

E-Records Management System for Mobile Work in UiTM

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Abstract. Record management is one of the key concerns in the world of mobile work, and mobile workers must overcome a number of obstacles to ensure that record management is carried out as effectively as possible. In order to do their daily activities and ensure that records can be managed properly and that there is no issue in relation to record management mobile workers need to discover new knowledge linked to the abilities of using ICT and technological devices. This study tries to pinpoint organisational record management motivational factors, challenges faced by mobile workers, and technical issues they encounter.

Keywords: Mobile workers, records management, mobile devices, mobile technology, information management, library management.

1 Introduction

Technology has become an enabler of mobile work and it is not a new phenomenon. However, efficient digital electronic record-keeping is very challenging and still difficult to achieve by mobile workers. Although there have been the developments of electronic records and records systems storage, these functions continue to be office and paper-based and the advantage of e-Record management (e-RM) has not been capitalised. Mobile devices and online connections have enabled record creation beyond the office context, and on other premises such as cloud storage. Most of the job tasks are done outside the workstation and in various different and unpredictable locations. Mobile workers are people who spend most of their time traveling and working in different places and use mobile technologies such as laptops, PDAs, mobile phones, etc. Their work involves some level of knowledge, intensity, and communication with others such

as their colleagues, business partners, and also clients. The COVID-19 pandemic worldwide has disrupted the normal working life in most organisations. Most countries have implemented complete or partial lockdowns to control the spread of viruses. Most organisations try to ensure their business continuity through work from home (WFH) which requires the access to information repositories remotely. At the organisational level, the developments of information communication technology (ICT) as well as staff competencies have transformed the work culture level. This has led to a diverse work environment. Mobile workers learn new mobile technologies to be able to carry out their work responsibilities in this new challenging period. They need to be able and ever ready 24/7 in delivering necessary services to the stakeholders. There is a need to study the challenges of assimilating work, adapting to new technology and family life during WFH. In work situations, handling of records and document management is either immediately or as soon as possible after the working hours. This may be challenging when working at home or in different places. Record management is very important because it is necessary to store important documents and data for strategic planning. Thus, this study aims to explore the readiness of mobile work and the potential contribution of records and information management on emergency crisis management during the COVID-19 crisis in Malaysia.

2 Problem Statement

The COVID-19 crisis has resulted in a change in the way that employees are required to work every day. The nature and requirements of work have changed, and employees must adjust. The way that records are managed is also impacted by this change in employment. Mobile workers face a challenge in this circumstance. There are several problems that have been addressed in this study regarding to the mobile work environment:

2.1 Organisation Motivational Factors

Organisations do not have the motivation to invest in hiring mobile workers. They still believe in the traditional ways of working environments that workers are still in office or at workstation and run all the work processes from the office. Workers also have to stay up at the office if they want to use the system / record management system in order to do their task. Organisations do not have the initiative to provide cloud computing systems that their workers can use and work away from the office from. Vartiainen (2006) stated that unplanned mobile workspace is how the organisation handles the management of mobile workers' information.

Venezia, Allee, and Schwabe (2008) agreed that organisations should think through to undertake a review of their typical workspace and reassign space in a greater arrangement according to the needs and expectations of the growing mobile workers population. Although the mobile work programme is supported on a corporate level, it still is not successful enough to reduce our office expenses (Venezia & Allee, 2007).

2.2 Mobile Workers Challenges

Mobile work and information technology have been growing and become a main focus. Bardram and Bossen (2005) argued that attention will arise from two sources.

Firstly, there is an increased understanding that without IT support and collaborative work new and difficult problems will arise. Secondly, from remote mobility anywhere, mobile workers travel across large distances and focus on new technology improvements that also enable them to work more easily.

Mobile workers need to move regularly and access resources using certain computer applications. They face some of the challenges during working hours as some equipment, systems, databases, and internet connectivity do not meet their needs as well as their working environment. This also causes their work quality to be affected. They have a lot of mobile technology that is rapidly changing. They have to make sure that their system can be compatible with the system that they currently use.

