



THE ROLE OF HUMAN RESOURCE INFORMATION SYSTEMS IN STRATEGIC HUMAN RESOURCE MANAGEMENT

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Abstract: The human resources department in any organization is of the utmost importance for the entire organization's operation. Its many functions act as a background supporting the company by providing things like skilled and talented labor, management training services, employee enrichment opportunities, etc. Since the cost of labor accounts for most of an organization's operating expenses, human resources departments assist businesses in maximizing the value they obtain from one of their most valuable assets. However, to perform at their highest level, departments that deal with human resources need access to the appropriate instruments and resources. A human resources information system, also known as an HRIS, is a type of software program that can be utilized within the department to assist personnel working in human resources as well as managers in increasing their levels of productivity and the outcomes of their efforts. This research investigates the function that human resource information systems (HRIS) play in the context of strategic human resource management (SHRM). A quantitative method is employed. Primary data are being collected for this investigation using survey questionnaires distributed to employees of private organizations in Malaysia. The study's findings indicated that human resource information systems (HRIS) play an important part in strategic human resource management (SHRM); however, the degree to which they do so varied greatly depending on the post type.

Keywords: Human Resources Information System, Strategic Human Resource Management, Private organization, and Malaysia

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INTRODUCTION

The Human Resources Information System (HRIS) provides management with strategic data for hiring and keeping employees and integrating HRIS data into a larger-scale corporate strategy (Islam & Shuvro, 2014; Bhakuni & Totlani, 2023; Bhatia & Nangia, 2023). A decision-making tool is provided to management due to the data collected from HRIS (Nawaz, 2017; Mohammed, 2019; Masum et al., 2018; Kumar, 2013). Companies with good HR department management can perform calculations that affect the business (Vahdat, 2022; Bieńkowska et al., 2022; Snell & Morris, 2022). These calculations include things like the cost of health care for each employee, the percentage of operating expenses that go towards pay benefits, the cost per hire, the return on training, turnover rates and costs, the amount of time needed to fill certain jobs, and the return on human capital invested as well as human value added. However, it is important to note that none of these calculations reduce costs associated with the HR function.

However, the domains above have the potential to realize significant cost reductions by utilizing more comprehensive and up-to-date data that is made accessible to the relevant decision-makers. As a result, HRIS is seen as facilitating the provision of high-quality information to management, enabling management to make more informed decisions (Al-Shibly, 2011; Al-Okaily et al., 2022; Alkhwald et al., 2022). In particular, it helps deliver executive reports and summaries to senior management. It is essential for learning organizations that view their human resource as providing a significant advantage over their competitors. Therefore, HRIS is a medium that assists human resource management professionals in more effectively carrying out their job responsibilities (Gallagher, 1986; Broderick & Boudreau, 1992).

In addition, several studies that were conducted in the past offered conclusive evidence to support the role that HRIS plays in the facilitation of strategic decision-making (Ahmed, 2023; Neal et al., 2023; Ali & Mahmood, 2022; Memon et al., 2022; Srivastava et al., 2021; Asfahani, 2021; Bilgic, 2020; Pushpamali et al., 2020; Noutsu Fobang et al., 2019; Dissanayake & Nandasena, 2019; Webb et al., 2018). There has been a significant rise in the number of businesses using HRIS. For instance, Lawler and Mohrman (2003) found that the utilization of HRIS had continuously increased over the preceding years, regardless of the degree of strategic partnership held by the HR function. It was the case even though the HR function had previously held more strategic partnerships. Without a shadow of a doubt, the utilization of HRIS has significantly increased even in businesses where HR did not play a strategic role. They cautioned, however, that using HRIS, particularly fully integrated HRIS systems, only sometimes guaranteed that HR would become a full strategic partner.

Even though many studies have already made important empirical and theoretical contributions to the field of HRIS, this particular line of research is only in its infancy. It is interesting to note, but more is needed about the function of HRIS in SHRM. Further research is still required in this field, particularly in private organizations in Malaysia, as the pressure to switch from HRM to SHRM keeps mounting, coupled with severe global competition and the ever-increasing demand for HRIS.

