Factors Affecting the Adoption of HRIS: An Empirical Study Using Extended UTAUT2 Model

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Abstract

Human Resource Information Systems (HRIS) have become indispensable in modern businesses, reshaping the landscape of Human Resource (HR) service delivery. Despite their crucial role, the adoption and implementation of HRIS present persistent challenges influenced by diverse factors. This study delves into the adoption dynamics of HRIS and their practical utilization in developing countries, specifically in Bangladesh. Leveraging the Unified Theory of Acceptance and Use of Technology (UTAUT) model, the research incorporates Hedonic Motivation (HM) and Personal Innovativeness (PI) as additional factors, forming an extended UTAUT2 model. Employing a quantitative approach, survey data was collected from 255 respondents, including top-level management, HR professionals, and executives from public and private organizations in Chittagong and Dhaka, Bangladesh. Structural Equation Modeling (SEM) with the partial least squares (PLS) method through SmartPLS was employed for model validation. Results reveal that all selected parameters exert a positive and direct influence on HRIS adoption. The results aim to enhance comprehension of the intricate aspects of HRIS adoption, providing valuable insights for organizations to tailor implementation strategies. These findings are pertinent for policymakers and HR managers, offering insights into overcoming obstacles associated with HRIS adoption and optimizing HR practices, thereby contributing to organizational performance improvements.

Keywords: developing country, human resource information systems, UTAUT2, adoption, structural equation modeling

1. Introduction

In the ascend of digital transformation has resulted in major changes in business operations. In this constantly evolving business environment, organizations are preparing for real-time solutions. No exception, human recourse is the fastest key instrument that has emerged as the most challenging issue in today's modern enterprise management. The success of an organization relies heavily on the performance of its human resources (HR) to a significant extent in a knowledge-driven economy (Chakraborty & Mansor, 2013; Moussa & Arbi, 2020). Technological innovation and its implementation enhance the quality of services and productivity, while simultaneously reducing operational expenses, thereby granting organizations a competitive advantage (Zainol, Fernandez, & Ahmad, 2017).

Strategic analysis of the workforce and sharing knowledge have become the prime focus of Human Resource (HR) management, which influences HR managers to adopt HR information technology like Human Resource Information Systems (HRIS). HRIS is defined as an information system that is "used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information about an organization's human resources" to assist the HR department in making managerial decisions" (Beadles II, Lowery, & Johns, 2005; Thite, Kavanagh, & Johnson, 2012). The use of HRIS has become a necessity for addressing HR activities, as entities strive to enhance their performance accuracy and effectiveness. Computers and the Internet have revolutionized the HRIS process, making it more efficient and dependable in terms of speed and reliability (Irum & Yadav, 2019).

HRIS works as a point solution that offers an extensive set of tools and features to simplify and automate HR activities. It affects employees and their workplaces, office data management, and assists with data-driven decision making. HR managers within their respective organizations play the role of strategic business partners. At the functional level, HRIS facilitates the monitoring of various data related to the demographics and qualifications of applicants and employees. Additionally, HRIS supports the management of recruitment

processes, professional training and development, payroll, remuneration, employee retention, and performance evaluation (Al-Okaily & Al-Okaily, 2022; Bondarouk & Ruël, 2013). In fact, HRIS technology provides a suggestive dashboard that is crucial for better execution of business's strategic plan.

As a developing country, Bangladesh is attempting to shrink its dependency on human beings and confide in the machines, especially computers. HRIS was first observed in the 1950s to 1960s through an automated payroll system (Martinsons, 1997). Whereas, human resource management (HRM) concept was observed in Bangladesh in the mid-90s with the hands of multinational companies (Bhuiyan & Rahman, 2014). Digitalization is observed everywhere–home, office, street, or restaurants. However, technology adoption in developing countries is slower in the public sector than in the private sector (Nam, 2019). HRIS is seen rare in organizations due the lack of knowledge and unawareness of the outcomes of it. A few commonly used HRIS software in Bangladesh are Smart HRM, Kormee HRM, Systech HR & Payroll, Wave HRM, Jibika Plexus, Smart Pay, and PEOPLE SOFT.

