# Human Resource Information System: An Innovative Strategy for Human Resource Management

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# ABSTRACT

In recent years information systems have been deployed by organizations for achieving efficiency, effectiveness, enhancing quality and gaining competitive advantage. Similarly Human Resource Information Systems (HRIS) are used by Human Resource (HR) departments to achieve similar objectives. The deployment of HRIS in banking is the key of development of Information Technology (IT). It has emerged as an important tool to achieve crucial organizational Human Resource (HR) objectives. HRIS is applied in human resource administration, salary administration, leave and absence recording, skill inventory, performance appraisal, training and development, HR planning, recruitment and career planning etc. HRIS helps organizations in managing all HR information. The use of a Human Resource Information System (HRIS) should lead to valuable outcomes for the organization. Declining costs and time consumption, improved communication should create an environment where the Human Resources (HR) department would play a more strategic role in the organization. The use of Human Resource Information Systems (HRIS) is an opportunity for human resource (HR) professionals to become strategic partners with top management. The idea has been that HRIS would allow for the HR function to become more efficient and to provide better information for decision-making. In this paper an attempt has been made to study the role of HRIS in performing human resource management functions.

# **INTRODUCTION**

In global era, to meet the competition in the marketplace, firms need to balance its available resources to achieve the desired results of profitability and survival. Resources are the

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key elements of any organization. These resources include capital resource, physical resource, and human resource. Management of the human resources is the most important of the three. It's the man for whom the systems and organizations are made and run.

In a rising competition among organizations, human resources are now recognized as a source of competitive advantage. There is greater recognition that competencies are obtained through highly developed employee skills, distinctive organizational cultures, management processes, and systems. Competitive advantage can be obtained with a high quality work force that enables organizations to compete on the basis of market responsiveness, product and service quality, differentiated products, and technological innovation.

Human resources define the productivity capacity of the organization with the infinite limits. Thus, it influences the organization's lifespan, its shape, and its health. In fact the developmental scale of the organization is measured by its human resource. Human, not being machine needs to be satisfied according to his mental needs. HRM is the solution to it; it is a set of rules and strategies involving the practices of maintenance, motivation, training and development, staffing, external influences, labour relations, management practices, government legislation, and globalization.

But in the era of globalization, information systems (IS) have been deployed by organizations for achieving efficiency, effectiveness, enhancing quality and gaining competitive advantage. In order to conduct an audit properly, human resource professional need considerable amount of data. Gone are the days when decisions about future could be based on guess work. Now you need to collect concrete information in order to make future events more manageable than before. Manpower planning, too, demands a lot of information amount people and jobs. A comprehensive data system is therefore necessary to fulfill the HR informational needs of an organization. Similarly, Human Resource Information Systems (HRIS) are used by Human Resource (HR) departments to achieve similar objectives (Rao, 2000). The effective management of human resources in a firm to gain a competitive advantage in the marketplace requires timely and accurate information of current employees and potential employees in the labor market. With the evolution of computer technology, meeting this information requirement has been greatly enhanced through the creation of HRIS. The management of employee information will be a critical process that helps the firm to maximize the use of its human

resources and maintain competitiveness. HRIS can be used in HRM programmes, such as selection and training of employees and to make them more efficient and effective.

Human Resource Information Systems have been used by the HR departments for many years, but more recently its use has changed, it has been playing a more strategic role to support HR workers and HR managers. The job contents and the expectations from HR managers have changed over the last a few years, with functional and strategic pressures growing on them.

## **CONCEPT OF HUMAN RESOURCE INFORMATION SYSTEM**

Information technology (IT) is recognized as a critical infrastructure in many organizations. IT is also emerging as an effective contributor to organizational performance. It is often argued that success of the IT induction is attributed to strategy, consistent delivery and systems usability. An information system (IS) is recognized for its importance of HR.

