Evolution of E-records Management Practices in E-government: A Malaysian Perspective

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Abstract
In compliance with Electronic Government (E-Government) policy 1997, government bodies need to implement electronic records in their administration, such as Electronic Records Management (ERM). ERM has a significant influence on the management of public electronic documents. Unlike traditional records settings, the electronic environment becomes the duty of every employee, regardless of rank. In this regard, user participation is critical to the success of ERM implementation. As a result, a robust implementation strategy that works hand in hand with policy and guidelines is required to promote user acceptance of the system. The implementation of ERM is a lengthy and complex process that impacts how people operate at all levels. As a result, change management should be included. The main purpose of this study is to investigate the existing practice of electronic records management in the Public Services Commission of Malaysia (SPA), a well-known government body in Malaysia. A total of 76 questionnaires were distributed to randomly chosen sections within the SPA. 75 questionnaires were collected, with a response rate of 98.68%. Data were analysed using Statistical Package for Social Sciences (SPSS) version 26.0. The results revealed that the procedures for managing electronic records management systems must be quickly provided or reviewed. It is because, despite the fact that the majority of transactions are now conducted online, national regulations have been developed. Moreover, systematic records management may aid in the delivery of public services, and the positive impact of an ERM system has been shown in several government organisations. Besides that, public officials at all levels should be educated about ERM in order to foster a culture of exceptional service. There is a need to raise awareness among people or staff about the significance of electronic records management as a basis for honesty and accountability.
Keywords: Electronic Records Management (ERM), Electronic Government

Introduction
The Malaysian government established the E-Government (Electronic Government) programme in 1997. In 1996, the Multimedia Super Corridor (MSC) was introduced, initiating

the adoption of e-government. E-government aims to make contact between the public and businesses simpler by improving accessibility and, as a result, significantly reducing red tape. The usage of electronic records has risen in the digital age. Numerous types of electronic records must be properly managed to ensure their availability for future use, which will benefit organisations and the nation. Most transactions are done electronically, but many organisations or agencies continue to use the hybrid approach, where everything in the system must be printed, placed in a manual file, and stored in a file room for future reference, as well as to maintain and preserve important records.

In keeping with government policy to foster E-government, electronic records management (ERM) has become a requirement for government bodies to implement electronic records in their administration. The majority of firms have a sizable budget for ICT development. However, based on a previous study by Ramli (2017), most departmental systems, such as E-SPARK, built by Malaysia's National Archives (NAM), are not administered under the national policy.

Poor record-keeping and a lack of attention appear to be the major causes of record mismanagement. Abdullah et al (2019) revealed that not all government agencies have electronic records management policies and certain electronic records are far from complete, clear, or easily accessible. Many organisations maintain their electronic records without a formal policy in place. Additionally, records and information are not handled as business assets (Mukred et al., 2021).

Problem Statement

The advancement of information and communications technology (ICT) has resulted in changes in records management inside a company. The significant differences are in the conversion of the printed form to digital form. This becomes the primary emphasis of all enterprises in having a single solution that can handle and maintain their records appropriately throughout their whole business environment. As a result, public and private organisations must take action to assist the growth of ICT and government policy in managing all records. However, certain steps must be taken to guarantee that the system's implementation meets the government's goals.

Past research by Hassan et al (2019); Hawash et al (2020) found that electronic document management systems are not widely implemented, resulting in several issues in storing and processing all data in enterprises. One of the reasons for failure is a lack of a proper system that fulfils ISO criteria, resulting in noncompliance with the records management concept and policy. When adopting an ERM system in an institution, the lack of records management knowledge becomes a key challenge, which will be the most challenging difficulty to overcome for the institution's ERM system.

ERM has a significant influence on the management of public electronic documents. Unlike traditional settings (which are often confined to filing activities), the electronic environment becomes the duty of every employee, regardless of rank. In this regard, user participation is critical to the success of ERM implementation. As a result, a robust implementation strategy that works hand in hand with policy and guidelines is required to promote user acceptance of the system. The implementation of ERM is a lengthy and complex process that impacts how people operate at all levels. As a result, change management should be included.

