



# e-HRM: A Proposed theory based on the Social Cognitive Theory (SCT)

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## Abstract

electronic – Human Resource Management (e-HRM) provides the Human Resources (HR) function with the opportunity to automate certain HR process to improve HR efficiency and influence HR strategy. Automation might lead to staff disjointed due to the fact that most of the work they do will now be automated and they will not have work to do. Staff might not adopt the automated way of working. Social Cognitive Theory (SCT) as a widely accepted model of individual behavior can be used to study reasons why individuals adopt certain behaviors, in this instance, it can be used to determine why staff do not want to adopt an automated way of working which is to use eHRM system. This paper will discuss some of post-adoption behaviors that staff can have. South African Municipalities that are intending to adopt e-HRM will be able to know the things that they can focus on for a successful post-adoption of e-HRM. e-HRM topic is certainly not becoming outdated, and its full potential is still expected and therefore more studies in this topic will grow. This paper is intended to contribute to the South African literature pertaining to this subject. Based on a review of the extant literature on E-HRM, HR roles, and SCT, a theory model is presented and propositions outlined for future empirical testing.

**Keywords:** *Electronic-Human Resource Management, Human Resources, Human Resource Management, Social Cognitive Theory (SCT).*

# 1 Introduction

Endless investments in building and maintaining information systems (IS) are being made by organizations (Park, Park and Lee, 2014). Research on post-adoption issues is now being given more focus rationale been that IS have been used more than decades (Park et al. 2014). According to (Jasperson, Carter and Zmud, 2005), the post-adoption behavior is countless system functionality adoption decisions, system functionality use behaviors and system functionality postponement behavior that is made by the individual after IS has been put into a production environment, made available to the user and is used by the user to do his/her work activities.

The past decade also saw an increase in the use of innovative information technologies (IT) in human resource management, (HRM) (Marler and Fisher, 2013) claimed. This growth is stimulated by the extent of increasingly sophisticated enterprise resource planning (ERP) software combined with internet-based technologies that standardize and automate HRM activities and tasks administrative components (Marler and Fisher, 2013).

Organizations implement systems without taking into considerations the workforce, thereby the systems deployed do not deliver the expected outcome

According to (Ruël, Bondarouk and Looise, 2004) (Ruta, 2005), organizations have been adopting and using information systems (IS) to enable business processes such as completing Human Resource (HR) activities. Electronic – Human Resource Management (e-HRM) has led to a drastic restructuring of the work that HR managers used to do. e-HRM empowers managers and employees to now do reporting activities only and these activities were previously done by HR professionals. Employees now have online access to information about HR issues such as training, benefits, salaries, and terms of service; enrolling online in programs and services; and completing online surveys (Singh and Raghuvanshi, 2013).

HR involves a lot of processes but according to (Ensher, Nielson and Grant-Vallone, 2002) the key HR processes and their major activities are recruitment and selection of employees, performance appraisal, compensation and benefits for employees, training and developing employees, managing employees career, employee health and safety, employee relations, employee retention and work-family balance.

This research aims to examine the influence of e-HRM post-adoption to Human Resource Management (HRM) strategy. The contributions of this paper include proposing a theory based on SCT to consider facts that should be taken into consideration for the success of e-HRM post-adoption. This will ensure that organizations are able to understand the main contributors of e-HRM post-adoption behaviors and enable them to take necessary steps to ensure an ideal post-adoption behavior. A research theory is proposed using factors identified from the literature review.

## 2 Study Context

The study will be carried out at the City of Tshwane Metropolitan Municipality. The municipality is situated in Gauteng Province, Pretoria (see figure 1, next to the green circle). The City of Tshwane Metropolitan Municipality was chosen as they have implemented e-HRM.

