



## The Value Of Human Resource Information Systems In Human Resource Management

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### ABSTRACT

In today's organizations Human Resource Management has become one of the key resources of business organizations. The need to integrate Human Resource Management (HRM) with information systems has become a necessity as modern firms are realizing that their people and information resources are vital for their survival. This is the reason Human Resource Information Systems (HRIS) is now used extensively in all organizations irrespective of its size, tenure of establishment, complexities of operations etc. With the growing importance of human resource management and increasing size of the organizations, maintenance of employee related data and generating reports are the crucial aspects of any organization. Therefore more and more organizations are adopting computer based human resource management systems (HRMS) This paper is an attempt to highlight the value of information systems in Human Resource Management. The study is conducted through analysis of secondary data from books, journals and reviews.

### Keywords

Human Resource Information System (HRIS); Decision Making; Human Resource Management (HRM).

### Academic Discipline and Sub-Disciplines

Human Resource Management; Information Systems.

### SUBJECT CLASSIFICATION

Library of Congress Classification.

### TYPE (METHOD/APPROACH)

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## INTRODUCTION

With the use of large database system, human resources management system integrates almost all the information sources data, which relates to human resources such as pay and benefits, recruitment, individual career design, training, position management, performance management, and job descriptions. An important decision support system function of HRIS is data processing and analysis, making predictions and decision support for the management.

Human Resource Management (HRM) is the organ that works with the people of an organization [1]. It is the process of procurement, maintenance and development of human resource in the organization. Nowadays, new information technology is constantly used to improve the whole process and organizations' overall competitiveness. Technology usage makes human resource professional free from many daily manual routine works and provides scope for improving service function and strategic decision making of the organization. Human resource management has received keen attention because of its recognition that better output could be gained from the use of information systems for managing human resources effectively. Collection of information on the aspects of salary and payroll, compensation, leave, accidents, employee benefits and other administrative and managerial functions have always been part of the human resource manager's function that are addressed through the Human Resource Information Systems. HRIS can be defined as a composite of database, computer applications, hardware and software necessary to collect/record, store, manage, deliver, present, and manipulate data for human resource [2]. [3] defines HRIS as an integrated system used to gather, store and analyze information regarding an organization's human resources' comprising of databases, computer applications, hardware and software necessary to collect, record, store, manage, deliver, present and manipulate data for human resources function. Human resources information system is an organized method of collecting, storing and presenting information to managers, in order to make decisions. It can perform a number of functions from the simple storage and communication of information, to more complex transactions. As technology advances, the range of functions that HRIS can undertake increases.

## OBJECTIVES

The main objectives of this study are:

- a) To identify the areas of use of HRIS
- b) To find out the value of HRIS in management decisions.
- c) To discuss the challenges faced by organizations in fully implementing HRIS
- d) To discuss factors that influence decisions to use HRIS by organizations.

## METHODOLOGY

This study is a review of various discussions that have been conducted in various parts of the world. Discussions from various journals, books, magazines, websites have been taken. Data from various journals have been a part of discussion.

## DISCUSSIONS

Organizational success depends majorly on the performance of human resource management (HRM) [4;5]. Furthermore, Human Resource Management (HRM) has recently turned its concentration on knowledge sharing and workforce analysis and has been increasingly evolving into a significant contributor on the organizational strategic management [5]. This turn in HRM to some level is as a result of technologies enablers, such as human resource information system (HRIS) which consists of systematic procedures and functions to acquire, store, retrieve, analyze, manipulate, and disseminate relevant information concerning organizational HR [4, 5]. To increase the effectiveness of HRM, organizations are becoming more and more dependent on HRIS [6;4;5]. The efficiency of administration is enabled as HRIS maintains faster information processing, improved employee communications, and greater information accuracy [7;8], lower HR costs and overall HR productivity improvements are also attributed to HRIS. [8,9,5].

Effective, accurate and timely decisions are important activities in all organizations. These decisions of HR department have a lot of effect on every aspect and field of an organization. Findings indicate that HRIS is vital to managing the various functions of Human Resource Management in any organization. This is due to the fact that the world has adversely changed and better methods of management are being put to use for an organization to have an upper hand and get a cutting edge in its operations. Strategic Integration, Human Resources Analysis, Personnel Development, Knowledge Management, Hiring etc are some of the areas of HRIS use in day to day activities of Human Resource Management.

