

Employee Acceptance of Human Resource Management Information System: Integrated UTAUT and TTF Model in a Selected Public Firm in Sri Lanka

Abstract

Aim: In the modern digital world, many companies are moving towards technology-based applications to perform human resource administration work. Employees nowadays are capable of accessing a web-based Human Resource Management Information System (HRMIS) to obtain critical data from recognized techniques such as System Applications and Products (SAP), PeopleSoft, Bann and Lawson. This study aims to investigate the factors affecting the adopting intention of HRMIS in a selected public firm in Sri Lanka.

Design: Acknowledging the vital concepts on accepting or resisting technology, six components (performance expectancy, effort expectancy, social influence, facilitating conditions, task characteristics, and technology characteristics) from the Unified Theory of Acceptance and Use of Technology (UTAUT) model and the Task Technology Fit (TTF) model were contextualized to investigate the drivers influencing HRMIS adoption intentions in a selected public firm in Sri Lanka. Target population was identified as the Executives, Supervisors/Technical Officers, Clerical and Allied employees of the chosen public company in Sri Lanka. A structured online questionnaire, including 30 items, was used to collect data.

Findings: Multiple regression analysis results revealed that the factors of Performance Expectation, Task Characteristics, and Technology Characteristics have a positive influence on users' adoption intention to HRMIS. Effort Expectancy, Social Influence, and Facilitating Conditions had negative influence.

Implications: The outcomes highlight the necessity of combining TTF components with technology acceptance theories when evaluating the factors influencing acceptance of HRMIS or other information systems. The study's findings will aid management in making the required organizational changes to encourage employees to use the HRMIS application.

Keywords: Human Resource Management Information System; Task Technology Fit (TTF); Public firm; Unified Theory of Acceptance and Use of Technology (UTAUT)

Introduction

Manual Human Resource administration work comprises working with many software applications and hard copy-based systems, which is a highly challenging and troublesome process resulting in difficult conditions for Human Resource Professionals. Disadvantages of manual HR administration include many concerns, such as slow and complicated processes, and employees tend to spend more time than they need to carry out a task. This will have a direct impact on productivity. Spending too much time on administrative work will disinterest employees and, as a result, can leave a costly mark while affecting the quality of work (Srivastava, and Bajaj, 2022; SutiSoft, 2023).

In today's digital technology-driven industry, managing paper forms and fighting with excel sheets and multiple hardcopy files to find vital information and data is becoming outdated. Today the face of HR is often a portal rather than a person. In the modern digital world, many

companies are moving towards technology-based applications to keep up with the modern world and competitiveness in the business environment (Kumara and Galhena, 2021). Hence, employees nowadays are capable of accessing a web-based Human Resource Management Information System (HRMIS) to obtain critical data from recognized techniques such as SAP, PeopleSoft, Bann and Lawson (Moussa and el Arbi, 2020). HRMIS is one of the many integrated services in ERP (Kumari and Dayarathna, 2020). Companies in the telecommunication, banking, and manufacturing industries mostly use HRMIS (Dissanayake and Nandasena, 2019), however while implementing and adopting HRMIS, almost every organization faces challenges such as employee resistance to use, technological incompatibility, and incurring huge costs on installation and training of employees (Alkhwaldi et al., 2022; Mugaloremutt et al., 2022).

Sri Lankan organizations still use manual procedures in leave management, performance evaluations, training and development, human resources planning, confirmations, disciplinary management, benefits management, payroll management, etc. With reference to Kumara and Galhena (2021), Ceylon Electricity Board (CEB) has taken steps to implement an HRMIS including thirteen modules, but only two modules are being used. The implemented two modules are not used efficiently too. Employees seem unwilling to move toward the HRMIS due to a lack of training and awareness workshops. It was discovered that primary functions such as training and development and performance evaluation had not been integrated, whereas these functions could be performed through the HRMIS instantly. The HR personnel were more focused towards administrative and traditional duties rather than going forward with strategic operations. Consequently, the amount of documentation used was rather considerably high. It can also be identified that few large companies in the private sector use HRMIS, and a majority of public sector and private sector organizations do not use HRMIS for administration purposes. As noted by Das et al. (2019) and Maznorbalia and Awalluddin (2021), assuming HRMIS needs high cost, but should be considered as an investment, not as an expense, because later it is long-term profitable for the organization. In this regard, it is critical to investigate the drivers influencing HRMIS adoption intentions in the Sri Lankan setting. This study aims to investigate the factors affecting the adopting intention of HRMIS in a selected public firm in Sri Lanka.

The selected public firm in the aviation sector was chosen to identify the factors influencing HRMIS adoption. The Government of Sri Lanka owns and leads the business that makes outstanding profits. This selected public firm has the statutory powers to manage and develop civil airports in Sri Lanka. The company consists of around 3500 employees in many categories, which include Executives, Supervisors/Technical Officers, Clerical and Allied, Skilled and Semi-Skilled Workers, Minor Employees and Unskilled, and Casual and Trainees.

Literature Review

HRMIS

HRMIS is clearly demarcated as a system used to acquire, store, manipulate, analyze, retrieve and distribute pertinent information about an organization's human resources (Alkhwaldi et al., 2022). HRMIS is an information system driven by technology that supports an organization in collecting, gathering, keeping, accessing, and distributing HR data and information, allowing it to fulfill its HR duties more effectively (Al Mamun, 2022). Moreover, there are different functions related to HRMIS.