As awareness of HRIS capabilities and operations grows, companies are more interested in obtaining and maximizing its use. An extensive amount of research has been conducted on HRIS over the past 20 years. However, few efforts have been made in studying the adoption of HRIS technology by integrating the unified theory of acceptance and use of technology (UTAUT) model. So far, these studies have not ascertained all crucial aspects that may influence HRIS technology acceptance & adoption. Hence, the present study endeavors to address this research gap by employing the UTAUT2 model proposed by (Venkatesh, Thong, & Xin, 2012).

Specifically, the key objectives of the study are to determine the relative significance of hedonic motivation and personal innovativeness, along with UTAUT constructs for HRIS adoption, to minimize the gap.

2. Literature Review and Hypotheses Development

Over the past two decades, businesses have been challenged by a number of factors, including technological development, increased competition, globalization, and other issues. Technology acceptance and use are among the most significant issues in coping with these changes. Different prominent models were found to get the influential factors in technology adoption and use (Ajzen, 1985; Davis, Bagozzi, & Warshaw, 1989; Quaosar, 2018; Tornatzky, Fleischer, & Chakrabarti, 1990; Uddin, Alam, Mamun, Khan, & Akter, 2020). These theories have been comprehensively tested to predict user acceptance (Thompson, Higgins, & Howell, 1991; Venkatesh & Davis, 2000), but none of these models were appropriate in dynamic situations.

Venkatesh, Morris, Davis, and Davis (2003), anatomized eight different prominent models: Theory of Reasoned Action (TRA, in 1975), Technology Acceptance Model (TAM, in 1989), Theory of Planned Behavior (TPB, in 1991), Model of PC Utilization (MPCU, in 1991), Motivational Model (MM, in 1992), Combined TAM and TPB (in 1995), Social Cognitive Theory (SCT, in 1999), and Diffusion of Innovation Theory (DOI, in 2001). They integrated the components of these models into a single model, Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT is widely utilized due to its better comprehensiveness and logical adjustment, making it more appropriate for defining the results of technology adoption and practical use. It can explain 70% of the variance in usage intention and 50% of the actual use (Raaij & Schepers, 2008; Venkatesh et al., 2003). HRIS is a worthwhile technology for HR professionals; however, itis rarely used in Bangladesh. Therefore, researchers attempt to apply this model in Figure 1, with the exception of any moderating variable, to determine the preview of HRIS adoption in developing countries. The proposed model of this study is as follows:
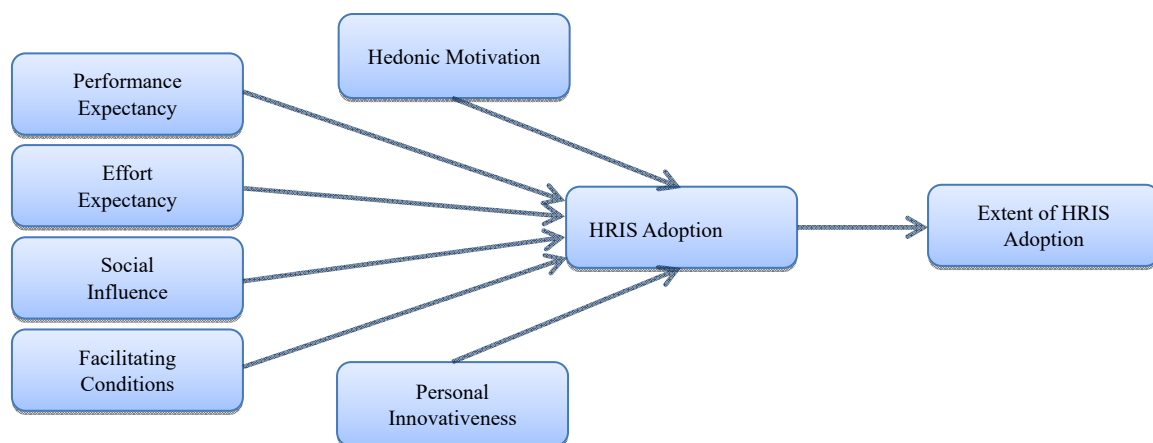

Figure 1. Research model (Extended UTAUT model of the study)

