Electronic Human Resource Management (E-HRM)

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Article Info	ABSTRACT
	Electronic human resource management (e-HRM) systems are increasingly being used by non-profit organizations and for-profit organizations. However, this field currently lacks a theoretical framework that can be useful in addressing key issues related to the implementation of e-HRM systems, particularly to gain a better understanding of the factors influencing the adoption of e-HRM systems. The aim of this paper is to provide a foundation for the development of a theoretical framework for the implementation of e-HRM systems and to develop a conceptual model that will reflect the nature of the adoption of eHRM systems through a systematic literature review. about electronic human resource management, then categorize it into 4 characteristics that affect adoption; system and technological characteristics; organizational characteristics; user/individual characteristics, and environmental and contextual characteristics. Finally, a research framework for the adoption of e-HRM was prepared and based on the framework, various possible future research directions were discussed.

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	Sistem manajemen sumber daya manusia elektronik (e-HRM) semakin banyak digunakan oleh organisasi nirlaba dan organisasi yang mencari keuntungan. Namun, bidang ini saat ini masih kekurangan kerangka kerja teoretis yang dapat bermanfaat dalam mengatasi isu kunci terkait implementasi sistem e-HRM, khususnya untuk memperoleh pemahaman yang lebih baik tentang faktor-faktor yang memengaruhi adopsi sistem e-HRM. Tujuan makalah ini adalah untuk memberikan landasan bagi pengembangan kerangka kerja teoretis untuk implementasi sistem e-HRM dan mengembangkan model konseptual yang akan mencerminkan sifat adopsi sistem eHRM melalui tinjauan literatur sistematis. tentang manajemen sumber daya manusia elektronik, kemudian mengkategorikannya ke dalam 4 karakteristik yang memengaruhi adopsi; karakteristik sistem dan teknologi; karakteristik organisasi; karakteristik pengguna/individu, dan karakteristik lingkungan dan kontekstual. Akhirnya, kerangka kerja penelitian adopsi e-HRM disusun dan berdasarkan kerangka kerja tersebut, dibahas berbagai kemungkinan arah penelitian di masa mendatang.

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INTRODUCTION

Information systems (SI) are increasingly influencing human resource management (HR) practices in various organizations. The rapid development of the internet and information technology over the past decade has increased the adoption of electronic human resource management (hereinafter referred to as e-HRM).

Although organizations are implementing e-HRM technology as a means to facilitate HR practices and research interest in e-HRM is increasing, the field currently lacks a solid theoretical framework that can be useful in addressing key issues related to the implementation of e-HRM systems, in particular to gain a better understanding of the factors influencing the adoption of e-HRM systems. As academic and research interest in e-HRM adoption has increased, a literature review is needed to identify e-HRM adoption research trends as well as to find gaps in the literature that will be valuable for future research to improve understanding about the adoption of e-HRM.

Given the widespread use of eHRM systems and the potential advantages and disadvantages associated with them, the main purpose of this article is to provide an overview of the factors influencing the acceptance and adoption of e-HRM. The adoption and acceptance of information systems (SI), in this case e-HRM systems, is not only about its advanced technology and features, but several other factors also determine the adoption of SI within organizations. From a theoretical perspective, this review can offer a direction for e-HRM research by explaining factors such as systems and technology, organizational characteristics, user and individual characteristics, as well as environmental and contextual factors influencing e-HRM adoption.

From a managerial and practitioner perspective, the review also provides useful insights into how e-HRM can be implemented in organizations, where multi and holistic factors are behind the adoption of information systems. Therefore, the purpose of this paper is to provide a foundation for the development of a theoretical framework for the implementation of e-HRM systems and develop a conceptual model that will reflect the nature of the acceptance and adoption of the e-HRM system.

The methodology used to compile empirical research from two popular academic databases through a systematic literature review is described. Then, after that, the results of a systematic literature review will be presented and followed by a discussion and its implications for future practice and research.

LITERATURE REVIEW

Electronic Human Resource Management is defined as the planning, implementation, and application of information technology to build a network and support at least two individual or collective actors in the implementation of HR activities together. From a theoretical perspective, e-HRM is introduced by organizations to improve efficiency and service delivery, to improve the strategic orientation of HR functions, and to improve standardization.

Nonetheless, the various positive consequences of the implementation of e-HRM in organizations cannot be underestimated. This means that e-HRM is just a technology, which requires other factors in order to be adopted and implemented successfully.

In addition, from Human Resources practices (e.g. recruitment, selection, performance appraisals), the shift from manual/traditional to electronic processing requires a good understanding of how the adoption and implementation of e-HRM can be carried out.

RESEARCH METHODS

As described in the previous section, a systematic literature review was conducted to find and select papers that were relevant to this review. This study adopted the procedure of Crossan and Apaydin (2010) when they conducted a systematic literature review on organizational innovation. The step-by-step, planning, implementation, and reporting that has been done in the systematic literature review process will be described below.

1. Planning Phase, The two main activities in the planning phase are defining the research objectives and identifying key data sources. First, the purpose of the literature review is to identify and conceptualize all the relevant factors influencing the adoption of e-HRM in organizations.
2. Execution Phase, The implementation phase includes data collection and organization as well as data processing and analysis.

E-HRM research uses quantitative and qualitative approaches as a research methodology. In particular, researchers adopt e-HRM using a wide variety of research methodologies, such as survey research, exploratory case studies, action research, and mixed methods. Each of the research methodologies will be described below.

RESULTS AND DISCUSSION

The E-HRM system has practical value in organizations. However, many studies of E-HRM still lack theoretical consideration and little is reported in the academic literature regarding the adoption of such systems. Therefore, this literature review aims to find explanations of the various multidimensional factors that contribute to the adoption of eHRM within organizations. Before explaining this, the various theoretical foundations and methods used in the research will be discussed first.

