

The Determinant Factors for Affecting Human Resource Information System Usage

LMA Shamila¹, E.P.A.Hasarindi²

¹Lecturer, Faculty of Communication and Business Studies, Trincomalee Campus, Eastern University, Sri Lanka

²Assistant Lecturer, Faculty of Communication and Business Studies, Trincomalee Campus, Eastern University, Sri Lanka

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.905000331>

Received: 28 April 2025; Accepted: 02 May 2025; Published: 14 June 2025

ABSTRACT

In the digital era, organizations are increasingly leveraging information technology to improve operational efficiency and decision-making processes. One significant advancement in this regard is the implementation of Human Resource Information Systems (HRIS), which streamline core HR functions such as recruitment, payroll, performance management, and employee data maintenance. While HRIS offers substantial benefits, its successful adoption and usage vary across organizations and industries. This inconsistency has prompted researchers and practitioners to explore the key factors that determine effective HRIS utilization.

Therefore, this research paper main objective is to identify the determinant factors for affecting HRIS usage by means of a content analysis of the findings of previous HRIS studies. A review of the relevant literature has shown that a large number of previous studies have attempted to identify factors determining the adoption and implementation of HRIS usage. For the purpose of this study, these factors are presented and discussed under three dimensions: system quality, information quality, and service quality.

Understanding these determinants factors are crucial for HR leaders and IT managers to design appropriate strategies that enhance user acceptance and maximize the value of HRIS investments. This paper explores these factors using established models and empirical analysis to provide a comprehensive understanding of what drives HRIS usage in organizational settings.

Apart from that, researcher discussed about benefits of HRIS usage in an organization, HRIS usage's organizational structure, HRIS components, HRIS application and evolution of HRM and HRIS in today business world.

Keywords: Human Resource Information System Usage, System Quality, Information Quality, Service Quality

INTRODUCTION

An information system is a combination of software, hardware, and telecommunication networks to collect useful data, especially in an organisation. Many organizationa use information system to complete and manage their operations, interact with their customers, and stay ahead of their operations (Shamila, 2024).

“HR information systems help discover potential employees, keep personnel records, and develop talent and skill development programs for staff” (Bal, Bozkurt & Ertemsir, 2012). “Due to the shared database used by all HR-related units such as payroll, benefits administration, and pension, HRIS substantially contributes to the various HR operations. HRIS avoids work duplication and improves the efficiency of numerous work processes. Because effective use of these systems helps achieve the organization's objectives and performance development through the proper application, these systems help to improve the performance of the human resources function by providing managers with the information necessary to support resolutions on human resources management, and these systems are one of the most critical systems used in the facility” (Al-Omari,

Al-Mobaideen & Allahawiah, 2012). If the organization use HRIS then easily adopt different types of benefits. Such as:

Single data entry: “Employee data is entered or updated in a single database in HRIS. This information is shared among various departments, such as payroll, production, and projects. So, this process reduces errors, eliminates duplicate records, and saves time and money. Problems such as having one employee number in the payroll department and another in the HR department can cause payroll processing delays and errors. This inaccuracy makes it difficult to generate accurate attendance records and salary and benefits for any employee. This type of error is prevented if data entry occurs in one location and is used by all departments” (Singh, Jindal & Samim, 2011).

Reduced data entry costs: The clerical expense associated with data entry in other departments is decreased when data is entered in one place and used by several departments. Without HRIS, various departments would have to utilize different apps and enter the same data multiple times, increasing the clerical cost of data entry. The bottom line improves when clerical expenses are lowered by avoiding redundant data entry and associated errors (Singh et al., 2011).

Better employee services: “HRIS can assist in obtaining reports about an employee's eligibility to salary and benefits and how much he has previously utilized, and the balance available from the benefits pool. To get to the report in a manual system, one would have to go through multiple files and documents, and however, in an automated system, we can access it self-service mode, where all of these reports are available to employees at the press of a button” (Singh et al., 2011).

Pre-defined reporting formats: “HRIS includes modules that include pre-defined reports. These reports include information on employee salaries by role or grade, employee turnover by role, number of years of experience in the bank, a turnover report for each department and area with a trend over time, and the reason for leaving the bank, among other things. These studies assist senior management in determining the fundamental cause of attrition, which may lead to changes in bank policies that improve employee relationships and satisfaction” (Singh et al., 2011).

Evaluation and Development of HRIS Usage

“Human resource information systems were primarily employed for administrative and operational objectives in the early stages of development, despite being often accurate and comprehensive. Leave requests, workers' compensation, accident data, income variation, and superannuation entitlements were collected using forms. Between 1945 and 1960, only manual labor was used to manage all HR activities; they had human capital issues, employee morale, and proper selection and development methods. Previously, organizations did not prioritize HR-related activities; they were not interested in HR's primary function” (Gupta & Kumar, 2013).

