



## EFFECTIVENESS OF HUMAN RESOURCE INFORMATION SYSTEM

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### Abstract

The Human resources information of an organizations can be procured, cached, navigated, fetched and distributed with the help of system. The computer-based information system carries both the managerial functions as well as operative functions of functions of human resources with effective manner in the organization. The Human resource information system consists of hardware, software, people, forms, policies, procedures and data.

**Key Words:** HRIS, Effectiveness, Computer-based Information, Organizations

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## **HISTORY OF HUMAN RESOURCE INFORMATION SYSTEM**

### **Pre- World War II**

Very few employers from the firms were set up employees' welfare and departments of administration to safeguard the interests of their employees. The records of health and safety, working hours, payroll has been maintained by employers. Employees record keeping paves the way for designing HRIS. At this time of history computer technology cannot automate the records. The cost of HRIS is still huge today and cannot afford by the smaller firms, there we can see lot of paper works with regard to employee performance.

### **Post- World War II (1945-1960)**

After World War II, there is a tremendous change and need of expanding business that leads to updating and upgrading of all the process in the business world. The emerging workforce sector began to keep numerous classifications of employees and their records to store and save with the help of computers. Comprehensive occupational Data Analysis Program (CODAP), helps to initiate crystal clear about the description of job classification system for Air Force jobs.

The usage of computer is restricted to employee payroll and very few HR functions were executed. During that typical period the companies were not in the position to afford for payroll software, since they were under the process of vendor system, but the large firms can step forward to harvest the usage of computer technology by dragging the information with regards to compensations of the employees. It became a vital function of every organization to procure and develop software for all the functions of payroll process.

### **Social Issues Era (1963-1980)**

The potential and right implementation of Human Resource Management were made an impact in the down line of the organizations, there is a necessity to use computer technology which paves way to the growth of Human Resource Departments. This leads to more and more urge for Human Resource department to practice the storing of employee's information through computer-based technology. These customs will lead to the firms were assisted by the vendors to automate HR departments programs both in software as well as hardware in nature.

### **Cost – Effective Era (1980 to the Early 1990s)**

During the year 1980 all the HR departments came under the critical position of adopting technology that was needed as well required as a big tool, to increase or upgrade efficiency and effectiveness in the service delivery. All types of business can able to spend for the

implementation of HRIS, with the help of microcomputers all the works can be done without any additional cost and being more cost effective. The arrival or implementation of HRIS has changed the mindset of the management from transactional activities to transformational activities, instead of reducing employees in the organization improvising the employees work can be done through the computer, by the way they can save time and also productivity shall be increased. Above all it is said to be value added to the organization.

### **Technological Advancement Era and the Emergence of Strategic HRM (1990 to Present)**

It is obviously known that no one can imitate intellectual capital of human beings at any circumstances, today's scenario all the firms are realizing that employees are holding keys on knowledge of the organizations whose supply sufficient sustainable competitive advantage. Day by day all organizations are upgrading themselves by using technology to be strategic one which is focused on HRM Functions and also adding value to its product or service. Strategic human resource management is vital in the thinking of management and practice.

## **INTERFACE BETWEEN HR AND TECHNOLOGY**

Technology - driven automation (IT) and the redesign of work processes certainly help reduce costs and cycle times as well as improve quality. Information systems (IS) can further help decision makers to make and implement strategic decisions. The critical success factors in information systems projects implementation are non-technical and are due more to social and managerial issues.

With the increasing use of information technologies in HR planning and delivery, the way people in organizations look at the nature and role of HR itself may charge.

### **E-HRM AND HRIS**

Electronic human resource management reflects a philosophy for the delivery of HR, it uses information technology, particularly the web, as the central component of delivering efficient and effective HR services. This approach does not simply utilize technology in the support of human resources but instead see technology as enabling the HR function to be done differently by modifying information flows, social interaction patterns, and communication processes. It tends to be more application and HR -function focused like e-recruitment and e-training.