METHODOLOGY

For this investigation, we consult a mix of primary and secondary sources of information. According to Acaps (2012) and Driscoll (2011), primary data are collected from the source of information being processed or analyzed. These data can be viewed as raw or unprocessed data. There has been no processing or analysis done on the primary data. Secondary data are data that have been collected from information that has already been analyzed at least once before it was used in the research that is currently being conducted. Primary data are collected from raw information that was not analyzed before it was used in the research. It is possible to acquire it by reading research that has been published, obtaining materials from the internet, or reading reports from the media (Acaps, 2012). Primary data are being collected for this investigation using survey questionnaires distributed to employees of private organizations.

Participants working for private organizations make up the sample for this study. Because the population being studied is unknown, a non-probability sample is used for the research.

According to Hair et al. (2006), the minimum sample size requirement should be at least five participants per item. Because the questionnaire has seventeen items, having 85 respondents will be a sufficient minimum requirement. As a result, one hundred participants from the private organization staff are anticipated to participate in the study. Descriptive statistics allows one to describe the respondent's profile (Redzuan et al., 2009; Amin & Rahman, 2011). It is the typical approach when describing the respondents' profiles and other characteristics.

FINDINGS

Profile of Respondents

Table 1: Profile of Respondents

Q1	Gender	Frequency	Percentage
1	Male	58	46
2	Female	68	54
Total		126	100
Q2	Age		
1	20-30	14.3	44.94
2	31-40	41.3	22.15
3	41-50	38.1	21.07

4	51-60	6.3	13.11
5	Above 61	0	
Total		126	100.00
Q3	Marital Status		
1	Single	33	26.2
2	Married	93	73.8
Total		126	100%
Q4	Education		
1	Secondary school	0	0
2	Certificate	16	12.7
3	Diploma	22	17.5
4	Bachelor degree	46	36.5
	Master degree	42	33.3
	Ph.D.	0	0
	Others	0	0.00
Total		126	100.00
Q5	Monthly income		
	Below RM 2,000	1	8
	RM 2001-3,000	13	10.3
	RM3001, 4000	31	24.6
	RM 4001 -5000	45	35.7
	RM 5001-6000	31	24.6
	More than RM 6000	5	4.0
Total		126	100.00
Q6	How long have you been working in the field of human resources?		
	1 to 3 Years	15	11.9
	3 to 5 Years	22	17.5
	5 to 7 Years	33	26.2
	7 to 10 Years	45	35.7
	More than 10 Years	11	8.7
Total		126	100
Q7	Do you think of yourself as having a professional demeanor?	Yes	No
Total		126	None
Q8	Do you consider yourself to have a professional demeanor, and if so, why? Please select at least one box.		
	Have an HR specific under/postgraduate degree	108	85.71
	I am trained in HRM	38	30.15
	I am a participant in the Human Resources Association.	45	35.71
	I was employed in human resources (HR) for a long time.	0	0
	Other: please specify:	0	0

54% (68 out of 126) of the respondents belong to females, while only 46% (58 out of 126) are male. It indicates that the majority of the respondents are female. Regarding age, most respondents fall into the age range of 31 to 40 years, followed by the age ranges of 41 to 50, 20 to 30, and 51 to 60, respectively. The remaining age ranges make a small contribution. The respondents who hold at least a bachelor's degree make up more than a third of the total, and this group makes up the majority (36.5%) of the respondents. The next highest level of education obtained is a master's (33.3%), then a diploma (17.5%), and finally a certificate (12.7%). Regarding marital status, 73.8% of the respondents are married, followed by single respondents, who comprise 26.2%. Regarding individual income, most respondents (35.7% of the total) fall into the range of (RM 4001-5000). It is followed by the content of (RM 3001-4000) (24.6% of the total), RM 5001-6000 (10.3% of the total), and the range of (RM 2001-3000) (10.3% of the total). A relatively low percentage of the respondents (less than RM 2,000 for 8% and more than RM 6,000 for 4%) reported having an annual income of less than or equal to the stated amount. Regarding the respondents' experience in this area, the vast majority (35.7%), followed by (26.2%), have between 7 and 10 years of experience. 17 % between the ages of 5 and 7 years, 11 % between the ages of 3 and 5 years 1 to 3 years, with an additional 8.7% having spent more than ten years in the field. We frequently hear that it is critical to conduct oneself in a "professional" manner while one is on the job. It is essential to work yourself professionally if you want to advance in your career, be taken seriously, and earn your supervisor's respect as a valuable team member. To our great relief, all respondents affirm that they maintain a professional demeanor. Most have either an undergraduate or postgraduate degree in HR-related fields, 35.71 percent are members of HR associations, and 35.15 percent have training in HR management. None of the respondents stated that they had worked in human resources (HR) for a long time.