“Then, from the early 1960s through the early 1970s, people became more focused on human resource management. Human resource management was seen as crucial in the organization. HRIS was utilized for keeping administrative records at the time. Several variables drastically transformed attitudes about human resource information systems in the 1970s and 1980s. After that, from 1980 until the present, both large and small businesses have used HRIS. During this time, the increasing complexity of payroll systems necessitated increased flexibility and access to information systems. Personal computers have made HRIS accessible and affordable to businesses of all sizes. HRIS has progressed from essential record-keeping to sophisticated analytical tools to aid managerial decision-making. Then, as a result of globalization and technological change, computerized HRIS was established. This system aims to combine human resource management (HRM) and information technology (IT) activities into a single database using enterprise resource planning (ERP) software. The purpose of using HRIS is to combine many aspects of human resources, such as payroll, labor productivity, and benefits management, into a less capital-intensive system than the mainframes that are used to administer activities” (Gupta & Kumar, 2013). “This principle refers to a person's belief that utilizing a particular system will be painless”. “The actual use of a computer system can be determined by how well system attributes match user task requirements. This concept refers to how much a person believes that utilizing an HRIS will improve his or her performance inside an organization”. As a result, the functions that

the HRIS provides for the user will be the primary motivator for them to use it. The use and exploitation of outflows from an information system predicted future IS consumption, or system usage output (Petter & McLean, 2009). Frequency of use, amount of time spent using the system, number of accesses made, method of use, and degree of reliance are all taken into account.

METHODOLOGY

“Past studies focused on the status of HRIS and its uses and implementation. However, little research has been conducted to identify the factors which determine the usages of HRIS” (Batool, Sajid, & Raza, 2012.). According to the literature review, the researcher tried to identify determinant factors affecting HRIS usage.

This research employed a qualitative systematic literature review approach to examine the role of system quality, information quality, and service quality as determinant factors of Human Resource Information System (HRIS) usage. A total of 20 peer-reviewed research articles published between (1990 -2022) were selected for analysis. These articles were sourced from reputable academic databases such as Scopus, Web of Science, Google Scholar, and ScienceDirect using keywords including "HRIS," "system quality," "information quality," "service quality," "technology acceptance," and "HRM systems." The inclusion criteria for article selection were: (1) relevance to HRIS implementation or usage, (2) discussion or analysis of system, information, or service quality, and (3) empirical or conceptual research published in English. Articles not directly related to HRIS or that lacked substantial methodological grounding were excluded. The selected articles were systematically reviewed and summarized to identify recurring themes, findings, and methodological approaches. A thematic analysis was conducted to categorize the influence of system quality, information quality, and service quality on HRIS usage. This process involved coding key findings and aligning them with the research objectives to establish common determinants and their interrelationships. By synthesizing existing literature, this study aims to provide a comprehensive understanding of how the three quality dimensions collectively shape the effectiveness and adoption of HRIS in organizational contexts.

Determinant Factors for Affecting HRIS Usages

According to the literature review, the researcher tried to identify determinant factors affecting HRIS usage. Because of that, the researcher selected 20 articles. The details of the articles are presented in Table 1. Further, this extensive literature review enabled the researchers to uncover eight different determinant factors of HRIS usage, as identified in Table 1

Table 1. List of Determinant Factors Affecting HRIS Usage

No	Author	Year	Determinant Factors of HRIS Usages
01	(DeLone & McLean)	1992	System quality, Information quality, Ease of use, User satisfaction
02	(Rai, A., Lang, S.S. & Welker, R.B.,)	2002	System quality. Information quality
03	(Rodgers, W., Negash, S. & Suk, K)	2005	System quality, Information quality, Service quality,
04	(Gorla, N., Somers, T.M. & Wong, B.,)	2010	System quality, Information quality, service quality
05	(Lin, C. C., Wu, H. Y. & Chang, Y. F.)	2011	System quality, Information quality, service quality
06	(Aggarwal, N. and Kapoor, M.,)	2012	System quality, Information quality, Ease of use, Usefulness
07	(Kim, J., Ahn, K. & Chung, N.,)	2013.	System quality, Information quality, Service quality
08	(Zheng, Y., Zhao, K. &	2013	Service quality,

	Stylianou, A.,)		Information quality
09	(Shamila, 2024)	2024	System quality, Information quality, Service quality
10	(Xu, J., Benbasat, I. & Cenfetelli, R.T.,	2013	System quality, Information quality, Service quality
11	Suryanto, T.L.M., Setyohadi, D.B. & Faroqi, A.,)	2016	System quality, Information quality, Service quality
12	(Ojo, A.I.,)	2017	System quality, Information quality, Service quality
13	(Benmoussa, K., Laaziri, M., Khouliji, S., Kerkeb, M.L. & El Yamami, A.,)	2018,	System quality, Information quality, Service quality
14	(Ahmed J.B. & Mansor, S.,)	2018	Information quality, Service quality, Data quality
15	(Ameen, A., Alfalasi, K., Gazem, N.A. & Isaac, O.,)	2019	System quality, Information quality, Service quality
16	(Shahreki, J., Ganesan, J., Raman, K., Chin, A.L.L. and Chin, T.S.,)	2019	Ease of Use, Usefulness
17	(Ammar, H.O., Ghorab, M.M., Mostafa, D.M., Abd El-Alim, S.H., Kassem, A.A., Salah, S. and Shalaby, E.S.,)	2020	System quality, Information quality, Usefulness, Ease of use
18	(Roslina, W., Fahmy, S. and Haslinda, N.,)	2020	System quality, Information quality, User satisfaction, System success
19	(Strelbitskyi, M., Mazur, V., Ivashkov, Y., Karpushyn, A., Serkhovets, S., Sinkevych, S. & Bloshchynskyi, I.,)	2020	System quality, Information quality, Service quality
20	(ElNakib, D.M., Ragheb, M.A., Youssef, R.A.E. & Ghanem, A.N.,)	2021	System quality, Information quality, Ease of Use and Usefulness

(Source: Survey Data)

Table 1 summarizes the list of determinant elements that influence HRIS usage. It showed how various determinant factors influence HRIS usage as reported by various researchers.

