



HUMAN RESOURCE INFORMATION SYSTEM IN BANKING SECTORS OF INDIA

Madhusmita Majhi* Bharat chandra malik**

*Research Scholar, Department of Business Administration, Utkal University, Bhubaneswar, Odisha

**Research Scholar, Department of Business Administration, Utkal University, Bhubaneswar, Odisha.

Abstract

Technology is an essential part of our lives; today that shapes future of humankind. Technology has transformed the role of human resources management professionals largely. More and more human resources management functions of an organisation performed electronically to improve the administrative efficiency and responsiveness of human resources management to their clients, employees, and managers. HRIS also known as a human resource information system or human resource management system is an intersection of human resources and information technology through HR software. This allows HR activities and processes to occur electronically.

Human Resource Information System (HRIS) has become crucial part in every organization due to decreasing of paper works, synchronise the organizational works, improve capability, and generate more profits. HRM is the departments that regularly use management information systems. In Odisha, HRIS is in the introducing phase in order to maintain the challenging environment and it has been implemented successful both in public and in private sector companies. Human Resource Information System (HRIS) is a system of collecting, keeping, manipulating, recovering, and circulating relevant information about an organization's human resources. The information systems provide an opportunity to HR professionals to be a strategic part with the top management. To face the changing global scenario, HRIS perform all-round growth for an organization. In developed and developing countries, both private and public sector banks are feeling easy to implement HRIS in their HR process as well as in banking process. Bank is a service industry. For expansion of its branches and business activities, work forces need to be recruited in banks.

Keywords: Information Technology, Information System, Employee productivity, Banking Sector.

Introduction

Twenty first century has become an age of very fast and dynamic world with "Less effort gain more" strategy. It is the place where people and organization are working with the "Technology" and technology bringing innovation in every small, big, or large organization. The organizations are working with people, people are working with technology and technology brought the best result to the organization, which helps an organization to create a market value and company value as well as. Therefore, organization and technology has a direct relation (Fig. 1). Organization operated with four main divisions' i.e. Human resource department, Marketing department, Finance Department, and Operation department. Though people are working in all departments but Human Resource is a department of "People", because Human Resource gave an important feature to the organization i.e. PEOPLE and these people are working with the technology v.i.z. Information Technology, the an essential aspect given by the world.

Today information Technology plays a vital part in Human Resource management. Though HRM/HRD is a Dependent factor and IT is an Independent factor (Fig.2), each activities depend on its own software but when these two crucial aspect i.e. IT and HRM are merged. This gives several key names to the organization like- HRIS, HRIT, HRMS, E-HRM, WEB-BASED HRM etc. Without IT solutions, the HR department cannot run to make the task easier and effective as well as efficient. HRIS is a process of implementing the HR strategies policies and practices with the use of Information Technology (IT).The HRIS support the HR functions through web-based technology channels; it brings an access that enable HR professional to view best information that necessary for managing, training, and development the HR of the organization. The HR is a merging of two technical words, i.e. Human Resource Management (HRM) and Information System (IS). One is activities of an organization and other one operated with software. A HRIS function introduced in the organization after the e-commerce introduced to the organization. Almost half of the paper work of the organization has reduces through this new system. Information system associated with the HR functions and the primary users of systems and that information captured are as part of HRIS function [Veblen et. al.: Transiting HRIS and the reshaping of Talent]. HRM consist of the administrative functions like – recruitment, selection, placement, induction, training and development, promotion, capabilities and skill management, compensation, planning, work record of each employee etc. HRIS software like – collaborative tools WEB 2.0, portal, software such as SAAS, SOA, Enterprise portals and business intelligent systems, software planning process, learning management software (LMS), Occupational assessor software, CMR, ERP, ESS, Web technology etc. Actually, HRIS is software for all type of data entry with in a business. Much type of HRIS software packages is available all form of HR that

has different capabilities. It is the requirement of the company, which one is preferable for its requirement. HRIS provide overall packages like-

- Management of all employee information
- Company related documents
- Benefits administration
- Complete integration with payroll
- Performance development plans
- Disciplinary actions
- Training records

Information Technology (IT) has made an unlimited transformation to the Indian banking system; bank began to electronically assembly numerous of these practices by developing and introducing IT-oriented software applications which progress to the enhancement of focused Human Resource Management System.