Then, they also face the issues of internet connection to access to their system because not all places have a good internet connection and this can cause a delay on the delivery of their task. A mobile worker is unclear by information retrieval using several devices, and managing interruptions, uncertainty, and change in work locations. In addition, social functions and required technologies, multi-location work has challenged the knowledge sharing among organisations as a learning process. The changes in workplace and the use of alternative offices have had a great effect on the organisation itself. Venezia and Allee (2007) added that they do not have enough expertise of this working environment to guide them.

2.3 Technical Problems

In this new era, when we are required to work far from the organisation of our own office, such as attending seminars or outstation, we do really need enough IT equipment, record management system, and basic office facilities. When staff face problems in the mobile work environment at their organisation, they will also take it as an opportunity to improve because normally only small group of staff will work remotely far from the office. Mobile devices dependent problems are related to the change in the environments and circumstances in mobile work.

Technical and usability problems are compounded and related to the poor network connections, poor capacity of mobile devices, and synchronisation or compatibility of multiple devices. Technical matters usually could not be solved by innovative thinking like information management problems. Those issues are not necessarily dependent on the workers but they usually could be worked out by technological support like changing the information technology. The problems of access to information are probably most familiar to mobile workers like how to unpack and plug in a laptop in an unfamiliar environment, how to remotely access records management systems and databases, how to print a file, how to transfer a file, and how to secure a confidential file. The problems are more substantial if the record is created collectively (Perry et al., 2001). The document which is being amended is always in the same place. The record may also have a creator who is responsible for that distinct record. The increasing trend for mobile workers to bring their own devices to work, will create a new set of productivity

options while raising the spectra of information security. There are several issues related to the level of security such as theft or stolen device, viruses and spyware, incident of data loss, employees connecting to unsecured networks personal computer that have been hacked, concerned or very concerned about mobile malware, and a worry or concern about their IT managers.

Allen and Shoard (2005) opined that the culture of the organisation has been moving near to a more open information environment. With information being shared more generously and widely, mobile work collaboration focuses only on technical issues such as connection support and remote access while working. They do not grab the opportunity to grow and improve the workforce for long distance workers. They believe there are some drawbacks in research on non-technical issues that are essential to designing mobile collaboration systems and removing the relationship between the context of collaboration and mobility. They also think that as long as workers who work far away are able to carry out their daily tasks without any of these problems, it will not cause major problems.

The design of mobile system interaction is a complex activity as it only takes into perspective the usage of the record management and user experience aspects to exploit the peculiar features of mobile devices, such as its well-known and global nature. Vartiainen (2006) stated without doubt, mobile technologies are the one of the main drivers of mobile work. Mobile tools are one of the challenges in this mobile work such as mobile devices, applications, and services.



Figure 1: Conceptual Framework for E-Records Management System for Mobile Work in UiTM

3 Research Questions and Objectives

Based on the problem statement mentioned, this study aims to find out the answers for three research questions which were created to guide the entire study: a) What are the organisation motivational factors towards record management in a mobile work en-

vironment? b) What are the perceived challenges by mobile workers in relation to records management?, and c) What are the technical problems mobile workers face in relation to record management in a mobile work environment?

In order to answer the stated research questions, three main objectives have been identified as follows: a) to identify organisation motivational factors in the mobile work environment related to records management, b) to identify challenges faced by mobile workers in a mobile work environment in relation to record management, and c) to determine the technical problems mobile workers face in relation to record management in a mobile work environment.

