Employee Motivation and Acceptance of Human Resource Information System in Pakistan

AURANZEB¹ SANA ARZ BHUTTO²

1 PhD. (Economics), LLB, Dean Faculty of Management, Business Administration & Commerce, Sindh Madressatul Islam University

2 M. Phil, Assistant Professor Faculty of Management, Business Administration & Commerce, Sindh Madressatul Islam University

Abstract

In the context of modern HR practices and boom in information technology infrastructure, the environment of the workplace has changed to a great extent and systems have been made more effective by introducing new information system functions. Several organizations have now realized that the significance of implement technology in organization. In this study, we focus on how motivation and helps in ensuring the effectiveness of HRIS acceptance. Human Resource Information System (HRIS) is a relatively new avenue and provides an opportunity for organizations to improve their HR department administratively and strategically participative in operating the organization. The study conducted a survey of 75 HR Managers from various organizations in Pakistan. The results indicate that motivation has significant impact on HRIS acceptance. The practical implications have also been provided in the paper.

Keywords: Motivation, human resource information system acceptance, Pakistan

1. Introduction

The function of human resource department is to manage and deal with employee's needs and requirements in the organization. The purpose of HR department is to transform strategy into operations in a suitable style. Human resource information system make it possible to use technology for transformation of human resource strategies and practices of the organizations efficiently and effectively. They accomplish this by using tools like web based and computer based technologies for the proper functioning of human resource department (Ruël et al., 2004). Human resource information system is the collection of systems such as communication system, hardware and software, and databases in order to manage data and implement practices of human resource department (Broderick & Boudreau, 1992).

Previous studies discuss the adoption and use of human resource information system and the the application of HRIS in the organization (Clark etal.,2000). Haines & Petit (1997) discusses the important factors of HRIS and determined the factors that successfully implement HRIS in the organizations, while other researchers such as Panayotopoulou et. al(2007), and Lau & Hooper (2008) talked about general issues of HRIS.

The studies related to HRIS are mostly conducted in developed markets and economies particularly, UK and European countries (Panayiotopoulosetal., 2007). Literature of HRIS in developing countries is rare as far as the researcher is aware. HRIS is a new concept for business organizations in Jordan and can be considered an important IT tool for the proper functioning of the organizations and particularly, human resource department. However, HRIS is one of the most important tool of human resource management. In order to get potential new employees and encourage and motivate existing employees HRIS is the most effective tool for the organization. Furthermore, this research will provide policies on the basis of finding in the form of recommendations for possible decision makers related to implementation and improvement of HR practices through HRIS.

2. Research questions

1- Does motivating HR professionals have affect on acceptance of HRIS?

2- What should an organization do to solve problems associated with the implementation of HRIS?

3. Research objectives

- 1- To discover whether motivating HR professionals has an effect on the acceptance of HRIS.
- 2- To suggest an alternative method for solving problems associated with the implementation of HRIS.

4. Literature review

The Human Resource Information System (HRIS) is used to gain and maintain the data that manage human resources, transforming data into information and then reporting the information to the employee (Ngai et al, 2008). Unfortunately some developed and developing countries do not benefit very well from HR information systems. The study of Krishnan and Singh (2006) explored the issues and barriers faced by some Indian organizations in implementing and managing HRIS. They found two important issues; lack of knowledge within the HR department about HRIS, and lack of importance of the HR department. Further, Batool et al. (2012)

concluded that HRIS causes some challenges, such as lack of expertise, technical problems, lack of funds, and time consumption by the untrained employee. The majority of studies focus on the importance of motivating factors among employees. There are limited number of researchers who have investigated factors that might motivate the HR professional to join the workforce in the future. Lim et al , 2008 found that recruiting employees who have information technology skills may affect their attitude towards HRIS. Therefore, asking HR professionals about factors that will motivate them at work is empirical part of this paper.

In addition Sadiq,U et al (2012) conclude that there are many reasons behind not utilizing HRIS from the employees' point of view, the, first one being that HRIS workers do not have enough skills to focus on HRIS usage. Secondly, training needs for employees and managers for all staff are ignored in those organizations.

Finally the training needs assessment forms have not been properly developed by strategic levels. In order to face those issues, organizations must focus on training courses to increase knowledge for employees, and show strengths and weaknesses in dealing properly with HRIS usage.

