Factors Affecting Organizations Adopting Human Resource Information Systems: A Study in Bangladesh

Arifur Rahman Khan\(^1\), Najmul Hasan\(^2\), Md. Rubel\(^3\)
\(^1\)(BRAC Business School, BRAC University)
\(^2\)(MRC Bangladesh Ltd., Dhaka)
\(^3\)(Department of Management Studies, Jahangirnagar University)

Abstract: The aim of this paper is to identify the factors affecting organizations adopting Human Resource Information Systems (HRIS) in the context of growing economic country. Many research works are conducted on finding the critical success factors of HRIS adoption in developing country. In this paper, attempt has been made to demonstrate the influential factors of HRIS adoption in Bangladesh. Most of the variables are retrieved from the literature review. Primary data has been collected through survey by distributing a structured questionnaire to the employees of the organizations. Some factors such as organization, Technology and Environment of the organization are found to be most influential for HRIS adoption by the organizations. The study indicates that the practice of HRIS has positive effects on the organizational performance.

Keywords - HRIS, Growing Economic Country, IT, Bangladesh

I. Introduction

The uses of Internet and technology advancement have brought revolutionary changes around the world. In this age of information, global businesses seek to develop their competitiveness in the increasingly competitive global market (Hitt, Wu & Zhou, 2002). Organizations need to incorporate innovations to get a relative position in the market. Organizational success is highly dependent on the induction of new changes in all departments of the organization. Due to the new technology being introduced at a rapid pace, information technology (IT) plays a major role in management of various functions of organization, especially human resource (HR). Both the increased competition and rapid economic growth have enabled diverse business environment that lead to make exponential technology applications growth in all business areas of Human Resource Management. Therefore, it has pressurized human resource practitioners and researchers to think again about the achievement of organizational objectives through the adoption of integrated systems called Human Resource Information Systems or HRIS.

The HRM importance is growing with the organizational size which requires appropriate HR reports generation and employee data maintenance imposing organizations to adopt the Human Resource Information Systems (Tripathi, 2011). Basically, HRIS is a systematic computerized processing of human resource functions in an organization. HRIS adoption helps a firm to achieve the competitive advantage. In fact, it reduces the overall cost of HR activities which keep them to advance the HR system (Wiblen, Grant & Dery, 2010). Over the past decade, information technology considerably changed the HR function. By providing continuous support to the administrative activities like payroll issues, attendance management process etc. The recruitment functions in the long and short-term candidate attractiveness, screening, processing applications, new employee hiring or contracting. HRIS is imperative regarding the online job advertisements through the corporate web sites, online database and managing electronic applicants. The main role of HRIS is to retrieve and disseminate appropriate information pertaining to human resources.

However, the adoption of HRIS in the organization is challenging. At individual level, there is defense of personal interest and values. There are further influences on integration of such innovation at the structural level. To enhance organizational effectiveness and productivity, innovations have to be adopted and incorporated; therefore, human resource managers adhere to adoption of HRIS.

The introduction of HRIS has been expected to enable an efficient and strategic direction to work with HR practitioners (Gardner et al., 2003). Using HRIS is the method of making the implementation of HR strategies and policies. It supports the HR activities to conform to organizational HR needs by technology (Ruel et al., 2004). HRIS provides portal that enables users including managers, employees as well as HR professionals to modify data, create automated report necessary for the organizations.

Whether the organizations are likely to adopt new technology or systems, it depends on their sophistication of IT and associate department (Ruel et al., 2004). On the basis of this issue, companies sometime face difficulties in adoption of HRIS. Moreover, HRIS ought not to be measured as an expense but consider it as investment (Gardner et al., 2003). In fact, the cost incurred in the installation of the infrastructure for the finalization or importation of HRIS is significant in terms of money. But it is also true that the return derived from this investment also be significant and profitable for the long period of time. Furthermore, relative...
advantage along with compatibility is positively correlated with the adoption of HRIS in the organization (Raza, 2012).

1.1 Objective Of The Study
This paper attempts to address the following issue:
- To identify the factors affecting organizations adopting HRIS in Bangladesh
- To observe the overall picture of HRIS factor Structural Modelling Equation is to perform to give strong evidence.

