The International Technology Management Review, Vol. 6 (2017), No. 3, 82-93

Determinants of the Adoption of Human Resources Information Systems in a Developing Country: An Empirical Study

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Abstract

This study explores the relationship between innovation, organizational and environmental characteristics, and the adoption of HRIS. After an extensive review of existing literature, a research model and corresponding questionnaire was developed to collect data using purposive sampling method. The targeted companies were located in Dhaka, Bangladesh. Discriminant analysis of the data reveals that relative advantage, compatibility, complexity, top management support, organization size and HRIS expertise are positively related to the adoption of HRIS. The study also examines whether there is a relationship between the extent of HRIS adoption and innovation, organizational and environmental variables. The results indicate that size of organization has a substantial impact on with the extent of HRIS adoption. However, HRIS expertise is only significant in the regression with total number of HRIS applications as the dependent variable. In a developing country scenario, this study has noteworthy theoretical and practical contribution in the field of HRIS.

Keywords: Human Resource Information Systems, Adoption, Structural Equation Modeling, Information Technology, Bangladesh.

1. Introduction

The face of modern organization has been changing due to globalization, rapid technological development, the move towards a knowledge-based economy and a number of other factors [5, 46]. Eventually, all the above mentioned forces are having a major impact on the role of human resource management (HRM) [37, 40]. Within the HRM, successful adoption and implementation of innovations deal with these problems and prospects which can be very critical determinants of organizational success [35].

In present times, the use of information technology is an important innovation in the area of human resources management (HRM) function, which has gradually led to the advancement of computer-based human resources information systems (HRIS). As mentioned by Hendrickson [23], HRIS is regarded as the backbone of contemporary HRM function. In accordance with Tannenbaum [48], a system which acquires, stores, influences, analyzes, recovers and disseminate pertinent information regarding human resource can be defined as Human Resource Information System (HRIS). The major task of HRIS is to gather and facilitate analyzing the data necessary for human resource department to do its job in a correct manner [2, 56]. HRIS synergistically combines two important types of resources of an organization- human and information. So it is pertinent to examine the adoption of HRIS. Hence, the study aims at examining the factors influencing the adoption of HIRS in organizations.

It has been confirmed by studies that organizations that have adopted HRIS, investments are small and usually deals with tactics and administration rather than strategy. Tactical HR applications usually refer to transaction processing for payroll and benefits administration. On the other hand, strategic applications make organizations more effective and competitive, especially in the field of knowledge management and workforce planning [3, 42]. However, the focus of HRIS is to ensure administrative efficiency in most of the organizations. However, as organizations strives to grow over time and face more competitive pressures, the pressure to breed for HR to play a more strategic role in the organization [13, 44]. The potential link between HR and business strategy induces organizations to look for innovative programs and practices to build a more competitive workforce. Therefore, the second objective of this study is to examine the elements influencing the extent of HRIS adoption in organizations.

Despite the significance of HRIS application in organizations, yet there is a limited understanding of successful use and outcome of HRIS in a developing country like Bangladesh. This study aims at exploring the factors that influence the decision to adopt HRIS and the extent of HRIS adoption using in the context of Bangladesh. The organization of the paper is as follows. The next section explains the background of the study which followed by the description of the research model and the hypotheses. Then, the methodological process was elaborated which is followed by the findings. The succeeding sections focus on discussion, implications, contribution and conclusion.

2. Theoretical Foundation

Empirical investigation on the linkages between information systems (IS) adoption and technological innovation adoption has been recommended by several researchers [27, 29, 31]. The theoretical foundation of this study is based on the innovation adoption literature. An extensive body of literature is available on innovations which spans over many disciplines and focuses on both organizational and individual levels. On the basis of classical innovation diffusion theory Rogers [43], linked adoption decisions to five innovation-specific attributes: relative advantage, complexity, compatibility, trialability and observability. Kwon and Zmud [27] Proposed another framework on the adoption of IT by organization as part of the process of IS implementation. They identified five major contextual factors: innovation characteristics, organizational characteristics, environmental characteristics, task characteristics and individual characteristics.

Teo, et al. [49] have examined the determinants of HRIS adoption in Singapore. Several studies have also examined the level to which HRIS can facilitate strategic focus of Human Resource [9, 57]. Moreover, studies have also confirmed that the adoption of HRIS in the public sector depends on environmental, organizational and technological factors [52].