2.1 Performance Expectancy (PE) and Behavioral Intention (BI) to HRIS Adoption

Performance expectancy refers to the extent to which an individual perceives that utilizing a system would contribute to the enhancement of their work performance (Venkatesh et al., 2003) and PE refers to the end-users' belief in increasing their functional performance through the adoption and use of technologies in a given situation (Uddin et al., 2020). The Construct performance expectancy has evolved from outcome expectations (SCT), extrinsic motivation (MM), perceived usefulness (TAM/TAM2), relative advantage (IDT), and job fit (MPCU). The PE of UTAUT has an enormous influence on the intention to use and adoption of technology (Bandyopadhyay & Fraccastoro, 2007). PE is one of the strongest and most important determinants affecting technology usage (M. S. Alam & Uddin, 2019; Ali & Arshad, 2018; Hoque & Sorwar, 2017). Further studies have revealed that PE impacts positively in technology adoption and usages (Carlsson, Carlsson, Hyvonen, Puhakainen, & Walden, 2006; Rahi, Mansour, Alghizzawi, & Alnaser, 2019; Soliman, Karia, Moeinzadeh, Islam, & Mahmud, 2019). It is assumed that HR professionals' behavioral intention to use an HRIS is based on their positive attitudes toward HRIS performance in organizations. Considering these findings, together with previous studies, the following hypothesis is proposed:

H1: PE influences the HR professionals BI in adopting HRIS.

2.2 Effort Expectancy (EE) and Behavioral Intention (BI) to HRIS Adoption

Effort expectancy is "the degree of ease associated with the use of the system' (Venkatesh et al., 2003). It was developed from three different constructs: ease of use (IDT), perceived ease of use (TAM/TAM2), and complexity (MPCU). The idea of "EE" is significant in determining how willing people are to embrace and use new technologies. Several researchers have determined a favorable correlation between EE and propensity to employ technology in earlier investigations (Arman & Hartati, 2015; Raza, Shah, & Ali, 2019; Rozmi, Bakar, Hadi, & Nordin, 2019; Wrycza, Marcinkowski, & Gajda, 2017). According to Percy and Van Belle (2012), this construct affects one's attitude towards adopting a technology and is a significant determinant of users' intention to use technology (Aggelidis & Chatzoglou, 2009). The following hypothesis is presented to evaluate the influence of effort expectancy:

H2: EE predicts the HR professionals BI in adopting HRIS.

2.3 Social Influence (SI) and Behavioral Intention (BI) to HRIS Adoption

The social influence of the UTAUT model is an important precursor to behavioral intention. According to Venkatesh et al. (2003), social influence refers to the extent to which a person believes that he or she should try a new system. It is formulated from three other constructs: image (IDT), social factors (MPCU), and subjective norm (TAM2, TPB/DTPB, TRA, and C-TAM-TPB). People in society have a substantial effect on their behavioral intention to embrace and use inventions (Lu, Yao, & Yu, 2005; Rogers & Singhal, 2003). In their research, Fidani and Idrizi (2012), discovered a statistically significant relationship between SI and BI in the adoption of new technology. Previous research has shown a positive relationship between social influence and the propensity to adopt and use the technology (Ain, Kaur, & Waheed, 2016; Dwivedi, Rana, Jeyaraj, Clement, & Williams, 2019; Rahi et al., 2019). Based on these empirical and theoretical considerations, the following hypothesis is posited.

H3: SI affects the HR professionals' intention to use HRIS.

2.4 Facilitating Condition (FC) and Behavioral Intention (BI) to HRIS Adoption

Facilitating conditions are "the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system" (Venkatesh et al., 2003). This construct is derived from perceived behavioral control (C-TAM-TPB, TPB), facilitating conditions (MPCU), and compatibility (IDT). When people try something new, they usually seek assistance and other technical support. If these supports are not enough to perform, they may act as an inhibitor (Venkatesh, Thong, Chan, Hu, & Brown, 2011). (Aggelidis and Chatzoglou (2009)) found that facilitating conditions significantly influence behavioral intention to use technology and FCs influence directly on behavioral intention and use technology (Mun, Jackson, Park, & Probst, 2006). Substantial numbers of research have found where FCs has played as an influential determinant in the intention to adopt technology (Rozmi et al., 2019; Soliman et al., 2019; Uddin et al., 2020). In this context, FCs refer to the support mechanisms workers seek through a company to facilitate the adoption of HRIS. The following hypothesis is developed based on the explanation.

