

Name: Adrian Jackson Morilla

Misis No: M00794367

Leader Of Learning: Ms. Chinnu George

**CST-2320 Project Planning and Research for Information
Systems Professionals**

Literature Review:

“The rise of Human Resource Information Systems (HRIS) as a centralized system for managing organizations.”

Table Of Content

1. Abstract	_____
2. Introduction	_____
3.Review of Literature	_____
4.Conclusion	_____
5.Reference	_____

Abstract

Additionally, this literature review contains the parts of an HRIS features, including a Decision-support System, training, and performance management. The determinations provide scope to the technological capabilities of the HRIS involvement in organisational strategies and limitations.

Introduction

"HRIS stands an acronym for Human Resources Information System."

The HRIS "piles and stocks report on an organization's employees. In most circumstances, this contains the essential roles demanded for an 'end-to-end Human Resources Management (HRM).' It is a system for recruiting, performance control, learning, and growth of other operations. Human Resource Information Systems can run on different software and is practically a component of the Human Resource software. The HRIS operates on the enterprise's technical infrastructure or, as is more characteristic nowadays, on the cloud system. Thus, signifying that the Human Resource software is being used outside the company.

The HRIS focuses on providing information, validity, reliability, and utility process for the business (Kovach, K.A. and Cathcart, C.E. 1999). It states that 'Human resource information systems provides an evaluation and supports decision-making with the HR personnel,' effectively supporting businesses in recruiting employees with unique skill sets.

Human Resource Management is commonly understood as "human resources" (HR).

The human resources department of an enterprise is generally in control of creating, enforcing, and operating guidelines that handle the workforce and the firm's interaction with its staff'. 'Human Resources is utilized to determine the people who worked for the institution in the entirety of the early 1900s and more widely in the 1960s. Human Resource Managing is employee command concentrating on employees as corporate assets.

Workers are directed to as human capital in this sense, as with other organization assets. The goal is to construct the most benefit for personnel while undervaluing risk and maximizing recovery on investment (Chai, 2020).

Human resource management strategically manages people to achieve the company's mission and vision and reinforce the workplace's atmosphere. If implemented suitably, HR managers can aid in drafting unique specialists with the capabilities needed to facilitate the enterprise's goals, as sufficiently as the development and education of current workers to accomplish their purposes (Johnson, R.D. and Diman, K. 2017).

Furthermore, only a limited fraction of secondary quantitative research has been conducted on how firms and organizations may better manage their people resources. Human resource information systems are one method that most, if not all, more significant firms have employed to optimize Human Resource operations and improve the efficiency of the information systems (Johnson, R.D. and Diman, K. 2017). According to research, 'small- to medium-sized enterprises' (SMEs) have struggled to maximize the cost and efficiency gains enabled by these technologies and have trailed behind larger organizations in adoption. Researchers must investigate digital Human Resource strategies and challenges around their implementation and utilization (Johnson, R.D. and Diman, K. 2017). The strategic methods of primary and secondary research are organized into checking employment records and tracking the data required to identify the organization's prioritization.

This literature review will cover the subjects of Human resource Information Systems being a central system for managing firms & organizations. The study will cover the; Foundations of Human Resource Information Systems, The advantages & disadvantages of HRIS, Its strategies for managing human resource allocation toward recruiting new employees, and its importance in the recruitment decision-making process. Definitive human resource information systems can provide an approach to the existing Human resource department and support in recruiting business personnel with existing skill sets or providing potential training to future candidates (Tansley, C. and Newell, S. 2007).

The Decision Support System tools' ability to provide the support needed for the Human Resource. Thus, making the expertise more operational and managerial in terms of the strategic levels of the organization (Dulebohn, J.H., and Johnson, R.D. 2013).

Review of literature

2.1 Foundation of Human Resource Information Systems.

A software program comprehended as a 'human resources information system' (HRIS) is utilized to systematize and arrange specific personal data as well as human resources-related restrictions and policies. The Information system provides standard human resources (HR) responsibilities and strategies while promoting data integrity and publishing to a dynamic information system management (Oracle 2022).