Human resource information system encompasses the technology and processes rudimentary. this new way of conducting human resource management and it includes the

technologies such as databases, small functional systems focused on a single HR application or a large-scale, integrated enterprise resource planning (ERP) architecture and web-based applications. Organizations are more focused to acquire and support the system to convert the legacy system into the electronic one.

#### **NEED OF HRIS**

- Supplying Demonstrated processed data as individual, collected database, this drives the firms to feed structural connectivity beyond units and tasks and immediate transactions.
- Possibly escalating competitive advantage by improving Human resource functions and processes.
- Enhancement of quality decision by converting raw data into both information as well as knowledge.
- Bringing forth a huge number of reports regarding Human Resources.
- Rejuvenate and intensify human resource administration functions in potency manner.
- Replacing transaction process of Human Resources to Course of Action.
- Restructuring Human Resource Steps and Key Functions
- Providing and delivering Sufficient and accurate services of HR to ensure employee satisfaction

#### **E-RECRUITMENT AND SELECTION**

Now a days all the companies are inviting the potential candidates to apply for a job through internet a recruitment tool. To upgrade the process of recruitment every organizations are optimizing the computer based information systems. Practically with the core aim of attracting, filling, Satisfaction of employees and attrition rates.

Many firms are expecting the experts of Human Resource Information System on the process of selection regarding different types of tests to measure the skills, abilities, personality and knowledge.

#### **E- TRAINING AND DEVELOPMENT**

The information and communication technology highly facilitates the source of information by communicating, indexing and cloning within the density of the organizations. Electronic training and development consisting the process of web-based model as need identification, design of solutions, adoption and evaluating the effectiveness of the same.

#### **E- PERFORMANCE MANAGEMENT**

Both Quantitative and Qualitative evaluation of employees' performance can be done through by internet-based system. Information for appraisal will be obtained with the help of two

levels of data. One hand of organizational level data by receiving performance of goals and strategies, on the other hand individual level data by the outcome flow. Although the plans of performance are within the limit of job/task.

#### **HRIS and International Human Resource management**

The globalization of business is one of the major changes in the world of work. One of the major changes in the world's business economy has been the formation of regional free-trade zones. Stating the Increasing significance of international human resource management are

- **International Corporation**  
It uses its existing core competencies to expand operations into foreign markets. These organizations compete in the global marketplace by exploring existing products and eventually opening facilities in other countries.
- **Multinational Corporations**  
A more complex international business operation. MNC operate as fully autonomous units in multiple countries, in an attempt to capitalize on lower production and distribution costs.
- **Global Corporation**  
The global corporation integrates its worldwide operations through a centralized home office. There is no best structure that fits the distribution and marketing needs of all MNEs. Perhaps having a flexible approach to structure is the best way to manage an MNE.
- **Going Global**  
For international and multinational corporations, becoming a global corporation is vital process. The difficulties involved in managing the workforce of any MNE, including a global one.

#### **HRIS Applications in IHRM / Effectiveness**

- **Service – Oriented Architecture (SOA)**  
It is vital to reexamine some of the HRIS approaches in terms of HRIS applications in an MNE. These applications can be much more useful in an international firm than in a domestic one.
- **Outsourcing, Offshoring, and Insourcing**  
The tremendous financial benefits if the MNE could use outsourcing or offshoring, these practices continued. Many companies reverted to insourcing certain business processes, particularly those in the HR department.
- **Data Privacy and Security**  
The normal safeguards and privacy laws and regulations in different countries. Adopting a global approach to employee privacy issues, and building an internal culture of respect for privacy, is the best course of action open to a

multinational corporation that wants to act as a global employer in the current regulatory environment surrounding the collection and use of personal information.

### Information Security and Privacy in HRIS

The history of information security can be traced back to World War II, when the physical protection of information, with barricade and armed guards controlling access, was introduced in the military. The internet and mobile technologies have enhanced the interconnectivity of many computers and information systems.