According to City of Tshwane website, City of Tshwane is classified as a Category A Grade 6 urban municipality by the Municipal Demarcation Board in terms of section 4 of the Local Government Municipal Structures ACT, 1998 (Act of 117 of 1998). The municipality was established on 5 December 2000 through the integration of various municipalities and councils that had previously served the greater Pretoria regime and surrounding areas.

On 28 May 2008, a proclamation through the Government Gazette was made to incorporate the former Metsweding District Municipality, including Dinokeng tsa Taemane (Cullinan) and Kungwini (Bronkhorstspuit) into the borders of City of Tshwane. The incorporation which gave birth to the new City of Tshwane in May 2011 after the Local Government elections, was in line with the Gauteng Global City Region Strategy to reduce the number of municipalities in Gauteng by the year 2016.

The new City of Tshwane has 105 wards, 210 councilors and about 2.5 million residents, and is divided into seven regions. The municipality currently offers Electricity, Water and Sanitation, Emergency Services, Metro Police and Licensing, Tshwane Bus Services, Housing, Roads and Storm Water, Waste Management and Health services to all these regions.



**Figure 1: South African Map - Showing Pretoria (circled in green)**

### 3 Literature Review

The concept of e-HRM has been in existence in the last 3 decades. e-HRM is defined as a set of IT applications including all possible integration mechanisms and contents between HRM and IT's aiming at creating value within and across organizations for targeted employees and management (Bondarouk and Ruël, 2009). According to (Johson, Lukaszewski and Stone, 2016) e-HRM is defined as the application and delivering HR functionality supported by an HRIS [HR information system] that links employees, applicants, managers, and the decisions they make'.

The use of this new kind of human resource technology makes easier to carry out human resource functions (Hooi, 2006). This introduction of human resource technology is simplifying the way things are done within human resources. (Shilpa and Gopal, 2011) illustrated the 10 essential drivers to introduce e-HRM systems in companies. Some of the most common drivers for (manufacturing and service company) to introduce e-HRM systems are to reduce time of repetitive administration tasks and paper transactions. The burden of paper transactions with not trail is pushing these companies to introduce technology.

Organizations that are implementing a particular e-HRM are expected to achieve goals such as client satisfaction, decreasing cost, increasing efficiency and HR's strategic improvement (Adli and Saleki, 2014). In the studies done, multifunctional framework suggested that organizations should be empowered to understand and solve the difficulties of e-HRM adoption, like attitude is concerned towards these systems, (Adli and Saleki, 2014), therefore without this empowerment, organizations will find themselves have issues with workforce, staff attitudes towards the systems they implement.

The three goals of e-HRM are decreasing costs, improving HR services and improving strategic orientation, the literature on e-HRM suggested (Marler, 2009), (Stanton and Coovert, 2004).

#### 3.1 SCT as a theory

SCT Is defined as the theory that analyses human motivation, thought and action and helps understand, predict both individual and group behavior and identify methods in which behavior can be modified or changed. (Bandura, 1986) (Bandura, 2001), refer to section 5 figure 2 for the SCT theory model.

This theory started being used by Information Systems (IS) academics in the early nineties when the relevance of the self-efficacy concept was realised in understanding information technology use and adoption (Carillo, 2010) posits.

Social Cognitive Theory revolves around a concept titled self-efficacy which (Bandura, 1986) defines as People's belief of their abilities to organize and perform a sequence of actions required to achieve selected types of performances. Self-efficacy is not concerned with the skills one has but the belief what one can do with whatever skills one holds.

Self-efficacy is the key to determining whether one can effectively shape the reality in the manner the person needs, Social Cognitive theory suggests. Self-efficacy contains convictions in one's abilities to sort out and perform a sequence of actions required to oversee forthcoming situations (Bandura, 1995). According to (Hughes, Galbraith and White, 2011), self-efficacy speaks to one's apparent capability,

one's conviction that he or she can execute the activity required to arrive at an objective and an idealistic evaluation of one's probability of progress.