It is the fact that organizations apply HRIS that supports most of HR application. Organization performs electronic technology in their day-to-day operation particularly in human resource department (HRD). In late 90's this e-HRM or HRIS used in an organization when e-commerce domain the business world.

Technology improves banks HR process in an effective manner by contributing the availability of information and knowledge. It is the interaction and intersection between IT and HRM that leads to the HRMS termed as HRIS that handling HR activities into an order routine process and with the packages of enterprise resource planning (ERP) software.

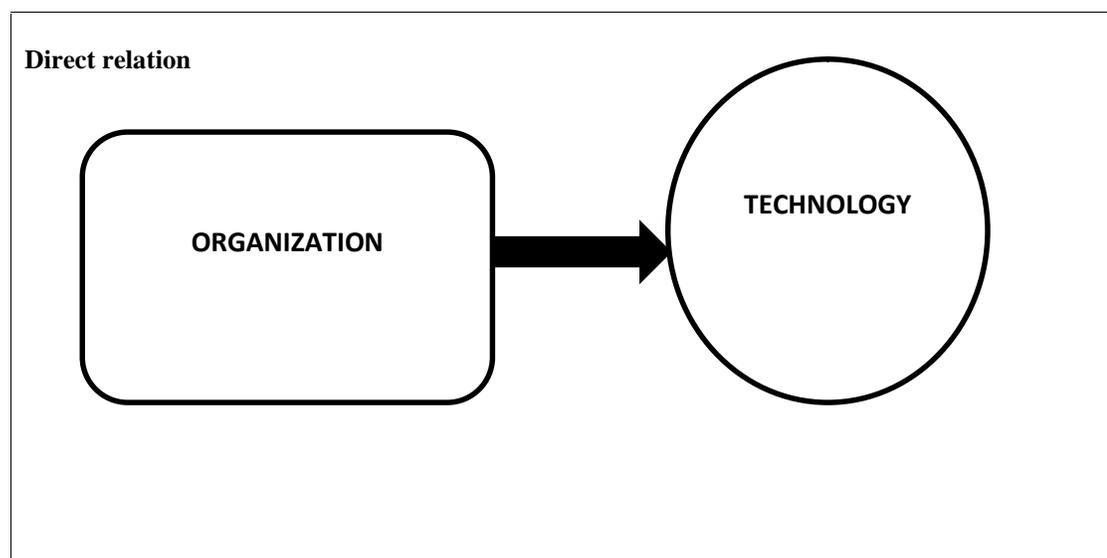


FIG.1

Figure 1 shows the direct relation between the organization and technology. The organizations adopt the technology for its smooth works as well as to increase its productivity.

Figure 2 shows the dependency of an organization towards the technology. Technology has software basing upon the requirement of the works. An organization has many departments, each department do its own assignments among those the HR department depends upon various software for managing its assignments. In Fig.2, organization is a dependent factor because organization adopted technology and it cannot manage works without technology for the easiness in job accomplishment, to complete the challenging environment of the market. Therefore, this is the reason technology is an independent factor.