First and foremost, this system functions as an Applicant Tracking System (ATS). This function retains tracks of information and applicants' resumes while enabling managers to match employment openings with eligible applicants from the organization's application pool. All the organizations recruiting needs are handled through this software. The employee pay method is similarly automated using HRMIS. Furthermore, information on new recruits and contractual data are often uploaded to this system, and the payment orders are also generated at the end of the month (Verma et al., 2022). Performance management is a significant area that can be done through the HRMIS system. In HRMIS systems, reporting and analytics are relatively rare components. The automatic generation of HR reports on a range of topics, including employee turnover, absenteeism, performance, and more, is now possible with the help of modern technology. Making more intelligent judgments requires analytics, which is the act of assessing this information. The three primary aims for implementing HRMIS for firms have been highlighted as cost savings, upgrading of HR services, and development of HRM strategic orientation (Al Mamun., 2022).

According to Al Mamun (2022), developed-country organizations have been aware of HRMIS for a long time and have increased its adoption by recognizing its short and long-term advantages. In contrast, underdeveloped nations have significant barriers to implementing HRMIS due to various socioeconomic variables. HRMIS is regarded as a strategic instrument that contributes to competitive advantages in industrialized nations. Nonetheless, Bangladesh has encountered significant implementation challenges in the industrial and service sectors (Hosain et al., 2020). Compared to the benefit, organizations have to face many issues due to the disability to adapt to an HRMIS. Lack of technical expertise, knowledge, skills, or talents can be a problem for HR managers who may not understand the technology, resulting in major personnel inadequacies (Valcik et al., 2021).

A substantial proportion of research on human resource information systems has concentrated in affluent nations such as the United States, Canada, and Western Europe, whereas research in poorer countries is sparse (Priya and Preetha, 2022). Research on web-based HRM and HRMIS is attractive, pertinent, and timely in the Sri Lankan context due to the increased interest in comprehending technological implications. This is notably evident in the banking and manufacturing industries. However, research has shown that using ICT in HRM takes longer than other organizational procedures (Pushpasiri and Pushpasiri, 2021). According to Pushpasiri and Pushpasiri (2021), a study was conducted on large scaled enterprises in Colombo Districts. It

was discovered that Sri Lankan companies are swiftly using technology in HR management. It was also said that it would take several years to fully integrate the e-HR approach into the business model. HR professionals have a more remarkable ability to play a strategic role in the business when they use an HRMIS. As a result, learning more about the obstacles impeding an organization's adoption goal is critical.

Theoretical Review on Technology Adoption

A vital concept for understanding (un)successful innovations is the acceptance of innovations, which is a decision-making process characterized by acceptance and resistance factors. The Technology Acceptance Model (TAM) was created to examine the acceptability of technical improvements. TAM is a frequently used model for acceptance study since it predicts behavioral attitudes about technology (Venkatesh, 2003). However, TAM does not include several subjective factors namely society norms and values, as well as individual characteristics and personality traits, which cannot be accurately examined the foundations of behavior (Ajibade, 2018).

Theory of Planned Behaviour (TPB) is a model that bases its explanation and prediction of attitudinal-behavioral responses on three variables: attitude, subjective norm, and perceived behavioral control (Mohr and Köhl, 2021). Personal attitude toward a given behavior is measured as a desire to use a system, subjective norm refers to stakeholders' or others' perceived social obligation to do or refrain from performing the relevant activity. TPB model does not consider behavioral elements, such as emotions beliefs, and a tendency to act.

The Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) was introduced to overcome the limitations in TAM and TPB. UTAUT combined eight models namely theory of reasoned action, the technology acceptance model, the motivational model, a model combining technology acceptance and the theory of planned behavior, the model of PC utilization, the innovation diffusion theory, and a social cognitive theory (Venkatesh et al., 2003). The UTAUT model includes five multi-level variables: performance expectancy (PE) and effort expectancy (EE), both individual-level variables; social influence (SI), a group-level variable; facilitating conditions (FC), an organizational-level variable; and intention to use (IU), to predict actual use or intention to use technology (Al Mamun, 2022). The ease associated with utilizing the system is characterized as effort expectancy. Furthermore, performance expectancy is the degree to which a person feels that using the system would assist them in improving their work performance. The extent to which an individual thinks influential individuals believe they should use the latest system is characterized as social influence. The notion of facilitating conditions refers to an individual's belief that an organizational and technological infrastructure exists to facilitate the usage of information technology (Bader and Mohammad, 2019).

In spite of the fact that the UTAUT theory is a renowned and commonly quoted model, experts question its practical effectiveness and theoretical assumptions. In complex situations, to better

understand information systems and their own performance, task characteristics and technical features are the two key areas need to be concerned (Bader and Mohammad, 2019). Task Technology Fit (TTF) model, proposed by Alkhwaldi et al. (2022), suggests that users would accept and use IT based on the fit between IT features and work desires. Although people who use it believe IT to be sophisticated, they will not utilize it if it is unsuitable for their work requirements and cannot improve their performance (Viridiananto et al., 2016). The TTF is influenced by task and technological features such as relative advantage, compatibility, trialability, and security. TTF is influenced by both task and technological parameters, which in turn impact actual use and individual performance (Alkhwaldi et al., 2022). On these notes, with the TTF, the UTAUT is enhanced in terms of employee desire to embrace technology and employee work performance context (Omieno, 2022). It is also critical to teach the UTAUT paradigm since it focuses on organizational adoption rather than individual user adoption. TTF enables to evaluate user acceptability from the standpoint of task technology fit (Wang et al., 2020).