SCT together with other theories (Technology Acceptance Model (TAM), Diffusion of Innovations (DOI) and Theory of Planned (TPB) suggests that that the utilization of a specific innovation is legitimately impacted by the recognition that it will enable the person to accomplish constructive results. An individual's inspiration may be expanded on the off chance that he/she sees that figuring out how to utilize a system will prompt a more elevated amount of execution for his/her activity (Carrillo, 2010) argued.

According to (Wood and Bandura, 1989), SCT suggests that the conviction that an individual executes a certain task influences the awareness of impression of potential positive or negative outcomes and equally. At the end of the day, the capacity to imagine the reasonable results of imminent activities has a solid impact on human inspiration and activity

Individuals thinking limitations and their failure to adapt to fast changes in technology may cause a negative influence on effective use of IT and their productivity (Shu, Tu and Wang, 2011) argued.

It is important to identify and validate the sources of negative psychological and behavioral reaction toward computer-based ICTs (Conway, 1999) posits. This is critical as it will give organizations idea on how to address the negative psychological and behavioral reaction towards computer-based ICTs by the workforce and this will in return instil positivity towards information technologies.

## 4 Gaps in the Previous Studies

Recently, e-HRM has been studied by many scholars. Thus far, most studies done focused on The Strategic Value of e-HRM, which was an exploratory study in a government organization. Though they might be strategic advantages of e-HRM, some scholars argued that e-HRM offer strategic opportunities to HR professionals (Ruël, Bondarouk and Looise, 2004), while others reported that with e-HRM has no impact on strategy (Hainness III and Lafleur, 2008), yet another group of scholars suggested that one have to think about special conditions when e-HRM can create strategic value for the organization and for the HRM function (Marler, 2009).

From the above studies done, it was evident that there was some kind of debate from different scholars as to whether e-HRM has an impact on strategy. The results presented in the study support the school that believes that e-HRM does create a strategic value to HR function (Bondarouk, T. and Ruël, H 2012). Gap1. More studies in other types of organizations need to be undertaken to add to the current literature on the debate of e-HRM and its strategic value (Bondarouk and Ruël, 2012) suggested.

Previous studies on strategic HRM were thoroughly reviewed, researchers focused on strategic outcomes such as organizational performance (Becker and Huselid, 1998), strategic alignment (Schuler and Jackson, 1987), and competitive advantage (Wright, Dunford and Snell, 2001) while in the e-HRM practitioner literature, e-HRM suppliers often state that internet-based technological improvements are important in realizing the outcomes predicted in the strategic HRM literature (e.g. www.SAP.com, CedarCrestone). The literate predicted that for an organization to achieve the predicted strategic outcomes like organizational performance, strategic alignment and competitive advantage, organizations need to acquire or procure an e-HRM solution.

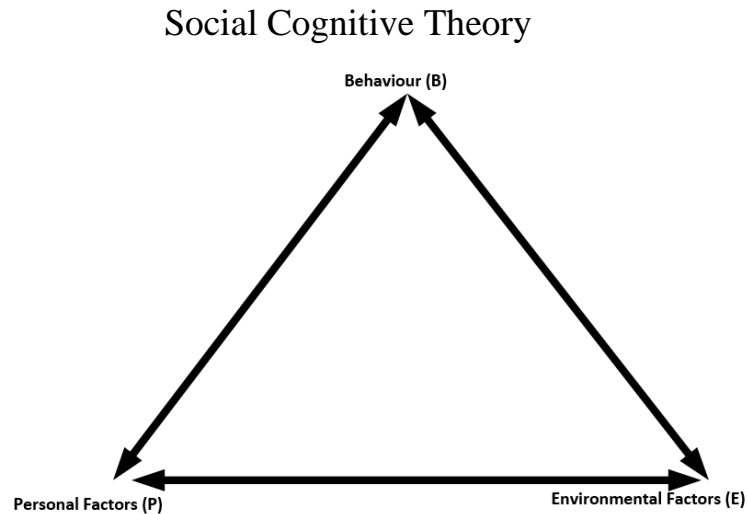
According to (Marler, 2009), organizational goals for e-HRM investments is to reduce cost through streamlining HRM operations while (Ruël et al. 2004) stated that improved effectiveness through providing better delivery of HRM services is one of the organizational goals for e-HRM investments (Lepak and Snell, 1998). Stated that organizations can invest in e-HRM to transformation of the HRM function to a strategic business partner. Though the studies do indicate that e-HRM do have an impact of strategic outcomes, it is vital for scholars and practitioners to have a clear picture of the accumulated research data to date on this alleged relationship, without clear evidence of the e-HRM strategic role, practitioners may incorrectly estimate the benefits of implementing any type of e-HRM systems, which might lead them to make unnecessary investments that might not yield expected results (Marler and Fisher, 2013).