A human resource information system (HRIS) is operated to acquire, store, alter, assess, collect, and disseminate information on an organization's human resources to support Human Resource Management and managerial decisions. HRIS is defined as systems that include processes, procedures, people, and roles for such accumulation, preservation, retrieval, evaluation, processing, and transmission of information relating to a firm's human resources (Hussain et al., 2007).

One main advantage of concentrating on HRIS is that these tool applications accelerate and have a significant impact on employee-related choices.

They alter the information that is taken into consideration by making data more accessible.

Adopting an HRIS expedites the processing of administrative records, allowing Human Resource Managers to focus their resources on other HR functions (Hussain et al., 2007).

Human resource professionals' and departments' relationships with employees and methods of performing their jobs are altered by HRIS.

HRIS is far more optimistic. Employees, and HR Managers, exhibit a more hostile perception concerning HRIS when assumptions revolve around a position focused on company employees and necessary to indicate the quality of work. Management support and the function of the Human Resources department explain variances in HRIS acceptance and whether or not results are reached. (Khechine et al., 2016; Venkatesh et al., 2016). The aspect is significant due to it reflecting a distinguishing feature of HRIS in comparison to other technologies and a critical organisational factor. Similarly, in the context of HRIS, as contrasted to other system technologies, the developments addressing the impact of variables clarifying approval are slightly less consistent (Khechine et al., 2016; Venkatesh et al., 2016).

The implementation of an HRIS may require the involvement of a firm to aid employees in response to the technological transition. This assistance and support may provide an opportunity to consult with stakeholders about their expectations indicating that Human Resource Managers are needed to input the information into the system. The anticipated involvement of the HR department may also serve as a basis for setting the deployment plan for HRIS functions. Because user happiness is vital, the HR job of evaluating employees' satisfaction with the environment at the workplace could be the focus of specific functions that make HRIS more desirable. The other argument in favour of HRIS is that technology can help employees make more open, fair, and balanced decisions (Weiner B., Mahwah, NJ: Lawrence Erlbaum, 2005)

A topic that HRM should take seriously is that this problem is about how people influence organisational culture and behaviour. It also has an impact on the human resource system, customer interaction, and the messaging that organisations use when recruiting. Moreover, it forces organisations to reconsider how they engage and retain people, train staff, and interact with consumers, as well as their corporate identity and value orientation (Weiner B., Mahwah, NJ: Lawrence Erlbaum, 2005).

Because of these factors, HR must place a compensation on the organization's sustainability efforts. Finally, due to the scarcity of leadership in the field of sustainability, many entrepreneurs believe that the HR workforce should learn the opportunity to display leadership on this vital strategic priority.

2.2 Adoption of Small Medium Enterprises (SMEs) for Human Resource Information Systems.

The objectives of this research were to create and statistically 'test a model of cloud-based human resource information systems (HRIS) implementation by small enterprises based on the technology organization environment model' (Tornatzky & Fleischer, 1990).

According to the findings, small organizations are the high likely to employ cloud based HRIS for assisting day-to-day HR activities. Furthermore, quality management (positive), technical infrastructure (positive), and organization starts (negative) were all found and associated with a firm's adoption of cloud-based HRIS (Tornatzky & Fleischer, 1990). Survey finds that small- to medium-sized firms (SMEs) have been unable to leverage the cost and productivity gains made available by these systems and have fallen behind more influential 'organizations in the extent to which they have implemented the information systems' (Ball, 2001; CedarCrestone, 2014).

According to the United States Small Business Administration, 'SME companies employ fewer than 500 people' (but in some industries, this number might reach over 1500). (U.S. Small Business Administration, 2016).

The rise of cloud computing adoption of Cloud-Based HRIS by Small and Medium-Sized Businesses HRIS gives small firms an alternative to outsourcing HR or using inefficient procedures. HRIS suppliers are constantly seeking new markets for their products and ways to fulfill all enterprises' demands better. This study could be beneficial by identifying the significant factors that SMEs consider when implementing HRIS. Lastly, the factors that motivate SMEs to embrace information systems may differ across smaller and larger firms (Chong, Ooi, Lin, & Tang, 2009; Lee, Lin, & Pai, 2005).