Acknowledging the vital concepts on accepting or resisting technology, six components (performance expectancy, effort expectancy, social influence, facilitating conditions, task characteristics, and technology characteristics) from the UTAUT model and the TTF model were contextualized to investigate the drivers influencing HRMIS adoption intentions in a selected public firm in Sri Lanka.

The degree to which adopting technology will increase users' efficacy in doing specified activities is termed as the performance expectation (Wang et al., 2020). At this stage, performance expectation reveals how much HRMIS supports the user to enhance their HR-related duties (for example, applying for leave, participating in training and development, and participating in performance evaluations). According to Jain et al. (2022), performance expectation has been linked to adoption intention in many scenarios, including the adoption of smartphones, mobile payments, advanced driver assistance systems, and autonomous delivery systems for last-mile delivery. In the context of HRMIS, users are far more inclined to accept the technology if they feel it will help them boost the efficiency and effectiveness of their jobs.

Furthermore, it is significant that performance expectancy also pertains to an individual's heightened focus on streamlined access to information, augmented learning efficiency, elevated job productivity, and time-saving measures (Bommer et al., 2022). Thus, to establish the positive influence of performance expectancy on users' adoption intention, the hypothesis can be formulated in the subsequent manner:

H1: Performance expectation has a positive effect on users' adoption intention to HRMIS of the selected public firm

Effort expectancy clarifies an individual's perception regarding the ease with which the system will assist them in performing their job tasks (Zeebaree et al., 2022). Employees' apparent

perceptions that HRMIS technology is simple to operate are called as effort expectations. Employees' symbolic adoption of information systems has been highly connected with the notion. Previous research has found that effort expectancy corresponds favorably with consumers' technology adoption and performance expectancy, according to Wang et al. (2020). As a result, if users perceive that using HRMIS is simple, they will anticipate improved performance in handling their work and adopt the system. The user-friendliness, ease of learning, clarity, and understandability of HRMIS interactions, as well as proficiency in using HRMIS, can all positively influence users' adoption intention. Therefore, to establish the positive influence of effort expectation on users' adoption intention, the following hypothesis can be formulated:

H2: Effort expectation has a positive effect on users' adoption intention to HRMIS of the selected public firm

Social influence, defined as the degree to which peers influence the use of a system, is a significant factor in many aspects of people's lives and is likely to be influential, whether positive or negative (Azidin et al, 2015). The term social influence relates to an individual's sense of how vital individuals endorse their specific actions (e.g., if coworkers and close friends would advocate the use of HRMIS in work management) (Wang et al., 2020). Previous research has demonstrated that social influence has a considerable impact on adoption intention (Jain et al., 2020). Furthermore, social influence focuses employees' attention and cognitive resources on developing fresh and important ideas. Users are more inclined to embrace HRMISs if important people approve of their use. The social influence variable is likely to include factors such as influencers suggesting HRMIS for tasks, colleagues using HRMIS increasing the likelihood of HRMIS adoption, the influence of colleagues on HRMIS adoption, and observing others helping HRMIS learning. Recent research has highlighted the considerable significance of social influence in the introduction of novel systems. For instance, external influences play a substantial role in shaping the acceptance of internet-based applications (Apps) (Alazab et al., 2021). Therefore, to establish the positive influence of social influence on users' adoption intention, the following hypothesis can be formulated:

H3: Social influence has a positive effect on users' adoption intention to HRMIS of the selected public firm

The degree to which consumers perceive resources and assistance accessible for executing an activity is referred to as facilitating conditions (Jain et al., 2020). It has also been noticed that a higher degree of enabling conditions (for example, access to and availability of technical help) minimizes the amount of effort necessary to utilize the technology. The facilitating conditions use to capture the organizational and technological environmental factors that are put in place to remove obstacles to the adoption of a system (Ebizie et al., 2022). Once users have sufficient resources to support them, such as having the expertise to utilize the technology and being directed and supported by specialists in the field, they will think that utilizing the technology is

simple and will want to continue using it. The facilitating conditions variable includes factors such as the availability of resources in the organization for HRMIS implementation, the confidence of users in their knowledge of HRMIS, the alignment of HRMIS with the existing technology, and the availability of support when HRMIS issues arise. Therefore, to establish the positive influence of facilitating conditions on users' adoption intention, the following hypothesis can be formulated:

H4: Facilitating conditions have a positive effect on users' adoption intention to HRMIS of the selected public firm

In the TTF paradigm, technology is viewed as the instruments people use to do their activities. Compared to traditional HR systems, HRMIS offers far superior technological characteristics regarding accessibility, openness, and usability. Such technological benefits can help users more effectively meet their job requirements and increase their performance. According to Alkhwaldi et al. (2022), a decent TTF will encourage consumers to embrace HRMIS. A poor task technology match, on the other hand, will reduce users' behavioral intention to embrace the technology. Although HRMIS offers numerous benefits, if system users (e.g., HR personnel) do not need e-transactions (e.g., they are mainly in their offices and have very little need for integrated systems and information exchange), they will choose classic or conventional HR systems rather than HRMIS. Previous research has also indicated the importance of TTF in user acceptability and utilization of IT/IS.

