



Evaluating the Applicability of the Functional Requirements Developed on the Practices of Records Management System in the Malaysian Court of Appeal

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Abstract. The purpose of this paper is to evaluate the applicability of functional requirements developed on the practices of records management system in the Malaysian Court of Appeal. A single case study approach was selected in this study. The instruments used for data collection are; (i) online focus group discussion by giving the international experts in Electronic Records Management (ERM) to review the functional requirements, (ii) face to face interviews with IT personnel of the Malaysian Court of Appeal and (iii) face to face focus group discussion with the members of *International Research on Permanent Authentic Records in Electronic Systems Project (InterPARES)*. The finding reveals that, the functional requirement that was developed, in line with the Malaysian Court of Appeal's ERM practice. Thus, it is hoped that the documented functional requirements could encourage the majority of the courts in Malaysia to have standardized ERM requirements and improving data sharing with other courts and judicial agencies. Besides, the functional requirements developed are not only meant to assist in designing related system, but also to assess the capability of software packages that is currently in place. The functional requirements could also be used to assist in streamlining the management of court records, save file storage space, reduce manual handling of files and contribute to the preservation of corporate memory.

Keywords. Electronic records management; Electronic court records; Court of appeal; Functional requirements

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1. Introduction

The functional requirement (within the context of electronic records management) is a description of the requirements of a system for it to fulfill its responsibilities and to support users in performing tasks relating to those responsibilities [8]. According to [2] functional requirements are the inputs and processes that lead to intended outputs. Thus, the underlying tasks of the functional requirements are to identify the controls needed to ensure a software system will complete the tasks it is intended to complete.

Various models and framework such as Business-Driven Recordkeeping Model [5], Model of High-Level Functional Requirements for ERM [6], Trust Model of Record's Life Cycle [12], and Trusted Electronic Records Management Framework [1] suggest that the systematic recordkeeping functional requirements is necessary to be complied by all organizations in order to manage the electronic records effectively. This view is supported by several studies which revealed that one of the significant approaches for guaranteeing the trustworthiness of electronic records in the organization is by embedding recordkeeping requirements (see [3, 4, 9, 14]).

Furthermore, in the context of court environment, the scope, and application of a piece of legislation refer to as its jurisdiction. If the jurisdiction of a particular policy or act is not clear, this can create difficulties for record managers and archivists. For instance, in Australia, there has been uncertainty about the jurisdiction of archival legislation over the court records. This is because the legislation does not explicitly cover case files and transcripts of the courts. These documents, therefore, may not be affected by the legislation. By contrast, in Namibia, the Archives Act 1992 explicitly states the legal records to which it applies [7].

This view is supported by [13] recommending that clear policy of court records management, paper and electronic should spell out requirements for every phase of court records' life cycle encompassing records processes from the creation until the disposition of court and case files regardless of the forms. In addition, records retention schedule and long-term preservation training should also be included in the policy.

In addition, [12] highlights, strategies must be developed to ensure that courts embrace opportunities and minimize new risks that did not present themselves in the paper-based the world and are unique to the digital environment. There is now the significant potential for the core values that underpin the justice system such as fairness, transparency, integrity and independence, to be inadvertently impacted by inadequate policy development.

On this basis, the specific functional requirements for the management of electronic court records has been developed at the Malaysian Court of Appeal through a comprehensive research study. The functional requirements developed serve as the basis for designing systems that facilitate the recordkeeping process and the benchmark for measuring the performance of the existing system. This is vital for the long-term preservation of those court records as evidence of transactions and accountability that the records held for their current use.

2. Objective of the Study

The objective of this paper is to evaluate the applicability of the functional requirements developed on the practices of records management system in the Malaysian Court of Appeal.

3. Methodology

A single case study was recognized as the most suitable approach based on the analysis of the methods used in previous studies. The rationale for a single case design is derived from the fact that in Malaysia, there is only one Court of Appeal which handles cases throughout the entire of Malaysia. Table 1 below illustrates the data collection methods in relation to the objective.

Table 1. Data collection methods in relation to the objectives

Objectives	Data Collection Instruments
Evaluate the applicability of functional requirements developed on the practices of records management in the Malaysian Court of Appeal.	<ul style="list-style-type: none"> • Online focus group discussions by giving the international experts in Electronic Records Management to review the functional requirements. • Face to face interviews by giving the IT personnel of the Malaysian Court of Appeal to review the functional requirements. • Focus group discussions with InterPARES3 team members to validate the final functional requirements.

To evaluate the applicability of the functional requirements developed on the practices of records management in the Malaysian Court of Appeal, the researcher had interviewed IT managers at the Information and Technology Department. The reason for the interviews was to obtain feedbacks from them to ensure the requirements draft can be implemented as intended. The interview guide was in the form of a checklist.