1. Theoretical Foundations in Research

Adoption of e-HRM This research uses the theory put forward by Davis, namely the Technology Acceptance Model. Seven research papers use the Technology Acceptance Model as a theoretical lens. This is not a surprising result, as the Technology Acceptance Model is a common and popular theory in e-HRM adoption research. Perceived usability and perceived ease of use have been identified as important variables for the successful adoption of new technologies and the lack of user acceptance can hinder the adoption of information systems.

Several theories have also been used in e-HRM adoption research, such as Planned Behavior Theory (TPB), Integrated Theory of Technology Acceptance and Use (UTAUT) (Venkatesh). Planned Behavior Theory (TPB) is one of the competing models in the acceptance of Information Technology. Specifically, Planned Behavior Theory extends Reasoned Action Theory (TRA) to predict human behavior and is then used to predict an individual's acceptance of Information Systems (SI). While TRA has only 2 main constructs, namely attitudes towards behaviour and subjective norms, Planned Behaviour Theory adds constructs, i.e. perceived control of behaviour, as an additional determinant of intentions and behaviour (Venkatesh).

Although the Technology Acceptance Model is popular in Information Systems research, the theory has been criticized. Furthermore, the Integrated Technology Acceptance

and Use Theory (UTAUT) was developed to differentiate between the intention to use and the actual use (Venkatesh et al., 2003). They argue that the intention to use will affect the actual use of the receipt information systems. This theory has been applied to investigate the influence of language standardization on the acceptance and actual use of e-HRM systems.

In addition, TAM must be integrated into a broader model and linked to processes of human and social change. Thus, several e-HRM adoption studies in this systematic review have integrated the Technology Acceptance Model with other theories, such as signal theory, contingency theory, and change management theory. Kashi and integrate the Technology Acceptance Model with signal theory, specifically to explore the potential influence of visual characteristics and user impressions on recruitment websites.

Change management theory has been integrated with the Technology Acceptance Model to explore the implementation of Human Resources (HR) portals (Ruta, 2005). The implementation of HR portals is a very complex process. Before the implementation of the HR portal, employees interacted with others, but after the implementation of HR, employees had to be familiar with information technology and accept interaction with computers.

The change process must run well, Managed by the organization so that employees receive the HR portal and organizational changes run smoothly. In conclusion, most of the types of theories used in adoption studies are one-sided that tend to positivism approaches. In addition, researchers used only one theory to explore the adoption of e-HRM, although few studies combined the two types of theories, such as contingency theory and management theory changes.

From the qualitative research approach, e-HRM researchers also use case study and action research approaches as research methods. Typically, they conduct research in one or more organizations; Then they interview employees and people who use the e-HRM system. Furthermore, they also used secondary data to support data analysis (e.g., Panayotopoulou et al., 2010). Finally, the data is analyzed and compared through in-case analysis and cross-case analysis. In addition, some e-HRM researchers use mixed methods. Generally, they conduct survey research using questionnaires and then followed by focus group discussions or interviews.

In conclusion, although few studies use qualitative research, most research methods in the adoption of e-HRM uses survey research. Survey research is the right method. The Technology Acceptance Model, Planned Behavior Theory (TPB), Integrated Theory of Technology Acceptance and Use (UTAUT) basically originated in psychology to find one single truth by making hypotheses and testing the relationship between independent and dependent variables.

2. System and Technology Characteristics

Systems and technology emphasize the fact that technological characteristics can influence the adoption of information systems . EHRM is essentially a computerized system that assists in the process of information in human resources practices, such as selection and recruitment processes, training, or performance appraisals. As such, e-HRM systems and technologies must ensure the reliability of information flowing inside and outside the organization. Based on this systematic literature review, various system and technological factors contribute in influencing the adoption of e-HRM. System and technology factors are external variables that ultimately affect internal beliefs, attitudes, intentions, and usage.

3. Organizational Characteristics

The adoption of E-HRM in organizations can be influenced by the characteristics of the organization. Several important factors of organizational characteristics were found in this systematic literature review. First, the adoption rate of e-HRM in an organization can be influenced by a high level of management commitment and top management support.

Management commitment and support from top management can make decisions that encourage employees to accept and adopt e-HRM within the organization.

4. User/Individual Characteristics

This literature review found a variety of individual and user factors influencing the adoption of e-HRM. System and technology factors are related to the quality of systems and technology that will be run and used by users. The adoption rate will differ among users as they have different skills and knowledge of IT as well as previous experience in working with IT. Gender, age, application-specific effectiveness, and user education level are considered important factors that will affect the adoption rate of eHRM at the individual level. HR will change and be facilitated by the eHRM system used, e-HRM adoption research assesses the results by measuring HR effectiveness, effective communication, cost reduction and efficiency improvement, increased HR value and business process improvement.

CONCLUSION

There are several opportunities for researchers to further investigate the adoption of e-HRM and ultimately contribute to the theory and research practice of e-HRM. Subsequent research must clearly determine and states a theoretical framework for empirical analysis. Further, it is recommended to use and combine two different theories as a theoretical framework to gain a better understanding of how the e-HRM system is adopted and accepted. Second, most e-HRM adoption uses cross-sectional rather than longitudinal data in nature.

Thus, future research could use longitudinal data that will investigate the before and after adoption of e-HRM, as well as shed light on the actual results of e-HRM for HR practices and business processes in organizations.

In addition, future empirical studies can also test the e-HRM adoption framework in various industries and explore the mechanisms that exist in e-HRM adoption. Also, although many studies have emphasized technological determinism, further studies can provide more insight into the nature and power of contextual factors that encourage or hinder the adoption of e-HRM.

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