A company that does not have a computerized system still has an HRM system known as the paper system. Most of the companies used this system before the development of computer technology. But the management of employee information was not done as quickly as in a computerized system. The nature of HRIS varies among organizations in relation to their size. In small organizations, it tends to be informal whereas in large organizations, it is more formal and coordinated.

Human Resource Information System (HRIS) is a concept which utilizes the development of Information Technology (IT) for effective management of the human resource, its functions and applications. HRIS enables systematic procedure for collecting, storing, maintaining and recovering data required by the organizations about its human resources (Singh, Jindal and Samim, 2011). The use of HRIS has been advocated as an opportunity for HR professionals to become strategic partners with top management. It would allow the HR function to become more efficient and to provide better information for decision-making (Beadles II, Lowery and Johns, 2005).

In its most basic form HRIS, it is a system used to acquire, store, manipulate, analyze, retrieve and distribute pertinent information about an organization's human resources. It is often regarded as a service provided to an organization in the form of information. It is a system used to acquire, store, manipulate, analyze, retrieve, and distribute information regarding an

organization's human resources. It includes hardware and software; people, forms, policies and procedures, and data.

# **OBJECTIVES OF HRIS**

Computerized HRIS is designed to achieve the following objectives (Rao, 2000):

- To offer an adequate, comprehensive and on -going information system about the people and job.
- To supply up to date information at reasonable cost
- To offer data security and personal privacy. Data security is technical problems that can be dealt with several ways, including passwords and elaqborate4 codes. In information age, personal privacy is both an ethical and moral issue.

# NEED OF HUMAN RESOURCE INFORMATION SYSTEM FOR BUSINESS

There are several advantages to firms in using HRIS. These are as follows: (Thite and Kavanagh, 2011).

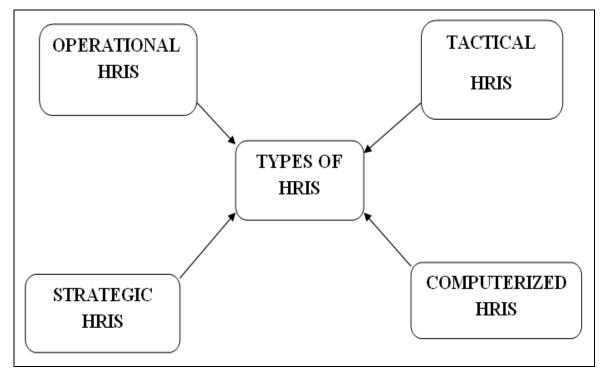
- Providing a comprehensive information picture as a single, comprehensive database; this enables organizations to provide structural connectivity across units and activities and increase the speed of information transactions.
- Increasing competitiveness by improving HR operations and improving management processes and collecting appropriate data and converting them to information and knowledge for improved timeliness and quality of decision making.
- Producing a greater number and variety of accurate and real-time HR-related reports and Streamlining and enhancing the efficiency and effectiveness of HR administrative functions.
- Shifting the focus of HR from the processing of transactions to strategic HRM.
- Reengineering HR processes and functions and improving employee satisfaction by delivering HR services more quickly and accurately to them.

# HUMAN RESOURCE INFORMATION SYSTEMS (HRIS) IN ORGANIZATION

The Human Resource Information Systems is introduced by presenting the various definitions, development, costs and benefits, as well as their functions and relationship with HRM. In addition, different software providers and their solutions are presented. HRIS shapes an integration between human resource management (HRM) and Information Technology (IT). Even though these systems may rely on centralized hardware resources operationally, a small group of Information System specialists residing within the personnel department increasingly manage, support, and maintain them. HRIS support planning, administration, decision-making, and control. The system supports applications such as employee selection and placement, payroll, pension and benefits management, intake and training projections, career- pathing, equity monitoring and productivity evaluation. These information systems increase administrative efficiency and produce reports capable of improving decision-making (DeSanctis, 1986).