5. Research hypotheses

H 1: Motivation will have a significant impact on HRIS acceptance

- H2: Motivation will have a significant impact on Training
- H3: Training will have a significant impact on HRIS acceptance

H4: Training will have a mediating effect on the relationship between motivation and HRIS acceptance.

6. Research Methodology

6.1Sampling Technique and Sample Size

Primary data were collected through questionnaires to HR executives engaged in the selected companies operating in different industries in Jordan. A questionnaire comprising of different aspects of HRIS was used to collect data related to HRIS (see Table 1). The study followed a purposive sampling technique to select the sample companies, after taking into account different constraints related to time, and cost. Due to different barriers and constraints, the study covered 15 companies from different industries.

The research constructs used in this study are adopted from previous literature as already tested and examined constructs. We used 7 point Likert scale to measure the items for the research with strongly agree to strongly disagree. The factors in this research comprise of three constructs. HRIS acceptance was assessed using six items, and these items are adapted from Sadiq et al, (2012). Motivation was assessed using five items, and six items used to capture Training were adapted from Al-Tarawneh & Tarawneh (2012). Table 2 represent all the list of items and their measurement. Prior to conduct survey, we used pre-test survey from 3 experts. The survey instrument was iteratively refined based on the assessment obtained.

	Table1: Reliability Coefficient for Multiple Items (n = 15)			
Variable name	No. of items	Cronbach's Alpha Pilot/30		
Motivation	5	.88		
HRIS acceptance	6	.72		
Training	6	.82		

Table 2 . Model Fit							
Model	X2	df	р	X2/df	IFI	GFI	RMSEA
Initial Model	2633	534	0.00	4.93	.612	.65	.123
Structural Model	662.1		0.00	2.99	.833	.82	.070
Minimum Recommended Value			0.00	1		.80	0.05

Table 2 : Model Fit

Constructs and	Standard loadings	Alpha	Composite	AVE
Items			Reliability	
Motivation		.82	.91	.80
MV1	.711			
MV2	.823			
MV3	.614			
MV4	.657			
Training		.89	.81	.90
TR1	.731			
TR2	.588			
TR3	.767			
TR4	.713			
TR5	.645			
TR6				
HRIS Acceptance		.80	.82	.77
HA1	.543			
HA2	.661			
HA3	.712			

Table 3: Properties of Measurement Model

6.2General Demographic Analysis for the Sample

This part provides more details of the characteristics of the samples. Initially, the survey instrument used in this study was questionnaires made up of several parts including covering letters. These questionnaires were distributed to a total of 15 HRIS managers from 15Jordanian companies, and all 15 survey questionnaires were returned. Of the total 15 respondents from the sample, just over half were male. Their average age was calculated to be 41 years, and they had on average two years of experience in their positions. In addition, regarding the education level of the respondents, 1% had PhD, 20% had a masters degree, and 79% were bachelor degree holders.

6.3Data analysis and Results 6.3.1Test of Multivariate Assumptions in SEM Table 5: Summary of Proposed Results for the Theoretical Model

Research proposed paths	t- value (CR)	Coefficient value (Std.estim)	P – value	Empirical Evidence
HA Common MV	.121	.023	.005	Supported
TR C MV	2.330	.211	.621	Not Supported
HA CTTR	2.615	.213	.007	Supported

This part investigates all the data for the assumptions of multivariate analysis in terms of normality, linearity, and multicollinearity.Normality is used to show the symmetrical curve which has the greatest frequency of scores in the middle and smaller frequencies towards the extremes (Pallant, 2005). However, after careful assessment of the skewness and kurtosis, the data were found to be normally distributed. Indeed, most of the values were in conformity with the requirements of normality (i.e., -3.0 to +3.0). Also the recommended test for outliers is to convert the data to standardized scores of greater than 2.5 for small samples and greater than 3 or 4 for large sample sizes (Haire et al., 1998). However, based on the above recommendations, and after careful examinations, no noticeable outliers were found from the 15 valid cases. Moreover Kline (1998) stressed that multicollinearity occurs when a high correlation between independent variables exists in a regression model. As a result the tolerance value is found to be less than 0.10 and a VIF value is found to be above 10. Indeed, both these values were within the acceptable ranges. Consequently, it can be concluded that the assumption of multicollinearity was not challenged.

