine (9) RMS parameters. This can be inferred that the Province of Laguna strongly agreed on the given parameters and is currently practicing RMS across Municipalities. On the other hand, the seven (7) Municipalities had no significant difference in the RMS practices, except one (1) from the eight (8) having a significant difference in its RMS practices. This meant that the implementation of RMS was considered to be adhering to the standard measures. Nevertheless, the municipalities have uncommon RMS practices that need to be standardized according to international standards and as to practice or implementation. Likewise, the study of Msosa, *et al.,* (2023) focused on establishing records creation practices, records management strategies, and the challenges that affect records management. It establishes that the institution creates both electronic and paper-based records. The electronic records are stored and preserved in a networked system called Enterprise Resource Planning; some are kept in free-standing devices such as personal computers. Paper-based records are kept in files and folders locked in drawers and cabinets while some are kept on shelves. The institution faces four key challenges in managing its records namely, lack of management support, lack of records management skills, poor infrastructure, and absence of formal policies, strategies, and guidelines. This study can be linked to the present study as the institutions was noted to have similar experience in terms of management support, human resources skills, technological facilities, or infrastructure facilities to effectively and efficiently implement the information system

management program. In support of the very high assessment of data collection and retrieval in records management, according to Weller (2017), keeping good records helps companies protect institutional memory as well as maintain evidence of activities, transactions, and decisions. An effective records management system can save money on storage and improve an organization's efficiency. Records management (RM), also known as records and information management (RIM), is an organizational function responsible for the creation and maintenance of a system to deal with records throughout a company's lifecycle. RM includes everything from the creation of a record to its disposal. Some people use the term information governance (IG) when talking about records management. IG is the management of information to support an organization's present and future, keeping in mind the regulatory, legal, environmental, and operational requirements. It includes the structure, policies, procedures, and processes necessary to manage all the information stored within an organization. In the institutions management and governance can both apply as the objective is to manage well the information stored through the information systems management of the school.

In the study of Touray (2021), the importance of records management in organizations was highlighted. In today's world records management cannot be overemphasized; records and information are the lifeblood of every organization and the basis on which decisions are made. The poor management of records not only hinders the development process of organizations but also leads to ineffectiveness and inefficiency in service delivery. Records, being personal or official, are very important. The success of any organization depends on effective records management practice that ensures the right records are available at the right time for effective business operations. The need for proper record-keeping is indisputable it is an ordinary and necessary component of virtually all business operations. Transparency and accountability can only be achieved if there is a policy that guides the management of records. In this regard, the focus in the institution is on the importance of efficiency and effectiveness of the service delivery system when it comes to information systems management where data management was noted to be very high. In this study, data control was also marked as very high. Egnyte.com defined data control as management oversight of information policies for an organization's information. Unlike data quality, which focuses on fixing problems, data control is observing and reporting on how processes are working and managing issues. Functions include inspection, validation, notification, documentation, issue reporting, and issue tracking. Data control monitors and restricts the transfer of files containing sensitive data to reduce accidental data loss. Organizations can measure the efficacy of data controls based on data governance objectives. For the institutions the information systems management includes data control to ensure that records are safe, complete, available, and can be delivered on time.

As explained by Rouse (2016), a data bank is a well-organized and maintained collection of data for easy consultation and use. This data repository is made accessible on local and remote servers and can contain information about a single, dedicated subject or multiple subjects in a well-organized manner. It describes a collection of information that a company uses to manage its operations. Data banks help companies coordinate the different departments in order to make their business more efficient and profitable. Although it was recorded as high in this study, for the institutions, it includes improved data quality and accuracy, enhanced data security and privacy, regulatory compliance, effective risk management, and improved decision-making and enables access for school administrators to reporting software, allowing them to meet reporting demands faster

and more efficiently. As a whole, the respondent's assessment of the overall level of record management in the institutions was very high. This denotes that the respondents and the proponent of the information systems management recognized records as valuable assets of the school. The very high mark of records management manifested they not only help protect records but also enhance organizations' operational efficiency.

Moreover, records management is an important function of an organization. They believed that good and proper recordkeeping is evidence of a well-governed organization and should be seen as an integral part rather than incidental. In terms of strengthening school governance and promoting good management practices, it has been known to have definite merits of sharing good records management practices and procedures with educational institutions working at their best in terms of records management through information systems management.

The Differences among Aspects of Institutional Readiness and Record Management

Table 10 demonstrates the differences among aspects of institutional readiness and record management.