System quality, information quality, and service quality have all been utilized by various researchers more than 15 times in their investigations, according to Table 1. As a result of the previous study, these three elements are recognized as the most commonly used determinant factors affecting HRIS Usage. As a result, the researcher used system quality, information quality, and service quality as decisive criteria for affecting HRIS usage in this study.

System quality

“System quality refers to the overall quality of the information system's processing, including software and data components, and measures how technically sound the system is. System quality is concerned with whether the system has defects, the consistency of the user interface, convenience of use, quality of

documentation, and sometimes, quality and maintainability of computer code" (Seddon,1997). "Easy use, usefulness, reliability, data quality, flexibility, and integration are factors that determine the quality of a system" (DeLone & McLean, 2003). Sedera, Gable, & Chan (2004) "created and validated a comprehensive instrument for system quality, resulting in nine attributes: ease of use, ease of learning, user requirements, system features, system accuracy, flexibility, sophistication, integration, and customization".

Furthermore, system quality measures concentrate on the system's performance characteristics. The technical aspects of the information system interface are referred to by this principle (DeLone & McLean,1992). Many studies identify various metrics, with data currency, reaction time, data correctness, dependability, completeness, and system flexibility being the most well-known.

Information Quality

"Information quality refers to the quality of the information system's outputs, reports or online screens" (DeLone & McLean, 1992). Furthermore, "information quality measures concentrate on a system's output and the user's utility or relative importance assessment" (DeLone & McLean,1992). Huh, Keller, Redman, & Watkins (1990) define "information quality as consisting of four dimensions: accuracy, completeness, consistency, and currency. Accuracy refers to an agreement with a real-world attribute, a value held in another database, or the result of an arithmetic calculation. Completeness is defined as whether or not all of the data relevant to a given application is present. Consistency refers to the absence of conflict between two datasets, whereas currency refers to current data. Researchers have utilized a range of criteria to determine the quality of information". "For information quality, employed the constructs of correctness, completeness, currency, and format" (Nelson, Todd, & Wixom, 2005).

Accuracy, precision, currency, output timeliness, reliability, completeness, conciseness, format, and relevancy are all essential aspects of information quality (Obeidat, 2012).

Service Quality

The degree of difference between customers' normative expectations for service and their views of service delivery has been defined as service quality (Zeithaml, Berry & Parasuraman, 1988).

"The quality of information system services is measured by service quality. In general, service quality is a technique established by marketing researchers to assess general service quality" (Pitt & Watson, Kavan, 1995). One of the indicators of information system effectiveness is service quality. Service quality refers to the IT department's assistance of users, which is frequently defined by the support organization's responsiveness, reliability, and empathy (Petter & McLean, 2009).

Benefits of HRIS Usage in Organization

An effective HRIS implementation gives data on almost anything the organization wants to track and analyze current and past workers and applicants. The organization will need to choose an HRIS system and configure it to fit its specific requirements. HR and other managers can employ a comprehensive and integrated HRIS in administrative, operational, and strategic sectors.

"HRIS data can be used at the operational level to identify possible internal candidates for job openings, reduce external recruitment expenses, and assure staff of career options. The human resource department can take a more active role in organizational planning with the help of HRIS. Forecasting will become more timely, cost-effective, and efficient due to computerization. HRIS systems are growing more advanced as a result of ongoing technological advancements. Intranet HR self-service is one of the most important HRIS functionalities. Today, several organization use their intranet for online appraisals, career management, sentiment surveys, training registrations, and posting information about their employees. An HRIS may manage compliance with federal and state legislation, streamline recruiting and selection procedures, and provide analyses, data, and reports for internal and external usage, all while being supervised by certified specialists who understand technology and HR functional and tactical operations. The ease of use for computer technology specialists, the quality of information, and the capacity to run HR audits using any combination of parameters are advantages of an HRIS. Employee and manager self-service tools are suitable methods to free up time for project work and other responsibilities for the human resources department. Employees and

supervisors may immediately find answers and information without consulting with an HR representative. Human Resources professionals can use an appropriate HRIS to enable employees to update their benefits and address changes on their own, freeing HR staff to focus on more strategic tasks. Furthermore, data for personnel management, knowledge development, career growth and development, and equal treatment is made easier” (Gupta & Kumar, 2013).