Most studies on innovations have used two separate perspectives for analysis- adoption and diffusion [4, 26]. Studies focusing on the adoption perspective evaluate the characteristics of an organization that will enable it to receive the innovation and change, while studies focusing diffusion perspective attempts to analyze why an innovation spreads and what features of the innovation facilitate its widespread acceptance. After the adoption of an innovation in an organization, the use of that particular innovation has to spread within the organization to reap the full benefits of the innovation. Though some innovations are adopted due to organizational or environmental pressures, lack of management support may hinder their spread within the organization. Given this backdrop, this study attempts to explore factors associated with the adoption of HRIS and the extent of adoption of HRIS.

3. Research Model and Hypotheses

On the basis of previous literature, the research model (figure 1) consists of three groups of variables: innovation, organizational and environmental characteristics. These variables are hypothesized to be related with the decision to adopt HRIS and the extent of HRIS adoption. Innovation context investigate factors such as relative advantage, compatibility, complexity that may influence intentions to use a specific technology. The organizational contexts describe the measures regarding the organization, such as firm size and scope, managerial structure and internal resources; and the environmental context is the arena in which a firm conducts its business: its industry, competitors and dealings with government.

3.1. Innovation Characteristics

3.1.1. Relative advantage

As information systems allow users to perform both their personal and business tasks more effectively, it is assumed to provide advantage to them [14]. Thus, it would be rational to presume that individuals who observe information systems as advantageous would also be likely to adopt the device. Relative advantage is claimed as one of the important factor in explaining adoption of new innovations [51].

The effectiveness of HR department can be improved by introducing HRIS through automation of administrative works, reduction of paperwork, simplification of work process and distribution of better information to management. According to many researchers, the most important benefit of HRIS is that organizations can spend less time on information input and day-to-day HR administration and more time on decision-making and strategic planning [6, 16]. On the basis of benefits acclaimed in different studies, the following hypotheses are hypothesized:

Hypothesis 1a: The greater the perceived relative advantage of HRIS, the more likely it will be adopted by the organization.

Hypothesis 1b: The greater the perceived relative advantage of HRIS, the greater the extent of HRIS adoption in the organization.

3.1.2. Compatibility

Tornatzky and Klein [51] advocated a meta-analysis of innovation adoption which reported that the probability of adoption of that innovation is more when it is compatible with an individual's job responsibilities and value system. Empirical studies found evidence in favor of positive relationship between compatibility and intention to use [14, 34, 51]. Thus, the second hypothesis can be put as:

Hypothesis 2a: The greater the perceived compatibility of the HRIS with an organization's beliefs, values and IT infrastructure, the more likely it will be adopted by the organization.

Hypothesis 2b: The greater the perceived compatibility of the HRIS with an organization's beliefs, values and IT infrastructure, the greater the extent of HRIS adoption in the organization..

3.1.3. Complexity

It has been reported by previous studies that innovation which complex in nature needs more technical skills and greater implementation efforts to increase its likelihood of adoption. It is presumed that the lower the complexity of using HRIS, the more the probability to adopt it by individual. Empirical evidences showed that perceived ease of use, which is the opposite of perceived complexity, is significantly and positively associated with the usage intentions [7, 34, 41, 53]. This leads to the next hypothesis:

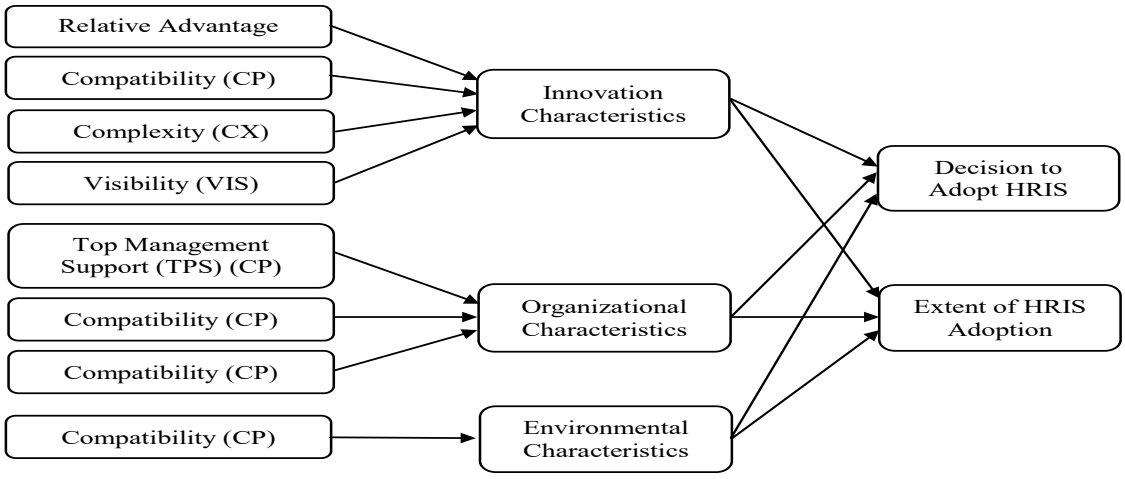

Figure 1: Research Model

Hypothesis 3a: The greater the perceived complexity of HRIS, the less likely it will be adopted by the organization.

Hypothesis 3b: The greater the perceived complexity of HRIS, the lesser the extent of HRIS adoption in the organization.

3.1.4. Visibility

Gan [14] claimed that the likelihood of the adoption of innovation is positively dependent upon its perceived visibility. It is usually assumed that if HRIS is more visible to individuals, the more likely it is to be adopted. Researches have reported that visibility/servility of an innovation found out to be positively related to intention to use [14, 25, 33, 54]. Thus, the next hypotheses are:

Hypothesis 4a: The greater the perceived visibility of HRIS, the more likely it will be adopted by the organization.

Hypothesis 4b: The greater the perceived visibility of HRIS, the greater the extent of HRIS adoption in the organization.

3.2. Organizational characteristics

3.2.1. Top Management Support

In the adoption and implementation of IT, top management support has been identified as a key factor. It plays a very important role for creating a supportive climate and providing adequate resources for the adoption and implementation of new technologies [21, 39]. Moreover, top management would be able to identify business opportunities for exploration of IT with broader perspective [15, 59]. In addition, signal regarding the importance of the innovation and would be also send by top management support and thus can overcome organizational resistance accept the IS. Hence, following hypotheses are postulated:

Hypothesis 5a: The greater the extent of top management support, the more likely the organization will adopt HRIS.

Hypothesis 5b: The greater the extent of top management support, the greater the extent of HRIS adoption in the organization.

3.2.2. HRIS Expertise

In the adoption of new technologies, expertise is an important factor [22, 27]. In another study, Elliott and Tevavichulada [12] reported that HRIS staff need multidisciplinary knowledge and have idea about of IS and all HR functions. In the long-term, the success and continuing growth of the HRIS is dependent upon the availability of skilled HRIS professionals [10]. The following hypotheses are thus postulated:

Hypothesis 6a: The greater the HRIS expertise in the organization, the more likely the organization will adopt HRIS.

Hypothesis 6b: The greater the HRIS expertise in the organization, the greater the extent of HRIS adoption.

3.2.3. Size

It has been found in different studies that organizational size is one of the important variables in innovation adoption [8, 28]. Larger firms can easily adopt and implement innovations as they have the capability of mobilizing adequate financial resources and absorb associated risks. It has been also found that lager firms have more complexity in coordination and thus they badly require information processing system. Therefore, it is claimed that the potentiality to use IS is greater in larger firms than smaller ones [50, 58].

Hypothesis 7a: The bigger the size of the organization, the more likely the organization will adopt HRIS.

Hypothesis 7b: The bigger the size of the organization, the greater the extent of HRIS adoption.

3.3. Environmental Characteristic

3.3.1. Competition

McCormick [30] argued that the pressures to grow for HR to reduce costs continue to mount as organizations move towards a knowledge-based economy. Competitive pressures induce organizations to adopt a better management technique to manage their employees and assets [45]. Thus, organizations get the most out of its human resource if it adopts HRIS. Hence, competitive pressure is one of the drivers that will lead to the adoption and use of HRIS. Therefore, it can be hypothesized that:

Hypothesis 8a: The greater the competition, the more likely the organization will adopt HRIS.

Hypothesis 8b: The greater the competition, the greater the extent of HRIS adoption in the organization.