## AREAS OF HRIS USE IN HUMAN RESOURCE MANAGEMENT

There exist several areas where HRIS can be used in facilitating Human resource activities within an organization. These include:

Human Resources Analysis. This is what Human Resource decisions are based on. Using this function, an organization makes a decision of whether their personnel capabilities are congruent or not. It is considered to be an ongoing way of collecting and identifying human resource needs [10]. Strategic Integration is another area where HRIS is used. HRIS leads to an improvement in organizational performance and changes the method in which organizations are managed [5].



HRIS facilitates strategic value generation by helping in designing and implementing internally consistent policies and practices which ensure the human resources contribute to accomplishing organizational objectives [5].

Personnel Development highly depends on HRIS. This function, helps an organization decide on any deficiency an employee has, and accordingly, make a decision of an appropriate training or development method to use to overcome that deficiency [11]

HRIS are mostly created for knowledge management of HRM. The reason for having any HRIS is to control the basic data on personnel. HRIS makes vital contributions to knowledge management by advancing organizational learning.

The records and compliance function is important to meet both various legal requirements that mandate specific information retention, and to present a database that puts in to the proper functioning of the other HRIS functions. Records and compliance function provides very important data for knowledge management [10].

Hiring is another important decisions of the management on which the organizational development depends. This is because wrong hiring decision can lead to serious consequences. HRIS has proved to be a major resource in making right hiring decisions. This begins from analysis to identify vacancies to be filled, advertisement, selection and finally hiring.

Employee appraisal is another major area in Human resource management which is linked to long term success and growth of an organization. It involves evaluation of employees' performance and in addition the capacity to use the relevant information in order to improve employees' as well as organizational performance. It should be conducted against various aspects that include the outputs / results, behaviors and attitudes.

Compensation system has become a very complicated issue for almost all employers. Such a strategy should be used as a motivation and satisfaction incentive and as a recruitment and retention tool. To say the least, it is the mirror of the values and beliefs that form the organizational culture.

Human Resource Development (HRD) is a wider concept than the one of HR training. Training is mainly applied to improve the technical skills that cover short term needs of an organization. Development includes training which is more strategic and focuses on the long term. It refers to the employees of the organization. It facilitates the development of core capabilities that are critical in developing and maintaining sustained competitive advantage [12]

## **BENEFITS OF USING HRIS IN HUMAN RESOURCE MANAGEMENT**

A survey by Overman [7] about the advantage of HRIS usage, showed that HRIS are faster in information processing, information is more accurate, it leads to improved planning and program development. It also improves communication of employees. Today many studies recognize the possibility of strategic benefits existence. Some authors like [13;6] explained that the HRIS usage in HR would reduce costs by automation information and number of employees will reduce; through helping of employees to control their own personal information; also HRIS allow managers to reach relevant information and data easily, conduct analysis, make decisions, and communicate with others without need to consult an HR professional. In ideal case the perfect use of HRIS, fewer employees would be needed for performing administrative tasks like record keeping which would give more time to managers to assist through providing data on strategic level. Some of these researchers think that the future is brighter for HRIS by creating new paths for human resources and for the organizations that use HRIS in effective manner. Brown [14] suggest that there is evidence that HRIS can improve shareholder value. Bhuiyan [15] concurs with this that the use of HRIS in an organization will lead to faster information process, greater information accuracy, improved planning and program development, enhanced employee communications, and ease in monitoring of costs related to HRM.