The Technology Organizational Environmental Model-framework (Tornatzky & Fleischer, 1990) covers how the technological, organizational, and environmental settings influence an organization's acceptance and implementation of technological advancements.

Technological factors include the expense of the latest technology, the complication of the system, the program's compatibility with current operations, and the software's relative worth over ongoing operations.

Organizational considerations include top management support, present employees' technological skill, and the organization's size. Every Professional Human Resource aims to engage with, apply to, and support the organization and its' objectives. The Human Resource must, therefore, set the essential structures, strategies, and attitudes in motion (Mayo, A. 2012).

The responsibilities of a Human Resource; Engaging, integrating, and acquiring new workers. Managing rewards and pay for employees. Being able to provide employment growth for employees. They are also responsible for resolving different individuals' job concerns and creating regulations that impact the entire firm's workplace environment (Mayo, A. 2012).

Businesses were less likely to employ cloud-based HRIS for more strategic missions like salary compensation and staff planning; this is congruent with the arguments and findings of Johnson, Stone, et al. (2016), who claim that much of the research and value identified in HRIS installations so far has come from the automation of HR operations.

In line with this conclusion, the second most preferred implementation option was to have no HR software. No matter the company's size, the HR department is a crucial aspect of the operation. Its responsibilities involve improving workers' efficiency and preserving the business from any problems which might emerge inside the labour workforce (Kenton, W. 2022).

The expanding legislative and regulatory requirements, the accessibility of outside technological help, and the financing available are all critical factors for HRIS expenditures. Researchers in 'SME adoption of information systems' have yet to investigate this specific variable. However, it should be particularly essential in HR management due to the expanding data reporting obligations of local, state, and federal regulations in the United States. Furthermore, European Union and particular countries authorize employees, and the protection and use of employees are expanding and complicating corporate operations within and beyond EU borders (Tornatzky, L. G., & Klein, K. J. 1982).

2.3 Traditional Human Resource Selection Method.

The review of the literature includes a look at the current economic environment, a description of SHRM characteristics, and a demonstration of the fundamentals of achieving SHRM. Following that, two opposing and particular examples were offered to encourage viewers to think extensively about this professional subject.

According to the study, businesses may benefit from a balance of traditional and strategic Human Resource Management.

The evolution of human resource concepts enables management to operate HR practices increasingly flexibly and effectively while human resource management is advancing - due to the expansion of a unique form of HRM. "Strategic Human Resource Management held stood and been obtained to the organization's concentration" to determine which is more appropriate for businesses among traditional Human Resource Management and Strategic Human resource information systems.

HRM has traditionally existed and is defined as the techniques and approaches organisations hire to supervise individuals in areas such as recruitment, development, benefits, and general organisational climate. Strategic HRM can be defined as a "human resource management method that provides a strategic configuration to stimulate long-term corporate goals, as well as future needs" and macro-concerns. This analysis utilizes commentary and comparison to resolve which is more fit for organizations in today's industry conditions. This understanding can enable corporations to expand their own industry networks and contest (Mowe J.C.1992).

Organizations must ensure that their entire talent pool is available, utilized, and implemented when and where necessary to achieve maximum productivity. Additionally, This means focusing not only on acquiring and developing "quality" talent but also on ensuring that all of their talents are fully available, utilized, and deployed. For the best increase in value returns, organizations must invest in their greatest assets, their "employees." Depending upon criteria including sector, functional role, type of goods and services offered, and staff makeup, the word "workforce management" (WFM) can signify various things to various individuals and organizations. Work Force Management, in its definition, includes vital procedures and systems that have an influence on the development, output, reliability, deployment, utilization, and performance pay (Workforce solutions review: the official journal of the International Association for Human Resource Information Management. 2010).