Finally, managers have access to the information they need to report on their employees' accomplishments in a legal, ethical, and effective manner. “Faster information processing; greater information accuracy; improved planning and program development; enhanced employee communications; reduced cost of stored data in HR; more transparency in the system; more meaningful career planning and counseling at all levels; better ability to respond to environmental changes are just a few of the advantages of such systems” (Gupta & Kumar, 2013).

An effective HRIS includes the following features:

- Data for the administration of all staff
- Reporting of the data needed for staff management and evaluation.
- Company-related records, staff handbooks, and security recommendations
- Rewards management, such as enrollment, status modifications, and updating of personal data
- Integration with payroll, in addition to other accounting systems and financial software
- Monitoring of applicants and resume administration

An efficient HRIS helps an organization track:

- Paid time off (PTO) and attendance
- Payscale history
- Positions and pay grades
- Overall performance development strategies
- Coaching obtained
- Disciplinary actions
- Personal staff data
- Key staff succession plans
- Identification of prospective staff
- Applicant administration, including interview process and selection

Human Resource Information System's Organizational Structure

A Human Resource Information System (HRIS) is a software package that automates the inputting, tracking, and recording of employee data, replacing manual, paper-based techniques. It has broken down into five primary sections. “An HRIS keeps track of employee personal and job-related information; it facilitates planning by matching employees to the jobs for which they are best qualified; and, with security features and data tracking required for regulatory compliance, it complies with data protection laws and generates reports for submission to management for decision-making” (Naidu, 2015).

Employees' Data

“A personnel database is used to structure a standard HRIS. Personal information includes name, age, residence,

phone numbers, social security number, dependents, education and training, and job-related information. The latter can contain current and previous salaries, employment history, and benefits information. The HRIS organizes the information into menu-driven pages that provide increasing levels of detail in any of the data categories. Because many personnel who access this database will not need access to the other modules, the HRIS organization separates it from the other portions” (Naidu, 2015).

Job Data

The organization may construct a second database for data relating to specific jobs using the HRIS. “The requirements for each existing company position, the name of the employee holding the position, the names of potential replacements, the paths available for promotion into and out of the position, and the salary and benefit levels associated with the position are all contained in this second database for an HRIS organized in this manner. The HRIS may incorporate global job and employee data in addition to specific job databases, such as where current employees originated from, how the organization found them, how long they stayed with the company, and how well they performed” (Naidu, 2015).

Planning

“A third organizational module of an HRIS can be used for business planning to identify future human resource requirements and possible sources, such a module uses the employee database, the jobs database, and global employee and job information. The module links current employees with company jobs and forecasts where gaps occur. The corporation can then address these needs by hiring more people, reassigning tasks, or changing its organizational structure” (Naidu, 2015).

Compliance

“An HRIS can be set up to track compliance. Companies must demonstrate adherence to employee-related regulatory obligations such as equal opportunity, gender neutrality, and workplace quality. Employee characteristics, recruiting decisions, employee assessments, and firing or layoff decisions will all be tracked by the HRIS. It can then generate reports that show whether or not the company complies with legal obligations and how successfully it is doing so” (Naidu, 2015).

Security

“A new organizational module for an HRIS is superimposed on the others to assure security. The security module ensures that privacy rules protect employee personal data by limiting access to just the employee and appropriate corporate officials. Thanks to the security module, employees can only see important data when they need it to do their work. For example, data on promotion tracks and candidates is likely to be tightly restricted. To safeguard HRIS data, the security module employs suitable degrees of security including various layers. Security to assure security, an additional organizational module for an HRIS is layered on the others” (Naidu, 2015).

HRIS Components

As indicated in Figure 1, HRIS includes three key functional components.

Input → Data Maintenance → Output

Figure 1. HRIS Components

Input

“The input function gives the tools that needed to get human resource data into HRIS. It populates the HRIS with employee data. First and foremost, procedures and processes are required to acquire necessary data, which is then entered into the system. Edit tables can be used to check if the data is correct. The data is automatically validated against these tables, which include approved values. The edit tables should be updated

and changed by the system. Scanning technology now allows for the scanning and storing an actual image of a business document, including signatures and handwritten annotations” (Naidu, 2015).

Data maintenance

“The data maintenance function is in charge of updating the data in the various storage devices. As changes in human resource information occur, this information should be incorporated into the system; as new data is introduced, it is often desirable to keep the old data in the form of historical data. After data has been entered into the HRIS, it updates and adds new data to the database” (Naidu, 2015).

Output

“Output is the most apparent function of HRIS because most HRIS users are concerned with information and reports to be used by the systems rather than collecting, revising, and updating human resource data. HRIS processes data, calculations and prepares the presentation to produce helpful output for computer users. HRIS stands for Human Resource Information System, and it is a computerized system that assists in processing data related to human resource management.

A well-knit HRIS serves as a worthy decision, a device, created to meet the organization's workforce information needs” (Aggarwal & Kapoor, 2012).

Human Resource Information System Applications

Job Analysis Application:

“A web-based job analysis application is software that assists HR departments in conducting job analyses, which are often conducted using an online questionnaire to collect data from employees, managers, and outside subject matter experts. The software evaluates each job and provides a job description for each one. A job evaluation is based on a job description” (Tesi, 2010).