4. Research Methodology

4.1. Sample and Procedures

HR executives and HR professional working in the companies located in Dhaka are constitutes the study population. Random sampling method is used to conduct the study. To collect data in systematic manner, a structured questionnaire was developed. To be specific, the questionnaire is based on a five-point Likert scale response format. Items of the survey were developed after an extensive survey of literature. The questionnaire was sent to the participants through email. About 207 valid responses have been received from the field level survey.

4.2. Instrument

In this study, there are two dependent variables. First dependent variable is decision to adopt HRIS, was a dichotomous variable, i.e. it indicates whether the organization was using computer hardware and software applications to facilitate its HRM activities, e.g., planning, staffing, compensation, etc. The underlying reason behind using this variable is to identify variables that distinguish an organization that adopts HRIS from one that does not adopt HRIS. As reported by Thong [50] and Premkumar and Roberts [39] a dichotomous measure is often used in innovation diffusion research. The second dependent variable, extent of HRIS adoption, was measured by the total number of computers dedicated for HRM functions and the total number of HRIS applications currently used in the organization.

Table 1: Variable operationalization

Variables	Variables Items	Description	References
Relative Advantage	RA1	HRIS will enable human resource personnel advantage personnel to accomplish tasks more quickly	Premkumar and Roberts [39]
	RA2	HRIS will improve the quality of the work the work of human resource personnel	
	RA3	HRIS will make it easier for human resource personnel to do their work	
	RA4	HRIS will enhance the job effectiveness of Human Resource personnel	
	RA5	HRIS will provide timely information for decision-making	
	RA6	HRIS will enable our organization to cut costs in our operations	
	RA7	HRIS will increase the profitability of our organization	
Compatibility	COM1	The changes introduced by HRIS are compatible with existing operating practices	Grover [17], Premkumar and Roberts [39]
	COM2	Adoption of HRIS is consistent with our organization's values and beliefs	
	COM3	HRIS is compatible with our organization's IT infrastructure	
	COM4	HRIS is compatible with our organization's computerized data resources	
Complexity	CX1	HRIS is complex to use	Grover [17], Premkumar and Roberts [39]
	CX2	HRIS development is a complex process	
	CX3	HRIS is hard to learn	
	CS4	Integrating HRIS into our current work practices will be very difficult	
Visibility	VIS1	I have seen what others do using the HRIS	Moore and Benbasat [32]
	VIS2	It is easy for me to observe others using the HRIS	
	VIS3	I can see many individuals using the HRIS	
Top Management Support	TMS1	Top management enthusiastically supports the management adoption of HRIS	Premkumar and Roberts [39]
	TMS2	Top management has allocated adequate resources for the adoption of HRIS	
	TMS3	Top management is aware of the benefits of HRIS	
	TMS4	Top management actively encourages human resource personnel to use HRIS in their daily tasks HRIS	
HRIS Expertise	HE1	All human resources personnel are computer-literate	Thong [50]
	HE2	There is at least one computer expert in the human resources department	
	HE3	Human resources personnels' understanding of computers is good compared with other organizations in the industry	
Competition	Com1	It is a strategic necessity to use HRIS in the workplace	Tan [47] and Grover and Goslar [18]
	Com2	Competitors' adoption of HRIS places pressure on our organization to adopt HRIS	
	Com3	Our organization actively keeps track of new and innovative uses of technology by competitors	
Size	SZ-1	Number of employees in the organization	Palvia, et al. [36]
	SZ-2	Annual revenue	

Studies of Thong [50] and Grover and Goslar [18] used these indicators to measure the degree to which innovations have been adopted.

As reported in table 1, the independent variables identified in the research model were measured using multiple item indicators. All variables, except the size of the organization, were measured using Likert scale continuum ranging from 1 (strongly disagree) to 5 (strongly agree). Size of the organization was measured number of employees [36].

5. Findings

Table 2 represents sample characteristics. The representation from male and female was a ratio of 87:13. Majority of the respondents have tertiary education. Most were in the age group of between 35 and 40 years old. The Income level of majority of the respondents was ranged between Taka 1,00,001- Taka 1,50,000 (US$1=Taka 80). Majority of organizations are in the Computers and communication sector (21.2 per cent) followed by retail sector (19.5 per cent).