4 Literature Review

4.1 Organisation Motivational Factors

The delivery aspects explain the coordinating efforts which not only require cooperative work but also focus on the temporary aspect of co-operative work which leads to the success of the record management in a digital environment itself. However, making cooperation in managing records and working online will open the mind of the organisation to prioritising the field of electronic record management as we are aware that today is more inclined towards digital (Bardram & Bossen, 2005). There are several ways that can be considered to create a more cooperative and effective workplace. Bosch-Sijtsema, Ruohomäki and Vartiainen (2009) stressed that the vital elements may either delay or enable knowledge work productivity in distributed teams like a team task, team structure and processes, the physical, virtual and social workspaces, as well as organisational context. Mäkinen and Henttonen (2011) stated that people, document, and their work activities, share information and keep their colleagues up-to-date about what has taken place in their work, in order to organise their own and team's work. They have also examined the motivations factors for an organisation to invest in records management, especially in a mobile working environment. They proposed that in some organisations, there is an ordinary need to have good records management and that individuals' motivations for records management are strictly linked to their own work and organisational culture.

Mäkinen (2012) hypothesised that the organisation provides motivation to employees in record management to update, control, or record a more comprehensive process than the organisation without the same motivation. Internal motivations are more important for users, instead of thinking of records management as a single entity and should perhaps consider it as a palette of partly independent records management activities, like capturing and storing information, organising information, controlling access, and managing the lifecycle of the record management. Venezia, Allee, and Schwabe (2008) on the other hand suggested that even though organisations face a small number of issues while performing the task, if they practice the well-managed record policy all these can be overcome.

4.2 Mobile Workers

Mobile workers' days are blurred by information retrieval using multiple devices, and managing uncertainties, disruptions, and changing locations. By combining mobile tools and information-related activities, it is found that mobile professionals have specific requirements for technology that can accommodate information requirements flexibly under uncertain circumstances. This also shows that there are more technological implications of integrating the access and distribution of electronic documents with cellular technology (Vartiainen, 2006). Venezia and Allee (2007) noted that mobile workers need workspace, technology supplies, technical support, and training, to send letters and meet their friends, customers, and socialisation customers who are more comfortable and conducive. An analysis of social networks or organisations can also be used to enhance the flow of knowledge and search for expertise by focusing on individual communication streams. Ng (2016) specified that the physical characteristics include the amount of space, layout, ambient conditions, internet and Wi-Fi connectivity that are needed. To be effective, mobile workers perform different tasks at different workplaces that support those specific work tasks.

4.3 Technical Requirement

The innovative technology has improved the opportunities to work from everywhere so as to reduce traveling and make the experts freer to resolve upon how, where, and when to carry out their work. (Wiberg & Ljungberg, 1999). Human interaction has attracted the attention of many researchers in a wide range of research fields concerned with technology including Computer-Mediated Communication (CMC), for sociology of interaction, and workplace studies to measure the interest in mobile work (Kakihara & Sørensen, 2004).

Nowadays, the ease of usage of information technology (IT) solutions and their lower costs to adopt these forms of work lead to considerable benefits for small and medium enterprises (SMEs), which by nature exhibit simple organisational structures and limited financial resources to invest in organisational innovations. (Raguseo, Paolucci, & Neirotti (2015).

5 Methodology

The approach for the present study is quantitative. According to Creswell (2009), quantitative method requires random sampling of population by which results are generalised. Quantitative methods are suitable to answer what and how questions. Creswell designated research approaches as strategies of inquiry or broadly research methodologies or approaches to inquiry. Hence to answer the research questions, the data collection approach for this study are questionnaire, literature review / past research, and participant of mobile workers. Data sampling for the current study will be collected from UiTM staff who have experience in mobile work or working from home (WFH). They will be selected randomly from different faculties and departments.

6 Conclusion

In the modern workplace, mobile work has emerged as a new approach, particularly in the pandemic era when mobile workers use gadgets like computers, PDAs, mobile phones, etc. to do their business from home. Although working in this style is more flexible, there are a number of challenges that mobile workers must overcome in order to ensure that work can be done in the best conditions. The electronic record management system is one of the challenges of mobile work. To ensure that their everyday tasks can be completed effectively, mobile workers need to possess the knowledge and skills required to create, store, and access electronic records. Mobile workers must also possess technological know-how to operate tools in order to do their jobs. To achieve the objective of the organisation, employers must train their mobile workers in these situations.

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