H4: FC affects the HR professionals BI in adopting HRIS.

2.5 Hedonic Motivation (HM) and Behavioral Intention (BI) to HRIS Adoption

HM refers to the joy or satisfaction that derives from using a certain technology, and it is clear that this factor

directly affects the acceptance and adoption of that technology into society (Venkatesh et al., 2012). Brown and Venkatesh (2005), elucidated HM as a predictor of behavioral intentions, which was subsequently confirmed and incorporated into the UTAUT2 model. Their findings highlighted that consumers seek technology that appears to be entertaining with unique, creative tools and functions (Acheampong et al., 2017; Alalwan, Dwivedi, & Rana, 2017). This work is a cautionary reminder to information systems designers, urging them to create systems that are fun, entertaining, and enjoyable (Alalwan, Dwivedi, Rana, & Williams, 2016).

The Human Resource Information System (HRIS) requires less effort to input, manage, and analyze HR data compared to existing HR procedures, and it is more likely that an organization will adopt the HRIS. In other words, it is a system that enhances an individual's comfort and job satisfaction at work, which leads to increase greater use and adoption, and decision-makers are also inclined to adopt the HRIS for their organization if they perceive that the technology can streamline their work environment. Thus, the following hypothesis is posited.

H5: HM influences the HR professionals BI in adopting HRIS.

2.6 Personal Innovativeness (PI) and Behavioral Intention (BI) to HRIS Adoption

Innovativeness is defined as a person's propensity and proactive attitude towards adopting a new technology (Shanmugavel & Micheal, 2022). It exhibits a person's receptivity and openness to discovering and experiencing cutting-edge concepts or technology (Patil, Tamilmani, Rana, & Raghavan, 2020). Innovativeness is a significant predictor of new products or innovation adoption, despite its lack of prominence in theoretical models of technology acceptance (Cowart, Fox, & Wilson, 2008; Karjaluoto, Shaikh, Saarijärvi, & Saraniemi, 2019; Slade, Williams, & Dwivedi, 2014).   Individuals who are more open to trying new information technology (IT) can serve as catalysts for change and opinion leaders, speeding up the adoption of said technology in a business (Agarwal & Prasad, 1998). According to studies of Chauhan, Yadav, and Choudhary (2022) and Iranmanesh, Zailani, Moeinzadeh, and Nikbin (2017), people who score higher on measures of personal inventiveness are more likely to be early adopters, more receptive to change, and better able to deal with uncertainty. The marketplace strongly appreciated the value of these innovative individuals, as they tended to take risks and purchase new products, thus acting as opinion leaders in the dissemination of new technologies (Senali et al., 2022). Despite being aware that new technologies may not fulfill all of their anticipated benefits, individuals with high PI still exhibit the first to use them (Khazaei & Tareq, 2021). Innovation is favorably correlated with the behavioral intention to use new technologies because these innovative individuals possess natural curiosity and actively seek out information. Thus, the following hypothesis is proposed.

H6: PI influences the HR professionals BI in adopting HRIS.

2.7 HRIS Adoption to Extent of HRIS Adoption to HRIS Adoption

An individual's attitude toward utilizing a particular type of technology may be seen as an aggregate sensory reaction to interacting with a given system (Venkatesh et al., 2003). The concept of behavioral intention may be defined as a construct that encompasses the influence of both attitudes and subjective norms on a particular activity, ultimately serving as a predictor of actual conduct (Pickett et al., 2012). Individuals' plans to engage in various technological interests are understood as behavioral intentions. The UTAUT proposed and showed a favorable correlation between technological adoption intentions and actual adoption behavior (Venkatesh et al., 2012; Venkatesh & Zhang, 2010). Many studies have found that users' intention to use technology has a substantial impact on how often they do so (Barrane, Karuranga, & Poulin, 2018; Motaghian, Hassanzadeh, & Moghadam, 2013; Raman & Don, 2013; Raza et al., 2019; Tarhini, El-Masri, Ali, & Serrano, 2016). Consistent with prior studies, researchers hope that increased HRIS usage and acceptance will lead to good outcomes. Thus, the following hypothesis is posited.