Reliability Test

Table 2: Reliability Test

Variables	Cronbach's alpha
Performing HR responsibilities	0.890
Managing strategic HR activities	0.870
Using a strategic approach to HR tasks	0.869
The organization uses HRIS	0.887
HRIS is utilized to assist in the performance of strategic HR tasks.	0.767
Strategic HR responsibilities	0.755
The HR Information System plays a part in strategic HR tasks.	0.876
The HRIS needs to be developed.	0.866
After utilizing HRIS, one's professional standing within the organization	0.754

The results of the reliability test are presented in Table 2 below. This test is carried out to determine whether or not the respondents can be relied upon to provide consistent answers when asked questions on the questionnaire. The fact that the respondents' answers received an alpha value of 0.834 indicates that their responses can be trusted. According to Brown (2002), Rattray (2007), Tavakol and Dennick (2011), and Siala (2013), the alpha value of each group and the overall alpha value are both greater than 0.7, which indicates that the findings can be relied upon.

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Table 3: HR Responsibilities

What percentage of the following HR responsibilities do you take on?	Mean
Human resource management and workplace education	3.6
Communications	3.2
Career management	3.1
Commitment management	3.3
Leadership administration	3.2
Reengineering company processes	3.5
Managing the organization's relations with its labor unions	3.2
Decision-making Making	3.4

The findings provided evidence in support of the assertion that HRIS plays an important role in the strategic responsibilities of HR. The findings align with organizations' increased reliance on HRIS to support strategic HR tasks and the higher professional ratings that HR professionals have received after utilizing HRIS. The results are also consistent with the fact that HR professionals have increased their use of HRIS. Each of the mean values is higher than the number 3.

Table 4: Strategic Human Resources Duties

Do you believe that you are performing strategic human resources duties?	Mean
	3.5

The mean value for the question "Do you believe that you are performing strategic human resources duties?" was 3.5, which is an excellent value.

Table 5: Human Resources Activities

Which of the following human resources activities do you consider to be strategic?	Mean
Human resource management and workplace education	3.2
Communications	3.4
Career management	3.8
Commitment management	3.7
Leadership administration	3.3
Reengineering company processes	3.6
Managing the organization's relations with its labor unions	3.7
Decision-making Making	3.5

All of the mean values are higher than 3.2, with the highest value being 3.7, which indicates that the response to the question "What level of importance do you place on each of the following HR responsibilities?" is above and beyond satisfactory.

Table 6: HRIS Software

Description	Mean
Does your company make use of HRIS software?	4.2
Your thoughts on how HRIS supports strategic HR tasks would be appreciated.	4.3

"HR professionals utilize HRIS to support strategic HR tasks," HRIS stands for human resource information systems. As part of our investigation into these assertions, the following questions were asked: "Does your organization use HRIS?" and "In what ways, in your opinion, does the Human Resources Information System (HRIS) serve to support the various strategic tasks that HR carries out?" The median values, 4.2 and 4.3, respectively, offer robust support for the hypothesis.