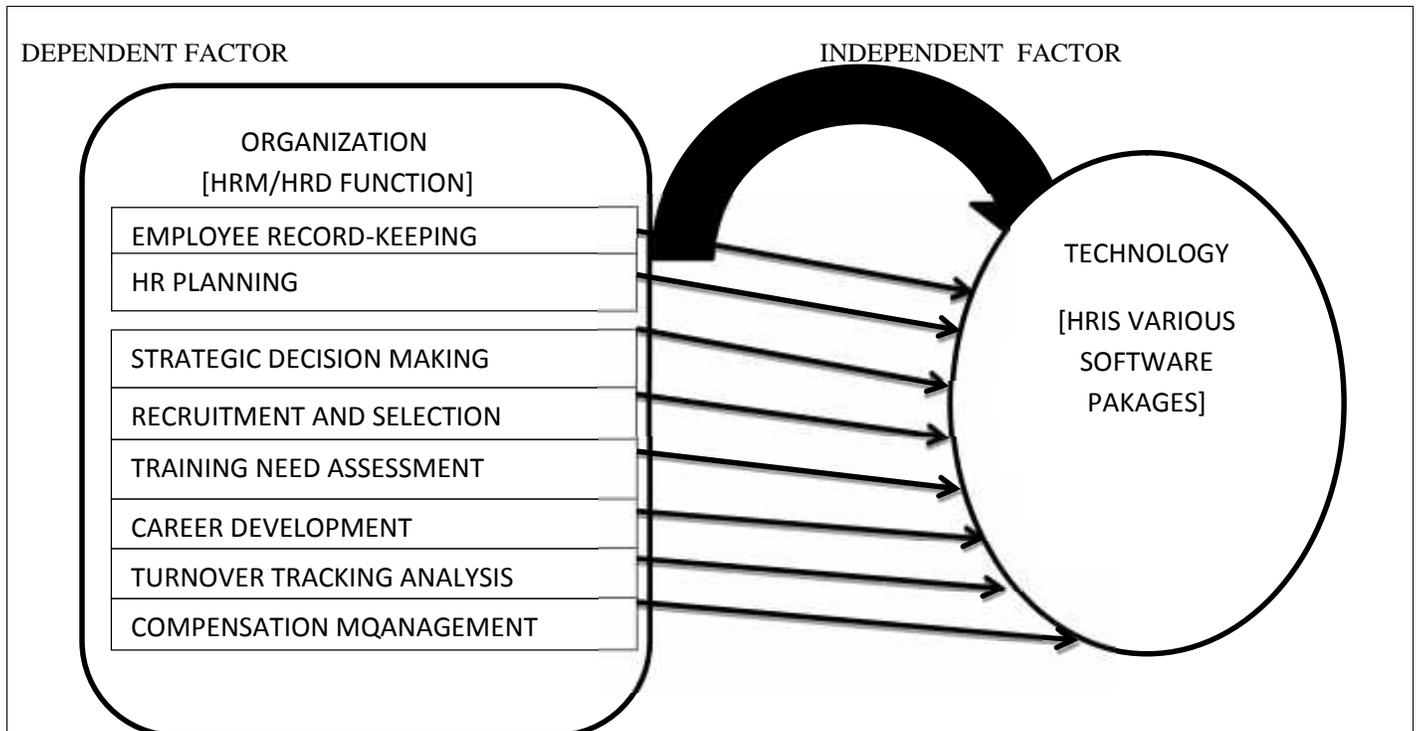


FIG. 2

What is Hris?

Within these twenty years, lot of studies have done on HRIS. The research paper focused on different software or applications that are in HRIS [DeSanctis 1986, Broderick and Boudreau 1992, Martinsons 1994], it has required for the effective implementation of HRIS [Yeh, 1997], and still the environments of the organization support to the successful HRIS [Haines and Petit, 1997].

HRIS is the integration of human resource (HR) and information system (IT) information technology. The merging word of HR + IT is given two things to an organization i.e. EFFICIENCY + EFFECTIVENESS. In addition, the software of HRIS is designed to manage PPP i.e. people, policies and procedures of the organization. HRIS software is for data entry, data information on Human Resources, data tracking, accounting functions, payroll, management etc.

HRIS is a procedure for getting data, storing and analysing it then retrieving and distributing related information about HR of an organization (Bondarouk and Roul 2008, Hendrickson 2003) and its includes all like hardware, software, data, people, policies, procedures [Kavanagh, Gueutal and Tannenbaum, 1990].

HRIS show by way of a strategic in modern HRM [Basselt, Campbell and Licciardi, 2003:2] and for the successful business operations and decision making HRIS convert data into information as per its requirements [Marler and Floyd, 2009].

HRIS is a method that HR professional can keep track on all employees and their information. This done in a series of inter-related databases and it include the employee name and their contact information, department, job title, grade, salary, salary history, position history, previous employees, current employees, newly recruited, supervisor, training completed, special qualifications, background, date of birth, disabilities, experienced person status, visa status, benefits selected, and more.

Literature Review

Kwon & Zmud (1987), pointed out five appropriate factors that influenced innovation adoption: Innovation characteristics, Organizational characteristics, Environmental characteristics, Task characteristics, Individual characteristics

Bondarouk et. al. (2009) has stated e-HRM has interchanged with Human Resource Information System (HRIS), WEB-BASE HRM, INTRANET based HRM, virtual HRM.

