Published by: Abhinav Publication

Abhinav International Monthly Refereed Journal of Research in Management & Technology

UNDERSTANDING HUMAN RESOURCE INFORMATION SYSTEMS & ITS IMPORTANCE IN ORGANIZATIONS

Jigar Patel

Assistant Professor, Parle Tilak Vidyalaya Association's Institute of Management, Mumbai, India Email: jigarpatel86@gmail.com

ABSTRACT

Human Resource Information System is not a new concept, but it makes a comeback day by day with the changing environment of business. It plays an important role in the Human Resource Department in any organization. HRIS has many advantages; it can easily serve as a database for various HR functions like Human Resource Planning, Personnel Cost Planning, Training & Development, Performance Appraisal, etc. The overall contribution of HRIS is that it helps in managing various strategic activities of HR department very efficiently and effectively. Human resources and information technology are the two elements that many firms are looking to utilize as strategic weapons to compete. Information systems specially developed for human resource management referred as human resource information system (HRIS). It 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 information system shapes an interaction between human resource management and information technology. HRIS has become a critical factor in making business competitive and effective. The present paper highlights the need, components, benefits and functions of HRIS. This will help in understanding the urgent need of HRIS in organizations and what is the future scope of HRIS.

Keywords: Human Resource Information Systems; HRIS; Human Resource Management; Information Systems

INTRODUCTION

Leading management thinkers suggest that "it is not technology, but the art of human - and humane-management" that is the continuing challenge for executives in the 21st century (Drucker, Dyson, Handy, Saffo, & Senge, 1997). Similarly, Smith and Kelly (1997) believe that "future economic and strategic advantage will rest with the organizations that can most effectively attract, develop and retain a diverse group of the best and the brightest human talent in the market place". A human resource information system (HRIS) is defined as a computer based application and database system developed to assist HR in decision making and reporting. It is an IT enabled HR service for managers which is available for analytics. HRIS is one part of the overall Management Information System of any organization. As in other types of information systems, an HRIS comprises a database, which contains one or more files in which the data germane to the system is maintained, and a database management system, which facilitates the users to access the system and utilize these data. HRIS contains tools that allow users to input new data and edit existing data; in addition, such programs allow users to select and generate a series of predefined reports that could be printed or displayed on a monitor. Reports may address any of a number of different HRM issues (e.g., personnel cost planning, employee benefits administration, compensation planning, succession planning). HRIS also generally include

Management & Technology

tools by which users or system administrators may generate ad hoc reports and select specific cases or subsets of cases for display.

HRIS supports activities such as identifying prospective employees, maintaining comprehensive database of all the current employees and developing modules for honing employees' skills, talent and competence. Hence, HRIS is used by all three levels of management viz. Top Level, Middle Level and Lower Level. Top Level management use HRIS to locate the manpower requirements in order to meet the company's goal and objectives. The middle management uses HRIS to supervise and review the salary structure, benefits and recruitment of employees. The lower level employees use HRIS to track the recruitment and selection of employees.

The emergence of the human resource management field (versus personnel administration) gave the human resource function greater credibility within the managerial setup, calling for more sophisticated use of information as it is related to the strategic management function. Companies have experienced increased competitive pressures leading to greater cost containment demands from upper management, giving rise to greater automation of the record-keeping function in HRM function. Many HRM departments in larger organizations have also developed internal information system capabilities and HRIS units have been established.

OBJECTIVES OF THE STUDY

- 1. To study the need of HRIS in organizations
- 2. To understand the components of an HRIS system
- 3. To study the HRIS model
- 4. To study the benefits of implementing HRIS in an organization

Need of HRIS

The primary purpose of HRIS is application of technology for enhancing the efficiency of human resource management. HRIS was initially perceived as a technology which converted the manual database into the computer based form. But now, when organizations have started using the HRIS, the application of HRIS has increased to a great extent and there are lots of HRIS systems available with numerous broad-based features. Therefore the objectives of an HRIS can be summarized as follows:

- To become a common point of source of information related to human resource in an organization where everyone can collect, access, store and distribute data in paperless form
- To collect appropriate data and convert them into information and knowledge for improved timeliness and quality of decision making
- To help in faster processing of information and powerful decision making for optimum utilization of resources
- To produce a greater number and variety of accurate and real-time HR-related reports
- To streamline the HR administrative activities so that efficiency and effectiveness of organization is enhanced
- To enable HR managers to focus more on strategic issues in HRM by relieving them from the day-to-day operational duties. This can be done with the feature of ESS (Employee Self Service System) wherein it lets employees to access the information directly without disturbing the senior managers for the operational work.
- To improve employee satisfaction by delivering HR services more quickly and accurately

Management & Technology

 Due to computerized software, the accuracy, reliability and validity of the data can be increased by eliminating the costs and wastage which occurs with manual maintenance of records

Components of HRIS

The three functional components of HRIS are shown in Figure 1.