Table 7: HRIS and Strategic Human Resources Work

How much do you rely on your HRIS to help you with the following kinds of strategic human resources work?	Mean
Human resource management and workplace education	3.7
Communications	3.5
Career management	3.8
Commitment management	3.9
Leadership administration	3.6
Reengineering company processes	3.9
Managing the organization's relations with its labor unions	3.8
Decision-making Making	3.8

According to the findings, human resource professionals view HRIS as a technology that enables them to advance their careers because the use of HRIS in their organizations boosts their professional standing. Despite this, the test conducted to determine whether HRIS supports HR strategic tasks found that HRIS supports all of the proposed strategic studies. The mean of every single value is higher than 3.5.

Table 8: HRIS's Role

How significant is HRIS's role in the various strategic HR tasks?	Mean
	3.7

In response to the question, what role does HRIS play in the strategic HR tasks that must be performed? The human resources information system, an HRIS, is important in strategic HR tasks. A mean score of 3.7, considered satisfactory, has been assigned to this inquiry.

Table 9: Implementing HRIS System

Considering the items listed below, how important is it for your company to implement an HRIS system?	Mean
Human resource management and workplace education	4
Communications	3.9
Career management	4
Commitment management	3.9
Leadership administration	3.8
Reengineering company processes	4
Managing the organization's relations with its labor unions	4
Decision-making Making	4

The highest mean value on the test for human resource development and workplace learning in the organization was 4, and the lowest was 3.8. It is consistent with the test to determine whether HR professionals believe organizations should develop HRIS. According to the findings, HR professionals believe HRIS development should be included in most strategic HR tasks. It is particularly true regarding developing HRIS for strategic HR tasks such as interaction, human resource development, workplace learning, career planning, dedication, leadership management, restructuring business processes, and decision-making.

Table 10: Improvement of HRIS System

After using HRIS, in what ways do you feel it has improved your professional standing within the organization?	Mean
	4.2

The presumptions for Question 17 are that the degree to which an HRIS supports the presumed strategic HR tasks corresponds to the degree to which the HRIS' technological enhancement is strengthened. In addition, the strength of the HRIS technical enablement increases in proportion to the rise in the status of HR professionals within the organization due to their use of HRIS in strategic HR tasks. The value 4.2 has been determined to be the mean.

DISCUSSION ON FINDINGS

In the past, the primary focus of HR professionals was on ensuring that their organizations complied with various regulations. This task naturally placed HR professionals on the periphery of most businesses. On the other hand, in their modern world, they have access to a wealth of data on everything from labor markets to work procedures, and they sometimes have to put this information to use.

Every HR professional should have expertise in at least one other field's specialty(s). To become more effective in providing their organization with technical guidance and human capital services, HR professionals should develop the skills necessary to act as advisors and strategic partners. Any of the roles could potentially contain a leader. HR professionals can demonstrate leadership skills at every level of an organization, regardless of whether or not they are in a formal leadership role.

We frequently hear that it is critical to conduct oneself in the workplace in a manner considered "professional." It is essential to work yourself professionally if you want to advance in your career, be taken seriously, and earn your supervisor's respect as a valuable team member.

The findings of this research showed that every respondent claims to be a professional, even though their responses vary. Eighty-five and seventy-one and a half percent of them have an undergraduate or postgraduate degree in human resources, thirty-five and seventy-one and a half percent are members of an HR association, and thirty-five and fifteen percent are trained in HRM. Nobody who responded to the survey had worked in human resources (HR) for a significant time.

The world in which we live is dynamic and ever-changing at all times, and as a result, new technological advances are being made all the time. Because of this change, the organization's leaders need to be aware of the various forms of technology which can potentially increase the organization's efficiency. Since their inception more than half a century ago, human resource information systems (HRIS) have undergone significant changes, expanding beyond their initial goals of digitizing paper records and storing them in computer databases. In today's world, HR and payroll systems can perform several functions associated with HR. The HR software we use today is more than just the data storage systems we were accustomed to operating in the past; it is feature-rich and completely self-contained. The Human Resources Information System (HRIS) that is being developed will assist the organization in effectively storing employee data in a manner that is both more secure and accurate. Today's human resources information systems have evolved into versatile tools that HR professionals can use regularly to accomplish various tasks. In the past, it was common practice for businesses to record and monitor data using paper and electronic spreadsheets. However, due to technological developments, many companies have realized they require implementing more advanced computerized systems, such as Human Resource Information Systems. Companies that switch to HRIS can keep records that are more accurate and up to date, enabling them better to prepare themselves for the future growth of their businesses. An HRIS will increase the department's efficiency level in most cases regarding the HR department's decision-making process. The quality of the decisions that are made should also improve; as a result, the productivity of both employees and managers should rise and become more efficient.