An HRIS is a system used to acquire, keep, examine, save, and distribute relevant information regarding an organization's human resources (Bondarouk and Roul, 2008, Hendrickson, 2003). This includes hardware, software, people, policies, procedures, and data [Kavanagh, Gueutal, and Tannenbaum, 1990].



It assumed that HRIS let the organization to reduce costs over automation labour intensive activities [Busseler and Davis, 2001].

HRIS is a tool for increasing efficiency and it not only can assist in management a quality of information regarding the firm's human capital and capital but also can provide an analytical tool to assist in decision-making about the management.

Last twenty years, there have been a number of analyses on HRIS. These analyses have focused on the type of applications that pre-dominate in HRIS for the successful implementation of HRIS (DeSanctis, 1986; Broderick and Boudreau, 1992; Martinsons, 1994, Yeh, 1997, Haines and Petit, 1997).

On the basis of research done by Ein-Dor and Segev's (1978), has prepared a model on IT that used in HRM surfaced, they suggested that IT use in an organization can be categorised by a two-factor model, which considers as farm's tasks have been computerized and was utilized on the level of the resulting information system (IS).

Applying Ein-Dor and Segev's model, DeSanctis (1986) and Martinsons (1994) prepared a report that it is an unsophisticated applications prevail in HRM and the regular focus of HRIS applications was improved efficiency significantly than effectiveness. DeSanctis and Martinsons ratified the situation to observe difficulties of building a HRIS as well as the universally view that HR functions are not strategic.

In 1997, Haines and Petit emphasized a numerous variables behind the successful HRIS. Their result of study showed that approaches such as training, development, documentation, planning, and number of HR applications used in the utmost important practices of success.

In 2001, Lengnick-Hall et. al suggested HRIS will generate organization informational efficiencies and cost savings for example HR departments can fit their interest for better analysis of present data and uses of HRIS to give improved and correct data upon strategic decisions.

The HR expert Ulrich implemented the strategy and gets benefits on HRIS within the organization. This is an automated system do not carry the office hours thus with the help of this HRIS, organization's staffs can manage their HR administrative works as well as can make their routine functions at any time. Researchers think about the Monitor that will be the particular device to HR professionals. Effective human resource developed due to increasing the use of Information Technology.

Objectives

1. To find out on implementation of IT is helpful to HRD practices in banking sectors.
2. To find out IT enhance the productivity of employees.

Emergence of HRIS

Human Resources Department (HRD) of an organization is emerging as an information centre, service provider, cost manager, internal consultant, business partner, facilitator etc. When researchers started documenting on business value over the strategic management, their secondary source of data states that HR is an outcome of the human relation movement of the early 20th century. Initially the HR function was dominated by the transactional work, such as payroll and benefits administration. However, after the globalization HR focuses on strategic plans: talent management, industrial and labour relations, mergers and acquisitions, diversity and inclusion, succession planning etc. Today scenario is most of the company focus on reducing employees' turnover and retaining the talent and intelligence personnel. Hiring the new staffs is not only involves a high cost but also increases the risk for not being able to replace the former person. HRD also endorsing some benefit scheme for workers to motivate them, where side by side they gain knowledge.

Due to globalization, many organization introduced information Technology (IT) that transfer the sectorial employments to universal level. Merging of two sciences i.e. Computer Science and Social Science has brought great achievement in all organizations especially in the HR department that leads to the evolution of the e-HR or electronic human resource, which also call as human resource information system. Many researchers also studies and evaluate the role of IT and how IT helpful to HRM that drag the greater success to the organization in the challenging environment also.

The last historical phase in the development of the HRIS, Employment Retirement Income Security Act (ERISA), Occupational Safety, and Health Administration (OSHA), and other legislation of 1970s by the governmental report. At this stage, most of organizations developed some type of automated personnel system for some thousand employees, few sources developed software programs and packages for companies with affordable price like the costs of computer processing, and storage dropped.



Large firms and public institutions have started spending on the HR staff like specialists on computer-retrieval who can tract information of each employee. HRIS merged with HRM, as it was increasing importance inside organizations. Though HRIS has been natural to HRM functions, due to inadequate analytical capabilities HRIS has been criticized by many experts of academics and industry.