Application for Employment:

“Recruitment entails identifying the best candidate for a job through techniques that produce a broad pool of competent candidates, as well as a reliable and valid selection process. These hiring practices will significantly impact the quality and type of new workers' talents. Furthermore, all roles in the organization are expected to comply with all legal obligations connected to employment and equal opportunities by following approved standards of practice and ensuring justice and fair treatment for all applicants” (Mina, Mehdi & Yaser, 2012).

The recruiting system keeps track of recruitment and selection operations details, such as the cost and technique of recruitment and selection, the time it takes to fill a position, and provides users with the information they need on time.

Application of Selection:

According to Mathis & Jackson (2010), “the selection process is focused on selecting qualified candidates to fill those positions”. According to Gatewood, Field, and Berrick (2008), “HR selection is the process of gathering and assessing information about an individual to expand an offer of employment. Who is hired in any company or organization is determined by the selection process”. “Selection procedures should be well-thought-out to find qualified candidates and appropriately match them to the job. Proper selection will raise the likelihood of selecting the correct person to fill a vacancy. Productivity rises when the best people are hired for the position” (Mina et al., 2012). “Managers should be aware of the selection objectives, policies, and procedures to be fully engaged in the process from the start, reflecting managers' responsibility for the

selection process. This role will assist managers in making the best selection decisions possible while gathering sufficient data” (Rosemond & Ernesticia, 2011).

Performance Appraisal Application:

“Forms used in performance appraisal systems evaluate an individual's performance, identify opportunities for future career progression, and, most significantly, improve performance. It is a merit rating that should benefit both parties (organizations and individuals) and should be assessed regularly to meet the requirements. Furthermore, a performance assessment system is concerned with establishing a standard against specific task performance and defining and assessing present performance. As a result, it necessitates the following inputs and outputs: payment, pay raises, level of expectation, promotion, and organizational planning” (Abang, May & Maw, 2009). “Employees should know exactly what is expected of them and how their performance and outcomes will be monitored by the organization”. According to Rosemond & Ernesticia (2011), “A defined and systematic appraisal program will enable a regular review of an individual's performance, emphasizing potential and addressing training and development needs. The most significant aspect is that a successful assessment scheme may improve staff's future performance. Therefore it can also serve as the foundation for reviewing cash awards and planned career advancement. The performance appraisal system provides individual employee performance appraisal data, such as the appraisal's due date, scores, etc”.

Communication Application:

“The communications application supports inter-organizational regulatory communications, which helps coordinate all of the numerous organizational operations and adjustments” (Casico, 2006). “An appropriate HRIS for this purpose includes a communication mechanism suitable for communicating, and it is suited for delivering the necessary information to all clients inside and outside the firm” (Mayfield, Mayfield & Lunce, 2003).

Evolution of HRM and HRIS

Table 2. Evolution of HRM & HRIS

Timeframe	Evolution in HRM	Evolution in HR Technology
Prior to 1940	Manual record-keeping and payroll	—
1940s–1950s	- Federal tax regulations introduced	- Homegrown payroll systems emerge
	- Skill inventories and job classifications for govt/military	- Mainframe computers support personnel/payroll
	- Large companies invest in personnel tech	- ADP is founded
1960s–1970s	- More employment laws (e.g., CRA 1964, ADEA 1967)	- MIS emerges
	- Tracking administrative costs and turnover	- IBM/360 introduced
	- Increased labor cost reporting	- Vendor software created
	- Streamlining HR data	- Personnel systems for mid-size firms
		- SAP founded; R/2 released
1980s–1990s	- Globalization drives system integration	- Client-server computing emerges

	- HR uses data for planning and analytics	- Personal workstations access HR data
		- PeopleSoft v1 released
		- HR DSS developed
1990s–2010	- Employee empowerment & self-service	- ERP systems grow (SAP, Oracle, PeopleSoft)
	- Strategic HR roles	- Intranets expand access
	- Compliance with privacy directives	- Web-based ERP (Y2K compliance)
	- Offshoring of IT/HR	- ESS/MSS systems
	- Balanced scorecard in HR	- Best-of-breed systems (e.g., Taleo, Kronos)
2010–present	- Cost containment focus	- Cloud-based HR systems (e.g., Workday, SuccessFactors)
	- ACA compliance	- Big data & analytics
	- Social media in HR	- Mobile-first HR platforms
	- Mobile HRIS adoption	

(Source: Johnson, Lukaszewski, & Stone 2016).