According to the findings of this study, there is substantial backing for the assertion that HRIS plays a significant part in strategic HR tasks. It was discovered by examining the extent to which this statement

was supported. These findings are consistent with the increased reliance that organizations have placed on using HRIS in support of strategic HR tasks, as well as the higher professional ratings that HR professionals have received after using HRIS.

An increasing number of organizations have used Human Resource Information Systems (HRIS) over the past decade to collect, store, and analyze data about human resources (Ball, 2001; Barron et al., 2004; Hussain et al., 2007; Ngai et al., 2006).

The research that has been done on HRIS so far suggests that these systems have varying effects on HR across organizations. However, it offers very few explanations for why this variation occurs. According to early surveys, the most common use of HRIS was to automate mundane tasks and "replace filing cabinets" (Martinsons, 1994). According to the findings of Ball (2001), Human Resources needed to take advantage of the strategic opportunity presented by HRIS. (Hussain et al., 2007) Research conducted more recently suggests that HRIS is being used more frequently to support strategic decision-making in HR. However, the degree to which HRIS is used strategically varies across organizations, with most organizations continuing to use HRIS primarily to replace manual processing and reduce costs (Bee & Bee, 2002), even though the degree to which HRIS is used strategically varies across organizations.

According to the findings of this study, HRIS is likely used to support strategic human resource tasks. The results align with organizations' increased reliance on HRIS to help their strategic human resource responsibilities.

HR professionals generally agreed that HRIS was implemented in order to provide support for strategic HR activities. It may be explained by the fact that increased uses of HRIS make it possible for professionals to achieve improved performance, making participation in internal consultancy easier. The findings lent credence to the conclusion Gardner et al. (2003) reached, which stated that extensive use of IT paves the way for HR professionals to have greater information autonomy. This disclosure gives the impression that companies will more or less need to rely on HRIS technology to carry out their strategic human resource management responsibilities effectively and efficiently. Because of this, both upper management and HR professionals need to demonstrate unwavering dedication to the goal of successfully implementing an HRIS. In a dynamic global market where information technology is the norm, businesses that do not have this technology may not only have a difficult time attracting human resource professionals who do not yet have HRIS skills and are looking for one on the job, but they may also lose those human resource professionals who already have these skills and may want to develop and improve upon them. It is because firms that still need this technology may need help to compete with businesses that do.

The findings of this study suggested that human resource management professionals consider HRIS an enabling technology. HR professionals working in organizations that use HRIS enjoy higher professional standing. Evidence suggests that human resource management information system (HRIS) professionals view this software as a technology that enables things.

Since the 1980s up until now, organizations, both big and small, have been using HRIS. The ever-increasing complexity of payroll systems during this period required greater adaptability in the information system and increased access to it. Because of personal computers, HRIS is now accessible to businesses of any size and can be purchased at an affordable price. HRIS began as a straightforward method of record-keeping but has since developed into a sophisticated suite of analytical tools to support management decision-making. Then, by the changes brought about by globalization and technological advancement, a computerized HRIS was developed. This system's goal is to combine the processes involved in human resource management (HRM) and information technology (IT) into a single database by utilizing enterprise resource planning (ERP) applications. The mainframes used in the past to manage activities have been replaced with HRIS, which aims to combine the various aspects of human resources, such as payroll, labor productivity, and benefits management, into a single system that requires less investment of financial resources. In some circles, HRIS is called Human Resource Management System (HRMS). In many companies and other organizations, centralized payroll processing sections have recently begun to be split off from other human resource functions. Some companies outsourced their payroll processing to external payroll bureaus to save money and take advantage of the greater

technological expertise offered by these bureaus. Now, the organization uses various software to cater to their requirements and preferences.