HRIS Steps in Implementing

1. Inception of idea
2. Feasibility study
3. Selecting a project team
4. Defining the requirements
5. Vendor analysis
6. Package contract negotiation
7. Training
8. Tailoring the system
9. Collecting data
10. Testing the system
11. Starting up
12. Running in parallel
13. Maintenance
14. Evaluation

Advantages and Disadvantages of HRIS

HRIS has many advantages and disadvantages as well. Among them, few of them are here:

- Advantages like use of this Information System it reduces paper workload, simply go with Eco-friendly work.
- HRIS operated by professionals who know technology, and disadvantages is getting a specialist person who has HR with technological knowledge is quiet difficult.
- It is easy to use by professionals, even can give greater accuracy information. Easily perform HR audit. However, it can be an error as it functioned by a human.
- Though HRIS is faster information process, and easy maintenances but too costly technology to update the system.
- HRIS have higher speed of processing of data, better analysis, improve quality of report, transparency, Improved planning, program development, easily time maintenance, timely report presentation, efficiently dealing with internal as well as external changes, and enhanced employee communications. But it has lack of management commitment, bad timing (time of year and duration), satisfaction with the status quo, poor in needs analysis, due to failed to include key people, keep project team intact, hidden agendas, involvement of significant groups, and lack of communication.

HRM adopted HRIS applications in these areas:

- HR planning
- Staffing
- Applicant recruitment and tracking
- Succession planning
- Salary planning
- Salary survey
- Pay roll
- Job evaluation
- Performance management
- Work force dynamics analysis
- Work force planning
- Compensation and benefits
- Benefits management
- International compensation
- Learning and development
- Employee data base development
- Develop innovative Organization Structure

Software Use in HRIS

- **ORACLE- HRMS:** Oracle Learning Management, HR Information, Oracle e-recruitment, Oracle Self-Service Human Resources, Oracle Time, and Labour, Payroll.
- **CORT-HRMS:** Tracking software Like Applicant tracking, Identify and track senior managers, Attendance tracking, Skills tracking, Status tracking, Job history tracking, Cost centre tracking, Mass update, change tools etc.
- **SAP HR:** It is rapid HR software. It uses the area like Human Capital Management (HCM) for Industry.
- **SPECTRUM HR:** E-vantage and HR-vantage refers to web-based HRIS creation designed for enterprise with up to 10,000 employees.
- **HR-SOFT:** Evaluate managements' skills and talents, Competency Management, Discover hidden talent, Generate a wide range of reports, resumes, employee profiles, Identify individuals for promotion, replacement plans and succession analysis reports, skills shortages, unexpected vacancy, career development, align succession plans etc.
- **PEOPLE- SOFT:** Labour force Planning, Organization e-recruit, Organization Resume Processing, Organization Services Procurement, Warehouse etc.
- **Human Resource Micro Systems:** High-level data collection and testifying, tractable expenditure accounts, reimbursement, employment history, time off, qualifications and experiences, Applicant and Application Tracking, Training Administration, Position Control and Development Planning, Organization Charts, HRIS-Pro Net [employee self-service(ESS) and managerial self-service(MSS)], EEO, HR Automation (e-Notification and e-Scheduler), and Performance Pro (performance management)

Critical Analysis

Generally, most of HR managers are aware with the importance of HRIS but still they do not practice it in the organization. Hence, only large companies have started using HRIS to complement its HR activities. Because the organization may face unseen problems in near future 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 basic reason to holdup in HRIS implementation in organizations is the fear psychosis created by "technology" and "IT" in the minds of senior management. They may not be very tech confidence and fear left out. Nevertheless, 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. SAP and People-soft provide HR modules within their business intelligence software. Hence, HRIS would soon be an integral part of HR activities in all organization.

HRM In Banking Sectors

In banking sectors has also a HR division, which adopted HRIS software to manage its people, organizations' policies, and procedures. Tiwari T.D has described in his book "Human Resource Management practices- Concept and Cases"19's, the basic of human resource management in general and its main practices in particular.