II. literature Review

The field of HRM can be characterized as having encountered frequent and numerous innovations in technology. Some of the terms include the human resource information system (HRIS), electronic human resource management (e-HRM) and virtual human resource management (VHRM) (Ngai, Law & Wat, 2008). A HRIS is a system used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information about an organization’s human resources and after reviewing the many definitions of HRIS, Kavanagh, Gueutal & Tannenbaum (1990) defined it as a system used to acquire, store, manipulate, analyze, retrieve, and distribute information regarding an organization’s human resources. Basically, HRIS is the blend of human resource management and information technology (DeSanctis, 1986). It is combination of database, hardware and software that are used to store data in the database from all departments of the organization and produce the required information on demand to human resource personnel (Broderick & Boudreau, 1992).

The world of business has been stirred by advent of information technology, information systems and internet technology (Xu, Wang, Luo, & Shi, 2006). Researchers have highlighted the fact that Information technology provided opportunities to transform organizations and help them achieve competitive advantages (Culnan & Markus, 1987; Huber, 1990). In current knowledge economy, organizational success is dependent on efficiency of human resources (Lippert & Swiercz, 2005). It is opined that IT should play vital role in Human Resource Management (HRM) domain (Straus, S.G., Weisband, S.P, & Wilson, J.M, 1998). It is further stated that a successful way to run business in today’s world is using appropriate application of Information Technology (IT) in HRM (Zhang & Wang, 2006).

Organizational factors represent the characteristics of the organization that influence HRIS adoption in the firm. (Troshani et al. 2011) stated that for successful innovation adoption, organization size, top level management support and skilled workforce are considered as important factors. Regarding the technology factor, (Yang et al. 2007) mentioned that it focuses on the technology characteristics that can influence the adoption of HRIS in the organization. (Oliverira & Martins, 2010) said that benefits that organizations seek to receive from the adoption includes service quality levels, ensure efficiency and reliability. Conversely, there are some barriers exist in the adoption of HRIS such as complexity in innovation, compatibility difficulties with organizational competency framework, employees or users’ acceptance of HRIS (Rogers, 2003).

Teo et al (2007) stated that organizations are realizing that they will be unable to make them competitive unless they manage their human resources effectively. These emphasized on the environment of the organizations where they conduct their operations of the business. Some of the environmental factors include industry features, government rules and regulations as well as infrastructure that have tremendous effect on the HRIS adoption. Success and failure of the adoption depends on these above mentioned factors (Oliverira & Martins, 2010). After the adoption it is required to train the users or employees so that they can easily use the system and bring the efficiency in the business operation.

The literature shows a variance in the analysis of HRIS usage with at least two extremes of use (Ball, 2001). In this regards, Kovach and Cathcart, (1999) and Kovach et al. (2002) argue that HRIS information could be used for administrative purposes that reduce costs and time; HRIS is used according to them also for more analytical decision support. Furthermore, (Lippert & Swiercz, 2005) identified different type of HRIS usages based on its degree of sophistication. He classified payroll and benefits administration, keeping of employee and absence records electronically as unsophisticated HRIS usage; he also describes this as simple-minded automation. On the other hand, (Lippert & Swiercz, 2005) characterized the usage of HRIS in recruitment and selection, Training and Development (T&D), HR planning and performance appraisal as sophisticated, as the generated information is important and used to provide support for important HRM decisions.

According to the (Parry, Tyson, Selbie & Leighton 2007), there is significance regarding the HRIS execution and it varies from organization to organization. Some organizations use HRIS in order to reduce cost, some use to bring acceleration in communication, some may use the system to re-orient HR activities to enhance the strategic decision of the department. Therefore, the HRIS application can minimize the HR related expense because automation in the HR process helps to reduce number of employees in the firms and facilitate the monitoring and controlling information. Moreover, it permits managers in accessing into relevant information which help them to analyze information, make faster decision as well as communicate with people based on the necessity (Awazu and Desouza, 2003).
APEC (2000) stated that E-Readiness is the point at which a community prepares themselves in order to engage in the digital economy platform. Assessing E-readiness depends much on the evaluation of the firm’s unique opportunities and challenges. Regarding developing countries like Bangladesh, firm’s e-Readiness assessment can be helpful to establish elementary benchmarks for internal comparison by employees and their degree of interest in digital platform introduction. At the same time, it is also true that various e-Readiness assessment models are existing and they are varied in terms of objectives and methodologies as well as outcomes.

