

# UTILIZATION OF HUMAN RESOURCE INFORMATION SYSTEM IN MANAGING BUSINESS: THE MALAYSIAN EXPERIENCE

- Khulida Kirana Yahya
- Siti Zubaidah Othman

## ABSTRACT

*This paper examines the usage of information technology (IT) on human resource management, particularly the utilization of human resource information system (HRIS) in managing business. It outlines how the changing technology has influence the human resource management functions such as planning, recruitment and selection, performance appraisal, training and development, compensation and benefits, and safety and health. Pertaining to that, information technology has changed the structure and system of the organization indirectly, therefore organizations will have to adapt to the changes in order to remain competitive. This paper will focus on the application of human resource information system in Malaysian companies.*

## INTRODUCTION

The last few years have brought many dramatic changes in business which require the Human Resource Department and HR managers to change. Economic pressures have resulted in restructuring programs that have forced organizations to operate with fewer but better trained personnel. In order to satisfy these changes, many organizations all across economic sectors have turned to Human Resource Information Systems (HRIS).

As competitive pressure increase for many organizations, the need to better manage their most important asset (employees) has never been greater. Whether big or small, organizations are looking to human resource information systems (HRIS) to help more informed decisions, get the most out of employee, streamline HR processes and better allocate HR resources.

The globalize economy enabled by rapid convergence in information, technology and communication has triggered the need for improvement and changes in human resource management. In terms of organization, the human resource strategies must be aligned to the business need, therefore, it requires competent human resource practitioners to position the human capital as a strategic input to facilitate business.

The Malaysian government's vision towards an industrial country status by the year 2020 and the setting up of Malaysia's Multimedia Super Corridor (MSC) has encouraged organizations in the country to use computer and information technology in their daily operations.

## **HUMAN RESOURCE INFORMATION SYSTEM**

Human resource information system (HRIS) can be defined as a system used to acquire, store, manipulate, analyze, retrieve and distribute pertinent information regarding an organization's human resources (Kavanagh et al, 1990). Even though HRIS comprise hardware and software, and it also includes people, forms, policies, procedure and data. As Kovach and Cathcart (1999) was saying, "it is easy for the HRIS in terms of the hardware and software. However, it is the most important elements of an HRIS is not the computer but the information". The main purpose of the HRIS is to provide service in the form of information to the "client" or users of the system since there are variety of potential users. The focus of that information may be to facilitate or support strategic, tactical, and operational decision making, to avoid litigation, to evaluate programs, policies or practices and to support daily operations (Kavanagh, et al, 1999).

The establishment of an HRIS looks towards the integration and support for three essential corporate processes; strategic planning, operational planning and human resource planning. It is crucial that any system can respond to changing directions, processes and practices in the field of human resource management. For example, future trends are likely to involve: decentralization of personnel information to line management, increased emphasis on analysis and interpretation of organization-wide trends in absenteeism and vacancy filling and proactive personnel activities such as performance appraisal (Hoise, 1995).

Until recently, the HRIS has been viewed as basic databases that keep track of personnel transactions. In the current reengineering effort, HR's link with IS and IT is becoming one of collaboration on solutions rather than one in which IS supports HR with programming services. HRIS is enabling many HRDs to move beyond personnel's administrative legacy to take on a much more strategic role in the company. In many organizations, HR and IS are collaborating on enterprise-wide systems that are designed to provide management with critical information about workforce issues (Santosus, 1995). "A comprehensive base of accurate, up-to-date HR infor-

mation that is readily accessible to decision makers throughout the organization is absolutely essential to HR's ability to perform its key roles" (Minneman, 1996).

In general, an HRIS reduces the usage of paper files that the HR department and probably other areas in the organization maintain. It makes information available, under strict, pre-defined security conditions to personnel in HR or throughout the organization. It provides Human Resource personnel, management and outside agencies with required reports as needed and offers the HR department and easy-to-use tool to keep their critical information up to date and available as required (Safran, 1994).

According to Kovach and Cathcart (1999), an HRIS need not be complex or computerized. HRIS can be as informal as the payroll records and time cards of a small business, or even as the computerized human resource databases of major manufacturers, banks and governments. HRIS can support long range planning, with information for labor force planning, and supply and demand forecasts; staffing with information on equal employment, separations, and applicant qualifications; and development with information on training program costs and trainee work performance. HRIS can also support compensation programs with information on pay increases, salary forecast, and pay budgets; and labor/employee relations with information on contract negotiations and employee assistance needs. In every case, the purpose is to provide information that is either required by human resource stakeholders or supports human resource decisions.

Even though the purpose of HRIS applications is to administer processing costs and time and assist HR managers, non-HR managers, and employees to make better decisions but study in the UK and US have found that human resource managers rarely use the computer well when carrying out their work (Kinnie and Arthurs, 1996). This indicated that organizations focus their efforts on administrative tasks such as record keeping and payroll compared to systems available which have the "potential to alter the nature of the work performed by human resource managers and professionals from an administrative to a strategic support role".

Many researchers have showed that the use of information technology in human resource management had influence human resource functions such as planning, recruitment, selection, performance appraisal, training and development, compensation and benefits, and safety and health.