Understanding the relationship between e-HRM and strategy is paramount. Despite vendor advertising claiming that e-HRM makes HRM more strategic, the empirical evidence supporting this perspective is extremely weak. Out of the five studies done one found a significant and positive relationship between e-HRM and strategic HRM and the other found no relationship (Marler and Fisher, 2013), positive relationship between the degree of IT support of HR functions and HR manager perceptions of the organization's HR strategic effectiveness was found (Hainess III and Lafleur, 2008), however, the sample was not longitudinal but cross-sectional.

At the individual level of analysis, three cross-sectional studies explicitly investigating whether there was a relationship between e-HRM and strategic HRM also provided mixed evidence concerning any perceptual relationships between e-HRM and strategic HRM. A qualitative study by (Bondarouk, Ruël and van der Heijden, 2009) found little evidence that deployment of an e-HRM system focused on career development within the Dutch Ministry had any influence on line managers' and employees' perceptions of human resource manager's strategic orientation or effectiveness.

Literature indicated that several interesting patterns were found and shown that e-HRM is still at an early stage when compared to either the general information technology literature or strategy literature. Relatedly, no studies directly examined the relationship between e-HRM adoption and any kind of organizational performance measures such as competitive advantage, organizational performance, reduced costs, or improved HR outcomes such as increased human capital, reduced turnover or increased organizational commitment or job satisfaction. More studies to investigate and understand the above need to be undertaken (Marler and Fisher, 2013).

## 5 Underpinning Theory



**Figure 2: Social Cognitive Theory (Bandura, 1986)**

Figure 2 above represents Social Cognitive Theory (SCT) and according to (Bandura, 1977), (Bandura, 1986) the SCT theory identifies human behavior as an interaction of personal factors, behavior, and the environment.

Social cognitive theory which is also referred to as social learning theory, is built upon individual and group psychological behaviors' foundations (Pincus, 2004). A widely accepted model of individual behavior (Chan and Lu, 2004) as it studies the reasons why individuals adopt certain behaviors (Bandura, 1986). The major principle of this theory is that individuals can influence their actions (McComick and Martinko, 2004).

