Human Resource Information Systems (HRIS) - Its role and importance in Business Competitiveness

Dr. Nisha Aggarwal¹, Mona Kapoor²

Abstract

Emerging hyper-competitive era in the last few decades has increased the need of information system and technology in human resource management for competitiveness. The revolution in information technology is completely and swiftly redefining the way things are done in nearly every field of human activity. Human resources and information technology are two elements that many firms are looking to utilize them as strategic weapons to compete. Information systems especially developed for human resource management referred as human resource information system (HRIS) is an integrated system necessary to collect, record, store, manage, deliver and present data for human resource and hence promotes effectiveness of human resource system. Human resource technology or human resource information system shapes an interaction between human resource management and information technology. There has been a considerable increase in the number of organizations gathering, storing and analyzing information regarding their human resources through the use of human resource information system. HRIS has become a critical factor in making business competitive and effective. The present paper focuses on the role and importance of HRIS towards business competitiveness. The paper will also highlight the need, components, benefits and functions of HRIS.

Keywords: Human resource information system, business competitiveness, human resource management, information system.

Introduction

Emerging hyper competitive era in the last few decades has increased the need of information systems and technology in human resource management for competitiveness. Information systems contribute to improve the organizational performance, and increase the competencies

Associate Professor, PG. GCG-11, Chandigarh. E-mail: nishaaggarwal42@yahoo.co.in
 PhD Research Scholar, Manav Bharti University, Solan. E-mail: shobha.kapoor3@gmail.com

of human resource professionals. In today's global competitive business environment, the organizations broadly implement information systems and information technology to change-improve-transform the human resource management system. With the evolution of information systems and technology, meeting information requirements has been greatly enhanced through the creation of Human Resource Information Systems (HRIS). HRIS merges traditional human resource management as a discipline and in particular it's basic human resource activities and processes with the information technology field. Human resource professionals in current scenario require accurate and timely data on recruitment, selection, training, development, compensation, productivity, quality of life, attrition rate etc. HRIS provides a complete support in the management of all processes, activities, data and information required to manage human resource in a modern company. It covers all aspects of human resource management and is an integrated system necessary to collect, record, store, manage, deliver, manipulate and present data for human resources. The present paper aims at providing the role and importance of HRIS towards business competitiveness. The present paper also highlights the need, components, benefits and functions of HRIS.

HRIS DEFINED

Human Resource Information Systems (HRIS) is a process that utilizes the information technology for the effective management of human resource functions and applications. It is a computerized system typically comprising a data base or inter related data base that track employees and their employment specific information (Gill and Johnson, 2010). It can be briefly defined as integrated systems used to gather, store and analyze information regarding an organizations human resources (Hendrickson 2003).

HRIS - Why it is needed?

HRIS provide human resource professionals with opportunities to enhance their contribution to the strategic direction of the firm, First by automating and devolving many routine human resource task to the line management, HRIS provides human resource professionals with the time needed to direct their attention towards more business critical and strategic level tasks, such as leadership development and talent management (Lengnick et al., 2003). Other incentives for HRIS implementation are mentioned as following.

- * Formulation of policies and programs related to human resource.
- * Facilitating decision making in areas like promotion, transfer, nomination, setting employees provident funds, retirement, gratuity, leave travel concession and earned leave compensation.
- * Supplying data and submitting returns to government and other statutory agencies.
- * Collecting appropriate data and converting them to information and knowledge for improved timeless and quality of decision making.
- * Producing a greater number of varieties of accurate and real time human resource related reports.
- * Increase competitiveness by Reengineering human resource processes and functions.
- * Improving employee satisfaction by delivering human resource services more quickly and accurately.
- * Provides a comprehensive information picture as a single, integrated data base; this enables organizations to provide structural connectivity across units and activities and to increase the speed of information transactions (Lengnick et al., 2006).

Considering these facts, it is important to mention that the human resource management function needs to invest in information technology training and communicate the benefits of employee's participation and involvement in HRIS services (Panayotopoulou et al., 2007).

Components of HRIS

HRIS has major three functional components as shown in Figure 1.