According to Kenton, Will. The business department responsible for seeking, reviewing, recruiting, and developing job applicants is known as human resources (HR). Furthermore, it handles beneficial plans for employees with long-term goals. Human Resource is essential in benefitting businesses adjusting to recruitment conditions where the demand for qualified workers is increasing at a rapid pace (Kenton, W. 2022).

2.4 Decision Support System.

A "decision support system (DSS) is a form of integrated information system that analyses vast amounts of data to help businesses make decisions."

A DSS administers an organization's leadership, operational, and planning levels in constructing more informed alternatives by assessing the relevancy of anticipation and the compromises applied in determining some decision over another (Olavsrud, 2020). A DSS uses a mixture of original data, records, human expertise, and business models to assist the individual in making conclusions.

“A DSS may use database sources of data, cubes, database systems, electronic medical records (EHRs), income estimates, sales projections, and other data sources” (Olavsrud, 2020).

Information Systems researchers agree that the design and support of IS can result in significant environmental changes (Melville, 2010; Watson et al., 2010).

Green information systems (green IS) are thought to alter enterprises by integrating sustainable business practices (Seidel et al., 2012). The idea of decision support systems (DSS) emerged from studies at the Carnegie Institute of Technology in the 1950-the 60s. However, it eventually took hold in the venture in the 1980s in the type of "executive information systems (EIS)," "group decision support systems (GDSS)," and overall organisational decision support systems (ODSS).

"Decision science (or decision intelligence)" is on the increase as firms increasingly concentrate on "data-driven decision-making," and judgment researchers may maintain the solutions to unleash the prospect of decision science systems.

Decision systems, which combine involve "data science, social science, and managerial science," focus on choosing from opportunities in order to reduce the work required to make higher-quality judgments.

Decisions are the commencement of activities and stand to be required for the implementation of long-term actions. While information systems (IS), in broad, it reinforces a wide range of analytical and operational assigned objectives. Information System class of decision support systems (DSSs) is comprehended to tackle semi-structured to unformed

decision issues using advanced (mathematical) models and methodologies. Determining and implementing a viable motion can shape semi-structured or undeveloped choice dilemmas (Olavsrud, 2020).

By evaluating the accessible alternative routes, decision systems can be utilized to schedule the most transient and shortest paths between two sites.

These techniques often comprise the possibility of monitoring traffic in real-time in order to bypass congestion. Agriculturalists depend on decision systems to decide the optimal point to plant, fertilize, and harvest crop yields. Bayer Crop Science holds "integrated statistics and a decision support system" into each and every element of its procedures, including the installation of "virtual factories" at its "corn manufacturing" locations to do "what-if" assessments (2020 Olavsrud).

The judgment procedures can manage "structured, semi-structured, or unstructured decision problems" (Turban et al., 2007). Different kinds of highly specialized DSSs exist to assist decision-makers in adequately deciphering their various problems. The Support Systems allow decision-makers to gather, organize, research, and recover essential information to sustain "decision-making at each stage of the decision-making process"(Turban et al., 2007).

DSSs assist with such organized to unorganized complex situations and provide the best solution that is often effective. DSSs are an essential topic in green IS research since such optimal solutions contribute entirely to the goals of green IS. DSSs are utilized in the context of organizational decision-making and support in specific issue circumstances (Turban et al., 2007).

Such problem situations commonly arise in the “domain of green IS research”, for example, in the design, growth, construction, reprocessing, or “disposal of products or other entities” such as power, sewage, and freshwater (Melville, 2010). As a result, the idea reflects on the application context that is allowed lifespan, which is supported by a DSS”.

It initially employed in the initial stage aid selection in application contexts such as the design, development, assembling, marketing, and distribution of commodities and add things

such as energy and water. DSSs in second-stage domains deal with the reuse, repurposing, and restocking of items.

With the alignment of the research, products, or entities such as fuel cannot exist to be "reused or repurposed and cannot be transmitted" to a second stage. Decision support systems in the final domains assist in choices on the end of products' lifecycles in periods of disposal and recycling, including the handling of different types of debris. Furthermore, papers dealing with decision-supported organization, development, and the provision of services (e.g., vehicle sharing) or procedures might be allocated to a specific lifecycle (Melville, 2010).