# **TYPES OF HRIS**

HRIS performs its functions in different forms. The various parts of HRIS are as follows:



#### **OPERATIONAL HRIS:**

Operational human resource information systems provide the manager with data to support routine and repetitive human resource decisions. A number of operational-level information systems collect the data relating to human resources including the information about the organization's positions, workforce and governmental regulations. Some of the system which is the part of operational systems is as follows:

#### **Employee Information Systems**

The human resource department must have the information of the organization's employees profile for taking various decisions. An employee profile includes personal and organization-related information, such as name, address, sex, minority status, marital status, citizenship, years of service or seniority data, education and training, previous experience, employment history within the organization, salary rate etc.

## **Position Control Systems**

A job is usually defined as a group of identical positions. A position, on the other hand, consists of tasks performed by one worker. The purpose of this system is to identify each position in the organization, the job title, its classification and the currently assigned to the position to the employees. This system allows a human resource manager to identify the details about vacant positions in the organization.

# **Applicant Selection and Placement Information Systems**

After manpower planning has been identified and then a suitable pool of job candidates has been recruited. For this purpose, the candidates must be screened, evaluated, selected and placed in the various positions in the organization. The primary purpose of the applicant selection and placement information system is to assist human resource staff in these tasks.

# **Performance Appraisal Information Systems**

This Systems include performance related data and productivity information data. This data is used as evidence in employee grievance matters. Careful documentation of employee performance, method of measuring the performance of employees and reporting system, is the critical. Performance management information can lead to a number of decisions beyond merely supporting the operational decision to retain, promote, transfer, or terminate the employees in the organization.

# TACTICAL HRIS:

Tactical information systems are used to provide managers with support for decisions related with allocation of resources. Major important decisions in human resource management include recruitment decisions; job analysis and design decisions, training and development decisions, and employee compensation plan decisions.

## Job Analysis and Design Information Systems

This system includes data from interviews with supervisors and workers and positive action guidelines and information from sources external to the firm, such as labor unions, competitors, and government agencies. The outputs of the job analysis information system are job descriptions and job specifications which provide managers with the basis for many tactical human resource decisions.

#### **Information Systems for Recruitment**

For the recruiting function, the organization needs to develop a recruiting plan. The plan specifies the positions to be filled and the skills required of the employees for these positions. For this purpose, a recruiting information system is necessary which collect and process the many different types of information like a list of unfilled positions; the duties and requirements of these positions; lists of planned employee retirements, transfers, or terminations; and summaries of employee appraisals. Other inputs to the recruiting plan include data about turnover rates and about the success of past placements.

# **Compensation and Benefits Information Systems**

The Compensation and Benefits Information Systems support a variety of tactical human resource decisions, especially when compensation and benefits information is related to information from internal and external sources. Compensation and benefit plans can play an important part in improving an organization's productivity.

#### **Training and Development Information Systems**

Training and development systems must meet the needs of jobs available in the organization as identified through the position control system and the job analysis and design system. The training should also be directed to the persons interested and should benefit them.

## **STRATEGIC HRIS:**

Strategic HRIS helps the organization in to implement strategic human resource management.

#### **Information Systems for Workforce Planning**

Organization involved in long-term strategic planning, such as those planning to expand into new market areas, construct factories or offices in new locations and wants to add new products, will need information about the quantity and quality of the available workforce to achieve their goals. Information systems that support workforce planning serve this purpose.

## **Information Systems Supporting Labour Negotiations**

Negotiating with craft, maintenance, office, and factory unions requires information gathered from many of the human resource information systems. The human resource team completing the negotiating needs to be able to obtain numerous ad hoc reports that analyze the organization's and union's positions within the framework of both the industry and the current economic situation.

# SPECIALIZED HUMAN RESOURCE INFORMATION SYSTEMS SOFTWARE

A great deal of software have been specifically designed for the human resource function. These software are available for all types and sizes of computers, including microcomputers. Software specifically designed for the human resource management function, can be divided into two categories: comprehensive human resource information systems software and limited-function packages that support one or a few human resource activities.