In the HRIS implementation, Information Systems unit plays significant roles in assisting the computerization of the HR segment both in the planning and development stage. It is necessary to provide computer training for the employees related to the HR function in order to achieve HRIS effectiveness. It has been found that one of the major problems regarding HR management is the lack of technical training for information management (Denton 1987). In fact, appropriate training needs to be provided to all the staffs ranging from the line managers to the operational level employees. Availability of technical experts is required for successful implementation of HRIS and successful implementation of HRIS depends much on the accessibility of human resource.

Based on the organizational hierarchy, the number of employees, departments and branches across the organization is considered as an essential factor regarding the implementation of HRIS especially in LAN technology. Lai and Guynes (1997) argued that there is no major relationship between ISDN or integrated services digital network implementation as well as level of centralization and complexity. Eder and Igbaris (2001) agreed that organizational structure was disparate in case of diffusion or infusion of the intranets means the internet connectivity within the firm.

HRIS development and implementation in Bangladesh is gone through from many problems. It is because the HR employees directorates finish through excel at program. So they don’t gain any benefits derived from HRIS. In contrast (Nagi, 2007) stated that they have positive effects on HRIS learning materials.

IT infrastructure plays a positive role in the adoption of HRIS successfully. It requires well configured computers and high powerful- stored databases which facilitates and gathers as well as stores data and provides suitable and appropriate information process. According to the Fink and Neumann (2009) that IT infrastructure is critical success factor perceiving business value of the firm.

Compatibility has been defined as the degree in which innovation is professed steady along with the current values and past experience required likely adopters (Rogers, 2003). It depends on the level of knowledge with the innovation and its associate process (Duxbury & Corbett, 1996). HRIS is functioned as inter-departmental activities related to HR and these may be matched with sectors of adopters. Roger’s model suggested that compatibility includes two dimensions; one is adopter’s values and another is adopter practices (Kim, 2009). Adopters values relate to the cognitive compatibility and adopters practices relate to the practical and operational activity and compatibility (Kim, 2009). On the other hand, besides top management support, financial capability of the firm is much more important. The reason behind it that the top management of the firm has agreed or shown interest in implementing HRIS in the firm but if they have no adequate money or investing capability there will be no fruitful outcomes.

The ultimate goal of implementing HRIS in a firm is to achieve competitive advantage from the market so that competitors reside outside the boundary. The firms which have adopted already HRIS are in competitive position and they will get long term in the consequence of HRIS implementation. Hani (2013) said several empirical studies show on competitive pressure is considered as a powerful factor of both IT adoption and diffusion. In the meantime, since organizations are moving into a knowledge-based economy, the densities grow continually to reduce HR costs for the long term as well as to serve a strategic role in the organization.

Organizational structure is to be narrated in facilitate or restrain the innovation adoption. It can be divulged by some parameters like the level of centralization within the firm and the extent of employee specialization within the firm as well as formalization of diverse activities inside the firm. In the above mentioned parameters the extent of employee specialization is considered a strong ingredient or criteria in the technology adoption especially HRIS adoption in an organization.

One of the important segments for successful implementation of HRIS is top management support. If they don’t give their consent, the process of implementing HRIS will be failed. It is observed that when IS is going to be implementing in the firm, many managers want only incremental improvements factors related to the activities execution, productivity increment, on time service delivery etc, (Watad, 2000). In reality, top level management show their disinterest on IS integration like HRIS. Top level management thinks that spending time and investing money seem to be worthless. Along with this concept, sometimes they desire to gain short term benefit which is not possible rather they need to consider long term benefit. According to the Gordon &Monideepa (2007), besides tools and competencies it is considered that top level management support has positive impact on the acceptance of HRIS.
Scholars in organizational behavior said that there is a positive relationship between organization’s success and its culture. Successful firms have the ability and capacity to accept and adopt the technological innovation in their culture along with the management process. Tushman and O’Relly (1997) stated that corporate culture stands on the heart of the firm’s organization innovation. Jackson (2011) mentioned that organizational culture needs to be considered as a crucial factor in the case of success and failure of the IS adoption.