H7: The adoption of HRIS and its effects have a positive effect on the extent of HRIS adoption.

3. Research Methodology

The research methodology refers to the systematic strategy employed to obtain answers to research inquiries. According to Sekaran and Bougie (2010)**,** research methodology may be described as a systematic framework consisting of principles and activities that aid in the production of research findings that are both valid and trustworthy. Methodology of a research is a planned approach to solve a research problem as well as a way of learning how the research will be carried out (Rajasekar, Philominathan, & Chinnathambi, 2006). Research methodology is a systematic and constructive way of analysis to gain insight into the solution of a study (Irny & Rose, 2005). Research methodology of a research deals with the methods and techniques of theoretical analysis, and finally approaches the best fit for research.

Information was acquired using a survey questionnaire. The questionnaire for this poll was divided in half. The

first part of the introduction includes background data about the respondents such as age, gender, educational qualification, nature of organization, year of experience, type of organization and the companies they work for. In the second part, specific questions were placed on 5-point scale or Likert scale, as five-point Likert scales are supposed to be more appropriate and reliable (Jenkins & Lloyd, 1985; Lissitz & Green, 1975). Dhaka (the capital of Bangladesh) and Chittagong (the commercial capital of Bangladesh) were preferred as the sampling areas because most private and public organizations in Bangladesh are situated in these two cities. Person- and region-based survey interaction techniques were used to ensure maximum response rates compared to online, postal, and telephone surveys, and this technique can also ensure the accuracy of data, to minimize missing data, and avoid delays in the context of developing countries (Malhotra, 2010).

To justify and validate the proposed model of the study and to find the relationship among the hypotheses, researchers used a second-generation multivariate data analysis technique called Structural Equation Modeling (SEM) with focus on the emerging path modeling approach called Partial Least Squares (PLS) (Ringle, Wende, & Becker, 2015). SEM is a well-known framework for testing hypotheses using real-world data (Oliver, Kerstin, & Manfred, 2010).

4. Results

4.1 Features of Sample

This study collected data from the top-level management, HR professionals, and HR executives of different public and private limited organizations. During conversations concerning technology adoption, they make sure that decisions are made based on an in-depth understanding of the organization's strategic goals, culture, resources, and workforce management needs. By adopting a collaborative approach, the organization enhances the probability of effectively implementing technology adoption and optimizing the advantages it brings. This study was followed by a probability sampling method where samples were drawn using a convenient/simple random sampling technique. A total of 300 questionnaires were sent for this study, and 270 were returned (85% response rate). The time slot of data collection for this study was October 2023 to December 2023. After eliminating outliers (seven respondents), imputed missing values (three respondents), and eliminated replies with unacceptable variation (five respondents), 255 questionnaires remained for further analysis. The demographics and other details of the respondents are presented in Table 1.

Table 1. Demographics and other details of the respondents

Variables	Categories	Frequency	Percentage
Gender	Male	202	79%
	Female	53	21%
Age	Below 30 years	15	6%
	31-40 years	62	24%
	41-50 years	105	41%
	Above 50 years	73	29%
Education	Bachelor	38	15%
	Master	142	56%
	PhD	23	09%
	Others	52	20%
Nature of Organization	RMG	72	28%
	Financing	80	31%
	Education	25	10%
	IT & Telecom	35	14%
	Others	43	17%
Year of Experience	1-5 years	27	11%
	6-10 years	54	21%
	11-15 years	67	26%
	16-20 years	49	19%
	Above 20 years	58	23%
Nature of Organization	Public	72	28%
	Private	183	72%