All model driven DSSs are represented by a model object, like an optimization procedure or another sort of (mathematical) model. Nevertheless, slighter than half of these are executed and illustrated by a software prototype instantiation. As a result, the commission of the anticipated (Model) resolution needs to be revised. Because "model-driven DSSs" may have a specific impact on tackling inefficiency difficulties and, therefore, sustainability-related matters in the organisational environment, their adoption is seen as critical.

Upcoming data driven DSSs could be built to systematically acquire and analyze product sheets or legal documents to assist centralized decisions, such as raising knowledge of sustainability issues.

2.5 Implementation of Reports & Analysis of Information Systems.

Implementation revealed that there are additional elements that contribute to System implementation and efficacy, including greater HRIS levels, usage by top managers, utilization by Human Resource professionals, and associated experience. In terms of HRIS efficacy, the most powerful components are training, assistance from the information systems department, a collaboration of human resource leaders, and HR staff computer literacy. Furthermore, judgment, assistance, speed, completeness, and correctness can all improve system efficacy Lin (1997).

Proper implementation of HRIS software would result in fewer employees being required to undertake administrative activities such as bookkeeping. Meanwhile, more opportunities would be accessible for HR managers to assist their staff by delivering strategic data. Many academics feel that the future of HRIS will be bright as it opens up new avenues for human capital and organisations that effectively employ HRIS. It also gives HR personnel the opportunity to contribute to the firm's strategic vision. Foremost, by automating and entrusting many conventional HR functions to management, HRIS frees up HR professionals' time to focus on more commercially important and strategic level responsibilities (Desouza and Wazu 2003, Ball 2001).

This type of technology exists and is utilized to connect more than one individual in the form of collaborative work, assisting them in performing HR-related duties. In terms of the distinction between HR management and e-HR, one can clearly assert that the former refers to the HR unit itself, whereas the latter refers to individuals who manage such systems. In general, these solutions are aimed at improving the procedures inside HR departments.

Utilizing sampling of Catalan enterprises investigated the key aspects of efficient companies and the primary sources of firm efficiency. When modern ICT usage is integrated with human resource methods, firm efficiency improves significantly. Furthermore, both parts of the formula are unambiguous. While many of the necessary costs (such as operating systems) may be identified, identifying the intangible advantages that can be received from installing HRIS systems is far more challenging (David et al., 2010).

As per Dileep (2010), HRIS integration of HRIS and data management that enables HR leaders to complete their responsibilities more efficiently and methodically by using

technology. Other academics believe that deploying HRIS would cut their expenditures by processing information and lowering the number of required HR professionals. It also gives employees more management over their confidential data and provides administrators access to essential information and statistics.

According to Kovach et al. (2002) stated that various executive and tactical benefits; however, they "choose to focus on the primary" explanations why businesses should utilise HRIS, as identified by (Beckers and Bsat, 2002). These existed due to "HRIS" integration can: firstly boost competition, enhancing HR operations; then it generates a higher quantity, a combination of HR-related results, change the focus of HR from transaction processing to strategic HRM; it also imitate the staff as a component of HRIS; and lastly, it reconfigures the whole HR department of industry.

Conclusion

It can be concluded that HRIS systems focus on providing information, validity, reliability, and utility process for the business, as stated and mentioned by Kovach, K.A., and Cathcart in the above review. It outlines many beneficiaries not only to the upcoming employees of the organization but to the Human Resources employees.

The literature review has covered how Human Resource Management systems work alongside the HR Department and an explanation of how Decision Support Systems take the role in an organization's management, operation, and planning. Making more informed choices by assessing the relevance of uncertainty and the compromises involved in choosing some decision over another.

The review has also instigated further investigating of the business' requirements by the Human Resource Department, further analysing the needs of the systems alongside the workforce. It creates a suitable environment for Information Systems and Human Resource Management employees. This creates an environment for both parties to coexist and apply information, knowledge, and expertise. It has demonstrated the means by which Human Resources Personnel uses Human Resource Management Systems as a support to recruitment and a part of the organization's decision-making process.