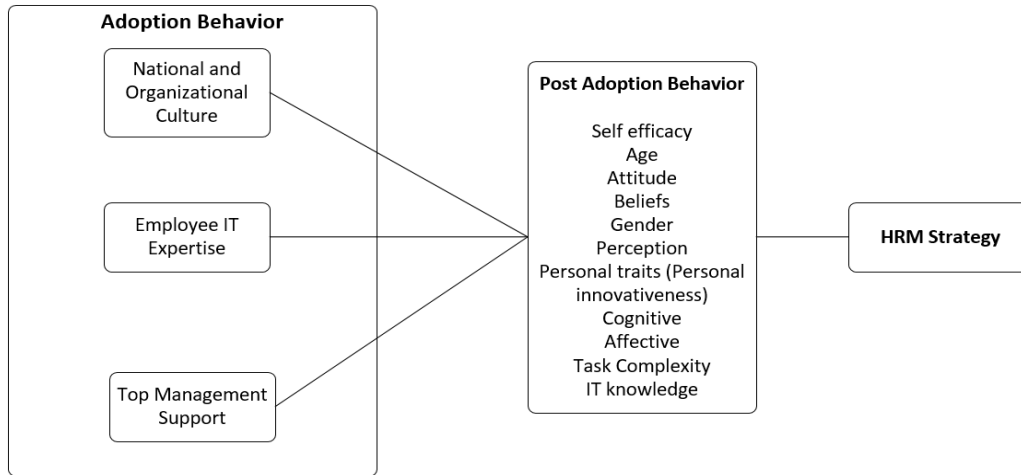
Due to its dynamic nature the theory has been utilized in a number of disciplines as it considers human behavior to constantly change (Kock, 2004). In the Social Cognitive Theory: B represents behavior, P represents personal factors in the form of cognitive, affective, and biological events, and E represents the external environment.

## 6 The Proposed Conceptual Research Framework

The conceptual research framework as stated above in (figure 3) is made up of three phases; the first phase represents the antecedents and contextual determinants that influence e-HRM adoption, the second phase represents e-HRM post-adoption behavior, both leading to fulfilment of HRM strategy.

The framework identifies the linkages between Social Cognitive theory's main independent construct(s)/factors (Behavior, Personal factors, and environmental factors) as it contains various factors that can drive individuals to behave in a certain way. The constructs are described: B represents

behavior and this is about individual behavior, P represents personal factors in the form of cognitive, affective, and biological events and E represents the external environment, an environment that can drive individual's behavior.



**Figure 3: Conceptual Research Framework**

## 6.1 Adoption Behavior

**Organizational culture** is a key to the successful adoption of technology (Büschgens, Bausch and Balkin, 2013), if not addressed this can impact the adoption of IS such as e-HRM in organizations. The researcher chose this adoption behavior as it plays a bigger role in ensuring that technology is adopted within the organization. The other rationale is that addressing the organization will ease the post-adoption of e-HRM.

The lack of **ICT expertise** was identified as one of the main barriers to adoption of ICT in studies done by (Harindranath, Dyerson and Barnes, 2008) and (Chebelushi, 2008). If users feel that they do have the required skills to use technology, they will not use it. It is critical that the issue of expertise is addressed to ensure the post-adoption of e-HRM, hence this adoption behavior was selected.

The lack thereof of **top management support** is barrier to ICT post-adoption (Harindranath et al. 2008). Top management support is very important for creating a supportive environment and for providing enough resources for the adoption of new technologies (Lin and Lee, 2005); (Wang, Yang and Yang, 2010). Without top management support, a supportive environment cannot be created and this will lead to employees feeling that they are not supported and will not adopt new technologies. If Top Management can offer support to employees, employees will feel empowered to use the new technologies. This is key to e-HRM post-adoption

The outcome of the theory is the ability to achieve HRM strategy through addressing adoption behavior that might arise and managing the post-adoption behavior the municipality can encounter. The conceptual research framework addresses the study elements that are relevant to e-HRM post-adoption and how these will enable an organization to achieve its HRM strategy.



## 7 Conclusion

In this paper, we compiled an overview of E-HRM and SCT. This paper has proposed a set of adoption behavior and post-adoption behavior that influence the attitude towards e-HRM. In this research, we have proposed the research framework to explore adoption behavior and post-adoption behavior of e-HRM that contributes towards attainment of HRM strategy.

In concluding this paper, we stress that e-HRM is being used increasingly by organizations in the Netherlands, Brussels, United States and other countries. Their adoption is an issue in certain countries and this is according to a lot of factors. Thus, further studies must be conducted to test the adoption behavior and post-adoption behavior factors offered in this paper. The future results from this proposed research will provide valuable knowledge that can be used to design and implement e-HRM that promote the welfare of both individuals and organizations.

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