Chapter-1
Human Resource and Human Resource Information System

1.1 HUMAN RESOURCE

There are organisations which consist of human resource talent. Human resource talent is necessary in the organization. Without human resources organization cannot work and work hampers a lot. According to L.F. Urwick” business houses are made or broken in the long run not by markets or capital, patents or equipment but by men”. The work efficiency of human resources keeps on increasing with the passage of time. Human Resources are” the knowledge, skills, creative abilities, talents and aptitudes obtained in the population.” According to Megginson human Resources refer to the “the total knowledge, skills, creative abilities, talents and aptitude of an organization’s workforce, as well as the values, attitudes and the beliefs of the individuals involved”

1.2 FEATURES OF HUMAN RESOURCES:-

1) Human Resources work for the organization. They work hard and smartly so that they can earn well and live happily.

2) Human Resources are different in nature, personality and behaviour. Due to the different nature, organization helps them in growing their field by
giving challenging tasks to them so that they can learn to manage things and problems.

3) Human Resources are essential assets of an organization. Their skills are effectively utilized in handling the task and take the next step in growth and innovation. There is essential need of human resources as well as the workforce in the organization.

1.3 HUMAN RESOURCE MANAGEMENT

Human Resource is the process of managing people in the organization. According to Flippo, “Human Resource Management is the planning, organizing, directing and controlling of the procurement, development, compensation, Integration, maintenance and reproduction of human Resources to the end that individual, organizational and societal objectives are accomplished”. Human Resource Management is a profession because it contains a recognized body of knowledge gathered from the literature and Research. It conducts pre-Entry and Post Entry training programmes and organizes seminars and conferences to update the knowledge of its members. Human Resource Management helps the organization to attain its goals by providing well trained and well motivated employees. The human resources conduct training for the employees, checking the performance of the humans and take effective steps in making their performance better by providing training. They also motivate them to work harder and smarter in achieving the goals by utilizing their knowledge and skills efficiently. Human
Resource Management helps in maintaining the work Environment balanced by co-ordination and dispersal of responsibility to the bottom level in the organization. It brings self-Actualizations of employees by encouraging and assisting every employee to realize his/ her full potential. It helps in maintaining policies of the organization and has watch on the policies of their competitive firm so that new ideas can be generated from them.

Table 1.1 Evolution of Human Resource Management in India

<table>
<thead>
<tr>
<th>Period</th>
<th>Development Status</th>
<th>Outlook</th>
<th>Emphasis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920-1930</td>
<td>Beginning Stage</td>
<td>Pragmatism of Capitalism</td>
<td>Statutory Welfare</td>
<td>Clerical</td>
</tr>
<tr>
<td>1940s-1960s</td>
<td>Struggling for recognition</td>
<td>Technical, Legalistic</td>
<td>Introduction of techniques</td>
<td>Administrative</td>
</tr>
<tr>
<td>1970s</td>
<td>Achieving</td>
<td>Professional</td>
<td>Regulations and Imposition of Functions</td>
<td>Managerial</td>
</tr>
<tr>
<td>1980s</td>
<td>Sophistication Promising</td>
<td>Legalistic Impersonal</td>
<td>Standards on other Functions</td>
<td>Managerial</td>
</tr>
<tr>
<td>1990s</td>
<td>Sophistication Promising</td>
<td>Philosophical</td>
<td>Human Values Productivity through other people</td>
<td>Executive</td>
</tr>
<tr>
<td>2000</td>
<td>Bright</td>
<td>Psychological</td>
<td>Development of Potential</td>
<td>Top Level</td>
</tr>
</tbody>
</table>

(Sources: C.S. Venkatraman and B.S. Srivastav, Personnel Management and Human Resources, Tata MC Graw Hill, New Delhi, 1991, p.5.)
1.4 EVOLUTION OF HUMAN RESOURCE MANAGEMENT

The Above Table shows that between 1920-1930 welfare of the factory workers stage came where it was decided to protect the labourers from being exploited. In 1931, The Royal Commission on Labour appointed Labour Officers to protect the workers from the evils of Jobbery and Indebtedness, to check corrupt practices in recruitment and selection in Indian Industry. Factory Act 1948 came and it has become mandatory for factories to employ 500 or more workers to appoint welfare officers. In 1960 Three Major Areas i.e. Labour welfare, Industrial Relation and Human Resource Administration emerged as a complementary parts of human Resource Management. During 1970s concerned for welfare shifted towards higher efficiency. A Change in the duties of human resource Manager was Visible. During 1980s, due to new technologies and other environmental changes Human Resource Development became a major Issue. During 1990s Industry were growing there was focus on human Values and a philosophical approach was used. In 2000, psychological Approach was adopted where the focus was on the development of Individual’s potential and this was done by top level management as well the Individual’s own effort.
Figure: 1.1- Evolution of Human Resource Management in India with Graph in Different Time Periods.