Table 2: Sample Characteristics

Variables	Category	Frequency	%
Gender	Male	180	87
	Female	27	13
Education	Certificate/ diploma	16	8
	Bachelor degree	104	50
	Master degree	75	36
	PhD	10	5
	Others	2	1
Age (in years)	≤ 25	4	2
	26-30	8	4
	31-35	16	8
	35-40	85	41
	41-45	63	30
	46-50	21	10
	Above 50	10	5

Table 2: Sample Characteristics (Continued)

Variables	Category	Frequency	%
Job	Manager	123	59
	Executive	65	31
	Others	19	9
Level of Income	< 50,000	34	16
	50,000-1,00,000	44	21
	1,00,001-1,50,000	104	50
	1,50,000- 2,00,000	20	10
	More than 2,00,000	5	2
HRIS Imple-mentation	Less than a year	21	10
	Between one and three years	85	41
	More than three years	94	45
	Others	7	3
Type of Industry	Banking/ Finance	45	15
	Computers/ Communication	65	21
	Education	35	11
	Manufacturing	55	18
	Retail/Wholesale/ Trading	60	20
	Travel/Tourism/Hotel	41	13
	Others (please specify)	6	2

Source: Source: Author's estimation based on survey data.

5.1. Validity and Reliability

Convergent validity which measures the degree to which multiple items measuring the same concept are in agreement, has also been tested. To assess convergent validity this study has used the factor loadings and average variance extracted which was suggested by Hair, et al. [19]. The loading for each items exceeded the benchmark value of 0.5 [19]. The average variance extracted, were in the range of 0.571 and 0.804 which exceeded the prescribed value of 0.5 [20]. The reliability was assessed by considering Cronbach's alpha and composite reliability. The composite reliability and Cronbach's alpha values greater than 0.70 are acceptable. Composite reliability values ranged between 0.705 and 0.958 which also exceeded the recommended value of 0.7 [20].

Table 3: Result of Measurement Model

Construct	Code	Loadings	Cronbach's Alpha	CR	AVE
Relative Advantage (RA)	RA1	0.872	0.959	0.958	0.804
	RA2	0.899			
	RA3	0.862			
	RA4	0.855			
	RA5	0.884			
	RA6	0.893			
	RA7	0.871			

Table 3: Result of Measurement Model (Continued)

Construct	Code	Loadings	Cronbach's Alpha	CR	AVE
Compatibility (CP)	CP1	0.763	0.840	0.838	0.669
	CP2	0.765			
	CP3	0.824			
Complexity (CX)	CX1	0.82	0.915	0.902	0.722
	CX2	0.864			
	CX3	0.799			
	CX4	0.845			
	CX5	0.79			
Visibility (VIS)	VIS1	0.751	0.832	0.832	0.669
	VIS2	0.796			
	VIS3	0.797			
Top Management Support (TMS)	TMS1	0.769	0.862	0.817	0.731
	TMS2	0.795			
	TMS3	0.763			
	TMS4	0.752			
HRIS Expertise (HE)	HE1	0.802	0.838	0.832	0.650
	HE2	0.688			
	HE3	0.721			
Size(SZ)	SZ1	0.732	0.708	0.705	0.565
	SZ2	0.741			
Competition	COM1	0.816	0.792	0.753	0.567
	COM2	0.739			
	COM3	0.761			

Note: CR indicates composite reliability; α is the Cronbach's alpha; AVE denotes average variance extracted; JS1 and TI3were deleted due to low loadings.

Source: Author's estimation based on survey data

5.2. Hypotheses Testing

5.2.1. Decision to Adopt HRIS

Discriminant analysis has been used to test the hypotheses discriminating between adopters and non-adopters of HRIS (table 4). The overall model was significant which confirms the ability of the independent variables to collectively discriminate between adopters and non-adopters of HRIS. The predictive validity of the discriminant function was measured by comparing the percentage of cases classified correctly (78.3 per cent) with the proportional chance criterion (52.2 per cent). According to Hair, et al. [19], the classification accuracy reflected in the percentage of cases correctly classified should be at least one quarter greater than that achieved by chance. In this study, the percentage of cases correctly classified (78.3%) far exceeded a chance classification percentage of 65.3% (1.25 x 52.2). As it is evidential from table 4, the significant variables discriminating between adopters and non-adopters of HRIS are relative advantage, compatibility, top management support, size and HRIS expertise.

