

# The Impact of Information Technology on the HR Management

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**Abstract**— Presently Information technology and human resource management unite together more and more closely. Human resources information systems can play an important role in the modern enterprise management. But there are many problems in the application of human resource information systems in India, including information content, information management, system evaluation, etc. We should take some measures to improve human resources information system applications in India. The purpose of the computer for Human Resource Managers is to improve the quality of the services they are offering. As a manager we carry out our human resources responsibilities by performing a variety of time consuming jobs. A large amount of the work in the human resources office is clerical in nature. By using Information Technology, many of the routine jobs can be automated and the number of persons can be reduced for these tasks. In large organizations, one of the biggest problems is to upkeep the current data file. It has been proved that one of the supporting pillars which can contribute to the fulfillment of the personal policy is the usage of Information Technologies in Human Resource Management. Computers should be believed of as another human resources management tool, like a growth program, an assignment process which when used properly, can help us to maximize the quality of the products and services we offer.

**Key words:** Human Resource Management, Information Technology, Services, Computer, Organization, Application

## I. INTRODUCTION

In the management field, the computer plays a vital role directly or indirectly. At all the 3 levels of management i.e. at the operational level, middle level and high level, wide use of computers is made. At present, the development of information technology becomes more and more rapid, and it is widely used in various areas of human activity. Human Resource Information System (HRIS) is an important application of information technology in business management. To reduce the routine transaction and traditional HR activities and to deal with the complex transformational ones, the organizations began to electronically automate many of these processes by introducing specialized HRIS (human resource information system) or HRMS (human resource management system). HRIS refers to the systems and processes at the intersection between HRM (human resource management) and information technology. It is a system used to acquire, store, manipulate, analyze, retrieve, and distribute information regarding an organizations human resource. An integrated HRIS is a database shared by all HR functions that provide common language and integrates all HR services. A database nuclear containing information about the competency is required of jobs and competencies of people by all HR functions. HRIS has increasingly transformed since it was first introduced at General Electric in the

1950s.[1] HRIS has gone from a basic process to convert manual information-keeping systems into computerized systems. Because of the complexity and data intensiveness of the HRM function, it is one of the last management functions to be targeted for automation (Bussler & Davis, 2001/2002). This fact does not mean that HRIS is not important, it just indicates the difficulty of developing and implementing it compared with other business functions (e.g., billing and accounting system). Powered by information system and Internet, almost every process in the every function of HRM has been computerized today. Currently, HRMS encompass: (1) payroll; (2) time and attendance; (3) appraisal performance; (4) benefits administration; (5) HR management information system; (6) recruiting; (7) learning management; (8) training system; (9) performance record; (10) employee self-service; (11) scheduling; (12) absence management.[2] Recent debates about technology and organization have highlighted the importance of social context and sought to develop frameworks which acknowledge both the material and social character of technologies including HRIS (Dery, Hall, & Wailes, 2006). Accordingly, theories which can be considered as “social constructivist” can play an important role in the study of technology as they explicitly recognize that technologies, such as HRIS, cannot be evaluated and analyzed without having an explicit understanding of the context of individuals and groups which consequently comprehend, interpret, use, and engage with the technology (Grint & Woolgar, 1997; Orlikowski & Barley, 2001; Williams & Edge, 1996). Sophisticated HRMS software in the form of stand-alone products and ERP (enterprise resource planning) systems gives HR departments the ability to effectively and efficiently administer data in areas ranging from benefits to regulatory compliance. The existing literature on HRIS suggests that they have different impacts on HR across organizations, but provides little explanation for this variation. It is early suggested that HRIS were used predominantly to automate routine tasks and “to replace filing cabinets” (Martinsons, 1994). HR professionals began to see the possibility of new applications for the computer. The idea was to integrate many of the different HR functions. The result was the third generation of the computerized HRIS, a feature-rich, broad-based, and self-contained HRIS. The third generation took systems far beyond being mere data repositories and created tools with which HR professionals could do much more (Lloyd, Byars, Leslie, & Rue, 2004). It has the potential to assist the HR function in developing business strategy, and thus enhancing organization performance (Barney & Wright, 1998; Broderick & Boudreau, 1992; Gueutal, 2003; Lawler, Levenson, & Boudreau, 2004; Lengnick-Hall & Moritz, 2003). HRIS is used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information regarding an organization’s human resources (Kavanagh, Gueutal, & Tannenbaum, 1990). It provides HR