Task characteristics refer to the way users interact with a system to transform inputs into outputs that meet their information needs (Alazab et al., 2021). Task characteristics, representing the perceived requirements of users, are typically identified as the steps individuals take to transform inputs into desired outputs. Furthermore, a task can be more precisely defined as the process through which one strives to accomplish a goal via a sequence of actions (Al-Maatouk et al, 2020). As such, task characteristics encompass the intricacy of the task, the extent of uncertainty associated with the task, and the level of interaction necessitated between the user and the task. The task characteristics variable includes factors such as the perceived benefits of HRMIS for job performance, the ability to manage tasks from anywhere with HRMIS, the ability to collaborate with others via HRMIS, and the ability to make better decisions with HRMIS data. Therefore, to establish the positive influence of Task Characteristics on users' adoption intention, the following hypothesis can be formulated:

H5: Task Characteristics has a positive effect on users' adoption intention to HRMIS of the selected public firm

Technology characteristics refer to the features and capabilities of a technology that are relevant to performing a particular activity (Alazab et al., 2021). The technology characteristics variable includes factors such as the reliability of HRMIS information, the security of HRMIS data, the relevance of IT skills to HRMIS usage, and the accessibility of HRMIS from anywhere.

Therefore, to establish the positive influence of Technology Characteristics on users' adoption intention, the following hypothesis can be formulated:

H6: Technology Characteristics have a positive effect on users' adoption intention to HRMIS of the selected public firm

Methods

The study used quantitative approach to identify the factors influencing adoption intention of HRMIS of the selected public firm. By testing hypotheses obtained from prediction theories, explanatory research is used to characterize and comprehend the strength of relationships to identify casual associations among objectively stated variables.

Incorporating the deductive method, a survey was utilized to collect data from the selected sample. In this context, the chosen public company in Sri Lanka was utilized as the research backdrop, where the study was conducted within its premises, offering a comfortable and authentic atmosphere for the research activities. The unit of analysis in this scenario was the individual employee. Based on the research objective, the target population was identified as the Executives, Supervisors/Technical Officers, Clerical and Allied employees of the chosen public company in Sri Lanka, in total 1100 employees. Utilizing the scientific model developed by Krejcie and Morgan (1970), the study selected sample of 500 employees using a simple random proportionate sampling method while considering the non-respondent rate. A structured online questionnaire, including 30 items, was used to collect data from the desired sample. The measurement items of the selected variables were based on established scales from the literature. The operationalization of the variables in the study is exhibited in Table 1.

Table 1: Operationalization

Variable	Measurement Items	Source
Performance Expectancy	Access to information more easily	Alkhwaldi et al, (2022); Tamrakar and Shrestha (2022)
	Enhance the learning efficiency	
	Enhance the job productivity	
	Time saving	
Effort Expectancy	User-friendliness	Alkhwaldi et al, (2022)
	Quickly learn to interact	
	Clear and understandable HRMIS interactions	
	Proficiency in HRMIS usage	
Social Influence	Influencers suggest HRMIS for tasks	Alkhwaldi et al, (2022); Viridiananto et al. (2016); Tamrakar
	Colleague use enhances HRMIS likelihood	
	Influence of Colleagues for HRMIS adoption.	

	Observing others aids HRMIS learning.	and Shrestha (2022)
Facilitating Conditions	Availability of resource in the Org for HRMIS implementation.	Viridiananto et al. (2016); Alkhwaldi et al, (2022),
	Confidence in HRMIS knowledge.	
	HRMIS aligns with the technology available.	
	Availability of Support when HRMIS issues.	
Task Characteristics	Job benefits from HRMIS.	Alkhwaldi et al, (2022); Viridiananto et al. (2016);
	Task management anywhere with HRMIS.	
	Collaboration via HRMIS.	
	HRMIS aids decision-making.	
Technology Characteristics	HRMIS offers reliable information.	Alkhwaldi et al, (2022)
	HRMIS ensures data security.	
	Job-relevant IT for HRMIS usage.	
	Access to HRMIS from anywhere.	
Adoption Intention of HRMIS	Anticipate regular HRMIS use ahead.	Alkhwaldi et al, (2022)
	Future job role includes HRMIS.	
	Foresee HRMIS adoption in future tasks.	
	Recommend HRMIS adoption to organisations.	
	Eager to embrace HRMIS.	

In quantitative approach, data analysis consists of three steps: measuring the sample profile, testing the goodness of the data, and testing the hypotheses. The sample profile is measured using frequency analysis. The measurement items' reliability and validity were tested to ensure the measurement goodness. Factor analysis, construct reliability, average variance extraction, Cronbach's alpha values, and discriminant validity were all tested. Multiple regression analysis was used to test the hypotheses. Statistical Package for Social Sciences (SPSS) version 24 was used as the statistical software.

Data Analysis and Findings

Out of the 500 employees, 300 (Response rate is 60%) employees responded to the questionnaire. The first section of the questionnaire gathered information on the respondent's backgrounds. Accordingly, the factors include gender, age, education qualification, work experience, employment category, IT Literacy, and prior experience. In terms of gender, it is readily apparent that the majority of the respondents were females (59.3%). Most of the respondents were within the age group of 31 to 40 years (58%). Most of the respondents possessed a postgraduate degree (48%) and had work experience more than 5 years (52.7%). All of the respondents have adequate experience on working with MS office package (Word, Excel, PowerPoint, and Access) and 63% have already worked with HRMIS in their previous workplaces.

Goodness of Measurements

To reduce the data and purify the items under each study variable, a factor analysis was used. The Kaiser-Meyer-Olkin (KMO) sample adequacy measure was used. According to Vinayan et al. (2012), a KMO value of 0.60 or higher indicates a good factor analysis. Table 2 shows that the KMO value of the measurement items was greater than 0.50 and that the Bartlett's test of sphericity showed a significant level ($p < 0.001$), indicating the appropriateness of factor analysis. The loadings of the items on their correspondents ranged from 0.565 to 0.954 (greater than 0.50).