Table 10 Significant Differences Among Aspects of Institutional Readiness to Information System Management

	Sum of Square	df	Mean Square	F	Sig.	Interpretation
Between Groups	3.182	2	1.591	2.176	.115	Not Significant
Within Groups	217.194	297	.731			
Total	220.376	299				

The table presents the results of an analysis aimed at identifying significant differences among various aspects of institutional readiness for information system management. The analysis employed an ANOVA framework to assess the variability both between and within different groups or categories of readiness aspects. Table 10 illustrates the findings derived from an extensive analysis of variance (ANOVA) designed to discern significant disparities across diverse facets of institutional readiness for managing information systems. This analytical approach scrutinizes both between-group dissimilarities, which elucidate variances among distinct groups, and within-group disparities, which delve into the intricacies within each group. The examination of between groups reveals a sum of squares amounting to 3.182, accompanied by 2 degrees of freedom, thereby yielding a mean square of 1.591 and an F-value of 2.176. Despite these metrics indicating a degree of divergence among the groups, the resultant p-value (Sig.) of .115 denotes a lack of statistical significance at the conventional threshold of .05. Consequently, the null hypothesis, positing the absence of noteworthy differences among the groups, remains unchallenged. Concurrently, within-group analysis unveils a sum of squares totaling 217.194, traversing 297 degrees of freedom to yield a mean square of .731. The cumulative sum of squares, encompassing the entirety of the dataset, tallies up to 220.376, spread across 299 degrees of freedom. In summary, while discernible variations exist among the groups concerning institutional readiness for information system management, the statistical inquiry suggests that these discrepancies lack substantive significance. Hence, any observed differences among the groups may be ascribed more to random chance than to substantial disparities in institutional preparedness.

The "Between Groups" section of the table quantifies the variance observed between these categories, with a sum of squares of 3.182 and a mean square of 1.591. The associated F-value of 2.176 indicates the ratio of between-group variance to within-group variance. However, the significance level (p-value) for this comparison is reported as .115, which exceeds the conventional threshold of .05. Consequently, there is insufficient evidence to reject the null hypothesis of no significant differences between the readiness aspects at the standard significance level. On the other hand, the "Within Groups" section reveals the variance within each individual group, with a sum of squares of 217.194 and a mean square of .731. The "Total" row summarizes the overall variability in the data, accounting for both within-group and between-group variations.

In summary, based on the analysis presented in the table, there are no statistically significant differences among the aspects of institutional readiness for information system management at the conventional significance level of .05. This indicates that, within the context of this study, the various readiness aspects do not exhibit distinct levels of preparedness for managing information systems. The table displays outcomes from a statistical examination aimed at discerning notable distinctions in various facets of institutional preparedness for managing information systems. Three specific areas are scrutinized: Human Resources (HR) and Technological Facilities, HR and Management (Mgt) Support, and Technological Facilities and Management Support. The analysis employs the F-statistic and associated p-values for each comparison of aspects. Using the instance of HR and Technological Facilities, the F-statistic is 0.603 with a corresponding p-value of 0.603. The null hypothesis, asserting no substantial difference between HR and Technological Facilities, is upheld as the p-value exceeds the common significance level of 0.05. This lack of significant differences is consistent across all comparisons in the table, evident by the p-values of 0.115, 0.603, and 0.095. Consequently, based on the statistical analysis, it can be inferred that, within the studied context, there are no noteworthy distinctions among the facets of institutional readiness for managing information systems.

Table 11 presents the statistical analysis of significant differences among different aspects of records management. The table includes the degrees of freedom (df), the F-statistic (F), and the significance level (Sig.) for each comparison, along with an interpretation of the results. The first row, "Among all Aspects," indicates that the comparison involving all aspects has 3 degrees of freedom, an F-statistic of .599, and a significance level of .616. The interpretation suggests that there is no significant difference among all aspects of records management based on these statistical measures. Subsequent rows focus on specific pairs of aspects. For instance, the comparison between "Data Collection and Retrieval" and "Data Banking" shows a degree of freedom of .689 with no significant difference at a significant level of .999. Similar findings are reported for other pairwise comparisons, including "Data Collection and Retrieval" with "Data Mgt," "Data Collection and Retrieval" with "Data Control," "Data Banking" with "Data Mgt," "Data Banking" with "Data Control," and "Data Mgt" with "Data Control." In each case, the statistical analysis indicates no significant difference among the respective aspects.

In summary, based on the provided statistical results, there are no significant differences among the aspects of records management considered in this analysis. This information is valuable for understanding the comparative relationships between different facets of records management, providing insights into their potential similarities or dissimilarities. This further implies that the differences among aspects of institutional readiness and record management

were not significant as the implementation could have been similar in all aspects and at all levels. The evaluation of the institutional readiness and the level of records management implemented in the institutions revealed p-values greater than 0.05 level of significance which were considered statistically not significant. This means that there is no measurable difference among the aspects. However, there were some respondents who declared that they did not fully agree, the implementations were the same in all levels.

The findings in this study can be associated with the study of Konen and Karbach (2021) which states that intervention studies, such as the implementation of the information systems management in the institutions, can be expensive and time-consuming, which is why it is important to extract as much knowledge as possible. Benefits and limitations were discussed in analyzing individual differences in intervention studies in addition to traditional analyses of average group effects. First, it presented a short introduction to latent change modeling and measurement invariance in the context of intervention studies. Then, we give an overview of options for analyzing individual differences in intervention-related changes with a focus on how substantive information can be distinguished from methodological artifacts (e.g., regression to the mean). The main topics are the benefits and limitations of predicting changes with baseline data and of analyzing correlated change. Both approaches can offer descriptive correlational information about individuals in interventions, which can inform future variations of experimental conditions. Applications increasingly emerge in the literature from clinical, developmental, and educational psychology to occupational psychology and demonstrate their potential across all of psychology. The former study was on the differences between branches of psychology which understandably differ from each other. On the contrary, the implementation of the information systems management in the institutions manifested that the differences were not significant. The differences can be on the impact of the intervention on the individuals or the intervention leads to significant average improvements compared with one or more control conditions. Nevertheless, the no significant effects in the implementation were based on the same group of respondents. Furthermore, there can be common effects within-group effects. Thus, the benefits and challenges of individual differences in the schools were found to be not significant and can be enhanced based on the long-term implementation.