professionals with the time needed to direct their attention towards more business critical and strategic level tasks, such as leadership development and talent management. HRIS provides an opportunity for HR to play a more strategic role, through their ability to generate metrics which can be used to support strategic decision-making (Lawler & Mohrman, 2003).[4] The current generation of HRIS automates and devolves routine administrative and compliance functions traditionally performed by corporate HR departments and can facilitate the outsourcing of HR. More recent research shows greater use of HRIS in support of strategic decision making by HR. With an appropriate HRIS, HR staff enables employees to do their own benefits updates and address changes, thus freeing HR staff for more strategic functions. Additionally, data necessary for employee management, knowledge development, career growth and development, and equal treatment are facilitated. Finally, managers can access the information they need to legally, ethically, and effectively support the success of their reporting employee. [5]

## II. HRIS GOALS

The main goals of HRIS are as followed:

HRIS is seen as offering the potential to improve services to HR department clients (both employees and management). Improve efficiency and cost effectiveness within the HR department, and allow HR to become a strategic partner in achieving organizational goals.[3]

Traditionally HR goals have been broken into three categories:

- 1) Maintaining cost effectiveness.
- 2) The enhancement of service for internal customers.
- 3) Addressing the tactics of the business.
- 4) Improvement of global orientation of human resource management.

HRIS has increased efficiency and helped businesses reduce their HR staff through reducing costs and increasing the overall speed of different processes.

HRIS also has relational impacts for a business; enabling a company's employees and managers with the ability to access HR information and increase the connectivity of all parts of the company and outside organizations. This connectivity allows for communication on a geographic level to share information and create virtual teams.[7]

HRIS creates standardization, and with standardized procedures this can ensure that an organization remains compliant with HR requirements, thus also ensuring more precise decision-making.

HR functions that HRIS assist with are the transactional and transformational goals.

Transactional goals help reduce costs and transformational goals help the allocation of time improvement for HR professionals so that they may address more strategic issues. To add to this operational benefits have become an outcome of the implementation of e-HRM. The process of payroll is an example of this, with HR being able to have more transactions with fewer problems.

## III. ADVANTAGES

The HR department has numerous benefits of this approach:

- 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.
- 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.
- Reduction or elimination of unemployment in the system, which results in high reliability of data in the system.
- Increased employee satisfaction in HR department due to ease in execution of tasks. [6]
- The ability to establish full control over internal migration of employees and the management of their talents.

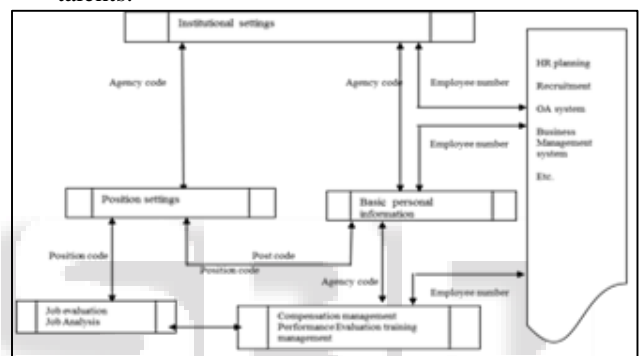


Fig. 1: Human Resource Information Systems Mode Architecture

## IV. DISADVANTAGES OF HRIS

### A. Lack the time and space

They generally feel that they lack the time and space needed to work quietly and thoughtfully with web-based HR tools and so, if there is no need, they will not do it.