6.3.2Assessment of Measurement Model

We used Maximum Likelihood Estimation (ML) for the fitness of the model in SEM due to the fact that this

method is widely used method and furthermore it is suitable for small sample size (Anderson and Gerbing, 1988) and for the estimation of all the parameters of the model simultaneously (Kline, 2011). The range of acceptable model is determined via x2/df ratio, with a value of three or less (Kline, 2011). The smaller value of the ratio represent the best fit of the model and goodness of the fit. James et al., 1982 recommends the value of this ratio between the range of 2 to 5. Moreover the acceptable values are 0.80 and 0.90 for AGFI, GFI, TLI, CFI and NFI (Bentler and Bonett, 1980). RMSEA value also tells about the goodness of fit of the model to be estimated with an acceptable value of 0.05 and 0.08 Hair, 1976). These values f goodness of fit and model are presented in table 3 (see table 3). In addition Table 4 above discusses convergent validity and discriminant validity. Some researchers (e.g., Schwab, 1980) argued that convergent validity is established when the factor loadings are significant (Schwab, 1980). Table 4 represent the standardized regression coefficients. The results shows that the value of loading is towards low loading towards latent variable which is less than 0.50, as recommended by Newkirk and Lederer (2006) the acceptable range of the value. In particular (MV5 = 0.312, TR1 = 0.273, HA3 = 0.462, HA4 = 0.264). Moreover, we have excluded the items for further analysis which do not have factor loading value of 0.50 as suggested by (Newkirk and Lederer, 2006). Furthermore, we have checked discriminants validity by examining the extreme large correlations among constructs. We also used correlation analysis to find discriminant validity among constructs.

Table 5 below also discuss the proposed theoretical model. In this table some hypotheses are supported and some hypotheses are not supported. Motivation has a significant positive impact on HRIS acceptance (b = .023, C.R = .121, P= .005) indicating that H1 is supported. Motivation has insignificant positive impact on Training (b = .211, C.R = 2.330; P=.621) indicating that H2 is not supported. Training has a significant positive impact on HRIS acceptance (b=.213, C.R = 2.615, P=.007) indicating that H3 is also supported.

Table 6: Result of Training As a Mediating Effect

Hypothesis	From	Mediation	То	Direct effect	Indirect effect	Total Effect	Mediating
H4	MV	TR	НА	.021	.051	.072	Mediating

However for this study, the researcher tested the mediating effects of training in the relationship between Motivation and HRIS acceptance as shown in Table 6. The significant result of empirical finding (direct effect .021 less than indirect effect .051) confirmed that Training does mediate the relationship between Motivation and HRIS acceptance. To conclude, this finding does support H 4.

6.3.3Discussion and Conclusion

This study revealed that motivation has significant influence on HRIS acceptance as shown in hypotheses H1. This is to say the firms that prioritise motivation have greater ability to enhance their HRIS acceptance. In addition the element of training is an important focus in the fields of MIS and management. The principal finding of the survey as shown in hypotheses H3 was that the existence of training in Jordanian organizations has a positive significant effect on HRIS acceptance. Also this study revealed the insignificant relationship between motivation and training as shown in hypothesis H2. Furthermore this research showed that training has a mediating effect on the relationship between motivation and HRIS acceptance, as shown in hypothesis H4. Thus, increased training with HRIS managers directly enhances the capability offered by Jordanian organizations, and consequently helps to promote HRIS acceptance.

This research shows several important implications for the HR managers of the responding companies. These include making employees more aware of the importance of IT in HR related activities. In addition, HR executives may be able to focus on the effective implementation of HRIS with the help of the results of this research, which include motivation and training. Moreover this study will help HR professionals to formulate different strategies related to HR.

The findings of this research may be helpful for the HR executives considering the issues that hinder the effective execution of this technology in the functions of HRM. However, the human resources information system should exceed its traditional role in the procedure of selecting and assigning the new human resources to work in the organization. Furthermore this study is among the earliest studies discussing HRIS for Jordan organizations and is useful for the implementation of HRIS in the country. The results shows the potential benefits of implementing HRIS in Jordanian organizations and highlights the important factors which are important for the successful implementation of HRIS in Jordanian organizations. This research is also one of the earliest studies of implementation of HRIS in the developing world, which forms a useful comparison to HRIS practice in developed countries.