## **Manpower Planning**

The application system will ensure that the organizations have sufficient and suitable number of personnel to meet their job requirements. In addition, the systems will support forecasting of manpower needs in the inclusive of multi-skilling and facilitate the formulation, monitoring and evaluation of right sizing policies.

## **Recruitment**

The system will ensure that the organization is able to hire the best people for the job. The system will also allow the organization to advertise, support on-line applications, review applications, interview applicants, offer and appoint new employees. With computerized data, recruiters can analyze past performance to determine the location and media strategies that produce the greatest number of applicants who are offered and accept positions.

## **Selection**

The system should be able to match the applicant and the job. Able to screen applicants faster and more consistently. Create more complete, consistent, and professional-looking communications with applicants and new hires. Keep job-posting lists current, thus fostering the goodwill of employees and human resources staff.

## **Training**

The system will ensure that all personnel are equipped with the right skills and knowledge to perform their tasks. The system will be able to analyze training needs, select candidates, support scheduling of training and evaluate training.

## **Performance Appraisal**

The system will ensure that performance appraisal are conducted efficiently, effectively, accurately and in a timely manner so that personnel are compensated based on their performance, given the accurate career advancement, promotion, and training needs.

## **OCCUPATIONAL HEALTH AND SAFETY**

The system should be able to assist management in monitoring the patterns of work-related injuries, types of accidents occurred in the organization, and able to expediate medical and workers' compensation claims. The computerized system does not affect the surveillance of work activities, although it may issue reminders about inspections and corrections required. Health promotion remains primarily a psychological and interactive process that relies on the knowledge and skills of safety and for the most part is unaffected by the automation process.

From a broader perspective, HRIS results in a well-managed business with better-informed employees. Operations become more efficient, work duplication eliminated, HR administration is more streamline. Top management and employees can spend more time in decision making and strategic planning. HRIS allow for the ability to plan for growth and improve productivity from all level of the organization (Berardine, 1997)

HRIS has changed the structure and system in the organization where the structure is flatter and the number of employees could be reduced. Moreover, with the changes informal communication could be established between management and employees, and thus this could reduce red tape and faster decision making could be implemented.

## **MALAYSIAN EXPERIENCE**

The aim of this paper is to look at the utilization of HRIS in HRM functions among Malaysian companies. A sample of fifteen organizations located in the Northern Region of Malaysia was selected at random. Personal interviews were conducted with the human resource officer to gather information on the types of HRIS and functions used in their organizations.

## **TYPES OF SOFTWARE APPLICATIONS**

The types of software applications used by the organization ranges from Atcom, People Soft to HRMS and SISPEN. The application used also varies from the basic function of payroll, working schedule to benefits, training and development, and also industrial relations.

The number of employees in the organization ranges from a minimum of 6 employees (Pusat Komputer Perlis) to 3,321 employees (Sharp-

Roxy Corporation). This exhibit some understanding as to why the organization had chosen a different HRIS in their operation. Most of the organizations started using HRIS in the late 1980s and 1990s.

## **INTEGRATION OF HRM ACTIVITIES AND COMPUTER SOFTWARE**

It has been indicated that there are varieties of software applications used to perform numerous activities by the sample organizations. This paper looks at the extend to which participating organizations have integrated computer software into their HRM activities. In general, all the organizations are actively utilizing the use of computer software to help them perform HRM activities. Figure 1 displays the results of organizational efforts to use computer software to perform specific HRM activities such as payroll/compensation, training and development, performance appraisal, benefits, selection and recruitment and industrial relations.

The results show the function's where most work had been computerized are payroll (86.6% or 13 of the organizations). This exhibits that most organizations emphasis the usage of computer system to speed up the payroll process and to increase the data accuracy. Moreover, payroll is a complex task where lots of numbers are involved.

Basic employees' information indicated being used by 66.6% (10) of the organizations. This shows that for organizations that have many employees, there is a need to install such system in order for management to update and access the information easily. Moreover, all the information kept in this system can be used by other functions in human resource.

In terms of training and development, only 4 of the organizations (26.67%) indicated that they use the HRIS in their operations. This shows that very few organization utilized the computer applications to keep employees record regarding their training needs. Training and development is important to employees as it could be use to determine the skills, ability and knowledge they require for promotion and career advancement. Even though studies have shown that training is usually the last function to be computerized, but it depends on the policy of the organization whether to computerized or not.

On the other hand, only 3 (20%) of the organizations indicated they use HRIS in evaluating employees performance appraisal. This exhibits that most organization use the computerized system to assist in managing employees performance in relation to provide avenue for career advancement and training needs.

The benefits are being utilized by 6 organization (40%). This is expected as benefits involve lots of numbers and it is a very tedious process. The type of benefits differs from one organization to the other. Therefore, the needs and usage also differs by nature of the organization.

Selection and recruitment is being used by only 3 (20%) of the organization. Organization that computerized the selection and recruitment function usually has lots of applications for various positions. Therefore, the system could speed up the process of matching the applicant and the job.