2.1 Functional Modules Of HRIS

HRIS functions have been established in order to enable the information system to take of procedures and policies which have used to manage firm’s human capital and the procedure that are required to activate both the computer’s hardware and software applications (Hendrickson, 2003). According to (Boating, 2007), some crucial HRIS functions include: Integrating the HRIS Technologies, Bringing efficiency greater than before, Increasing effectiveness. IT-Enabled Processes need to be given priority because information technology affects HR practices (Hall, 2003). HRIS administration encompasses a distinct supporting task within HR department. It can undoubtedly be said that functional modules of HRIS are the life blood for the firm and the firms which have deployed the technology started getting benefit.

2.2 Essentials Of HRIS

Company can easily follow the workforce gaps, labor quantity and quality, plan for future workforce meeting the company HR requirements through the HR knowledge management systems (Dessler, 2005). In the meantime, HRIS upkeeps the range of planning for labor force with proper information and ensure the supply and demand planning. Along with these benefits, it is possible through the use of HRIS, to help staffing with equal employment opportunities, separate applicant qualifications, develop training programs, correct budget planning as well as ensure employee-labor relationships (Hall, 2003).

2.3 Challenges In Implementing HRIS

According to (Kovach & Cathcart, 1999) major obstacles regarding acquiring maximum potentials included: insufficient finances and lack of support from the top management. Further, they stated that major barriers indicate designers’ insufficient HR knowledge processes and due to this lack of knowledge it is difficult for designers to provide proper solutions of the problems. A survey was conducted by the Institute of Management and Administration in 2002 on the major obstacles in management of HRIS. The obstacles that they included in the survey questionnaire included: deficient staff, insufficient budget, shortage of IT support, poor time management, and need for collaborating with other departments (E.W.T. Ngai & F.K.T. Wat, 2006).

Firms can be enabled to adapt the new technology if they feel to have competitive advantage. Nevertheless, many organizations resist new technology implementation like HRIS, unless benefits were perceived.

One of the reasons for reluctance in adoption and implementation of HRIS is the need of huge funds (Beckers & Bsat, 2002). Huge cost of instituting, and maintenance of a HRIS is said to be the major barrier in HRIS implementation (SAP Business One Review, 2013). The infrastructure cost along with the software packages expense and the installation cost for the implementation of HRIS are also high. Additionally, to capitalize on all HR possibilities, provision of personal computers to workers and Internet connection are required. It was identified that the transitional costs from traditional HR to an HRIS is high (Brown, 2002). Additionally, costs of hardware and software together with the cost of maintenance are significant.

As it is mentioned that HRIS is functioned as inter-departmental activities related to HR and these may be matched with sectors of adopters. But compatibility is another issue in which firms cannot be able to make the implementation successful unless technology is compatible with the existing framework or infrastructure of the firm.

III. Research Methodology

The nature of this research is descriptive and both the qualitative and quantitative data have been used to conduct the study. Quantitative data has been collected from primary source through conducting survey and qualitative data has been collected through secondary data sources such Internet, articles, books etc.

The population for this study comprised all those organizations which had adopted HRIS innovation operating in Bangladesh and were in the process of innovation implementation or had implemented. The survey has been conducted using structured questionnaires containing the 5-points Likert Scale statements. A random sample of 150 employees consisting 15 from 10 organizations were asked to fill the structured questionnaire, 65% respondents were male and 35% were female. Majority of the respondents were young (aged from 25 to 40) with high educational background. Exploratory Factor analysis has been conducted to determine whether multiple variables comprise one factor dimension. Then Structured Equation Modeling has been performed to
identify the relationship among Factors and variables. Statistical package SPSS 20.0 and AMOS 22 have been used to perform the analysis.