Regardless, there are still some things that HRIS needs to improve in analyzing the impact on the human resource system, customer interaction, and the messaging organisations use when recruiting. Nonetheless, corporations should reconsider how they engage and retain people, train staff, and interact with consumers.

The analysis also highlights the option between 'traditional HRM' and 'strategic HRM' in today's corporate environment. It is assumed that organisations will gain in the long run by employing strategic human resource management. From another perspective, it demonstrated an effective method for achieving success by using SHRM, demonstrating the importance of SHRM.

It provided a valuable lesson where it showed how traditional HRM must be addressed by organisations due to its irreversible effects on organisational growth. Nevertheless, there are still numerous features of this particular subject worth exploring. This research should have taken into account different organisational sizes. There is no question that more research will be conducted on the topic of SHRM to assist firms in advancing their business structures and surviving in competition.

The HRIS stores performance assessment information such as the appraisal's deadline, promotional possibility, quality measurement ratings, and so forth. Information can be linked with factual data acquired from the HRIS, and the discovered knowledge can be used for training and influencing employee migration in the form of relocation and promotion.

The flourish in the current competitive corporate environment is combustible. The organization's information systems must adapt how they achieve efficacy. However, such a significant adjustment severely impacted their staff infrastructure. They concentrate on business strategy and employees in this effort through changing working environments and work routines. Because Information systems were more focused on their business goal, there were fewer possibilities for people to grow and express unique solutions. As a result, the employees felt they were valueless at the assignment.

Referencing:

Awazu, Yukika, and Desouza, Kevin C. (2003). Knowledge Management. HR Magazine, vol. 48, no. 11, pp. 107-112.

Azjen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2).

Ball, K. (2001). The use of human resource information systems: A survey. Personnel Review, 30(6).

Ball, K. S. (2001). The use of human resource information systems: A survey. Personnel Review, 30(5/6).

Bondarouk, T. et al. (2011) Electronic HRM in Theory and Practice, Electronic HRM in Theory and Practice. Bingley: Emerald Publishing Limited.

Bondarouk, T., Ruël, H. and Parry, E. (2017) Electronic HRM in the Smart Era, Electronic HRM in the Smart Era. Bingley: Emerald Publishing Limited. Available at:
<https://doi.org/10.1108/9781787143159>.

Chai, W. (2020). What Is Human Resource Management (HRM)? - Definition from WhatIs.com. [online] TechTarget. Available at:
<https://www.techtarget.com/searchhrsoftware/definition/human-resource-management-HRM>.

Chong, A. Y. L., Ooi, K.-B., Lin, B., & Tang, S. Y. (2009). Influence of interorganizational relationships on SMEs' e-business adoption. Internet Research, 19(3),

Conrad, A. (2020). HRMS Software Features List & HR System Requirements. [online] SelectHub. Available at: <https://www.selecthub.com/hris/hr-software-features-requirements-list/>.

David, J., Jelf, G., and Brandes, D. (2010). "Human resource information systems: operational issues and strategic considerations in a global environment", International Journal of Human Resource Management, vol. 7, no. 1, pp. 245-269

Dileep, A. (2010). Enterprise resource planning: the emerging organizational value systems. *Industrial Management & Data Systems*, April, 2000, vol. 100, no. 3, pp. 114-118.

Dulebohn, J.H. and Johnson, R.D. (2013) 'Human resource metrics and decision support: A classification framework', *Human resource management review*, 23(1), pp. 71–83. Available at: <https://doi.org/10.1016/j.hrmr.2012.06.005>.

Hussain, Z., Wallace, J. and Cornelius, N.E. (2007) 'The use and impact of human resource information systems on human resource management professionals', *Information & Management*, 44(1), pp. 74–89. Available at: <https://doi.org/10.1016/j.im.2006.10.006>.