### Components of Information Security

- Information
- Integrity
- Availability
- Confidentiality
- Communications
- Hardware
- Software
- Products
- People

### Legal Requirement for Information Security

- Personal Information Protection and Electronic Document Act
- California Security Breach Information Act
- Computer Misuse Act
- The European Union Data Protection Directive
- Health Insurance Portability and Accountability Act

### Threats to Information Security

- Human error
- Damage by employees
- Misuse of computer systems
- Theft
- Computer – based fraud
- Viruses, worms, and Trojans
- Hackers
- Natural disasters

### Information Security Management for HRIS

- Solitude – The right to be alone without disturbances
- Anonymity -The right to have no public personal identity
- Intimacy – The right not to be monitored
- Reserve – The right to control one's personal information, including the methods of dissemination of that information.

### Information Security Program for HRIS

- Administrative
- It consists of policies, procedures, standards, and guidelines. An administrative control is developed

from the information security framework for managing people and organizational operations

- Logical

It regulates access to information in HRIS. The access privilege required by the new role is frequently added onto his or her already existing access privilege, which may no longer be necessary or appropriate.

- Physical

It refers to the physical environment, such as computer facilities in the workplace. Separation of duties ensures that an individual cannot complete a critical task by the people.

- Security classification for information

A vital aspect of information security and risk management is recognizing the value of information and defining appropriate procedures and protection requirements for it.

- Access control

Access to protected information must be restricted to people who are authorized to access the information. Control techniques such as identification and authentication are vital for Human Resource Information System.

- Cryptography

A computer technique to ensure that sensitive information is only read and used by authorized employees. These have been important academic research and technological developments in cryptography.

- Defense in depth

A fully protect the information during its lifetime, each component of the information processing system must have its own protection mechanisms. When using a defense-in0depth strategy, should one defensive measure fail, there are other defensive measures in place that continue to provide protectio

### THE FUTURE OF HUMAN RESOURCE INFORMATION SYSTEM

The ultimate aim of Intelligent human Resource software is to put back the old approach to decision making with an approach of that makes a potential decision in the effective manner. HRIS helps the organizations to improve the usage of human capital as well as maximize their cutthroat in the market.

- Software as a Service (SaaS) and the Cloud
- This a declared approach is to procure software which was the dominant and often the rare approach available to every companies, Legacy software model has been replaced by on-demand software plans, which helps the customer or

company to access on lease basis like how HR wishes to access. The current trend in delivering software to organizations is cloud computing. Human Resource Information system functionality is delivered to companies through the web.

- Service-Oriented Architecture

There is a possibility of converting the tradition unified model and inflexible into trendy and flexible components and its about efficient modular design and deployment and reusable software by service- oriented Architecture.

#### Web 2.0

A second generation of Web-related focusing on creativity, collaboration and sharing, in contrast to traditional isolated information silos. It is a knowledge-oriented environment where human interactions generate content that is published, managed and used through network applications in a service- oriented architecture.

- Social Networking

Now a days many organizations are utilizing couple of social networks to gather employees and communicate themselves. For example, EMC Corporation uses its social business network, EMC/One, to procure ideas from its employees for its yearly Modernization program. After the employees post their innovation ideas on EMC/One, they can also vote for the potential idea.

- Enterprise Portals

Each and every individual will be able to connect together is much possible here. The services of dimensions are such as processed data portals, Interconnection portals, Support as well as Knowledge entryway, Production gateway, Societal oriented web else mixture of above mentioned.

- Open-Source Software

This type of software is freely available (servers as free many times) one and also cost-wise least than the legacy software. To offer products Taleo and journey using this opensource software by many Human Resource Suppliers.

- Green HRM

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Another strategy or technology to be used to reduce carbon footage as well as to protect organizational environment, Green Human Resource Practices is needed or required for sustainable development in business (Core part of E-HRM).

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