However, only one organization indicated that they use HRIS in their industrial relations function. The organization that implemented this function is a subsidiary of a multinational corporation. In the Malaysian context, industrial relation is still not seen as an important element to be computerized yet.

From the above, it could be concluded that most organizations utilized the HRIS for financial administration function, that is, mainly for payroll purposes. The basic employees' information or personal records indicated being utilized by only 66% of the sample organization.

The results show that the degree of utilization of the HRIS functions varies from organizations', and the function also differs according to the needs and number of employees the organization employed. The utilization of the HRIS in Malaysia context (Northern Region) is rather low compared to other countries in Europe or America. The reasons for this could be due to the low computer skills and abilities, lack of awareness in the organizations and the high cost of implementing the HRIS.

## DISCUSSION

From the interviews conducted with human resource officers, it could be concluded that although there are variations in the type and degree of utilization of HRIS functions in those organizations, the system could assist management in the daily operation.

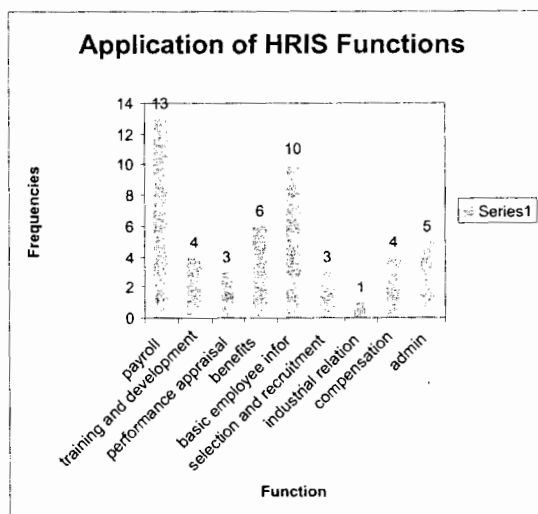
Most of the human resource officers indicated that HRIS are able to give employees' access/power to control information and access to more current and updated information at times comfortable to them. This could reduce bureaucratic system and help to strengthen the employer and employees relationship in the organization. Besides that, management of department functions could be more efficient since the system help to reduce mistakes in terms of employee data/information and to increase data accuracy and speed up data processing. In addition, the system also could reduce

the employee's workload where this can lead to a better performance. Apart from that, organizations also could benefit from this system by reducing operational cost and increase competitiveness among organizations. The system could replace the filling system that was not systematic and unsafe, and further a more sophisticated reports could be produced.

The human resource officers have encountered difficulties with the implementation and operation of HRIS. These include slow and problematic server, complicated and not user friendly software, unable to fulfill organization needs, lack of trained employees to handle the system, unable to solve each individual arising problems, and lastly, the system is unable to conduct activities such as counseling, interviews, supervisions and monitoring.

The majority of the HR officers also indicated that management should include HR staff in determining the types and functions of the system required for HR purposes. This is to ensure the right software and requirements related to HR functions are included in the system. Currently the purchasing decision was done either by top management or the computer department. It is suggested that Organization should expand their utilization of the HRIS to other HRM functions such as manpower planning, career development, and occupational safety and health, as this are important functions to both the employees and the management.

Figure 1 : Application of HRIS Function





## CONCLUSION

HRIS is seen as a technology-led change initiative, which will be the main catalyst in propelling the effective management of human resource in managing business.

Organizations can spend thousand of dollars on a new computer system to increase productivity, but if employees can't use it or don't want to, they are wasting their resources. On the other hand, HR departments need to devote more attention to the education and training of employees in the use of IT knowledge, particularly the use of HRIS. This could enhance and flourish employees' skills, abilities and also the organization's capabilities in producing knowledge employees that have current skills and information.

## REFERENCES

- Berardine, T.(1997). Human resource information system. *Canadian Manager*, 22(4), 17-19.
- Ceriello, V.R & Freeman, C. (1992). Human Resource Management Systems: Strategies, Tactics and Techniques. New York: Lexington Books.
- Hoise, P. (1995). Promoting quality in higher education using human resource information system. *Quality Assurance in Education*, 3:1 <http://www.emerald-library.com/brev/> download: 2/27/00.
- Kavanagh, M.J., Gueutal,H.F.& Tannenbaum, S.T. (1990). *Human Resource Information Systems: Development and Applications*. Boston: PWS-KENT Publishing Co.
- Kinnie, N.J & Arthurs, A.J. (1996). Personnel specialists advanced use of information technology: evidence and explanations *Personnel Review*, 25(3), <http://www.emerald-library.com/brev/01425cal.html> download: 2/27/00.
- Kovach, K.A. & Cathcart Jr. (1999). HRIS: providing business with rapid data access, information exchange and strategic advantage. *Public Personnel Management*, 28(2), 257-283.
- Minneman, W.A .(1996). Strategic justification for an HRIS that adds value. *HR Magazine*, December, pp. 35.
- Safran, G. (1994). Human resource information systems, *Canadian Manager*, 19:2, pp. 13.
- Santosus, M .(1995). Personnel matters *CIO Magazine*, May, pp. 44.