Figure 1: Components of Human Resource Information Systems

Input-Input function provides the capabilities needed to get human resource data into
the HRIS. It enters personnel information into the HRIS. First of all procedures and
processes are required to gather necessary data, once collected, these data's must be
entered into the system. Edit tables can be used to determine if the data are

acceptable. These tables contain approved values against which the data are automatically checked. The system should have the capability to easily update and change the edit tables. Now days scanning technology permits scanning and storage of an actual image of an organization document including signatures and handwritten notes.

- 2. Data maintenance- Data maintenance function is responsible for the actual updating the data stored in the various storage devices. As changes occur in human resource information, this information should be incorporated into the system, as new data are brought into the system it is often desirable to maintain the old data in the form of historical information. It updates and adds new data to the data base after data have been entered into the HRIS.
- 3. Output- This function of HRIS is most visible one because the majority of HRIS uses are not involved with collecting, editing, and updating human resource data; rather they are concerned with information and reports to be used by the systems. In order to generate valuable output for computer users, HRIS processes output, makes necessary calculations and formats the presentation.

HRIS is a computerized system that aids in the processing of information relating to human resource management. A well-knit HRIS acts as a worthy decision, a device; designed to fulfill the manpower information needs of the organization (Kovach and Cathcart, 1991).

Benefits of HRIS

HRIS helps in recoding and analyzing employees and organization information and documents, such as employee hand books, emergency evacuation and safety procedures (Fletcher, 2005). It also helps the organizations to keep an accurate, complete and updated data base that can be retrieved from reports and manuals. HRIS advantages can be systematized according to Kovach (2002).

- 1. Increase competitiveness by improving human resource operations
- 2. Ability to implement a number of different operators to human resource
- 3. Shift the focus from the operational(transaction) human resource information to strategic human resource information

- 4. Include employees as an active part of the HRIS
- 5. Reengineering the entire human resource department

(Krishna and Bhaskar, 2011) summarized the benefits of HRIS as mentioned in Figure 2.



Figure 2: Overall benefits of HRIS

HRIS benefits can be categorized as following:

- 1. Benefits for management
- 2. Benefits for human resource department
- 3. Benefits for employees.
 - 1. Benefits for management includes:
 - * Increase of overall decision making efficiency.
 - * Cost reducing and better control of budget.
 - * A clear vision of business including business transparency.
 - * Sharp insight into the process of hiring and firing employees, at the aggregate level.

- 2. Benefits for human resource department includes:
- * Possession of single data base of all employees in the company with all necessary information and opportunities of different reports.
- * Elimination of paper forms that are much slower and with higher probability of errors.
- * The ability to update data bases in real time, on the basis of all changes, which is of extreme importance to regionally diversified companies.
- *Minimize errors that are caused by human factor.
- * Improved management system in accordance with the legislation.
- * Elimination or reduction of redundancy in the system.
- * Standardization of business processes.
- 3. Benefits for employees:
- * Saves time (Time management)
- * The possibility of independent access to data, which often means working in one software window.
- * 24/7 data availability.
- * Increasing staff morale.
- * Automatic tracking and reminder to business obligations and events.
- * Encouraging employees to make decisions and initiatives on the basis of information obtained in the HRIS system.
- * The ability to attend internal training courses via the web and the development of personal skills and knowledge.

HRIS also has the potential to fundamentally affect revenue channels, beyond cost reduction and productivity improvements. It may enhance innovation, and speed up time to market for products. In addition HRIS can fundamentally change the way individuals relate to one another and to their organizations through various communication media.

Importance of HRIS in Business Competitiveness

Survival and success in current fast paced globalized economy increasing depends on competitiveness i.e. ability to compete. It is multidimensional concept. It has become the name of the game today to describe economic strength of a country or industry or firm with respect to its competitors in the global market economy in which goods, services, people,

skills and ideas move freely across geographical borders. Information management, in general and HRIS in particular, has become critical factor in making business competitive and effective as shown in Figure 3. Companies are increasingly realizing the advantage of having systems that capture, analyze and report on the host of human resource aspects that are critical to running a business. Human resource management consist of the activities, policies and practices involved in obtaining, developing, utilizing, evaluating ,maintaining and retaining the appropriate number and skill mix of employees to accomplish the organizations objectives. HRIS is a key management tool used for understanding the patterns for human resource policies, actions and employee behaviors as well as for identifying gaps in human resource systems and the effectiveness of human resource systems. HRIS is a software package—that provides a complete management system for human resource activities in businesses.