The reliability of each variable was assessed using Fornell and Larcker's (1981) measure of composite reliability (CR) and Cronbach (1951) alpha, as shown in Table 2. The CR and Cronbach's alpha values for each construct were above 0.70, which falls within the acceptable reliability range (Hair et al., 2010). Convergent validity of the constructs was assessed by examining the average variance extracted (AVE). The results presented in Table 2 further shows that AVE values exceed the respective threshold values (above 0.50) ensuring the convergent validity.

The discriminant validity was ensured as the square root values of all AVEs exceed the correlation values of the respective constructs (Fornell and Larcker, 1981) (Table 3). The values of the square root of the AVE are as given in italic along the diagonals in Table 3.

Table 2: Assessment of adequacy of measurement

Variable	No. of Items	KM measure	Bartlett's test of sphericity	AVE	CR	Cronbach's alpha
Performance Expectation (PE)	4	0.660	95.523	0.50	0.82	0.758
Effort Expectation (EE)	4			0.66	0.92	0.812
Social Influence (SI)	4			0.66	0.91	0.815
Facilitating Conditions (FC)	4			0.52	0.84	0.724
Task Characteristics (TAC)	4			0.69	0.94	0.822
Technology Characteristics (TEC)	4			0.66	0.91	0.749
Adoption Intention of HRMIS (AI)	4			0.75	0.94	0.890

Table 3 shows that highest mean value above 4.0 recorded in EE and SI, and FC represents the lowest mean value as 3.6284. Based on the correlation values, there were statistically significant correlations among PE, EE, FC, TAC, and AI at a 0.01 significance level. Further, none of the correlation coefficient was above 0.85, indicating the absence of multicollinearity in the variables (Hair et al., 2010).

Table 3: Discriminant validity

	Mean	Std. deviation	PE	EE	SI	FC	TAC	TEC	AI
PE	3.8385	.43331	.711						
EE	4.1440	.54593	.540**	.812					
SI	4.0213	.51471	0.127	0.056	.812				
FC	3.6478	.56771	.298**	.540**	-.281**	.721			
TAC	3.6284	.47858	.460**	.454**	.273**	.426**	.831		
TEC	3.7452	.46852	-0.035	.574**	0.007	.381**	.204*	.812	
AI	3.8940	.57872	.445**	0.145	0.052	0.138	.551**	0.025	.866
Correlation is significant at the 0.01 level (2-tailed).**									
Correlation is significant at the 0.05 level (2-tailed).*									

Multiple Regression analysis

The multiple regression analysis is used to test the desired hypotheses of the study. The results are given in Tables 4 and 5.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	F	Sig.
1	.674 ^a	0.454	0.431	0.75404241	2.184	19.843	.000 ^b

Table 5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.70E-16	0.062		0	1		
	PE	0.468	0.089	0.468	5.288	0.000	0.487	2.055
	EE	-0.395	0.108	-0.395	-3.647	0.000	0.326	3.072
	SI	-0.205	0.073	-0.205	-2.804	0.006	0.713	1.402
	FC	-0.187	0.086	-0.187	-2.167	0.032	0.510	1.960
	TAC	0.607	0.081	0.607	7.474	0.000	0.579	1.727
	TEC	0.217	0.088	0.217	2.461	0.015	0.491	2.035

The R2 value was 0.454 (F = 19.843, p > 0.001) (Table 4), implying that 45.4 percent of variation in users' adoption intention to HRMIS can be elaborated by Performance Expectation, Effort Expectancy, Social Influence, Facilitating Conditions, Task Characteristics and Technology Characteristics. The results in Table 5 emphasized that three variables negatively impact the dependent variable namely Effort Expectancy, Social Influence, and Facilitating Conditions. The

factors of Performance Expectation, Task Characteristics, and Technology Characteristics have a positive influence on users' adoption intention to HRMIS. The Task Characteristics showed the highest significant impact (Beta = 0.607) and Facilitating Conditions recorded the least impact on adoption intention. Since the VIF value is less than 5, there is no multicollinearity issue.

Discussion

The results indicated that the choice to use HRMIS had a positive and significant relationship with Task Characteristics, and Technology Characteristics in the context of the selected public firm. The relationship between task characteristics and HRMIS adoption intention has been documented (Alkhwaldi et al., 2022; Alazab et al., 2021), and the results confirmed the importance of the job role, easy task management, rapid collaboration with colleagues, and assistance in the decision-making process will promote employee HRMIS adoption. When the selected public firm adopts the HRMIS, it is essential to consider the compatibility between the task requirements of the user and the HRMIS function. For instance, HRMIS may probably be more critical for those using e-services frequently to complete their work than those who do not use it. HRMIS is a valuable solution for e-services users since it allows HR operations and activities to occur online anytime and from anywhere. Also, the organization needs to examine the demand characteristics of different user groups such as technical and operational, junior managers, middle level managers and senior managers.

The findings also confirmed that the technical characteristics significantly influence the adoption of HRMIS. Providing reliable information, security for information, hardware and software compatibility, and easy access to the system affects the adoption intention of HRMIS. The result was consistent with the previous findings made by Alazab et al. (2021) and Bader and Mohammad (2019). Technological tools (e.g., HRMIS) have been employed in many organizations to improve work experiences of employees (Alkhwaldi and Aldhmour, 2022). However, it is necessary to carefully examine these tools to ascertain how they affect employees' experience (Al-Okaily et al., 2022). As opined, employees' experience, acceptance, and attitudes on such tools should be examined when designing and developing information systems.