### B. Guaranteeing the security

Guaranteeing the security and confidentiality of input data is an important issue for employee in order that they should feel 'safe' when using web-based HR tools.

### C. Specialized Knowledge

One of the advantages of HRIS is that it may help the organization to reduce the cost HR personnel, though it could increase the requirements for technical staff with knowledge specific technology and functional area as well.

### D. Data Entry Errors

HRIS can only perform as good as its human programmers and end users.

### E. Improper use due to rigid mindsets

In order to make proper use of HRIS, it becomes very necessary for the staff to change their mindsets, as many people still have certain inhibitions in using technology in certain facets of their profession. If this transformation in

technology is not synchronized with transformation in the mind set and culture of the organization it can lead to a financial fiasco.

#### F. Threat to HR Itself

The propensity of being dependent on technology will reduce the reliance on manpower, thus it poses a great risk on the basic foundation of HR, where the Human resources are considered as an asset and capital to achieve organizational objectives and fulfill the mission and vision of the company. [9]

#### V. LIMITATIONS

While HR Management systems have countless advantages, they do have their downsides as well.

- Data Theft - With data theft on the rise, many companies are forced to improve their network security. And although they spend millions of dollars every year on securing these networks, the focus has largely been on securing the access to the network rather than protecting the information itself.
- Difficulty of Analysis - Our system can contain so much data that we may find it difficult to analyze. We may need a separate analysis system just to sort the data into meaningful chunks.

Although almost all HR managers understand the importance of HRIS, the general perception is that the organization can do without its establishment. Hence only large companies have started using HRIS to complement its HR activities.

But HRIS would be very critical for organizations in the near future. This is because of a number of reasons.

- Large amount of data and information to be processed.
- Project based work environment.
- Employee empowerment.
- Increase of knowledge workers & associated information.
- Learning organization

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 know-how and fear being left out.[8]

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. They are also coming up with very specific software modules, which would cater to any of their HR needs. Hence HRIS would soon be an integral part of HR activities in all organization.

#### VI. CONCLUSION

The applications of computers in human resources management has extended into areas imagined merely 2 decades back. With just a few keystrokes, or clicks on a mouse, organizations can instantly connect to sources of information that used to take weeks or months to access. Computers facilitate the storing and retrieving of employee records, policy information, and correspondence creating a showable paper trail. The vast majority of firms have made

at least some of IT to transform their HR functions. In fact, within US corporations alone, IT now represents the single largest capital expenditure, accounting for almost one-third of all capital investment. Recently, the computers have lowered the employee training costs through interactive training programmes, implementations and hands-on training opportunities.

Generally, traditional HRIS functions are common to all organizations. They consist of tracking data regarding personal histories, family details, skills, capabilities, experiences, pay, benefits and grievances. Performance of these functions is increasingly complex, that must be performed at the lowest possible cost and also at a fast rate, which pose increased challenges for HR professionals. Organizations have started to automate these functions by introducing HRIS technology. A Human Resources Information System is a system that lets you keep track of all your employees and information about them. It is usually done in a database or, more often, in a series of interrelated databases. Hence, development of client-server HRIS enables HR executives to assume responsibility and ownership of their systems.

The current pressures and issues affecting library and information services in all sectors are well known and have been documented in numerous articles and reports over the past decade. Human resources information systems have evolved since the 1980s from relatively simple computer applications to virtual treasuries of sophisticated human resources information and processes. HRIS also is the name of the human resources discipline for HRIS specialists and other human resources professionals involved in the technology for employment and personnel matters.

First, HR should clarify their real needs to HRIS, and keep the needs in mind in the whole process of HRIS introduction and implication..

Secondly, HR should expand HRIS applications, IT help HR to take on more work in human resources management, especially in performance management, staff training, compensation management and other core work, so can achieve full use of human resources information system.

Finally, HR should strengthen the evaluation of human resource information systems. HR should establish an index system including security, stability and economic and other indicators, using the index system to evaluate HRIS can help HR to identify the inadequacies in human resources information system applications, and also find specific areas and methods for improvement.

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