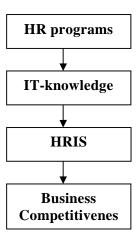


Figure 3: Road map business competitiveness

HRIS MODEL

HRIS designed for human resource management plays a vital role in implementing the strategic business objectives of the organization, and in running the daily functions effectively and efficiently to improve the productivity and proficiency. HRIS has been addressed as a tool that organizations use to solve and manage a variety of issues and processes connected to the management of people. On the one hand, technology may be used for different purposes within particular human resource functions- for recruitment and selection, performance evaluation, compensation and benefits, training and development,

health and safety, employee relation and legal issues, retention and work life balance (Enshur et al., 2002). On the other hand, a company that uses a complex mix of HRIS solutions enables the human resource function to manage in human resources as well as employees information flow in an integrated approach across the entire employment cycle of each individual, thus shifting the attention from a process centered human resource to a customer(employee)-centered human resource management. The HRIS model is outlined in the Figure 4.

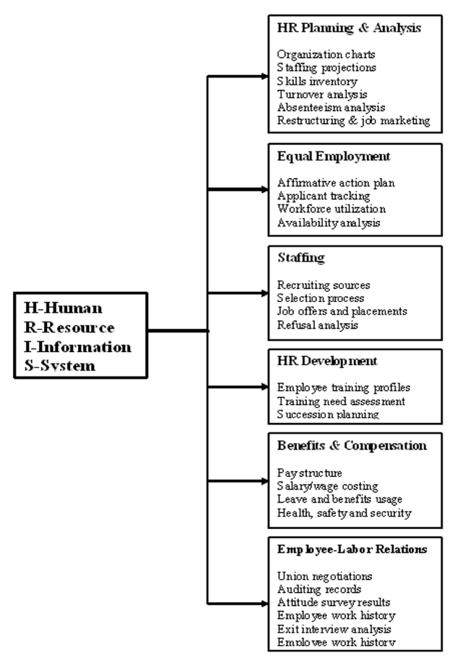


Figure 4: Model of Human Resource Information System (HRIS)

Importance of HRIS

HRIS primary role of integrating human resource management and information technology has lead to competitive advantage and hence attracted many human resource managers and professionals. Other vital facts of HRIS reported in literature are effective human resource decision making and also strengthening an organization's character (Sadri and Chatterjee, 2003), reducing process and administration cost, speeding up transaction processing, reduce information errors and improve the tracking and control of human resource actions (Lengnick et al., 2003), crucial in terms of operating, controlling and planning activities in human resource (Lenderer 1984).

It can be summarized that HRIS, is a computerized system that aids in the processing of information relating to human resource management and has become a crucial element of all organizations. It can be deemed as a device which is designed to fulfill the manpower information needs of the organization. Thus, the importance of HRIS is multifaceted, ranging from operational assistance in collecting, storing and preparing data for reports, simplifying and accelerating the processes and controlling the available data, reducing labor costs for human resource departments, and providing timely and diverse information to the management of the company, based on which it is possible to make quality strategic decisions related to human capital.

Functions of HRIS

HRIS functions interactively with human resource management systems such as human resource planning, staffing, training, and career development, performance management and compensation management (Kavanagh et al., 1990). The functions can also be categorized as following.

- 1. Create and maintain employee record:
 - The data being entered create an employee record and this record is maintained throughout employment. In most of the organizations the HRIS administrator is responsible for creating and maintaining these records.
- 2. Ensure legal compliance: Data entered into the HRIS can be used to help the organization comply with government regulations in an accurate and timely fashion. Ensuring data

integrity and accuracy is very important and a key responsibility of human resource professional.

3. Human resource planning and forecasting:

Information from recruitment, training and development, and administrative subsystems, such as number of open positions, types of positions, employee skills and competencies, job rates, retirement eligibility and employee turnover rates can be used to help managers develop long range staffing plans and provide valuable information to the human resource professionals.