Performance expectation is the degree to which an individual feels that adopting the system will enable them to improve work performance (Alyoubi and Yamin, 2019). It is also explained as the degree to which individuals assume that using technology will improve performance. This can also be interpreted as the technologies' perceived utility (Alkhwaldi and Al-Ajaleen, 2022). The study also found that performance expectation positively influenced the adoption intention of HRMIS. Easy access to information, making learning more efficient, enhancing the productivity of the job, and saving time will be affected to the adoption of HRMIS. The factors mentioned above will ultimately improve the selected public firm's employees' performance. On these notes, when adopting HRMIS, it is essential to consider staff expectations toward system function. If there is any improvement, it should be based on staff recommendations that better suit the end user's performance expectation.

The effort expectation factor included ease to use, less time to learn how to interact with HRMIS, clear and understandable interactions with HRMIS, and becoming skillful at using HRMIS. Users believe that using HRMIS is effortless, expect better performance in managing their work, and accept the system (Doan, 2020). The results of the study revealed that effort expectation had a negative impact on the adoption intention of HRMIS. This may be due to many of the respondents are knowledgeable about the HRMIS, and they have adequate experience in using the system with their previous experience (63% of the respondents have prior experience of worked with HRMIS in their previous workplaces). It was visible from the results that the respondents were aware that they could become skillful with the use of HRMIS.

Literature identified that social influence is essential to technology adoption and utilization (Akinuwesi et al., 2022; Alazab et al., 2022; Azidin et al., 2015; Jain et al., 2020; Wang et al., 2020). Interestingly, the study's findings revealed that social influence had a negative impact on the adoption intention of HRMIS. The term social influence relates to an individual's sense of how vital individuals endorse their specific actions (e.g., if coworkers and close friends would advocate the use of HRMIS in work management) (Wang et al., 2020). According to the findings, respondents are reluctant to embrace HRMIS if colleagues' influence is high. This might be caused that the majority of the respondents have prior experience in using an HRMIS and thus employees in the selected public firm may be considered colleagues' opinions and suggestions as unnecessary influence over their experiences.

The next factor which negatively impacted adoption intention was facilitating conditions. The facilitating conditions use to capture the organizational and technological environmental factors such as having the expertise to utilize the technology and being directed and supported by specialists in the field, that are put in place to remove obstacles to the adoption of a system (Ebizie et al., 2022). The prior studies showed that facilitating conditions significantly predicts users' technological adoption (Alkhwaldi and Ajaleen, 2022). However, the findings opined that availability of resources, confidence of users in their knowledge of HRMIS and alignment of HRMIS with the existing technology demarcate the users' intention to adopt HRMIS. This might be incurred because of the absence of top management support arising to implement HRMIS.

Implications and Conclusion

From a scholarly perspective, this study verifies the connections between TTF and UTAUT, demonstrating the value of the combined research model for comprehending user adoption of HRMIS in the selected public firm in Sri Lanka. The combination of the HRMIS adoption model not only well-explained users' acceptance from the viewpoints of their views and TTF but also supported the function of TTF in users' deliberate usage of HRMIS. The outcomes highlight the necessity of combining TTF components with technology acceptance theories when evaluating the factors influencing acceptance of HRMIS or other information systems. Furthermore, while researching the adoption of a new HRMIS application area within the framework of the selected public firm, located in a developing country, the integration process of the two models gave

more insightful results. It proved more realistic than each theoretical model alone. This implies that while studying the elements influencing user adoption of HRMIS, it is critical to examine both the influence of an acceptable TTF and technical viewpoints based on theoretical models such as UTAUT and TAM. The findings also suggest that the integrated study model explains user adoption more thoroughly than the standalone TTF or UTAUT theoretical models.

The study's findings will aid management in making the required organizational changes to encourage employees to use the HRMIS application. The results explicitly suggest that to increase the likelihood that employees will embrace HRMISs, HR services, and activities should be given in a way that may elicit a favorable response from users while still providing practical functions and information. According to the data, social influence had a detrimental influence on users' HRMIS adoption intentions. Despite the fact that they had communicated the benefits and usefulness of HRMISs to influential persons who may influence potential users' perspectives, such as users' superiors, family, and friends, it had a negative impact. This result indicates that coworkers and close friends, including family members' opinions regarding technology adoption, will provide negative directions to accept new technology. This might be the fear of losing jobs or lessening salaries. Thus, the management of the organization should provide accurate details of the benefits that employees and the organization will get after implementing HRMIS. The details should be updated time-to-time in order to lessen the spread of false information among employees.

The government and management of companies should prioritize in order to encourage people to use technology. Facilitating conditions like subsidized fast internet connections and reliable energy are crucial to consumers' adoption intentions. Concerning the study, it negatively impacts the HRMIS adoption intention. The organizations should consider building a user-friendly HRMIS that uses suitable terminology and processes data quickly and precisely. Even though theoretically, it made an impact, in the practical scenario, according to the study, it showed a negative impact. Therefore, although the selected public firm encourages the system's easy usage, it will not provide an end result. As such, the organization should provide proper training programmes regarding the HRMIS implication, usability, possible errors that could occur, and remedies that could be taken place. Moreover, individual and group meetings should be arranged time-to-time to discuss the issues in hardware devices, software applications, and other matters relating to the user-friendliness of the HRMIS. These actions would facilitate better performance in managing their work and accepting the system.