Figure 1. Components of Human Resource Information Systems

- 1. 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 facility to update and change the edit tables easily. Today scanning technology is available which facilitates the scanning and storage of an actual image of a company document including signatures and handwritten notes.
- **2. Data maintenance-** Data maintenance function is responsible for updating the data stored in the various storage devices. As and when changes occur in the human resource information, these changes have to be incorporated in the HRIS. The old data can be maintained in the form of historical information.
- **3. Output-** This function of HRIS is the most visible one because the majority of HRIS users 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 process's output, makes the necessary calculations and formats the presentation.

Benefits of HRIS

HRIS is a proven solution whenever the tasks of the HR and administrative functions of an organization become extensive and complicated. Companies of all sizes have recognized the benefits of such solutions and they regularly implement HRIS software programs. In this way they improve the efficiency of their organization.

The advantages of HRIS can be summarized as follows:

One time updation: The most crucial benefit of HRIS is that all the information has to be just filled in once and the data is available for lifetime. Only the updations are required at a later stage, that too are to be done once and it will be useful for the whole life of the organization.

Data integration: There are different parts of systems in HRIS which may be updated by different departments and can be integrated together for decision making, internal evaluations and meaningful reporting.

Accurate Data: Once the data is entered correctly, it can be assumed that it is full-proof and precise

Access to any number of people: Since this system can be customized, the employees can be given access to update their own data like address, contact number, etc. and departmental managers can update their own set of data like targets, budgets, performance etc. without any interference.

Management & Technology

Documents hosting: HRIS system can host a variety of documents which are important from employee and company perspective on the system which can be easily accessed and updated in one place. These set of data include manuals, handbooks, code of conduct, policies, compliances, etc.

Recruitment management: HRIS can manage and track the whole recruitment process right from the application of the prospective employee to the actual recruitment.

Automatic Reminders: HRIS can include automated reminders for events which have not been performed or have been missed by the organization like performance appraisals, deadlines, actions to be taken, notifications.

The most important advantages for the management of the company are:

- Increase of overall decision making efficiency,
- Cost reducing and better control of the budget,
- Business transparency,
- A clear business vision and
- A clear insight into the process of recruitment and selection and also layoffs
- The HR department also has a numerous benefits for HRIS:
- Possession of single database of all employees in the company with all necessary information and opportunities for different reports,
- The ability to update databases in real time, on the basis of all changes, which is of extreme importance to regionally diversified companies;
- Elimination of paper forms that are much slower and with much higher probability of errors;
- Minimize errors caused by human factor;
- Employees in HR department do not have to constantly refer to the instructions on working hours, because the application is configured according to existing guidelines, which have reduced delays and uncertainties;
- Improved management system in accordance with the legislation;
- Reduction or elimination of redundancy in the system;
- Standardization of business processes;
- Highly reliable data in the system, whether it is external or internal threats;
- Increased employee satisfaction in the HR department because the easiest and efficient execution of the tasks;
- The ability to establish full control over internal migration of employees and the management of their talents and
- The ability to take preventive measures to avoid unpleasant situations in the Company
- HRIS provides the advantages to the employees among which the most important are the following:
- Employees can update their own records in the system: One of the most common methods of granting this access has been by moving HRIS from client server architecture to a Web-based environment. Interactive voice response (IVR) is the latest method being adopted by many firms to allow employees to update their HR information. This includes such common tasks as updating address information, planning for retirement, updating health-plan information,

Management & Technology

reporting on life events such as the birth of a child, changing beneficiaries on life insurance. Merck & Co. has estimated a cost reduction of 86 percent per HR transaction when performed by the employee

• Other uses of HRIS to employees include the use of HR portals, which provide employees with information as well as the ability to complete HR-related transactions. By using these portals, employees are able to communicate to one another via e-mail, read company news and policies, link to Web sites with relevant job-related or company related information, and perform HR calculations for retirement scenarios or cost benefit analysis for insurance options.