According to a previous exploratory assessment conducted by Ab Aziz et al (2020), ERM performance in the Malaysian public sector is still hampered by low utilisation. The

implementation is also inconsistent (Mukred et al., 2021), despite the fact that most agencies like producing policy and guidance (Ramli, 2017). Therefore, ERM implementation standards for the Malaysian public sector must be developed, which may be used and coordinated by all implementing agencies.

Objective of The Study

The overall goal of this study is to investigate the existing practice of electronic records management in the Public Services Commission of Malaysia (SPA), a well-known Malaysian government body. The following are the specific objectives of the study:

i. to identify SPA staff's awareness of ERM

ii. to find out the qualification of staff involved in ERM

iii. to find out the training provided for staff involved in ERM

iv. to identify whether SPA possesses guidelines and policies on ERM; and

v. to find out the infrastructure provided in managing ERM.

Literature Review

According to Ab Aziz et al (2018), an ERM solution becomes a tool in creating and assessing the electronic record-keeping system, demonstrating the value of storage. As it comes together in one solution, the ERM solution incorporates the component or function of the electronic record-keeping system (Hassan et al., 2019). Each organisation's policy or business rule determines how the solution is designed and implemented. All records may be retained or saved in an appropriate storage area with the exact location that has been designated by managing the electronic records in electronic form.

The organisation's strength in controlling and executing the system must be the concept of electronic records management. Any records management technique or system should be able to properly manage, organise, evaluate and discard records (Safitri, 2020). As a result, ERM systems must evolve into the ideal platform for everyday transactions, ensuring that all businesses utilise the same solutions and activities for records management. By improving the existing system, it will be possible to create a new environment in the system without encountering many issues.

Records must always be accurate and trustworthy as proof and sources of information. To function successfully as proof of action, a record must first be compatible with any external standards in the environment where the organisation works. Along with financial and human resource management, records management is an important part of an organisation's architecture (Rosliy & Hussin, 2018). The reasons for keeping records are to ensure that business is conducted in an orderly, efficient, and accountable manner and that services are delivered consistently and correctly in order to preserve the company's and institution's memory. Jalil et al (2020) assert that no government or group can be held responsible unless it keeps records that provide documentary evidence of its activity.

However, records management is not seen as crucial to the organisation's goal, and it is rarely integrated into automated business operations on time. Low support for records management has resulted in a lack of training, resources, and direction for all employees, as well as a lack of interaction between records management and IT disciplines. It has been challenging to construct a records management programme due to a lack of understanding among administrators. The employees are not well-informed and trained in the area of

records management. This has resulted in a lack of training, resources, and advice for all employees, as well as a lack of synergy between records management and IT disciplines. According to Safitri (2020), policies, standards, and procedures are essential to ensure that records management programmes are executed efficiently and successfully in businesses. Despite the fact that records and information management is a crucial component in improving an organisation's performance, accountability, and openness, it receives less attention (Abdullah et al., 2019). Furthermore, one of the challenges in e-government is some government organisations do not view ICT spending as an investment (Ab. Aziz et al., 2018), which will become a stumbling block in ERM implementation.

Methodology

This research used a survey approach, employing observation and questionnaire as data collection methods to address the research questions. Visits to randomly chosen sections within the SPA, such as Recruitment Division, Special Recruitment Division, Digital and Informatics Division, Meeting Secretariat Division, and Service Division, were part of the observation. The purpose of the visits was to support and validate the data gathered from the questionnaires.

Findings

The researchers managed to collect 75 sets of questionnaires, yielding a response rate of 98.68%, as shown in Table 1.0. The raw data were keyed in and examined using the Statistical Package for Social Sciences version 26.0, where analysis on reliability and regression was conducted.

Table 1.0
Number of Respondents Involved (n=75)

Number of questionnaire distributed	Number of questionnaire returned	Percentage returned (%)	Number of valid questionnaire	Percentage valid (%)
76	75	98.68	75	100.0

Table 1.1
Demographic Profile of Respondents

Variable	Descriptive	Frequency	Percentage (%)
Gender	Male	31	41.3
	Female	44	58.7
Age	<30 years old	19	25.3
	30-35 years old	21	28.0
	36-40 years old	11	14.7
	41-45 years old	9	12.0
	46-50 years old	8	10.7
	>50 years old	7	9.3
Marital Status	Single	21	28.0
	Married	54	72.0
Race	Malay	60	80.0
	Chinese	5	6.7
	Indian	5	6.7
	Others	5	6.7
Work Experience	<1 year	6	8.0
	1-5 years	14	18.7
	6-10 years	18	24.0
	11-15 years	15	20.0
	>15 years	22	29.3

Gender of the Respondents
The majority of the respondents were female 58.7%, meanwhile, 41.3 % were male.