Despite the fact that extensive research was done, the study does have certain limitations. The selected sample might have biasness since the majority of the respondents are from the age group of 31 to 40 years of age, whereas the data is skewed. For future research, the researchers must follow up on non-responders and avoid convenience sampling. The present study's sample size is the subject of the second limitation. Three hundred respondents were included in the sample due to the low response rate. A larger sample would boost the statistical power and produce more

reliable results. Therefore, further investigation with a bigger sample size is needed. The third limitation relates to the instruments used to gather data. The current study collected primary data regarding the phenomena of interest through a questionnaire survey. Alternative methods, including interviews, would make it easier to comprehend the adoption of HRMIS and its factors in depth. It is also critical to regularly acquire user input on HRMIS and to update HRMIS as necessary. As such, it is highlighted in different theories (e.g.: perceived value theory), and/or context-related elements may influence users' deliberate adoption, meriting more study.

References

- Ajibade, P. (2018). Technology acceptance model limitations and criticisms: Exploring the practical applications and use in technology-related studies, mixed-method, and qualitative researches. *Library Philosophy and Practice*, 9.
- Akinuwaesi, B. A., Uzoka, F. M. E., Fashoto, S. G., Mbunge, E., Odumabo, A., Amusa, O. O., Okpeku, M., and Owolabi, O. (2022). A modified UTAUT model for the acceptance and use of digital technology for tackling COVID-19. *Sustainable Operations and Computers*, 3, 118–135. <https://doi.org/10.1016/j.susoc.2021.12.001>
- Al Mamun, A. (2022). Human Resource Professionals' Intention to Use and Actual Use of Human Resource Information Systems. *International Journal of Technology and Human Interaction (IJTHI)*, 18(1), 1-18. <http://doi.org/10.4018/IJTHI.299070>
- Alazab, M., Alhyari, S., Awajan, A., and Abdallah, A. B. (2021). Blockchain technology in supply chain management: an empirical study of the factors affecting user adoption/acceptance. *Cluster Computing*, 24, 83-101.
- Alkhwaldi, A. F., and Al-Ajaleen, R. T. (2022). Toward a conceptual model for citizens' adoption of smart mobile government services during the COVID-19 pandemic in Jordan. *Inf. Sci. Lett*, 11(2), 573-579.
- Alkhwaldi, A.F. and Aldhmour, F.M. (2022), "Beyond the bitcoin: analysis of challenges to implement blockchain in the Jordanian public sector", *Convergence of Internet of Things and Blockchain Technologies*, Springer, pp. 207-220.
- Alkhwaldi, A.F., Alobidyeen, B., Abdulmuhsin, A.A. and Al-Okaily, M. (2022), "Investigating the antecedents of HRMIS adoption in public sector organizations: integration of UTAUT and TTF", *International Journal of Organizational Analysis*, Available from: <https://doi.org/10.1108/IJOA-04-2022-3228> .
- Al-Maatouk, Q., Othman, M. S., Aldraiweesh, A., Alturki, U., Al-Rahmi, W. M., and Aljeraiwi, A. A. (2020). Task-technology fit and technology acceptance model application to structure and evaluate the adoption of social media in academia. *IEEE Access*, 8, 78427-78440.
- Al-Okaily, M., Alqudah, H.M., Al-Qudah, A.A. and Alkhwaldi, A.F. (2022), "Examining the critical factors of computer-assisted audit tools and techniques adoption in the post-COVID-19 period: internal auditors' perspective", *VINE Journal of Information and Knowledge Management Systems*.
- Alyoubi, B. A., and Yamin, M. A. Y. (2019). The Impact of Task Technology Fit on Employee Job Performance. *Marketing and Management of Innovations*, 4, 140-159. <http://doi.org/10.21272/mmi.2019.4-12>
- Azidin, S. S., Romle, A. R., and Mansor, M. H. (2015). Overarching Unified Theory of Acceptance and Use of Technology (UTAUT) Model on the factors effecting behavioral intention towards e-government adoption in Malaysia. *International Journal of Administration and Governance*, 1(4), 1-8.