Overall Summary of Past Research

Table 3. Frequency of Usage Determinant Factors Affecting HRIS Usage

No	Determinant	Literature Citation	Article Count (N=20)	
			Frequency	%
01	System Quality	DeLone & McLean 1992; Rai, A., Lang, S.S. & Welker, R.B.,2002; Rodgers, W., Negash, S. & Suk, K.,2005; Gorla, N., Somers, T.M. & Wong, B.,2010; Lin, C. C., Wu, H. Y. & Chang, Y. F.,2011; Aggarwal, N. & Kapoor, M.,2012; Kim, J., Ahn, K. & Chung, N.,2013; Hamdan, M.N.M.,2013; Xu, J., Benbasat, I. & Cenfetelli, R.T.,2013; Suryanto, T.L.M., Setyohadi, D.B. & Faroqi, A.,2016; Ojo, A.I.,2017; Benmoussa, K., Laaziri, M., Khouliji, S., Kerkeb, M.L. & El Yamami, A.,2018; Ameen, A., Alfalasi, K., Gazem, N.A. & Isaac, O.,2019; Ammar, H.O., Ghorab, M.M., Mostafa, D.M., Abd El-Alim, S.H., Kassem, A.A., Salah, S. and Shalaby, E.S.,2020; Roslina, W., Fahmy, S. and Haslinda, N.,2020; Strelbitskyi, M., Mazur, V., Ivashkov, Y., Karpushyn, A., Serkhovets, S., Sinkevych, S. and	17	85%

		Bloshchynskyi, I.,2020; ElNakib, D.M., Ragheb, M.A., Youssef, R.A.E. & Ghanem, A.N.,2021; Shamila, 2024		
02	Information Quality	DeLone & McLean 1992; Rai, A., Lang, S.S. & Welker, R.B.,2002; Rodgers, W., Negash, S. & Suk, K.,2005; Gorla, N., Somers, T.M. & Wong, B.,2010; Lin, C. C., Wu, H. Y. & Chang, Y. F.,2011; Aggarwal, N. & Kapoor, M.,2012; Kim, J., Ahn, K. & Chung, N.,2013; Zheng, Y., Zhao, K. & Stylianou, A.,2013; Hamdan, M.N.M.,2013; Xu, J., Benbasat, I. & Cenfetelli, R.T.,2013; Suryanto, T.L.M., Setyohadi, D.B. & Faroqi, A.,2016; Ojo, A.I.,2017; Benmoussa, K., Laaziri, M., Khouliji, S., Kerkeb, M.L. & El Yamami, A.,2018; Ahmed J.B. & Mansor, S.,2018; Ameen, A., Alfalasi, K., Gazem, N.A. & Isaac, O.,2019; Ammar, H.O., Ghorab, M.M., Mostafa, D.M., Abd El-Alim, S.H., Kassem, A.A., Salah, S. and Shalaby, E.S.,2020; Roslina, W., Fahmy, S. and Haslinda, N.,2020; Strelbitskyi, M., Mazur, V., Ivashkov, Y., Karpushyn, A., Serkhovets, S., Sinkevych, S. & Bloshchynskyi, I.,2020; ElNakib, D.M., Ragheb, M.A., Youssef, R.A.E. & Ghanem, A.N.,2021, Shamila, 2024	18	90%
03	Service Quality	Rodgers, W., Negash, S. & Suk, K.,2005; Gorla, N., Somers, T.M. & Wong, B.,2010; Lin, C. C., Wu, H. Y. & Chang, Y. F.,2011; Kim, J., Ahn, K. & Chung, N.,2013; Zheng, Y., Zhao, K. & Stylianou, A.,2013; Hamdan, M.N.M.,2013; Xu, J., Benbasat, I. & Cenfetelli, R.T.,2013; Suryanto, T.L.M., Setyohadi, D.B. & Faroqi, A.,2016; Ojo, A.I.,2017; Benmoussa, K., Laaziri, M., Khouliji, S., Kerkeb, M.L. & El Yamami, A.,2018; Ahmed J.B. & Mansor, S.,2018; Ameen, A., Alfalasi, K., Gazem, N.A. & Isaac, O.,2019; Strelbitskyi, M., Mazur, V., Ivashkov, Y., Karpushyn, A., Serkhovets, S., Sinkevych, S. and Bloshchynskyi, I.,2020; Shamila, 2024	13	65%
04	Ease of Use	DeLone & McLean 1992; Aggarwal, N. & Kapoor, M.,2012; Shahreki, J., Ganesan, J.,	5	25%

		Raman, K., Chin, A.L.L. and Chin, T.S.,2019; Ammar, H.O., Ghorab, M.M., Mostafa, D.M., Abd El-Alim, S.H., Kassem, A.A., Salah, S. & Shalaby, E.S.,2020; ElNakib, D.M., Ragheb, M.A., Youssef, R.A.E. & Ghanem, A.N.,2021		
05	User Satisfaction	DeLone & McLean 1992; Roslina, W., Fahmy, S. and Haslinda, N.,2020;	02	10%
06	Usefulness	Al Sibly.,2011; Shahreki, J., Ganesan, J., Raman, K., Chin, A.L.L. and Chin, T.S.,2019; Ammar, H.O., Ghorab, M.M., Mostafa, D.M., Abd El-Alim, S.H., Kassem, A.A., Salah, S.& Shalaby, E.S.,2020; ElNakib, D.M., Ragheb, M.A., Youssef, R.A.E. & Ghanem, A.N.,2021	04	20
07	Data Quality	Ahmed J.B. & Mansor, S.,2018	01	5%
08	System Success	Roslina, W., Fahmy, S. and Haslinda, N.,2020;	01	5%

(Source: Survey Data)

Table 3 shows the overall summary of past researchers' conclusions regarding determinant factors for HRIS usage. The percentage value is obtained by dividing each variable's frequency of use by twenty, the total number of articles utilized in this study.