Age of the Respondents
The majority of the respondents were between 31 to 35 years old, comprising 21 people (28%). This was followed by those aged between 25 to 30 years old, constituting 12 people(16%), 11 people aged between 36 and 40 years old (14.7%), 9 people aged between 41 and 45 years old (12%), and 8 respondents aged between 46 to 50 years old (10.7%). 7 respondents were below 25 years old (9.3%). Only 4 respondents aged between 56 to 60 years old (5.3%). Only 3 respondents were between 51 to 55 years old (4.0%).

Marital Status of the Respondents
Most respondents were married (72.0%), followed by those who were single (28.0%).

Race of the Respondents
The majority of the respondents were Malays, comprising 60 people. This was followed by Chinese, Indian, and other races, each represented by 5 people, respectively.

Work Experience of the Respondents
The majority of the respondents had work experience of more than 15 years, comprising 22 people. This was followed by 6 to 10 years, 11 to 15 years, and 1 to 5 years of work experience,

constituting 18, 15, and 14 people, respectively. The remaining 6 people had work experience of less than 1 year.

Educational Level of the Respondents

The majority of the respondents had other educational qualifications, represented by 26 people, followed by those who had a Bachelor's Degree and Diploma, each represented by 21 people, respectively. The remaining 7 had a Master's Degree or higher.

Reliability Analysis for Awareness, Qualification, Training and Infrastructure in ERM among SPA Staff

Variables	Number of Items	Cronbach's Alpha
INDEPENDENT VARIABLES		
• Awareness	6	0.765
• Qualification	6	0.796
• Training	6	0.730
DEPENDENT VARIABLE		
• Infrastructure	4	0.751

As presented in Table 4.6 above, the Cronbach's Alpha values for independent variables ranged from .730 to .796, indicating good values. Thus, the Cronbach's Alpha values for all variables were acceptable.

Table 1.3

Results of Regression Analysis with Infrastructure in ERM as the Dependent Variable

Independent variables	Standardised Beta Values
Awareness	.175
Qualification	.293*
R	.385
R squared	.148
F values	6.252
Significant F values	.003
Durbin Watson	2.134

Table 1.3 shows that the R squared value was 14.8%, indicating that the independent variables explained 14.8% of the variance in the regression model. The significance F value (F= 6.252, p = 0.003) showed a good model fit and the Durbin Watson value was 2.134, which was within the acceptable range. Looking at the individual contribution of independent variables in explaining infrastructure as the dependent variable, PU (β = .293, *p*<01) was found to be a significant predictor.

Discussion

The findings revealed several important discoveries about the evolution of ERM that may be applicable to other agencies, particularly those in the public sector. The lesson learnt serves as a reminder to our government or the selected SPA divisions that procedures for managing

electronic records management systems must be provided or reviewed as soon as possible (Ramli et al., 2017). It is because although most transactions are now conducted online, national regulations have been developed. Strategies must be in place to carry out the records management life cycle and its components. Existing policies must be examined and updated to suit the needs of each division. Specific and well-defined criteria, as well as solid infrastructure, are required to handle complete records such as planning, development, maintenance, updating, and disposal. Good governance is dependent on the adoption of records management, whether traditional or e-government. Based on the findings, systematic records management may help provide public services, and the positive impact of an ERM system has been shown in several government organisations. ERM could potentially reduce transaction time and costs of people travelling to liaise with government agencies. ERM is also able to strengthen the government's capacity to provide services to a larger population. Managers' ability to monitor work completion rates by government servants is also improved. Indeed, the country's Prime Minister has consistently emphasised the importance of improving public sector service performance in order to boost Malaysia's global competitiveness environment.