## **Comprehensive and Computerized HRIS:**

In the last few years, the software industry has produced several products that organize the various human resource information systems into integrated software referred to as human resource information systems or HRIS, software. In general, the computerization of HRIS has resulted in an integrated database of human resource files like position files, employee files, job analysis and design files and many other human resource files are constructed in a coordinated manner using database management systems software so that application programs can produce reports from any or all of the files.

## **Limited-function HRIS:**

Numerous commercial software packages are sold for use on mainframes, minicomputers, and microcomputers that are designed to handle one or a small number of human resource functions. Microcomputer versions of these single-function software packages are relatively inexpensive and easy to operate and allow the human resource manager to automate a function quickly and easily.

## **Training Software**

Many training software packages are available for all types and sizes of computers to provide online training for employees. They include

- Management training software
- Sales training software
- Microcomputer training software
- Word processing training software

These software packages can be used in computer-based training programmes designed by human resource department for training specific employees in group and independent study programmes. Computer-based training aids often simplify the trainer's job and allow the trainer to individualize instruction more easily than in traditional, group-based training classes.

# HUMAN RESOURCE INFORMATION SYSTEM COMPANIES

Some of the HRIS companies are as follows which provide solutions to the different HR problems (Snell and Bohlander, 2007).

**ADP, Roseland - http://www.adp.co, Roseland -** provides solutions and services for payroll, tax and HR benefits administration and retirement services.

**Ceridian, Minneapolis - http://www.ceridian.com -** integrate human resources, payroll, tax, time benefits management and employee effectiveness services.

**Employease, Norcross - http://www.employease.com -** Hosted web-based human resources software and services benefits administration, reporting and application tracking applications.

**Spectrum Human Resource Systems Corporation, Denver - httt://www.spectrumhr.com -** offers a variety of web based and desktop based software products for human resource management that allow for employee self-services. Spectrum also provides in-house support services for its software, including planning, training and hotline.

Human Concepts, Sausalito - http://www.orgplus.com/company/index/htm - solution for managing organizational change and supporting critical business decisions, software integrates with HR database to automatically create and publish organizational charts.

## CHALLENGES IN IMPLEMENTATION OF HRIS

The effective implementation of HRIS requires re-engineering of business processes, which many organizations find hard to adopt. The organization employees lack sufficient training to adopt the new system. At the same time, the information systems of most of the organizations are distinct, which reduces their efficiency. So even if organizations implement HRIS, it is a fairly long and peace-meal exercise. It is very important to view the implementation of HRIS as a whole to ensure system integrity.

The other challenge is the potential of HRIS, which arises from barriers associated with the acceptance of the new or upgraded HRIS among key end-users of the system and the importance attached to managing the change processes associated with its implementation and introduction. Further, it acceptance is hindered by the lack of understanding, insufficient management commitment, and fears that existing modes of work will be changed and result in job loss or altered leave entitlements and shift arrangements. Challenge of up-to- date information and its security is also a key issue in this system.

#### **CONCLUSION:-**

It can be concluded from the paper that human resource management is gaining importance in every organization. In the age of competitions, it is important to procure good human resource in organization. Now, human resource management is known as a investment in business. So, it is very important for the organization to have a good and efficient human capital. For this, HR department needs accurate information with regard to its human resources. In modern age of competition, nothing can be done on guess basis. HRIS is the system which helps the HR department to perform its functions in efficient and quickest way. HRIS support planning, administration, decision-making, and control. The system supports applications such as employee selection and placement, payroll, pension and benefits management, intake and training projections, career- pathing, equity monitoring and productivity evaluation. These information systems increase administrative efficiency and produce reports capable of improving decision-making. Yet, HRIS is a important tools for HRM, which ease the work and functioning of HRM, but it has to face challenges of its implementation and its integrality with organization. Further, the security of information and up to date information is also an important issue in HRIS.

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