4. Talent management/Knowledge management:

The data that are entered into the system, such as skills, competencies, jobs held, training and employee development interests, can be used to help managers provide development opportunities for their employees, ensure that the appropriate employees are offered positions that will enhance their skills, provide the appropriate training for employees so that they can advance in the organization, and highlight an employee's interests and development paths. This information will help human resource professionals to provide more targeted advice and counsel to managers to create a development plan that meets organizational and employee needs.

5. Strategic alignment:

Information from the system can help organizations align human resource activities more effectively with their strategic plan.

6. Enhanced decision making:

The ability to extract data from the HRIS and use these data not just to create information but also to improve the quality of management decision has become increasingly important. Information needs toe be relevant, useful, timely and accurate.

Conclusion

The combination of Human resources and information technology known as HRIS are being implemented by many firms as strategic weapons towards the uprising business competitiveness. From the above-mentioned discussion, it can be deduced that HRIS has the potential to be an enterprise wide decision support system that helps to achieve both strategic and operational objectives. Firms are increasingly moving beyond manual human resource system today, by computerizing individual human resource tasks, installing HRIS and using

the internets and intranet use of its human resources and maintain competitiveness in its market. HRIS can be seen as a spine of the company and vital in meeting the needs of all stakeholders in the company. HRIS enables effectiveness, efficiency and promotes competitiveness among the firms. Hence, HRIS must be driven by strategic vision and it should be implemented as an open system, where information technology facilitates communication freely between integrated features. Therefore comprehensive and effective HRIS must be driven by organization vision, value and culture. Finally, the paper has enlightened the strategic role and importance of HRIS especially towards business competitiveness. However, future studies should consider what makes successful implementation of HRIS.

References

- Broderick, R., Boudreau, J.W (1991). HRIS for competitive Advantage: Interviews with ten leaders, CAHRS working Paper Series, Cornell University.
- Broderick, R., Boudreau, J.W., (1992). Human Resource Management, Information Technology and the Competitive Edge. Academy of Management Executive, 6(2).
- Enshur, E., Neilson, T., Vallone, E. (2002). Tales from the hiring line; Effects of internet technology on human resource processes. Organizational Dynamics, 31(3), 224-244.
- Fletcher P. (2005). From Personnel Administration to Business Driven Human Capital Management: The Transformation of the role of HR in the digital age, In Gratuel and Stone (Eds), The Brave New World of Her, San Francisco, CA: Jossey-Bass, 1-12.
- Gill, J., Johnson, P., (2010). Research methods of managers, Sage Publications Limited, Fourth Edition.
- Gupta, P.K., (2004). HRIS, Himalaya Publishing.
- Hendrickson, Anthony R (2003). HRIS: Backbone Technology of Contemporary HR; Journal of Labor Research, 24 (3), 381-394.
- Kavanagh, M.J., Guetal, H., Tannenbaum, S. (1990). HRIS: Development and application. Boston: PWS Kent Publishing Company.
- Krishna, C.Y.S, Bhaskar, S.V. (2011). Assessment of support and benefits of HRIS in medium-scale textile industries. International Journal of Research in Economics & Social Sciences, 1 (2), 48-57.
- Kovach K.A, Cathcart C.E (1991). Human Resource Information Systems (HRIS): Providing Business with Rapid Data Access, Information Exchange and Strategic Advantage. Public Personnel Management, 28(2), 275-282.
- Kovach K.A, Hughes A.A., Fagan P., Maggiti P.G (2002). Administrative and Strategic Advantage of Human Resource Information Systems. Employment Relations Today, 29(2), 43-48.
- Lenderer, A.L (1984). Planning and developing a HRIS. The Personnel Administrator, 29(8), 29-39.
- Lengnick-Hall, Mark L., Moritz Steve (2003). The impact of e-HR on HRM function. Journal of Labor Research 24(3), 365-379.
- Ngai, E.W.T., Wat, F.K.T. (2004). HRIS: A review and empirical analysis. Personnel Review, 35(3), 297-314.

- Panayotopoulou, L., Vakola, M., & Galanaki, E. (2007). E-HR adoption and the role of HRM: Evidence from Greece. Personnel Review, 36(2), 277-294.
- Sadri, J., Chatterjee, V. (2003). Building organizational character through Human Resource Information Systems. International Journal of Human Resource Development and Management, 3(1), 84-98.