The public sector exists to fulfil the needs of the people, and as such, public officials must shift their mindset to serve rather than be served (Al-Tkhayneh et al., 2019). Government bureaucracy should be replaced with professionalism for the country's administration to work smoothly. Based on the findings, public officials at all levels should be educated about ERM in order to foster a culture of exceptional service. It is not just clerks and lower-level employees who should be concerned, but also upper management. There is a need to raise awareness among people or staff about the significance of electronic records management as a basis for honesty and accountability.

Apparently, the findings show the benefits of ERM implementation unable to be recognised by the employees. In relations to motivation, employee's involvement in record management could be discussed from the psychological needs' fulfilment. According to Deci and Ryan (2000), psychological needs promote self-competency, vitality, and social-oriented forms of behaviour that are meaningful for one's progress and self-growth (Otero-lópez & Villardefrancos, 2015; Pugno, 2008; Truong & McColl, 2011). The central components of psychological needs are autonomy, competence, and relatedness, which cover the crucial needs of one's growth and development. A feeling of being acknowledged and appreciated, being free to do anything, intimate and affiliated, as well as being competent, confident, and capable to perform any activity, are among the psychological needs. Psychological needs linked with intrinsic motivation are shaped by the satisfaction of autonomy, competence, and relatedness (Gilal et al., 2019). Human seek activities that satisfy their psychological needs and contribute to self-enhancement as they believe that these can affect their life satisfaction and psychological well-being (Deci & Ryan, 2000; Hope et al., 2016; Kasser & Ryan, 2001). In relation to the issue of employee's involvement in electronic record management, employees need to have a strong sense of self-autonomous which is associated with the ability to control own self and self-voluntary with respect to some behaviour or experience; relatedness needs reflect the need to feel connected and affiliated with others in a meaningful manner; while competence needs signify self-mastery and being 'effective' with behaviour or goal (Deci & Ryan, 2014).

According to Deci and Ryan (2000), when people engage in interesting activities, they can control themselves and be their own selves, feel capable and effective in performing activities, and get connected with others involved in the same activities. Satisfaction is a basic psychological needs component that reinforces and is accompanied by other fulfilment of needs, which can enable consumers to experience self-growth and development (Evans et al., 2013; Tamborini et al., 2011). Perhaps, the adoption of ERM, which was unable to meet their psychological demands and compelled employees to participate in order to protect themselves from negative repercussions, was one of the factors that discouraged employees' involvement. As employee's involvement were compelled, involuntarily, cognitively being forced in order to protect themselves from negative repercussions. Consequently, the non-autonomous behaviour, prevent employees to fulfil their competence needs which will affect job performance, satisfaction, happiness, psychological health and well-being.

Recommendations
Based on the findings, it is suggested that SPA makes concentrated efforts and takes measures to preserve and enhance electronic records management. It is recommended that the organisation raise awareness of ERM implementation. Besides, SPA needs to specify the qualifications of people handling ERM. SPA should also develop ERM guidelines and policies, and last but not least, SPA should maintain ERM facilities/infrastructure. The National Archives Act of 2003 (amendment) stipulates that organisations are accountable for current records management and managing electronic documents from creation to disposition. Act 639 specifically prohibits the destruction of public documents (paper or electronic records), and no one should delete any records without prior approval or written agreement from the Director General of the National Archives Malaysia (NAM). It also requires records management systems for auditing (International Standardisation Arrangement-ISO) to oversee the generation and organisation of records, which is the most significant role of record-keeping.

Conclusion
Systematic administration of electronic records and archives is critical in ensuring an effective government and cultivating the ideals of a greater world civilisation based on justice, peace, and prosperity for all humankind. Government agencies must follow the authority's ERM policy while employing best practices to ensure that the nation's corporate memory is effectively administered and protected. When it comes to developing and implementing an ERM system, organisations are not alone. NAM, as the primary agency, could not function on its own. Hence, it requires the cooperation of other ministries, agencies, civil workers, and the general public. Therefore, records management policies should be applied in a transparent, explicit, and complete manner. Controls are required to guarantee proper electronic records management in order to support government information. This study contributes to the body of knowledge as the findings provide a perspective and understanding that cast doubt on the adoption of ERM's effectiveness from the eye of practitioners. Thus, further should be carried out in-depth to investigate the underlying causes why employees refuse to accept ERM from the standpoint of their psychological requirements and wellbeing.

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