CONCLUSION

As a result, the researcher used system quality, information quality, and service quality as decisive criteria for affecting HRIS usage in this study. High system quality ensures reliability, user-friendliness, and functional performance, which enhances user satisfaction and promotes consistent usage. Information quality contributes by providing accurate, timely, and relevant data, supporting better decision-making and operational efficiency. Meanwhile, service quality encompassing technical support, responsiveness, and user training ensures users are adequately supported and confident in utilizing the system. Together, these three dimensions create a robust foundation for successful HRIS adoption and sustained usage, ultimately leading to improved human resource management outcomes.

REFERENCES

1. Abang A., May C., & Maw K. 2009. Human resource practices and organizational performance. Incentives as moderator. *Journal of Academic Research in Economics*, 1(2).
2. Aggarwal, N. and Kapoor, M., 2012. Human resource information systems (HRIS)-Its role and importance in business competitiveness. *Gian Jyoti E-Journal*, 1(2), pp.1-13.
3. Ahmed II, J.B. and Mansor, S., 2018. Overview of the application of geospatial technology to groundwater potential mapping in Nigeria. *Arabian Journal of Geosciences*, 11(17), pp.1-16.
4. Al-Omari, B.M.A., Al-Mobaideen, H.O. and Allahawiah, S.R., 2012. The Impact Of Human Resources Information Systems In Improving The Training Process In Industrial Firms:-Aqaba Case Study. *European Scientific Journal*, 8(25).
5. Ameen, A., Alfalasi, K., Gazem, N.A. and Isaac, O., 2019, December. Impact of system quality, information quality, and service quality on actual usage of smart government. In *2019 First International Conference of Intelligent Computing and Engineering (ICOICE)* (pp. 1-6). IEEE.

6. Ammar, H.O., Ghorab, M.M., Mostafa, D.M., Abd El-Alim, S.H., Kassem, A.A., Salah, S. and Shalaby, E.S., 2020. Development of folic acid-loaded nanostructured lipid carriers for topical delivery: preparation, characterization and ex vivo investigation. *Journal of microencapsulation*, 37(5), pp.366-383.
7. Bal, Y., Bozkurt, S. and Ertemsir, E., 2012. The importance of using human resources information systems (HRIS) and research on determining the success of HRIS (pp. 197-210). River Publishers, Aalborg.
8. Batool, S.Q., Sajid, D.M.A. and Raza, D.S.H., 2012. Benefits and barriers of human resource information system in accounts office & Azad Jammu & Kashmir community development program. *International Journal of Humanities and Social Science*, 2(3), pp.211-217.
9. Benmoussa, K., Laaziri, M., Khouliji, S., Kerkeb, M.L. and El Yamami, A., 2018, October. Impact of system quality, information quality and service quality on the efficiency of information system. In *Proceedings of the 3rd International Conference on Smart City Applications* (pp. 1-6).
10. Cascio, W.F., 2006. Managing human resources: Productivity, quality of work life, profits.
11. DeLone, W.H. and McLean, E.R., 1992. Information systems success: The quest for the dependent variable. *Information systems research*, 3(1), pp.60-95.
12. Delone, W. H., and McLean, 2003, (information system success) *journal of management information system*, Vol. 19, No 4.
13. ElNakib, D.M., Ragheb, M.A., Youssef, R.A.E. and Ghanem, A.N., 2021. The Effect of HRIS Adoption on Vodafone Egypt Firm's Performance. *Journal of Human Resource and Sustainability Studies*, 9(02), p.173.
14. Gatewood, R. D., Field, H. S., and Barrick, M. 2008. Human resource selection. 6th Edition. Thomson, South Western
15. Gorla, N., Somers, T.M. and Wong, B., 2010. Organizational impact of system quality, information quality, and service quality. *The Journal of Strategic Information Systems*, 19(3), pp.207-228.
16. Gupta, S. and Kumar, V., 2013. Sustainability as corporate culture of a brand for superior performance. *Journal of World Business*, 48(3), pp.311-320.
17. Hamdan, M.N.M., 2013. Improving the performance of accounting information systems of commercial banks in Jordan by using the balanced scorecard approach (Doctoral dissertation, Curtin University).
18. Huh, Y.U., Keller, F.R., Redman, T.C. and Watkins, A.R., 1990. Data quality. *Information and software technology*, 32(8), pp.559-565.
19. Johnson, R.D., Lukaszewski, K.M. and Stone, D.L., 2016. The evolution of the field of human resource information systems: Co-evolution of technology and HR processes. *Communications of the Association for Information Systems*, 38(1), p.28.
20. Kim, K.H., Jeon, B.J., Jung, H.S., Lu, W. and Jones, J., 2011. Effective employment brand equity through sustainable competitive advantage, marketing strategy, and corporate image. *Journal of Business Research*, 64(11), pp.1207-1211.
21. Lin, C.C., Wu, H.Y. and Chang, Y.F., 2011. The critical factors impact on online customer satisfaction. *Procedia Computer Science*, 3, pp.276-281.
22. Mathis, R. L. and Jackson, J. H., (2010), "Human resource management", 13th edition.
23. Mayfield, M., Mayfield, J., and Lunce, S., (2003), "Human resource information systems: a review and model development", *American Society for Competitiveness*, 11(1)
24. Mina, B., Mehdi, K. and Yaser, G., 2012. Researching the impact of human resources functions on organizational performance using structural equations method (case research: Iran Behnosh Company). *Interdisciplinary Journal of Contemporary Research in Business*, 3(9), pp.1-12.
25. Naidu, P.S., 2015. HRIS Efficiency and its impact on Organization. *International research Journal of Management science and Technology (IRJMST)*, 6(7), pp.85-98.
26. Nelson, R.R., Todd, P.A. and Wixom, B.H., 2005. Antecedents of information and system quality: an empirical examination within the context of data warehousing. *Journal of management information systems*, 21(4), pp.199-235.
27. Obeidat, B.Y., 2012. The relationship between human resource information system (HRIS) functions and human resource management (HRM) functionalities. *Journal of Management Research*, 4(4), pp.192-211.
28. Ojo, A.I., 2017. Validation of the DeLone and McLean information systems success model. *Healthcare*