4.2 The Measurement Model

Prior to hypothesis testing, the reliability and validity of the data analyzed (Bagozzi, Yi, & Phillips, 1991). Composite dependability and Cronbach's alpha were used to determine the level of trustworthiness. Composite reliability (CR) and Cronbach's alpha (α) values of 0.70 or above are considered satisfactory for a construct. According to Hair Jr, Hult, Ringle, and Sarstedt (2016), a value less than 0.60 indicates a lack of internal reliability. The Cronbach's alpha and composite reliability of all constructs of the study in table 2 are more than 0.80, which is higher than the recommended value. Therefore, these constructs were deemed to have adequate reliability. The assessment of validity involves an examination of convergent and discriminant validity. Convergent validity is deemed acceptable when the measuring constructs exhibit an average variance extracted (AVE) of no less than 0.50 (Hair Jr, Anderson, Tatham, & William, 1995). The measurement model table displays AVE values ranging from 0.688 to 0.849, which exceed the suggested limits. Hence, the criteria for establishing convergent validity were also satisfied.

Table 2. The measurement model and cross loading matrix

Construct	AVE	Composite Reliability	Cronbach's Alpha
PE	0.849	0.925	0.892
EE	0.815	0.891	0.862
SI	0.823	0.932	0.832
FC	0.768	0.891	0.897
HM	0.734	0.854	0.913
PI	0.688	0.874	0.864
HRIS Adoption	0.759	0.890	0.855
EHRIS	0.762	0.885	0.844

The measurement of discriminant validity includes the computation of the square root of the AVE and the analysis of the cross-loading matrix. According to Henseler, Ringle, and Sinkovics (2009), to demonstrate sufficient discriminant validity, the square root of the AVE of a construct must be greater than its correlation with other constructs. The square roots of AVE, as shown in table 3, the square roots of AVE had greater magnitudes in comparison to their corresponding correlations. This suggests that our dataset exhibited sufficient discriminant validity.

Table 3. Correlation matrix and square root of the average variance extracted

	PE	EE	SI	FC	HM	PI	HRIS Adoption	EHRIS
PE	0.856							
EE	0.328	0.897						
SI	0.474	0.535	0.912					
FC	0.565	0.363	0.566	0.832				
HM	-0.257	-0.267	-0.317	0.316	0.907			
PI	0.304	0.487	0.327	0.412	-0.451	0.862		
HRIS Adoption	0.327	0.527	0.364	0.392	-0.348	0.461	0.855	
EHRIS	0.269	0.345	0.263	0.483	0.562	0.298	0.439	0.702

4.3 Structural Model

The constructed structural model was built to identify the path relations between the components. This hypothesis was tested using the bootstrap method. This study examined the association between endogenous and exogenous variables using path coefficients (β) and t-statistics. This research revealed the substantial effects of many factors on HRIS adoption. Specifically, (PE) (t=4.250, β=0.34), (EE) (t=3.785, β=0.32), (SI) (t=4.256, β=0.36), (FC) (t=3.895, β=0.26), (HM) (t=4.126, β=0.18), and (PI) (t=3.530, β=0.22) have a substantial effect on the adoption of HRIS. In all hypotheses, the t-test results were above the critical threshold of 1.96. Thus, Hypotheses H1, H2, H3, H4, H5, and H6 were supported. The outcome of the study confirmed that adoption is positively correlated with the extent of HRIS adoption. This finding is supported by a statistically significant t-value of 3.430 and beta coefficient of 0.21, hence providing support for hypothesis H7, as presented in Table 4.

Table 4. Structural model

Hypothesis	Path	B	T-Statistics	Comment
H1	PE -> HRIS	0.34	4.250	Accepted
H2	EE -> HRIS	0.32	3.785	Accepted
H3	SI -> HRIS	0.36	4.256	Accepted
H4	FC -> HRIS	0.26	3.895	Accepted
H5	HM -> HRIS	0.18	4.126	Accepted
H6	PI-> EHRIS	0.22	3.530	Accepted
H7	HRIS -> EHRIS	0.21	3.430	Accepted

Note. Significant at $p < 0.05$.