Table 4: Discriminant Analysis

Variables	Univariate Discriminant	Sig.	Discriminant loadings
Innovation characteristics			
Relative Advantage	5.125	0.005	0.345
Compatibility	3.541	0.000	0.246
Complexity	14.651	0.002	0.454
Visibility	5.648	0.052	0.294
Organizational characteristics			
Top management support	25.506	0.000	0.681
HRIS expertise	8.112	0.000	0.368
Size	32.455	0.000	0.786
Environmental characteristic			
Competition	0.050	0.455	0.026
Multivariate significance level	0.000		
Percentage correctly classified	78.3		
Proportional chance criterion	52.2		
Wilks' Lambda	0.654		
Chi-square	55.098		
Degrees of freedom	8		

Source: Author's estimation based on survey data.

5.2.2. Extent of HRIS adoption

To test the hypotheses relating to extent of HRIS adoption, multiple regression analysis was used. For two measures, namely number of workstations dedicated for HRM functions (WKSTATN) and the total number of HRIS applications (TOTAPP) were assumed as the dependent variables for two regressions.

Relative advantage – As indicated by the results of the discriminant analysis, the decision to adopt HRIS is affected by organizational relative advantage. This means that adopters perceive greater benefits from the HRIS to the organization as compared to non-adopters.

Table 5: Regression Analysis

Variables	WKSTATN			TOTAPP		
	Beta	t-stat	Sig.	Beta	t-stat	Sig.
		0.211	0.833		2.237	0.03
RA	-0.088	-1.187	0.237	0.062	0.804	0.42
CP	0.043	0.41	0.682	-0.091	-0.824	0.41
CX	-0.015	-0.139	0.889	-0.093	-0.842	0.4
VIS	0.046	0.461	0.646	-0.004	-0.037	0.97
TMS	-0.037	-0.384	0.702	-0.055	-0.549	0.58
HE	0.052	0.619	0.537	0.18	2.067	0.04
SZ	0.364	5.394	0	0.231	3.289	0
COM	0.051	0.746	0.486	-0.048	-0.679	0.5
R^2	0.15			0.077		
Adjusted R^2	0.116			0.039		
F	4.365			2.058		
Significance	0			0.042		

Source: Author's estimation based on survey data.

In table 5, the results were reported. Both the regression models were significant at the 5 per cent level. As it can be seen from table 5, size of the organization was the only factor that was significant in both the regressions. However, in the second regression model assuming TOTAPP as dependent variable, HRIS expertise was the other significant factor, besides size.

6. Discussion and Implications

6.1. Decision to adopt HRIS

Six variables- relative advantage, compatibility, complexity, top management support, HRIS expertise, and size of the organization, emerged as significant variables discriminating between adopters and non-adopters of HRIS.

A possible explanation could be that the benefits of HRIS accruing to adopter organization may be more direct and observable (e.g. automate administrative tasks, streamline workflow) than the non-adopter organization. This result is congruent with studies which have found relative advantage to be a significant factor for innovation adoption. Hence, hypothesis 1a is supported.

Compatibility – Compatibility was found to affect the decision to adopt HRIS. As HR activities becoming more integrated with other business functions, organisations are realising that effective and strategic management of HR is a prerequisite of their success. To materialize this HRIS needs to be compatible with the other systems. The finding of the study is consistent with previous studies which also reported that compatibility to be an important factor influencing the

adoption of an innovation [1, 11]. Hence, hypothesis 2a is also supported.

Complexity – Complexity of the HRIS was also found out to be significant factor discriminating between adopters and non-adopters. This finding is consistent to findings in the innovation adoption literature [24, 50]. A possible reason would be, the staffs are more efficient with computer applications in this modern age of IT. Hence, hypothesis 3a is supported.

Visibility - Visibility is hypothesized to be positively related to intention to use HRIS. This study found no evidence in favor of this hypothesis. This finding is not consistent with previous studies [14, 25, 54], which found visibility to be a major predictor of technology usage. Thus, hypothesis 4a cannot be accepted.

Top Management Support – According to the results of the study, top management support to be essential for innovation adoption which is in line with the findings of other studies [38, 50, 55]. It can be explained by the fact that top management support is very crucial to overcome possible internal resistance to the adoption of HRIS and ensure successful implementation. Thus, hypothesis 5a is supported.