Reference

- Anderson, J. and Gerbing, D. (1988) Structural Equation Modeling in Practice: A Review and Recommended Two- Step Approach. *Psychological Bulletin*, 103, 411-423.
- Al-Tarawneh, M& Tarawneh, H. (2012). The Effect of Applying Human Resources Information System in Corporate Performance in the Banking Sector in Jordanian Firms. *Intelligent Information Management*, (4), 32-38.
- Awazu, Y., & Desouza, K. C. (2003). Knowledge Management. HR Magazine. 48(11), 107.
- Bentler, P.M. and Bonett, D.G. (1980) Significance Tests and Goodness of Fit in the Analysis of Covariance Structures. *Psychological Bulletin*, 88, 588-606.
- Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of The Academy of Marketing Science*, 16(1), 74-94.
- Ball, K.S. (2001). The use of human resource information systems: a survey. Personnel Review, 30, 677-93.
- Batool S. Q., M.A Sajid, &Raza S. H. (2012). Benefits and Barriers of Human Resource Information System in Accounts Office &Azad Jammu &Kashmir Community Development Program. *International Journal* of Humanities and Social Science, 2(3), February 2012.
- Broderick R., Boudreau J.W. (1992). Human resource management, information technology and the competitive advantage, *Academy of Management Executive 6 (2), 1992, 7–17.*
- Clark, T., Grant, D., & Heijltjes, M. (2000). Researching comparative and international human resource management: key challenges and contributions. *International Studies of Management & Organization*, 29(4), 6–23.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Haines, V. Y., & Petit, A. (1997). Conditions for successful human resource information systems. *Human Resource Management*, 36(2), 261–275.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (1998). *Multivariate Data Analysis*: Prentice hall Upper Saddle River, NJ.
- Hair, J., Black, W., Babin, B., Anderson, R., Tatham, R. and Black, W. (1976) Joseph F. Foster. Nature, 259, 433.
- James, L., Mulaik, S. and Brett, J. (1982) Causal Analysis: Assumptions, Models, and Data. Sage Publications, BeverlyHills.
- Kline, R. (1998). Principles and Practice of Structural Equation Modeling (1st ed.). New York.
- Kline, R.B. (2011) Principles and Practice of Structural Equation Modeling. 2nd Edition, The Guilford Press, NewYork.
- Krishnan, S., & Singh, M. (2006). Issues and concerns in the implementation and maintenance of HRIS. Issues and concerns in the implementation and. Indian institute of management ahmedabad-380015. *Research and Publication Department in its series IIMA working papers with number WP2006-07-01.*
- Lim, V., Srivastava, A., & Si Sng, Q. (2008). Money motives, achievement orientation, and motivation to work among youths. Journal of International Business and Economics, Vol 8, No 3, 104-111.
- Lau, G., & Hooper, V. (2008). Adoption of e-HRM in large New Zealand organizations. Encyclopedia of Human Resource Information Systems, 31–41.
- Newkirk, H., & Lederer, A. (2006). The effectiveness of strategic information systems planning under environmental uncertainty. *Information & Management, 43*, 481-501.
- Ngai, E.W. and Wat, F.K. (2006). Human resource information systems: a review and empirical analysis. *Human Resource Information Systems*, 35, 298-314.
- Ngai, E., et al. (2008). Importance of the Internet to human resource functions in Hong Kong. *Personnel Review*, *37*(1), 66-84.
- Pallant, J. (2005). SPSS Survival Manual: A Step Guide to Data Analysis Using SPSS version 12. Chicago, Illinois: Open University Press.
- Panayotopoulou,L.,M.Vakola and E-Galanki,2007.E.HR adoption and the role of HRM.evidence from Greee.Personal REV,36: 277-294.
- Ruel, H,T.Bondarouk and J.K.Looise,2004. E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web based HRM. Manage.Rev,5: 364- 380.
- Sadiq,U., Khan,A.,& Ikhlaq,K.(2012). The Impact of Information Systems on the Performance of Human Resources Department. *Journal of Business Studies Quarterly*, 3(4), 77-91.
- Schwab, D. (1980). Construct validity in organizational behavior. *Research in Organizational Behavior*, 2(1), 3-43.
- Yin, R. (2003). Case Study Research: Design and Methods (3rd ed.). Thousand Oaks: Sage.
- Youndt, Snell, Dean, &Lepak, (1996). Human Resource Management, Manufacturing Strategy, and Firm Performance. *Academy of Management Journal*, 39(4), 836-866.