5. Discussion

A pivotal component of this research is the utilization of the UTAUT2 model within the realm of HRIS adoption. To gain a deeper understanding of this concept, we expanded the UTAUT2 framework by incorporating elements of hedonic motivation and personal innovativeness into the foundational model. This research provides a comprehensive theoretical framework by extending this model to incorporate specific factors relevant to HRIS. This extension is particularly appropriate in the HR domain because HRIS adoption involves both technological and human-centric elements. This study's theoretical foundation helps to bridge the gap between technology adoption theories and HR management practices. Our results provide both theoretical and empirical validation of the effectiveness of the UTAUT2 framework in forecasting the adoption of HRIS technology. The inclusion of HM and PI added more explanatory power to the baseline UTAUT2 framework.

Examination of the theoretical association between performance expectancy and behavioral intention provided a statistically significant effect at (t=4.250, β=0.34), confirming the support of H1. PE is a critical factor in HRIS technology adoption because it directly addresses employees' perceptions of how technology impacts their work. When employees believe that using HRIS will help them perform their tasks more effectively and efficiently, they are more likely to embrace the technology. These research results go in the same direction as those of previous studies of Chao, C. M. (2019) and Yu et al. (2021).

The findings of the study show that effort expectancy is a significant predictor of behavioral intentions to adopt new technology, H2, at (t=3.785, β=0.32), to adopt new technology. This indicates that consumers are more inclined to have intentions to use new technology during the adoption phase, when the technology is straightforward and easy to understand. Different scholars of previous studies have found that EE and Intention to use new technology are positively associated with each other (Islam, Mamun, Afrin, Quaosar, & Uddin, 2022; Rozmi et al., 2019). The less effort required to understand and use the system, the more adoption intention will be. H3's link between social influence and behavioral intention showed a significant result at (t=4.256 and =0.36). Social Influence can be a powerful driver of HRIS adoption within organizations. It leverages the social dynamics and interpersonal relationships among employees to encourage the adoption and integration of new technology into the workplace. The result is consistent with the previous studies (Lu et al., 2005; Rahi et al., 2019).

The fourth hypothesized relationship, H4, at (t=3.895, β=0.26), revealed that the Facilitating Condition significantly and directly affect the HR officials' behavioral intentions to use HRIS technology. Facilitating Conditions encompass the infrastructure, support, and resources necessary for employees to effectively use technology. This finding supports existing literature on technology adoption (M. S. Alam & Uddin, 2019; Uddin et al., 2020). The path analysis for Hypothesis H5 showed a significant positive correlation between behavioral intention to adopt HRIS and hedonic motivation at (t=4.126, =0.18). Hedonic motivation taps into the pleasure and enjoyment that users derive from their technological experience. When technology provides positive emotional and sensory experiences, it is likely to be embraced and adopted by users. Similar results were observed by Acheampong et al. (2017) and Alalwan et al. (2017), who emphasized that users prefer technology that looks enjoyable with distinctive, innovative tools and features. Similarly, Personal Innovativeness, H6, at (t=3.530, β=0.22) also plays a vital role in affecting users' intention to adopt HRIS technology in their organization. These factors have proven to be highly influential in predicting the adoption of new products or innovations in various other fields (Karjaluoto et al., 2019). So, to attract more customers and inspire trust in the products they purchase, marketers should focus on making technologies simple to use, fun to interact with, and packed with innovative features, all while keeping in mind the significance of individual attributes and differences. HRIS is a highly advanced technological tool utilized by HR professionals to enhance the

effectiveness and efficiency of HR operations. As a result, it is often regarded as a fundamental component of modern HRM functions (Hendrickson, 2003). Hypothesis seventh, H7, at (t=3.430 and β=0.21), found a significant and positive relationship between HRIS adoption and the extent of HRIS adoption. Numerous literatures have found that the extent of technology adoption is significantly influenced by behavioral intentions (M. Z. Alam, Hoqye, Hu, & Barua, 2020; Venkatesh et al., 2012).