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

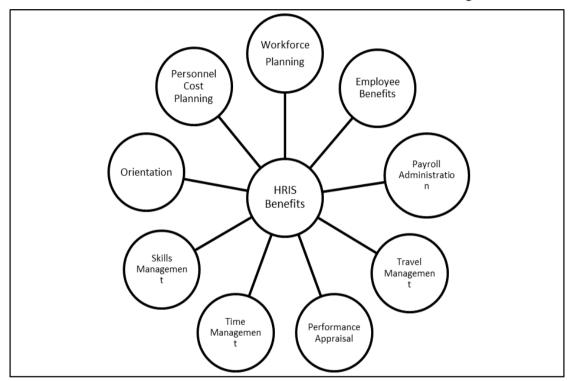


Figure 2. Benefits of Human Resource Information Systems

HRIS Concerns

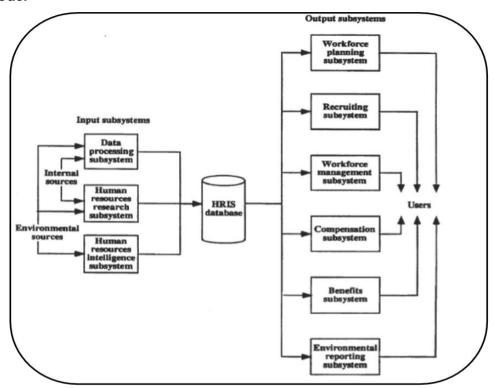
Protection: Security is one of the biggest worries. The biggest security concern today is unauthorized access to the system since HRIS contains all the confidential data. The system must to adapt to disallow unauthorized access and publishing of such data. This would require compartmentalizing the data, that is different people having restricted access to the data and all the data must not be accessed by all.

Monetary Value: Cost factor is the most important problem since any software requires huge investment which may not be affordable to relatively smaller companies. With any system, there are acquisition costs and maintenance costs. SaaS (software as a service) systems are somewhat easier to handle from a cost point of view since they are cloud-based and don't require as much initial cash outflow.

Extra staff: In larger organizations, where HRIS is installed with variety of features, there becomes a necessity of hiring an IT specialist who looks after the technical aspect of the software.

Management & Technology

HRIS Model



The above figure shows the resource flow of HRIS model by Raymond (1995). As you can observe through the HRIS model, it has three sets of components which are Input subsystem, HRIS database, and Output subsystem. In Input subsystem, there are three main subsystems which are data processing, human resource research, and human resource intelligence. Some input data might include software that can transform the data into the format that needed and required. The second one is HRIS database, all the data and information can be stored in computer storage. The software such as Database management system (DBMS) can help to perform the maintenance processes. The last one is output subsystem which contains all the output related to HR which consists of a workforce planning subsystem, recruiting subsystem, workforce management system, compensation subsystem, benefit subsystem, and environmental reporting subsystem.

Four Cornerstones of HRIS

HR managers always are worried about the following four areas which has been named as Four Cornerstones of HR



Management & Technology

Accuracy: HR managers expect the HRIS to have accurate data about the employees since that information is of the utmost importance to the company for accurate calculations, overtime calculation, promotion purpose, etc. The inaccuracy of data may lead to lot of problems as which may lower the morale of the employees.

Cost: Cost comes as the foremost priority of HR managers when it comes to implementing the software. The cost in this case would be the implementation costs associated with HRIS, transaction costs, the technical people involved with the software, upgradation of software, addition of features in the current software also increases the cost. So HR has to make sure the cost benefit ratio is maintained related to the software.

Compliance: HR managers would expect the HRIS to be compliant with the laws of the land. That is, the software should consider the laws applicable to the country and should have in-built features regarding the same like tax calculation, retirement, pension, etc.

Timeliness: Time is the essence of HR and hence HR managers expect the HRIS to be up-to-date with all the information which will help in salary calculation, promotions, deductions and increment calculations on exact dates.

Although almost all HR managers understand the importance of HRIS, the general perception is that the organization can do without its implantation. Hence, only large companies have started using HRIS to complement its HR activities. The primary reason for delay in HRIS implementation in organizations is because of the fear psychosis created by "technology" and "IT" in the minds of senior management. They may not be very tech savvy and fear being left out. But trends are changing for the better as more and more organizations realize the importance of IT and technology. Major HRIS providers are concentrating on the small and middle range organizations as well as large organizations for their products. Hence HRIS would soon be an integral part of HR activities in all organizations.

Any technology has a shelf life and similar is the case with HRIS. The traditional HRIS/ERP systems are being replaced by Software as a Service (SaaS) applications which are faster and easier applications. Companies have realized that undiversified HRIS has become a thing of the past and this kind of system does not work in complex HR environments organizations are working in. Also HRIS covers a lot of generic functions, but functional data recovery is a problem as data recovery techniques differ from organizations to organizations. HRIS also fails to deliver IT solutions required for each situation. For e. g. some companies need Health and Safety software as priority and some organizations may need Learning and Development software as a priority. This is difficult in HRIS, whereas SaaS will give an opportunity to choose an application which is best fitting for your organization.