## **CHALLENGES EXPERIENCED BY ORGANIZATIONS IN THE IMPEMENTATION OF HRIS**

Shilpa and Gopal [16] suggest several challenges that have been experienced in the implementation of HRIS or e-HRM. The first challenge is Cost Implications. According to the researches, Costs tend to be proportional to requirements and the type of organization. Given the costs, companies must enable only those operations that are vital, essential or desirable. The second challenge is Aligning the HRIS system with the business requirements. Applications vary widely in their allowance for control, typically assuming either a corporate or business-unit locus of control. Hence management must consider its stance on control to ensure it will meet the business requirements of the company. The third challenge is Security of the information generated. A company needs to ensure that outsiders or competitors should not access the information. In this context proper vendor selection is a critical condition to ensure confidentiality. The fourth challenge is Managing the huge amount of data generated through HRIS which is a relatively new challenge for companies. The fifth challenge is 'Overkill' and loss of the 'human touch'. It should not be the case that in a bid to be techno-savvy we neglect the human side. The sixth challenge was identified as difficulty in the task especially for traditional companies E-HRM is more so a challenge for the traditional companies which need to bring about a change in the mindsets to a large extent. These companies as compared to those in the IT sector are having a tougher time getting people to speed up on these e-HR tools. The seventh challenge was the need for Customization to be taken up in the right perspective. Most of the packages are of international standards and based on best practices. Hence customization is huge and needs to be taken up in the right perspective. Customizations can also be costly and maintaining and upgrading customizations can be cumbersome. Training the users was another crucial issue. Training the users is many a time a long drawn out process, as many people do not find them to be user friendly. Justification of the Return On Investment (ROI) on an e-HRM project The ROI on an e-HRM project is the projected cost reduction brought about by the system and its impact on revenue/profits over time. The e-HRM initiative should align itself with the overall HR and IT strategy and ultimately, with





the business strategy to ensure ROI. Difficulty of the system to function along with other systems to be successful was another challenge. Companies wanting to integrate their value chains with the business activities of their suppliers, business partners and customers typically have to implement systems such as Customer

Relationship Management (CRM). Finally, Continuous monitoring and feedback for the success of any information system effort in an organization is tedious and costly.

Other obstacles include Lack of management commitment, Satisfaction with the status quo, no or poorly done needs analysis, failure to include key people, failure to keep project team intact, Politics / hidden agendas, failure to involve / consult significant groups, and lack of communication.

## KEY PILLARS THAT INFLUENCE DECISIONS TO ADOPT THE USE OF HRIS

Decisions to adopt the use of HRIS by organizations is influenced by various factors. Thompson [17] identified some of these factors. Firstly, the departmental relative advantage. Adopters perceive greater benefits from the HRIS to the HR department as compared to nonadopters. Both adopters and non-adopters perceive the benefits of HRIS to the organization in the same manner probably because the benefits of HRIS accruing to the HR department may be more direct and observable (e.g. automate administrative tasks, streamline workflow) than the benefits to the organization as a whole. The second factor is Compatibility which was found to influence the decision to adopt HRIS. As organizations realize that the effective and strategic management of HR is integral to their success, HR activities are becoming more integrated with other business functions. This requires the HRIS to be compatible with the other systems, standards and work procedures in the organization [18]. Top management support is essential for innovation adoption [19]. This is especially so in the case of HRIS, where it is difficult to see the immediate payoff from adopting the system. At the same time, adopting the HRIS may have significant impact on work practices, top management support is crucial to overcome possible internal resistance to the adoption of HRIS and ensure successful implementation. The other factor is the size of the Organization. Larger organizations are more likely to adopt HRIS. This concurs with [20] that size is a critical factor in IT adoption and use. HRIS expertise is another significant factor influencing the decision to adopt HRIS. This agrees with [21] theory that lowering knowledge barriers will facilitate adoption of IS.

## CONCLUSIONS AND RECOMMENDATIONS

Human resources information systems are considered one of the most important elements that affect the activities of human resource department. HRIS play a major role in assisting in the decision making process. As such, applications of HRIS need a lot of attention and efforts. It is evident that the Human Resource Management for competitive advantage in the 21<sup>st</sup> Century rests entirely on effective and efficient use of HRIS.

There are many problem domains in HRM that a HRIS can be able to explore. In which case, the management should make effort to identify problem domains where HRIS tools are needed to transform uncertain and incomplete data into useful knowledge.

Many researchers agree that hybrid systems are the best approach to support decision making especially in reasoning and learning. As such the HRIS should use hybrid techniques i.e., Knowledge-based system and machine learning approaches.

There is also the need to continuously improve the core knowledge on effective HRIS. This can be enhanced through continuous development in web-enable tools, wireless protocol and group decision support system.

The recommendation of this study is that every organization both big and small, should endeavour to establish HRIS in the management of their human resource activities. It is true that the cost of doing this from scratch is expensive but the benefits it comes with after establishment and the long term benefits outweigh the initial costs. However, every organization must look into the aspects of security of the kind of HRIS adopted for use with greatest interest.

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