- Bader, A. A., and Mohammad, A. Y. Y. (2019). The impact of task technology fit on employee job performance. [Online], Available from: https://essuir.sumdu.edu.ua/bitstream-download/123456789/76007/1/Alyoubi_mmi_4_2019.pdf;jsessionid=2DA3F3D1E60A16C847BA632A9E509F95
- Bommer, W. H., Rana, S., and Milevoj, E. (2022). A meta-analysis of eWallet adoption using the UTAUT model. *International Journal of Bank Marketing*, 40(4), 791-819.
- Das, S., Das, S., and Sarkar, P. R. (2019). Factors affecting the adoption of human resource information system (HRIS) in Bangladesh: A study on private banking industry. *International Journal of Accounting & Business Finance*, 5(2), 1–15. doi:10.4038/ijabf.v5i2.42
- Dissanayake, D., and Nandasena, N. (2019). Elements influencing the success of Human Resource Information System. *Annals of Management and Organization Research*, 1(1), 65-75.
- Doan, T. (2020). Factors affecting online purchase intention: A study of Vietnam online customers. *Management Science Letters*, 10(10), 2337-2342.
- Ebizie, P. I., Nkamnebe, A. D., and Ojiaku, O. C. (2022). Factors Influencing Cryptocurrency Adoption Among Nigerian University Fintech Entrepreneurs: An UTAUT perspective. *British Journal of Marketing Studies*, 10(3), 25-37.
- Fornell, C. and Larcker, D.F. (1981), Evaluating structural equation models with unobservable variables and measurement error, *Journal of Marketing Research*, 18(1), 39-50.
- Hair. J.F, Black. W.C, Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*, 7th ed., Pearson Prentice-Hall, New Jersey, NJ.
- Hosain, S, Mohammad M. A. A. H. and Hossin, A. (2020), The Role of Human Resource Information System on Operational Efficiency: Evidence from MNCs Operating in Bangladesh. *Asian Journal of Economics, Business and Accounting*, 18(2): 29-47, 2020; Article no. AJEBA.61403, Available at SSRN: <https://ssrn.com/abstract=3740318>
- Jain, N. K., Bhaskar, K., and Jain, S. (2022). What drives adoption intention of electric vehicles in India? An integrated UTAUT model with environmental concerns, perceived risk and government support. *Research in Transportation Business & Management*, 42, 100730
- Krejcie, R.V., and Morgan, D.W., (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement* 30, 607–610. <https://doi.org/10.1177/001316447003000308>
- Kumara, W. H., and Galhena, B. L. (2021). Determinants of Human Resource Information System Usage: Evidence from Ceylon Electricity Board (CEB), Sri Lanka. *Determinants of Human Resource Information System Usage: Evidence From Ceylon Electricity Board (CEB), Sri Lanka - Kelaniya Journal of Human Resource Management*. <https://doi.org/10.4038/kjhrm.v16i1.85>
- Kumari, K. T. D., and Dayarathna, N. W. K. D. K. (2020). Impact of Human Resource Information System on Human Resource Management Effectiveness in Selected Steel Manufacturing Company in Sri Lanka.
- Maznorbalia, A. S., and Awalluddin, M. A. (2021). Users acceptance of E-government system in sintok, Malaysia: applying the UTAUT model. *Policy & Governance Review*, 5(1), 66-81.
- Mohr, S., and Kühl, R. (2021). Acceptance of artificial intelligence in German agriculture: an application of the technology acceptance model and the theory of planned behavior. *Precision Agriculture*, 22(6), 1816-1844.

- Moussa, N.B. and El Arbi, R., (2020). The impact of Human Resources Information Systems on individual innovation capability in Tunisian companies: The moderating role of affective commitment. *European Research on Management and Business Economics*, 26(1), pp.18-25.
- Mugaloremutt, S Verma, S. and Naganna, H. and Shikhare, Dr. R. (2022). Factors Affecting the Effectiveness of HRMIS (Human Resource Information System): - An Empirical Study. 6. 5795–5802.
- Omieno, K. (2022). A Critical Review of Technology Adoption Theories and Models for E-Learning Systems, Kenya. *International Journal of Innovation Engineering and Science Research*, 6(2).
- Priya, A.A. and Preetha, S. (2022), Review Of Studies On Hrmis Adoption in Different Countries and Various Sectors. [Online], Available from: https://kalaharijournals.com/resources/APRIL_49.pdf
- Pushpasiri, G. T. T. K., and Pushpasiri, G. T. S. Y. (2021). The Impact of human resources information system on non-executive employees' performance with special reference to manufacturing industry.
- Srivastava, S., and Bajaj, B. (2022). A Study of the relationship between the Symbolic Adoption of Human Resource Information Systems', Technology Adoption factors, and Work-Related Outcomes. *Int. Journal of Business Science and Applied Management*, 17(1).
- SutiSoft - SaaS For Business Solutions And Security Solutions. (2023, July 13). SutiSoft - SaaS for Business Solutions and Security Solutions. <https://www.sutisoft.com/>
- Tamrakar, B., and Shrestha, A. (2022). Factors influencing Use of Human Resource Information System in Nepali Organizations. *Journal of Business and Management Research*, 4(01), 1–16. <https://doi.org/10.3126/jbmr.v4i01.46678>
- Valcik, N. A., Sabharwal, M., and Benavides, T. J. (2021). Conclusion—What Have We Learned? *In Human Resources Information Systems* (pp. 165-173). Springer, Cham.
- Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>
- Verma, S and Naganna, H and Mugaloremutt, S and Shikhare, R. (2022). Factors Affecting the Effectiveness of HRMIS (Human Resource Information System): -An Empirical Study. 6. 5795–5802.
- Vinayan, G., Jayashree, S., & Marthandan, G. (2012). Critical success factors of sustainable competitive advantage: A study in Malaysian manufacturing industries, *International Journal of Business and Management*, 7(22), 29-45.
- Viridiananto, A. L., Dewi, M. A. A., Hidayanto, A. N., & Hanief, S. (2016, October). User acceptance of human resource information system: An integration model of Unified Theory of Acceptance and Use of Technology (UTAUT), Task Technology Fit (TTF), and Symbolic Adoption. In *2016 International Conference on Information Technology Systems and Innovation (ICITSI)* (pp. 1-6). IEEE.
- Wang, H., Tao, D., Yu, N., and Qu, X. (2020). Understanding consumer acceptance of healthcare wearable devices: An integrated model of UTAUT and TTF. *International Journal of Medical Informatics*, 139, 104156.
- Zeebaree, M., Agoyi, M., and Aqel, M. (2022). Sustainable Adoption of E-Government from the UTAUT Perspective. *Sustainability*, 14(9), 5370. <https://doi.org/10.3390/su14095370>