This second method that was used is focus group discussion where the focus group participants need to review and comments each of the functional requirements developed. Two focus group discussions were organized as listed below:

- (i) Online focus group discussions with international experts in Electronic Records Management, to review the functional requirements.
- (ii) Face to face focus group discussion with InterPARES team members to validate the final functional requirements.

The rationale for conducting online focus group discussions was to gain feedbacks and comments from the international experts. Literature such as [8] and [4] highlight that two ways to conduct an online focus group are synchronous (real-time) and asynchronous (nonreal-time). Synchronous could be defined as a fast moving and chaotic focus group discussion which similar to face to face discussions in a traditional focus group while the asynchronous focus group provide the participants with time to consider their responses and are usually lengthier than those in the synchronous focus group. Since the respondents are the international experts from different region throughout the world, therefore the asynchronous online focus group was

employed to overcome global time difference where the participants can respond on their own time through online networks.

Once the functional requirements were corrected and edited, the final draft was presented to the InterPARES3 team members at the International Summit meeting for final validation of the functional requirements. The rationale of choosing InterPARES3 members was because there are the experts and professionals in electronic records management in diverse industries. In addition, InterPARES projects have made a universal impact in the field of electronic records.

4. Results

After completing the first draft of functional requirements for the management of electronic court records (civil cases) in the Malaysian Court of Appeal, the authors began to proceed with evaluating the applicability of the functional requirements developed into the practices of records management system in the Court of Appeal.

The evaluation began by giving the international experts in ERM to review the functional requirements in the context of ERM. The reasons for allowing the experts to review the functional requirements were (i) to ensure that the functional requirements developed, meet with the international and national standards, (ii) to identify functional requirements that need customization, (iii) to refine functional requirements as needed, (iv) to ensure that the functional requirements developed are applicable to the Malaysian Court of Appeal's operations and (v) to ensure the trustworthiness of the study.

The draft was prepared in the form of a checklist and sent via email to the Director of InterPARES, requesting the InterPARES collaborators to review the functional requirements. InterPARES collaborators are individuals who have special expertise in some aspects of the InterPARES research and contribute to the InterPARES project as needed. The reason for choosing InterPARES collaborators was because this study is a part of InterPARES phase 3 project which is based at the University of British Columbia and all the collaborators are professional practitioners in the developed countries.

The asynchronous online focus group was organized by using InterPARES group email. In order to allow easy comment by participants, the functional requirements developed were converted into a checklist form. All the participants were given a duration of two months to review the draft. The reviewer should tick (✓) in the columns indicated as "REQUIRED" while the "REVIEWER COMMENTS" column is meant for any remarks for every requirement made during the interview session.

Three of the InterPARES3 experts responded and gave comments. The experts are (i) Director of Information Access Department, Toronto City Hall, (ii) Director of InterPARES, and (iii) Project Coordinator of InterPARES3. Below are the numbers of comments made by them.

Table 2. Number of Comments Made by the Online Reviewers

Reviewer	Number of Comments
Director of Information Access Department, Toronto City Hall	23 Comments
Director of InterPARES	2 Comments
Project Coordinator of InterPARES3	1 Comment

The first significant change to the specification was a redefinition of the term ‘court records’. It was recognized that: (i) the original definition only applies to one particular requirement and there is no alternate definition given for later requirements and (ii) the definition was in a smaller scope which was a bit confusing. Based on the comments given, the author has revised the definition to make it clearer and more precise. Description of the reporting term has also been revised.

The second modification to the specification was eliminating some of the requirements, notes and words that were not necessary. Two sub-functional requirements and one ‘note’ were deleted. The reason for deleting them was because those requirements and ‘note’ have been accounted for in the specification. Redundant requirements, therefore, were eliminated or integrated. Besides eliminating some of the requirements, one of the reviewers proposed for the deletion of some words in the specification. The reason for deleting them was because those words were unnecessary to be included as it caused confusion and have no effect on the requirements.

The third modification was to include additional points and examples of some of the requirements. For instance, the types of authentication that were used by the Court of Appeal i.e., “public key infrastructure” and “system login” were added to the requirement. The fourth modification to the specification was redrafting the requirements. The next modification was replacing existing words, examples, and sentences with words that were recommended by the reviewers.