3.1 Conceptual Framework & Hypothesis

Attempt has been made to find out the factors affecting in adopting HRIS in Bangladesh. The following figure satisfies the conceptual framework.

![Conceptual Framework](image)

3.1.1 Hypothesis:

- **H0**: There is no statistical significant impact for the organizational factor to innovative factor of HRIS through the mediatory factor like environment.
- **H1**: There are statistical significant impacts for the organizational factor to innovative factor of HRIS through the mediatory factor like environment.
- **H2**: There are statistical significant impacts between the organizational factor and the Technological Factor of HRIS.
- **H3**: There are statistical significant impacts between the Technological factor and the environmental Factor of HRIS.
- **H4**: There are statistical significant impacts between the organizational factor and the innovative factor of HRIS.
- **H5**: There are statistical significant impacts between the organizational factor and the environmental Factor of HRIS.

IV. Data Analysis and Findings

This part deals with hypotheses testing. The hypotheses have been tested using chi-squared ($\chi^2$)–test in order to determine whether there is an impact of independent variables on Successful implementation of HRIS in the innovative activities. According to the Decision rule, factors: “Accept “the null hypothesis (H0), if calculated value ($\chi^2$-calculated) is less than critical value ($\chi^2$-tabulated) and “reject” (H0), if resultant value is greater than critical value. Also, “0.05” level of significance has been used to analyze the collected data. According to the Decision rule: “Reject” null hypothesis (H0) when calculated value is very high and the test (P value) gives significant result. On the other hand factor analysis may conduct to reduce the number of total variables when the statistic Bartlett’s test of Sphericity has been used along with the Kaiser-Meyer-Olkin (KMO) statistic shows small values (below 0.5) of the KMO statistic indicate that the correlations between pairs of variables cannot be explained by other variables and that factor analysis may not be appropriate. But here the results shows 0.839 (Table 1) which is very much strong to continue a factor analysis.

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.839</td>
</tr>
<tr>
<td>Bartlett's Approx. Chi-Square</td>
<td>1461.796</td>
</tr>
<tr>
<td>Test of Sphericity Df</td>
<td>105</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 1: KMO and Bartlett's Test

Initially, the 15 variables which are divided by four factors like organizational, technological, environmental and innovative factors practicing HRIS and relation among the factors were examined. Firstly the values shown in the table 3 which are loading above 0.5 suggesting reasonable factorability. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was almost 84%, above the recommended value of .6. Finally, the initial
eigenvalues communalities were all above 73% (see Table 2), further confirming that each item shared some common variance with other items. Given these overall indicators, factor analysis was conducted with all 15 items.

Principal Axis Factoring was used because the primary purpose was to identify and compute composite coping scores for the factors underlying the short version. The initial eigen values showed that the first factor explained 42.84% of the variance, the second factor 14.76% of the variance, third factor 8.24% of the variance and the fourth factor 7.40% of the variance where the factor solutions were examined, using both varimax rotations of the factor loading matrix.

5.1 Exploratory Factor Analysis

An exploratory factor analysis using SPSS 20.0 was conducted on the survey data. The rotated factor matrix, resulting from a varimax rotated principle axis factor exacting of the independent variables using the 1.0 eigenvalues cut-off criterion is shown in table 2, which indicates that the four factors emerged and reports their factor loading.

The data were examined using the SPSS reliability analysis to evaluate the Cronbach’s alpha, which range from 62% to 84%. Each item was tasted individually to ensure convergent validity and the reliability. On the other hand all the factor loadings were larger than 0.5 which indicates an acceptable significant level of the validity. The factor loading range 52% to 89% for organizational perspective, 67% to 83% for technological perspective, 61% to 84 for environmental perspective and 51% to 70% for innovative perspective. Since all factor loadings were of an acceptable significant level, all the variables were retrained for further analysis.