According to the findings of this study, the test regarding human resource development and workplace learning in the organization recorded a mean value of 3.8 as the lowest and a mean of 4 as the highest. It holds when compared to the test conducted to determine whether or not HR professionals believe that organizations ought to develop HRIS. According to the findings, HR professionals believe an HRIS should be developed for most strategic HR tasks. The development of HRIS in communication, human resource development and workplace learning, career management, commitment management, leadership management, business process reengineering, and decision-making as strategic HR tasks illustrates this point very clearly.

Broderick and Boudreau (1992) investigate HRIS's role in reducing costs, improving quality, ensuring customer satisfaction, and fostering innovation. According to Sadri and Chatterjee (2003), an HRIS can speed up the decision-making process for human resources and bolster an organization's identity. Most businesses implementing HRIS rely on readily available, easy-to-reach, measurable measures to justify financial investment.

The findings of this research indicated that the degree to which an HRIS supports the presumed strategic HR tasks is inversely proportional to the degree to which the HRIS' technological enhancement is strengthened. Furthermore, the technological enablement of HRIS improves in proportion to the high standing of HR professionals in the organization due to the utilization of HRIS in strategic HR tasks.

CONCLUSION

The study's results demonstrated that HRIS is important in strategic HR tasks. SHRM can also use the capabilities offered by HRIS to mold the integration between HRM and IT (Hendrickson, 2003). It indicates that human resource professionals will be able to adjust to their new roles without experiencing any anxiety because their new role, SHRM, will continue to be supported by HRIS. It is good news for those in the field.

Nevertheless, the extent of the support for particular strategic HR tasks varied depending on the kind of organization that was being discussed. Larger firms and companies have received significant assistance from their HRIS systems in performing the most strategic human resources functions, including communication, human resource development and workplace learning, career management, business process reengineering, and decision-making.

There was a widespread consensus among HR professionals that HRIS was utilized to support strategic HR tasks. It may be explained by the fact that increased uses of HRIS enable professionals to achieve improved performance and, as a result, facilitate participation in internal consultancy. In other words, HRIS makes it easier for professionals to do their jobs. The findings lent credence to the discovery by Gardner et al. (2003), which stated that extensive use of IT paves the way for HR professionals to have greater information autonomy. The findings were that extensive use of IT paves the way for increased information autonomy. This disclosure suggests that companies will more or less need to rely on HRIS technology to effectively and efficiently perform the strategic human resource management tasks they are responsible for. It necessitates an unwavering dedication to the goal of a successful HRIS implementation by management and HR professionals. In a dynamic global market where information technology is the norm, businesses that do not have this technology may not only have trouble attracting human resource professionals who do not yet have HRIS skills and are looking for one on the job, but they may also lose those human resource professionals who already have these skills but who may want to develop and improve upon them. It is because firms that still need this technology may need help to compete with businesses that do.

The study's findings again demonstrated that human resource professionals agree that using HRIS for strategic human resource tasks improves professional standing within the organization. It was in line with Brockbank's (1999) findings that the use of HRIS by HR professionals not only provides value to the organization but also improves the HR professionals' standing within the organization. This disclosure

implies that human resources professionals must improve their proficiency in information technology and become up-to-date on the most recent developments in HRIS technology to maintain their position as competitive applicants. As a result, businesses will also need to develop and plan HRIS training programs per specific strategic HR tasks for prospective and current HR professionals who work for the company. Having a higher professional standing suggests having an effective and efficient workforce. It, in turn, leads to improved performance and increased output, which ultimately results in higher profit margins and acceptable returns on investment (ROI).

The study's findings indicated that human resource information systems (HRIS) play an important part in strategic human resource management (SHRM); however, the degree to which they do so varied greatly depending on the post type. However, due to the limited sample size, proceeding cautiously when generalizing the study's findings is important. Despite this, the findings can serve as a foundation for further investigation.

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