On the view of Dr. Tiwari, HRM put its efforts in banks on integrity, teamwork competence, and development of utilization of competence, character building even build self-discipline, and motivation for public service. Being as a service industry, banks have to focus on increasing productivity and profitability in the market through the right utilization of human resource. Like other organization, banks also has recruiting/ATS, core HR, benefit administration/ OE, compensation, Training and development, absence management, workflow, self-service, reporting etc. The author has based his study on HRM practices adopted by Kolhapur Commercial Co-operative Bank Ltd. Ahmedabad and analysed its relationship among morale motivation, commitment, work culture, industrial relations, work behaviours, and social relations in the organizations.

The statement of H.K. Swain and B.B. Acharya says Human resource is an integral part of the management process and strategies. Traditional HR replaced by more dynamic and active roles. HR has become totally computer savvy and it uses latest HR software packages to build transparency in the dealings.



The authors pointed out those technical developments, organizational re-structuring added with downsizing the organizations forced by e-commerce, e-management, e-HR policies, and practices have influenced the human resource manager.

HRM adopted IT

After the introduction of IT in HRM, it has evolved differently for example: Human Resource Information System (HRIS), electronic HR (e-HR), Human Resources Management System (HRMS), Human Resource Development and Information Technology (HRDIS) and Human Resource Management Information Technology (HRMIT). Collaboration of HRM and IT has also identified as a crucial success factor in HRIS adoption and use that HRM practices affect IT usage in organizations even.

Day by day, the use of IT by HRM is rapidly growing to handle business. Phases like merging, acquisitions, retention, restructuring and downsizing are altering the organization landscape in a drastic way. With the use of IT, HR professionals are more efficient than ever, they are able to align their both management and individual employee's goal with the corporate strategy to deliver strategic plans with the quantifiable result.

Evolution between HRD and IT

The relationship between the Information Technology and Human Resources Management has suggested by the academics. They emphasized on studying the histories of IT and HRD because these histories reveal, the evolution and revolution of struggles and challenges, even they revealed the parallel developments in the transition from tangential activities to strategic thrusts.

In 1991, Boone stated that both hardware and software, this type of information technology has not designed at all until late 1940s but later adopted by HRM and initially it used for scientific calculations only, such as those to plot the missile trajectories.

Around that time, the term and entity of HR was not created, and the role of the department closest to HRM within organizations was administrative (Fletcher, 2005), while the tool used was "just some employee manila folder" (Geis and Kuhn, 1987). Agreed by many researchers (among them: Hayes, 1999; DeSanctis, Dickson, and Price, 2000), The advances of IT in organizations can be roughly divided into five stages, based on the major innovations, developments, and applications that significantly shifted management practices.

Particularly, a core HRM and a significant development of HRM are rooted in training and development, industrial psychology, and education so in 1989, McLagan describes HRD as a comprised use of training and development, organization development, and career development that leads to effective improvement of individual, group, and organizational which are the components of HRM practices.

The multiple uses of IT have changed the role, function of HRD and HRM, for example, HRD professionals have recently become broadly interested in regional and national workforce development, and HRM practitioners focus on sustaining a competitive workforce of diversity across cultures, countries, and technology platforms.

- At each stage, IT and HRM were gaining more and more responsibilities within organizations; and as IT lent more help to HRM in executing development, organization development, and career development to improve individual, group, and organizational effectiveness.
- Since that time, the availability and the multiple uses of information technology have changed the function, role, and form of HRD (Rosenberg, 2001), and HRM as well accordingly. For example, HRD professionals have recently become broadly interested in regional and national workforce development, and HRM practitioners focus on sustaining a competitive workforce of diversity across cultures, countries, and technology platforms.

Procedure should include five elementary concepts; they are data base, data entry, retrieval, Human Resource Information Centre (HRIC), and data quality. These five primary elements of HRIS essentially retain same qualities and requirements as in the current e-HR system, only in a more primitive form. This, again, shows how the interaction relationship originated between the use of IT and HRM.

Understanding Between Information Technology (IT) and Information System (IS)

In the view of James A. O'Brien, information technology is different from information system. Information technology cover areas like computer hardware, data resource management, computer software, telecommunication and networks; and



information system can be any systematized organisation of people, hardware, software, communications networks, and data resources that collects, transforms, and Circulate information in an organization.