<table>
<thead>
<tr>
<th>Factor loading</th>
<th>Cronbach alpha</th>
<th>Variance explained (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Factor</td>
<td>0.801</td>
<td>42.842</td>
</tr>
<tr>
<td>Centralization</td>
<td>0.762</td>
<td>0.889</td>
</tr>
<tr>
<td>Complexity</td>
<td>0.818</td>
<td>0.595</td>
</tr>
<tr>
<td>Organizational Size</td>
<td>0.818</td>
<td>0.525</td>
</tr>
<tr>
<td>Technological Factor</td>
<td>0.625</td>
<td>14.746</td>
</tr>
<tr>
<td>IT infrastructure</td>
<td>0.785</td>
<td>0.667</td>
</tr>
<tr>
<td>Readiness of Technical Resource</td>
<td>0.833</td>
<td>0.647</td>
</tr>
<tr>
<td>Environmental Factor</td>
<td>0.848</td>
<td>8.243</td>
</tr>
<tr>
<td>Organizational Realness</td>
<td>0.787</td>
<td>0.785</td>
</tr>
<tr>
<td>Competency</td>
<td>0.845</td>
<td>0.610</td>
</tr>
<tr>
<td>Regulation Compliance</td>
<td>0.515</td>
<td>0.697</td>
</tr>
<tr>
<td>Innovative Factor</td>
<td>0.703</td>
<td>7.409</td>
</tr>
<tr>
<td>Relative Advantage</td>
<td>0.641</td>
<td>0.641</td>
</tr>
<tr>
<td>Capability</td>
<td>0.515</td>
<td>0.515</td>
</tr>
<tr>
<td>Used SPSS Principal Axis Factoring extraction with Varimax rotation method.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Factor loadings (from SPSS exploratory factor analysis)

5.2 Confirmatory Factor Analysis

We consider the conceptual model to test the model fitness by performing a Confirmatory Factor Analysis (CFA) on the survey data set. The results performed that the conceptual model is recursive. There were 120 distinct sample moments from where to compute the estimates of the default model and 38 distinct...
parameters to be estimated, leaving 82 degrees of freedom. The minimum iteration was achieved, thereby proving a consolation that the estimation process resulted an admissible solution, avoiding any multi collinearity effects. The result also provide a quick overview of the model fit, which indicates the χ² value (382.33), together with its degrees of freedom (82) and probability value (<0.0005).

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Recommended Value</th>
<th>Observed Value</th>
<th>Overall Model Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/ degrees of freedom</td>
<td>≤5.00</td>
<td>4.663</td>
<td>Yes</td>
</tr>
<tr>
<td>GFI</td>
<td>≥0.90</td>
<td>.961</td>
<td>Yes</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥0.80</td>
<td>.850</td>
<td>Yes</td>
</tr>
<tr>
<td>NFI</td>
<td>≥0.90</td>
<td>.889</td>
<td>Acceptable</td>
</tr>
<tr>
<td>CFI</td>
<td>≥0.90</td>
<td>.887</td>
<td>Yes</td>
</tr>
<tr>
<td>RMSEA</td>
<td>≤0.06 OR ≤0.08</td>
<td>.078</td>
<td>Yes</td>
</tr>
</tbody>
</table>

GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; NFI = normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation.

Table 3: Review of fit statistics

5.3 Reliability Of Parameter Estimates

Another test statistics is the critical ratio (C.R.), which indicates the parameter estimate divided by its standard error (S.E.). As a “rule of thumb” the C.R. needs to be >±1.96 if the estimate is acceptable. The results showed that the critical ratio values were greater than 1.96, indicating that they were all acceptable.