Effect of Institutional Readiness on Information System Management to Record Management

Table 12 shows the effect of institutional readiness on information system management to record management. In terms of human resources its effect on data collection and retrieval obtained an $r=.090$ and $r^2=0.0081$; for data banking, $r=-.035$ and $r^2=0.001225$; on data management, $r=-.79$ and $r^2=0.006241$; with data control, $r=-.047$ and $r^2=0.002209$; all were declared not significant. This means that readiness for information system management in terms of human resources has no significant effect on the level of record management along data collection and retrieval, data banking, data management, and date control.

With regard to technological facilities, its effect on data collection and retrieval got $r=.168$ and $r^2=0.028224$; for data banking, $r=.087$, and $r^2=0.007569$; on data management, $r=.072$ and $r^2=0.005184$; with data control, $r=.055$ and $r^2=0.003025$; all were found to be not significant. This denotes that readiness for information management in terms of technological facilities has no significant effects on the level of record management along data collection, data banking, data management, and data control.

Table 11 Relationship of Institutional Readiness on Information System Management to Record Management

Readiness to Information System Management	Level of Record Management	r	p	Interpretation
Human resources	Data collection and retrieval	.090	.371	Not significant
	Data banking	-.035	.730	Not significant
	Data management	-.079	.437	Not significant
	Data control	-.047	.645	Not significant
Technological facilities	Data collection and retrieval	.168	.095	Not significant
	Data banking	.087	.391	Not significant
	Data management	.072	.474	Not significant
	Data control	.055	.585	Not significant
Management support	Data collection and retrieval	.190	.059	Not significant
	Data banking	.118	.244	Not significant
	Data management	.072	.474	Not significant
	Data control	.095	.349	Not significant

Further, the effect of management support on data collection and retrieval attained r=.190; for data banking, r=.118; on data management, r=.072; and with data control, r=.095; all were described as not significant. This suggests that the effect of institutional readiness on information system management in terms of management support to record management along data collection and retrieval, data banking, data management, and data control was not significant as revealed by the results in the table. The findings in this study demonstrated that the readiness of the institutions to establish or implement information system management was indeed very low and it was marked as not significant effect on the level of record management. This further implies that the readiness for information system management in terms of human resources, technological facilities, and management support was low, thus it was declared as not significant for data collection, data banking, data management, and data control as aspects of record management. This could possibly be due to lack of training, lack of motivation, and lack of facilities to adopt and implement information system management.

Institutional Readiness. In terms of institutional readiness, the results which were interpreted as low need to be addressed through an evaluation of the individual capacities of human resources to adopt the information system management, provision of state-of-the-art technological facilities, and enhanced management support. This can be done through capacity enhancement programs where all members of the organization, the institutions shall be mandated to participate and attend. Through it, individual skills, talent, and technical know-how on information system management shall improve with the specific strategies to be adopted and implemented to achieve success. After which, there shall be an assessment of the employees' opinions, perceptions, and motivations about the required changes, or readiness as well as the organization or school's ability to successfully implement those changes. The importance of the acquisition of the newly learned skills and their transfer to the workplace; new facilities and appropriate management support would present an important concern in this aspect. Despite the increased investment in training, sometimes not all would be that capacitated unless there is full implementation which everybody should be doing. The transfer of newly learned skills, knowledge, and attitudes necessary for their job scopes should be put into practice.

Management, supervisor's role, and opportunities must be offered and made available to everyone.

Record Management. As to record management, generally, it was recognized as very high. This means that the aspects of record management must be sustained such that data collection and retrieval, banking, management, and control must be fully operational, functional, secured, and safe. It can be done through corresponding action such as for records/files needed on a regular basis, must be kept in the most accessible place such as a file cabinet within your desk. For records that are needed by many people, keep them centrally located so everyone has fairly easy access but there must be a built-in control system.

CONCLUSION

For effective and efficient record management, the school must adopt a system of document retention, the method and practice of storing, maintaining, and archiving important and confidential information over a required period of time. Then, know which records to keep, and for how long, to ensure legal and regulatory compliance. Indexing and categorization is an important aid to the filing. Filing and indexing are interrelated in that filing without indexing is incomplete and indexing without filing does not exist. Indexing is the process of determining the name, subject or other captions under which the documents are filed. The index is a guide to records. Concerning secured storage, it is where data resides. It is also where users and applications interact with data either directly or indirectly. An effective storage security strategy is essential in preventing unauthorized access to data and underlying storage systems.

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