Information system (IS) is an orderly prescribed collection of modules to accomplish data processing operations of an organization for (i) make available information to the manager to perform his functions effectively (ii) arrangements of various useful reports, and (iii) gathering requires legal data processing.

Information systems consist of people, processes, machines, and information technology. IT is introducing to allow organizations to carry up-to-date HR services, and decreased expenses, nevertheless of the firm size-to get HR technologies. Both information system (IS) and information technology (IT) is used interchangeably. A component of co-ordinated network of component, which functions of producing, producing, distributing, and processing information are called information system. Its main characteristic is precision. The use of information system in business is in two ways one as an operations system and another one is management support system.

Conclusion

HRIS has implemented in the banks both in public and private and the results are satisfactory. In every developing country, the HRIS has a wider scope in banks. This application apply in HR planning, recruitment, training and development, performance appraisal, career planning, skill inventory, personnel administration, negotiations, salary administration, leave or absence recording, medical history etc. Before implementation HRIS, it is the most important thing for a bank is too clearly finding banks' system requirements. This will help to make an appropriate decision on the level of complexity of HRIS and will lead to maximum application of limited resources. Database HRIS should use as a particular acquire of all information. The results of study indicated that system conditions such as training, documentation, numbers of HR applications are ease to use for the most important antecedents of success. Other organizational conditions like the availability of internal support for users also represented critical conditions for success on the use of HRIS.

Reference

1. Hendrickson, A.R. (2003), "Human resource information systems: backbone technology of contemporary human resources", *Journal of Labor Research*, Vol. 24 No. 3, pp. 381-94.
2. De Sanctis, G. (1986), "Human Resource Information Systems- A Current Assessment", *MIS Quarterly*, Vol. 10, No.1
3. Broderick, R., & Boudreau, J. W. (1992). Human resource management information technology, and the competitive edge. *Academy of Management Executive*, 6(2), 7-17.
4. Martinsons, M. G. (1994). Benchmarking human resource information systems in Canada and Hong Kong. *Information and Management*, 26(6), 305-316.
5. Kwon, T.H. and Zmud, R.W. (1987): "Unifying Fragmented Models of Information System Implementations" in Boland and Hirschheim (eds.). "Critical Issues in Information Systems Research", John Wiley, New York, 1987.
6. Heines, V.Y. and Petit, A. (1997), "Conditions for successful human resource information systems", *Human Resource Management*, Vol. 36 No. 2, pp. 261-75.
7. Rogers, E.M. (2003), *Diffusion of Innovations*, 4th ed., The Free Press, New York, NY.
8. Teo, T.S.H., Lim, G.S. and Fedric, S.A. (2007), "The adoption and diffusion of human resources information systems in Singapore", *Asia Pacific Journal of Human Resources*, Vol. 45 No. 1, pp. 44-62.
9. Singh, H.P, Jindal.S & Samim.S.A (2011) Role of Human Resource Information System in Banking Industry of Developing Countries, Special issue of the international journal of the computer, the internet and management, vol.19, No-SPI
10. Jain, R (1997) A Diffusion Model for Public Information Systems in Developing Countries, *Journal of Global Information Management*, Vol. 5, No-1,pp 1-13.
11. Troshani, I., Jerram. C & Hill ,S.R (2011) Exploring the public sector adoption of HRIS, *Industrial Management & Data Systems* Vol. 111 No. 3, pp-470-88.
12. Shiri, S (2012) Effectiveness of Human Resource Information System on HR Functions of the Organization. A Cross Sectional Study, *US- China Educational Review*, pp-830-39.
13. Lead, P.,Maria.V & Eleanna.G (2015) E – HR adoption and the role of HRM: evidence from Greece, Report information from ProQuest, july-2015.
14. Tannenbaum S.I. (1990), "HRIS: User Group Implications", *Journal of Systems Management*, 41(1), pp. 27-32.
15. Fletcher P. (2005), "From Personnel Administration to Business Driven Human Capital Management: The Transformation of the Role of HR in the Digital Age", In Greutal and Stone (Eds), *The Brave New World of Her*, San Francisco, CA: Jossey-Bass, pp. 1-12.