- informatics research, 23(1), pp.60-66.
29. Petter, S. and McLean, E.R., 2009. A meta-analytic assessment of the DeLone and McLean IS success model: An examination of IS success at the individual level. *Information & Management*, 46(3), pp.159-166.
 30. Pitt, L.F., Watson, R.T. and Kavan, C.B., 1995. Service quality: a measure of information systems effectiveness. *MIS quarterly*, pp.173-187.
 31. Rai, A., Lang, S.S. and Welker, R.B., 2002. Assessing the validity of IS success models: An empirical test and theoretical analysis. *Information systems research*, 13(1), pp.50-69.
 32. Rodgers, W., Negash, S. and Suk, K., 2005. The moderating effect of on-line experience on the antecedents and consequences of on-line satisfaction. *Psychology & Marketing*, 22(4), pp.313-331.
 33. Rosemond B., & Ernesticia L. (2011). The Effect of Human Resource Management Practices on Corporate Performance: A Research of Graphic Communications Group Limited. *International Business Research*, 4(1).
 34. Roslina, W., Fahmy, S. and Haslinda, N., 2020. Employee Perception Towards Information System Portal for Lecturers. *International Journal of Synergy in Engineering and Technology*, 1(2), pp.18-22.
 35. Seddon, P.B., 1997. A specification and extension of the DeLone and McLean model of IS success. *Information systems research*, 8(3), pp.240-253.
 36. Sedera, D., Gable, G. and Chan, T., 2004. A factor and structural equation analysis of the enterprise systems success measurement model. In *Proceedings of the 10th Americas Conference on Information Systems* (pp. 676-682). Association for Information Systems.
 37. Shahreki, J., Ganesan, J., Raman, K., Chin, A.L.L. and Chin, T.S., 2019. The effect of human resource information system application on employee satisfaction and turnover intention. *Entrepreneurship and Sustainability issues*, 7(2), p.1462.
 38. Shamila, L. M. A. (2024). The Impact of Information Systems on Employees Performance in Department of Education, North Western Province, Sri Lanka. *International Journal of Research and Innovation in Social Science*, VII(XII), 1425–1431. <https://doi.org/10.47772/IJRISS.2023.7012110>.
 - Singh, H.P., Jindal, S. and Samim, S.A., 2011. Role of Human Resource Information System in banking industry of developing countries. *Special Issue of the International Journal of the Computer, the Internet and Management*, 19, pp.44-1.StatSoft, I., 2013. *Electronic statistics textbook*. Tulsa, OK: StatSoft, 34.
 39. Strelbitskyi, M., Mazur, V., Ivashkov, Y., Karpushyn, A., Serkhovets, S., Sinkevych, S. and Bloshchynskyi, I., 2020. Scheme of Evaluating Information System Effectiveness of the Border Guard Service. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(1), pp.96-120.
 40. Suryanto, T.L.M., Setyohadi, D.B. and Faroqi, A., 2016. Analysis of the effect of information system quality to intention to reuse of employee management information system (Simpeg) based on information systems success model. In *MATEC Web of Conferences* (Vol. 58, p. 03001). EDP Sciences.
 41. Tesi d. (2010) *Human Resource Information Systems and the performance of the Human Resource Function*, PhD theses, Libera University, Roma
 42. Xu, J., Benbasat, I. and Cenfetelli, R.T., 2013. Integrating service quality with system and information quality: an empirical test in the e-service context. *MIS quarterly*, pp.777-794.
 43. Zeithaml, V.A., Berry, L.L. and Parasuraman, A., 1988. Communication and control processes in the delivery of service quality. *Journal of marketing*, 52(2), pp.35-48.
 44. Zheng, Y., Zhao, K. and Stylianou, A., 2013. The impacts of information quality and system quality on users' continuance intention in information-exchange virtual communities: An empirical investigation. *Decision support systems*, 56, pp.513-524