Hussain, Z., Wallace, J., and Cornelius, N. E. (2007). The use and impact of human resource information systems on human resource management professionals. *Informat. Manag.* 44, 74–89. doi: 10.1016/j.im.2006.10.006

Johnson, R. D., Stone, D. L., & Lukaszewski, K. M. (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*,

Johnson, R.D. and Diman, K. (2017), "An Investigation of the Factors Driving the Adoption of Cloud-Based Human Resource Information Systems by Small- and Medium-Sized Businesses", Bondarouk, T., Ruël, H.J.M. and Parry, E. (Ed.) *Electronic HRM in the Smart Era (The Changing Context of Managing People)*, Emerald Publishing Limited, Bingley, pp. 1-31. <https://doi-org.ezproxy.mdx.ac.uk/10.1108/978-1-78714-315-920161001>

Kenton, W. (2022). Human Resources (HR). [online] Investopedia. Available at: <https://www.investopedia.com/terms/h/humanresources.asp>.

Khechine, H., Lakhal, S., and Ndjambou, P. (2016). A meta-analysis of the UTAUT model : eleven years later. *Canad. J. Admin. Sci.* 33, 138–152. doi: 10.1002/cjas.1381

Kovach, K.A. and Cathcart, C.E. (1999) 'Human Resource Information Systems (HRIS): Providing Business with Rapid Data Access, Information Exchange and Strategic

Advantage', *Public personnel management*, 28(2), pp. 275–282. Available at:
<https://doi.org/10.1177/009102609902800208>.

Lin, C.Y.Y. (1997). "Human resource information systems: Implementation in Taiwan", *Research and Practice in Human Resource Management*, vol. 5, no. 1, pp. 57-72.

Martocchio, J.J. (2006) *Research in personnel and human resources management*. Vol. 25. Amsterdam; Elsevier JAI.

Martocchio, J.J. (2009) *Research in Personnel and Human Resources Management*, *Research in Personnel and Human Resources Management*. Bingley: Emerald Publishing Limited.
Available at: <https://doi.org/10.1108/S0742-7301201634>.

Mayo, A. (2012) *Human Resources or Human Capital? : Managing People as Assets*. Milton: Taylor & Francis Group.

Melville, N.P. (2010), "Information Systems Innovation for Environmental Sustainability", *MIS Quarterly*, Vol. 34 No. 1, pp. 1–21.

Mowe J.C.(1992) The time and outcome valuation model: Implications for understanding reactance and risky choices in consumer decision making [J]. *Advances in consumer research*, . 19: 182-189.

Olavsrud, T. (2020). *Decision support systems: Sifting data for better business decisions*. [online] CIO. Available at: <https://www.cio.com/article/193521/decision-support-systems-sifting-data-for-better-business-decisions.html>.

Oracle (2022). What Is HRIS? [online] Oracle.com. Available at:
<https://www.oracle.com/ae/human-capital-management/what-is-hris> [Accessed 2 Dec. 2022].

Tansley, C. and Newell, S. (2007) 'Project social capital, leadership and trust: A study of human resource information systems development', *Journal of managerial psychology*, 22(4), pp. 350–368. Available at: <https://doi.org/10.1108/02683940710745932>.

Tornatzky, L. G., & Klein, K. J. (1982). Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. *IEEE Transactions on Engineering Management*, 1.

Tornatzky, L., & Fleischer, M. (1990). *The processes of technological innovation*. New York, NY: Lexington Books.

U.S. Small Business Administration. (2012). Frequently asked questions. Retrieved from https://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf

vom Brocke, J. and Seidel, S. (2012), “Environmental Sustainability in Design Science Research: Direct and Indirect Effect”, in Peffers, Ken and Rothenberger, Marcus and Kuechler, B. (Ed.), *Design Science Research in Information Systems. Advances in Theory and Practice*, pp. 294–308.

Weiner B., Mahwah, NJ: Lawrence Erlbaum (2005) *Social motivation justice and the moral emotions: An attributional approach* [M],

Workforce solutions review: the official journal of the International Association for Human Resource Information Management. (2010). Austin, TX: Futura Publishing.