CONCLUSION

The main conclusion of this paper is the realization that the use of Human Resource Information Systems seems to play an important role in Human Resource Management (HRM) because HRIS functions improve HRM in terms of administrative purposes and analytical purposes. The use of technology is turning into less and less the domain of only IT functions and more of different departments in global organizations. This is certainly true of HR, where the use of technology and the effect it will have on the function is of major concern to senior HR executives. HRIS is going to become an integral part of organizations and organizations will increasingly need to adapt their HRIS for most importantly compliances. As understood from the above data, HRIS can make a whole lot of data accessible to employees which help in transparency. The company can follow rules and procedures clearly and can be communicated well to employees. The crucial part of HRIS is the data which is accumulated there. That data will be a lifetime asset for the company and hence HRIS is going to remain an integral part of organizations.

Management & Technology

REFERENCES

Journals & Book References

- 1. Akansha Chauhan, Sanjeev Kr Sharma & Tarun Tyagi, (2011) Role of HRIS in Improving Modern HR Operations. *Review of Management* 1(2), pp. 58-70
- 2. Bader Yousef Obeidat, (2012). The Relationship between Human Resource Information System (HRIS) Functions and Human Resource Management (HRM) Functionalities. *Journal of Management Research* 4 (4), pp. 192-211
- 3. Dessler, G. (2013). Human resource management: Global Edition (13th Ed.). Pearson Education
- 4. Dr. Nisha Aggarwal, Mona Kapoor (2012) Human Resource Information Systems (HRIS) -Its role and importance in Business Competitiveness, *Gian Jyoti E-Journal*, Volume 1, Issue 2 (Jan Mar 2012)
- 5. Dr. Shikha N. Khera, Ms. Karishma Gulati, (2012) Human Resource Information System and its impact on Human Resource Planning: A perceptual analysis of Information Technology companies. *IOSR Journal of Business and Management (IOSRJBM)*, 3 (6), pp 06-13
- 6. Kamini Teotia (2012). Role Of Hris In Performance Evaluation & Decision Making. *International Journal of Multidisciplinary Research*, 2 (4), pp. 229-239
- 7. Marler, J. H. (2009), Making Human Resources Strategic by Going to the Net: Reality or Myth. *The International Journal of Human Resource Management*, 20 (3), 515-527.
- 8. Nicholas Aston Beadles II, Christopher M. Lowery, Kim Johns (2005). The Impact of Human Resource Information Systems: An Exploratory Study in the Public Sector. *Communications of the IIMA*, 5 (4), 39-46
- 9. S. C. Kundu, Rajesh Kadian (2012), Applications of HRIS in Human Resource Management in India: A Study. *European Journal of Business and Management*, 4 (21), pp. 34-41
- 10. Sabrina Jahan, (2014), Human Resources Information System (HRIS): A Theoretical Perspective. *Journal of Human Resource and Sustainability Studies*, 2, 33-39
- 11. Sadri, J. & Chatterjee V. (2003), Building organizational character through HRIS. *International Journal of Human Resources Development and Management*, 3 (1), 84-98.
- 12. Saharan, T. and Jafri S. (2012), Valuation of HRIS Status an Insight of Indian Companies' Perspectives, pp. 113-27.
- 13. Sandeep K. Krishnan, Manjari Singh, (2006), Issues and Concerns in the Implementation and Maintenance of HRIS, *Indian Institute of Management Ahmedabad Research & Publications*. 2006-07-01 pp. 05-19
- 14. Shirivastava, S. and J.B. Shaw. (2003). Liberating HR through technology. *Human Resource Management*, 42: 201-222.
- 15. Singh, M. (2002). Issues related to selection and implementation of HRIS: A Study of 10 organizations. *IHRIM Journal* 6 (5), Pp. 45-54

Website References

- 16. http://www.dresserassociates.com/what-is-hris.php
- 17. http://ezinearticles.com/?The-Importance-of-a-Human-Resource-Information-System&id=3967603
- 18. http://hrdailyadvisor.blr.com/2013/04/23/hris-101-selecting-the-right-system-for-your-organization/
- 19. http://smallbusiness.chron.com/advantages-human-resource-information-system-1160.html
- 20. http://www.hrvoice.org/top-ten-success-factors-for-hris-implementations/

Management & Technology

- 21. http://www.referenceforbusiness.com/encyclopedia/Gov-Inc/Human-Resource-Information-System-HRIS.html
- 22. http://www.gjimt.ac.in/wp-content/uploads/2012/12/N14.pdf
- 23. http://yourbusiness.azcentral.com/importance-human-resource-information-system-11588.html
- 24. http://www.indianmba.com/Faculty_Column/FC283/fc283.html