Size – In this study, organization size is the most substantial discriminator between adopters and non-adopters of HRIS as reflected by the value of the discriminant loading in table 4, which is the highest. This indicates that organizations with greater size are more likely to adopt HRIS. This finding is in line with prior studies that have found size to be a critical factor in IT adoption and use [39]. Hypothesis 6a is thus supported.

HRIS Expertise – HRIS expertise is another significant element that effects the decision to adopt HRIS. This finding is consistent with Attewell [4] theory that lowering knowledge barriers is associated with the adoption of IS. Hypothesis 7a is thus supported.

Competition – In this study, competition was not found to be a significant factor influencing the adoption of HRIS. This suggests that the competition does not really have any direct link for organizations intention to adopt HRIS. The possible reason behind is that many top managers and board of directors view HRIS as more administrative rather than strategic issue and so they do not see the HRIS as being able to deal with the competition in the external environment. Thus, hypothesis 8a is not supported.

6.2. Extent of HRIS Adoption

One of the most significant findings of the study is that only size of the organization was found out to be significant in both regression models. The possible explanation behind this that larger organizations have adequate resources available, which gives them the leverage to use more workstations for HRM and more opportunities to adopt more HRIS applications. Thus, only hypothesis 5b is generally supported. HRIS expertise was to be significant for the regression model in only one of the regressions measuring extent of HRIS adoption which assumes total number of HRIS applications as dependent variable. Thus, hypothesis 6b is partially supported.

In the second regression equation which assumes total number of HRIS applications as the dependent variable, besides organization size, HRIS expertise also emerged as a significant variable. A possible explanation is that an organization with HRIS expertise may handle complexities associated with the application of HRIS. Thus, it would ensure the successful implementation of HRIS which could eventually lead to possibility of adopting more HRIS applications.

7. Contribution

7.1. Contribution to the Literature

The study was aimed to understand the influence of various perceived attributes of innovations on the decision to adopt HRIS and extent of HRIS adoption. The building block of this research is theory of adoption of IT build by Teo, et al. [49]. This study possesses noteworthy implications in the field of innovation. This study provides further evidence on the appropriateness of using framework of Teo, et al. [49] to gauge different dimensions of decision to adopt HRIS and extent of HRIS adoption. However, the research model of the study incorporates one additional constructs to existing framework, viz. visibility. Therefore, the theoretical contribution of this study it provides additional insights to explain the decision to adopt HRIS by adding one more dimensions in innovation characteristics.

7.2. Practical Implications

The practical contribution of the study is that it will provide direction for the organizations in the implementation or deployment of new IT systems or processes. Organization can now provide a more convenient implementation plan as it can address the attributes of the innovation.

8. Conclusion

The results of the study highlight the relative significance of organizational characteristics on the decision to adopt HRIS and the extent of HRIS adoption. It indicates the importance of organizational initiatives to expedite the adoption of new technologies. Size of the organization was found out to influence both the decision to adopt HRIS and the extent of HRIS adoption. However, the extent of HRIS adoption was also found out to be influenced by the HRIS expertise in addition to size of the organization.

It has been also evinced by the study that there are some differences in the factors influencing the decision to adopt HRIS and the extent of HRIS adoption. The adoption decision is influenced by the perceived innovation characteristic such as relative advantage, compatibility and complexity, while the extent of HRIS adoption is not influenced by these variables. In a similar fashion, components of external environment, i.e., competition moderately affect the decision to adopt HRIS though it has no impact on the extent of HRIS adoption. Lower values of R2 indicate that the explanatory power of the two regression models is moderate and there may other variables which need to be encompassed in the hypothesized regression models to explain diffusion of the HRIS more comprehensively.

This study was conducted on a sample population selected from HR executives and HR professional working in the companies located in Dhaka are constitutes the study population. Hence, the results may not provide a true reflection of the attitudes toward the intention to use HRIS of the entire population of Bangladesh. A potential future research study, therefore, could focus on a wider scope, to identify and include other potential factors in order to develop a model that is more widely applicable. This study was based on quantitative analysis and therefore only provide a narrow scope in the complex world of HRIS. Future research should also focus on qualitative study which would provide more insight into some of the result.

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