<table>
<thead>
<tr>
<th>Parameter Estimate</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Standardized Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF</td>
<td>.131</td>
<td>.069</td>
<td>1.892</td>
<td>.059</td>
<td>.489</td>
</tr>
<tr>
<td>EF</td>
<td>2.272</td>
<td>1.159</td>
<td>1.961</td>
<td>.050</td>
<td>.908</td>
</tr>
<tr>
<td>IF</td>
<td>.714</td>
<td>.140</td>
<td>5.096</td>
<td>***</td>
<td>.646</td>
</tr>
<tr>
<td>TF_1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td>.659</td>
</tr>
<tr>
<td>TF_2</td>
<td>1.290</td>
<td>.119</td>
<td>10.803</td>
<td>***</td>
<td>.808</td>
</tr>
<tr>
<td>TF_3</td>
<td>1.373</td>
<td>.151</td>
<td>9.084</td>
<td>***</td>
<td>.974</td>
</tr>
<tr>
<td>TF_4</td>
<td>.774</td>
<td>.114</td>
<td>6.760</td>
<td>***</td>
<td>.598</td>
</tr>
<tr>
<td>TF_5</td>
<td>.226</td>
<td>.090</td>
<td>2.500</td>
<td>.012</td>
<td>.211</td>
</tr>
<tr>
<td>TF</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td>.171</td>
</tr>
<tr>
<td>TF_1</td>
<td>4.031</td>
<td>2.005</td>
<td>2.010</td>
<td>.044</td>
<td>.826</td>
</tr>
<tr>
<td>TF_2</td>
<td>4.524</td>
<td>2.245</td>
<td>2.015</td>
<td>.044</td>
<td>.888</td>
</tr>
<tr>
<td>TF_3</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td>.602</td>
</tr>
<tr>
<td>TF_4</td>
<td>1.121</td>
<td>.128</td>
<td>8.739</td>
<td>***</td>
<td>.624</td>
</tr>
<tr>
<td>TF_5</td>
<td>1.613</td>
<td>.199</td>
<td>8.111</td>
<td>***</td>
<td>.882</td>
</tr>
<tr>
<td>TF_6</td>
<td>1.582</td>
<td>.195</td>
<td>8.091</td>
<td>***</td>
<td>.878</td>
</tr>
<tr>
<td>TF_7</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td>.650</td>
</tr>
<tr>
<td>TF_8</td>
<td>.936</td>
<td>.153</td>
<td>6.097</td>
<td>***</td>
<td>.574</td>
</tr>
<tr>
<td>TF_9</td>
<td>1.142</td>
<td>.175</td>
<td>6.520</td>
<td>***</td>
<td>.619</td>
</tr>
</tbody>
</table>

Table 4: Parameter estimates (AMOS report)
5.4 Results Of Hypothesis Testing

After constructing an acceptable measurement model, we evaluated the structural model shown in a path diagram in Fig. 2. The regression weights are reported in Table 4. The results of the SEM analysis show that H1, H3 and H4 were supported, while H2 and H5 were not supported.

To test the statistical significance of the parameter estimates from SEM, the test statistic is the Critical Value (C.R.), which represents the parameter estimate divided by its standard error (S.E.). Based on significance level of 0.05, the C.R. needs to be >±1.96. Below this level, the parameter can be considered unimportant to the model. The factor loading on OF-TF (Table 4) was 0.131 (with C.R. = 1.892, p=0.059), which was not significant, and thus H3 was not supported. The factor loading on OF-EF was 0.052 (with C.R. = 1.227, p=0.220), which did not support hypothesis H5. On the other hand factor loading of TF-EF was 2.272 (with C.R. 1.159, p= 0.050) which was marginal result and acceptable so the hypothesis H3, H1 and H4 are supported.

V. Conclusion& Recommendation

So, it is clear that HRIS supports planning, administration, decision making, and control and thereby facilitates the applications such as employee selection, employee placement, payroll management, pension management, training projections, and performance evaluation. These information systems increase administrative efficiency and generate reports capable of improving decision making. Technology and environment has a positive impact on the successful adoption of HRIS context. On the other hand Organizational factor does not have any successful effect on Technology as well as environment in the context of successful adoption of HRIS.
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Organization should set up HRIS with high network externalities to enhance services providing and increase the performance level of the daily work which will help to cut the cost of operating human resource department and also increase the efficiency and effectiveness of the human resource section. Also organization should pay much attention to establish qualified and specialized IT team and organization should prepare automatic performance indicator enable them to interact with HRIS step by step in logical and critical manner as starting point for successful adoption of HRIS by employee’s competency.

References


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