After several revisions as recommended by the international experts in ERM, the revised version was submitted to the IT personnel of the Malaysian Judiciary to review on the applicability of functional requirements developed in the practice of the records management system in the Court of Appeal. This is necessary to ensure the requirements can be implemented as intended. Three IT managers were chosen because they are the leaders in their respective department related to the management of the electronic system as listed below:

- (i) E-court IT Manager
- (ii) Network and Data Centre IT Manager
- (iii) Management and Application IT Manager

A functional requirement checklist was again used to assist in interviewing the IT Managers. This checklist was provided as part of the evaluation process to assess the applicability of the developed functional requirements in the practices of records management system in the Malaysian Court of Appeal. The checklist assists designated reviewers to determine whether the requirements are acceptable and applicable to the Court of Appeal. The method employed was a semi-structured interview.

The first interviewee was requested to review the developed functional requirements to evaluate its applicability into the practices of records management system in the Court of Appeal. Based on the 78 requirements that were reviewed, 65 requirements were accepted without any changes while 13 requirements were accepted with minor changes. Only 1 requirement was eliminated.

Once the requirements were corrected and edited, the updated requirements together with the requirements that were commented by the first interviewee were shown to the second interviewee for verification. The researcher was fortunate that there was no conflict of information among the interviewees. At this point of time, the correction is less. All requirements were accepted. Only 6 requirements had minor amendments. In the final interview session with the third interviewee, only two requirements needed to be edited, while 76 requirements, which reached the percentage of 97% had been accepted without any changes. As can be seen, the author continued to analyze and refine the functional requirements after each interview until it reached saturation point. Finally, all interviewees agreed that this functional requirement which consists of requirements on creation, maintenance, dissemination, administration and compliance are applicable to the Court of Appeal's environment.

Once the functional requirements were corrected and edited, the final draft was presented to the InterPARES 3 team members at the International Summit meeting for final validation of the functional requirements. The rationale of choosing InterPARES 3 members was because there are the experts and professionals in electronic records management in diverse industries. In addition, InterPARES projects have made a universal impact in the field of electronic records. In relation to the involvement of the experts, face to face focus group was conducted with eight members of InterPARES. They are from Italy, Brazil, South-Africa, Canada, South Korea, Turkey, and Malaysia. The feedbacks from the InterPARES3 members were encouraging. The functional requirements were approved with minimal amendments. Comments received were in terms of spelling and grammatical error. The final comment was on the obligation level of the requirements. These requirements are focused on mandatory requirements as minimum requirements and as a list of tasks that the system must perform. Even though there are international requirements such as MoReq2010 and U.S. DoD 5015.2 focusing mainly on the mandatory requirement, the Director of InterPARES3 recommended that future research could be broadened to include as well non-mandatory requirements. In sum, the functional requirement that was developed matches the situation in the Malaysian Court of Appeal and is relevant in the international and national context.

5. Conclusion

The evaluation began by giving the international experts in ERM to review the functional requirements in the context of ERM. Upon edition and modification of some of the functional requirements recommended by the international experts on ERM, the revised version was submitted to the IT managers of the Malaysian Judiciary to evaluate on the applicability of functional requirements developed in the practice of the records management system in

the Court of Appeal. The functional requirement that was developed based on the findings from the first and second objectives of the study, in line with the Malaysian Court of Appeal's ERM practice, This functional requirement specification has also been accepted by the InterPARES 3 members as revealed in the findings.

The study provides an exploration into the new legal records environment and may be seen as a contribution to the consideration of electronic records management literature in Malaysia. The outcome of the study is relevant to researchers, practitioner communities and Malaysian Judiciary as a functional requirement specification for the management of electronic court records in the Malaysian Judiciary has not been developed.

The recordkeeping functional requirements developed would encourage and assist the Malaysian Judiciary, particularly the Court of Appeal to reinforce a trusted environment and trusted records, which would benefit the judges, lawyers, courts' staff and clients, if it is adopted and implemented. The findings of this study could help the Malaysian Court of Appeal's staff to understand the provenance, procedural, administrative and social context of the court and establish a strategy for reviewing their recordkeeping practices when they refer to these functional requirements.

Besides, the functional requirement developed is not only meant to assist in designing the related system but also to assess the capability of the available software packages that is currently in place. The documented functional requirements could as well be used to identify missing functional components of the system, to appraise and audit the court records.

As a result, an electronic system which complies with the principle of records management would assist in streamlining the management of court records, save file storage space, reduce manual handling of files and contribute to the preservation of corporate memory. It would save both time and money for attorneys and their clients by delivering more efficient services to them. In addition, it could also eliminate petty problems such as misplaced or stolen documents, thus giving judges convenient and immediate access to records via desktops, laptops, handheld devices and other devices that access the Internet. Furthermore, it would also benefit the plaintiffs and defendants as the trusted system would speed up the legal procedures, which are normally subjected to time and energy constrained.

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Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

All the authors contributed significantly in writing this article. The authors read and approved the final manuscript.

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