The study results from the viewpoint of Bangladesh validate the importance of the core UTAUT2 constructs—Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions—in influencing individuals' behavioral intentions to use HRIS technology. In addition to the core UTAUT2 constructs, this study examined the extended factors like Personal Innovativeness and Hedonic Motivation; the results revealed that these motivational factors had a significant impact on recruiting and retaining competent individuals and creating more opportunities for them. Organizations may harness this inherent drive by offering chances for experimentation, encouraging user feedback, and cultivating a culture of innovation to accelerate the adoption of HRIS among early adopters and technology enthusiasts. Furthermore, fostering a culture that encourages creativity, experimentation, and continuous learning helps cultivate individuals' readiness to use HRIS technology as a means for advancing their professional growth and development. To sum up, the research on factors affecting the adoption of HRIS using the extended UTAUT2 model will significantly contribute to both the theoretical and practical understanding of HRIS adoption. By combining theoretical rigor with empirical evidence, this study will equip organizations with valuable insights for making informed decisions, ultimately enhancing HR management practices and organizational performance.

6. Conclusion

Due to a lack of knowledge about the factors influencing technology adoption, people in underdeveloped nations may be digitally excluded. A conceptual framework was developed and verified by the study of HR professionals and higher-ups in businesses to comprehend the essential variables in the adoption and expansion of HRIS technology. The results indicate that performance expectations (PE), effort expectations (EE), social influence (SI), facilitating conditions (FC), Hedonic Motivation (HM), and Personal Innovativeness (PI) are positively associated with the adoption of HRIS.

6.1 Theoretical Contributions

The UTAUT model holds widely spread recognition for facilitating the adoption and utilization of innovative technologies. Within an organization, the innovation process plays a pivotal role in streamlining the efficient assimilation of information systems. The integration of information systems is crucial for streamlining an organization's innovation process. This was confirmed by those who found that the UTAUT model explained how information technology was integrated into organizations. This study makes a substantial contribution by adding two other influential factors of the UTAUT2 model to the firm's sense and understanding regarding the adoption and extent of HRIS in developing nations like Bangladesh. With evidence, the empirical study's conclusions are tied to IT adoption. The adoption and extension of HR information technology are heavily influenced by the firm's environment.

6.2 Practical Implementation

By adding empirical evidence to the current HRIS adoption literature, this study sheds light on the most critical factors that influence the uptake of HRIS. The study's empirical findings provide businesses with actionable information that can be used to make better decisions. Businesses may utilize this study's results to craft HRIS adoption plans that are more likely to be successful by considering the unique circumstances in which their workforce operates. Implementing user-friendly interfaces, effectively articulating the benefits of HRIS, and encouraging a cooperative and supportive work environment are all examples of possible approaches. The practical implications of these research findings are substantial, particularly for HR departments seeking to optimize their HRIS implementation strategies.

Furthermore, the extended UTAUT2 model serves as a valuable tool for assessing an organization's readiness for HRIS implementation. By comprehensively evaluating the factors outlined in this model, businesses can identify potential barriers and areas requiring attention before embarking on an HRIS implementation. This proactive approach significantly increases the likelihood of a successful HRIS adoption, ultimately leading to improved HR processes, enhanced data management, and improved overall organizational performance.

6.3 Limitations and Future Research Directions

Due to the fact that this research is in its early stages in Bangladesh, it was not possible to bring up many concerns regarding its capture for discussion and resolution. These untouched subjects will become the central

focus of subsequent studies in this domain. As most of the enterprises are primarily profit-oriented, their management strongly emphasizes on profit maximization. To ensure the best returns, management adopts strategies that they deem most effective. Hence, it is recommended that future researchers consider these challenges. The current study has several limitations. First, this research study examined the adoption of HRIS from the standpoint of UTAUT. Additional theories, such as TTF and Diffusion of Innovation theory, may also play a role in investigating users' intentions in technology adoption and should be explored in future studies. Second, incorporating technology is intricately connected to cultural and religious influences. Cultural dimensions, particularly in the regions like Muslim countries, can significantly impact the success of HRIS adoption and implementation. Third, technical infrastructure plays a crucial role in facilitating the adoption and implementation of technology within organizations. It impacts several aspects, such as accessibility, compatibility, security, performance, cost, and user experience. Bangladesh is a growing economic country, and its positioning is changing in relation to the adoption of new technology; more exploration is needed here as education and awareness for technology adoption increase. Lastly, Leadership styles and voluntarism are not mutually exclusive between public and private limited organizations; these constructs should be explored as a moderating variable to provide a deeper understanding of the context.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal and publisher adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

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