Figure: 1.2 - Evolution of Human Resource Stages and Role of Each Position in Human Resource Department

Source: - Evolution of HRM, Stages Six by Jennifer Wharton and Janine Brown Australian Catholic University, Australia
### Table 1.2: Stages in Development of Human Resource Management

<table>
<thead>
<tr>
<th>Stages of Development of HRM</th>
<th>Time Period</th>
<th>Relevant Task</th>
<th>Role</th>
<th>Focus on Restructuring within the Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource partial/File Administration (File Maintenance)</td>
<td>Until Mid of 1960s</td>
<td>Fulfilment of Management Information Needs</td>
<td>Personnel office</td>
<td>Focus on restructuring of HR Database</td>
</tr>
<tr>
<td>HR full administration Accountability</td>
<td>From Mid of 1960s until mid of 1980s</td>
<td>Compliance with legal and tax rules, fulfilment of administrative and legally mandated task</td>
<td>Personnel Administration</td>
<td>Focus on Optimal legal handling of a full range of administrative tasks, development of an HR departmental structure</td>
</tr>
<tr>
<td>HR Professionalization (Organizational Accountability)</td>
<td>In the 1980s and 1990s</td>
<td>Accountability of success in single business unit, effective use of HR tools (recruitment, development) for business success</td>
<td>Personnel Management</td>
<td>Focus on increasing professionalization of HR department, development of services and tools, optimising the cooperation between other HR partners</td>
</tr>
<tr>
<td>HR Strategic Integration (Strategic Business Partner)</td>
<td>From the late 1990s ongoing development</td>
<td>Demand for Added Value to Business, Contributions with Strategic Impact, Participative Developed Organizational Strategy</td>
<td>Business Partner and role sets</td>
<td>Focus on outsourcing, enabling of Line Managers to do HRM, inclusion of new fields</td>
</tr>
</tbody>
</table>
1.5 INFORMATION SYSTEM

An Information System is a system used for collection, organize, storage and communication of information. This system used to collect, filter, process and distribute data. Information system is the backbone of the organization because it is used for doing sales work, accounting work, human Resource work and more over developed in supporting business decision. Role of the Information System is to take data and turn it into information and then transfer that information into organizational knowledge. Information system has been used in supporting business decisions so that quality of business decision increases. Operational level Transaction Processing System (TPS) used for business transactions involving collection, modification and retrieval of all the transactions. This information system is reliable and performs well in the organisation. Competitive advantage of the Information System has been diminished and transaction processing system has been taken place. Information system has been used at managerial level to gain competitive advantage. Management Information System (MIS) and Decision Support System (DSS) are mostly used for business decisions that take output from TPS. Executive Support System (ESS) is especially used for strategic level decisions that take input from MIS and DSS. MIS outputs are inputs to DSS
The Three Basic components of Information System are as input, process/transformation and output. In information system inputs are data that are going to be transformed. The process component of an information system transforms input into an output. Output is considered to be the final product of a system. In case of an information system, an output would be obtaining necessary information in a desired format.
The above Diagram shows the three vital role of Information System in Business firm

1. HRIS support an organisation’s Business Processes and Operations: - Include TPS and Process Control System (PCS).

2. Support Business Decision Making: - This includes Management Information System (MIS) and Executive Information System (EIS)

a) Operations support system

In an organization, data input is done by the end user which is processed to generate information products i.e. reports, which are utilized by internal and or external users. Such a system is called operation support system. The purpose of the operation support system is to facilitate business transaction, control production, support internal as well as external communication and update organization central database.

B) Transaction Processing System (TPS)

In manufacturing organization, there are several types of transaction across department. Organizational departments are Sales, Account, Finance, Plant, Engineering, Human Resource and Marketing. Across which following transaction may occur sales order, sales return, cash receipts, credit sales; credit slips, material accounting, inventory management, depreciation accounting, etc.

C) Process Control System

In this type of system, critical information is fed to the system on a real-time basis thereby enabling process control. This kind of systems is referred as process control systems.
D) Enterprise Collaboration System

This system which enables collaborative effort by improving communication and sharing of data is referred to as an enterprise collaboration system.

E) Management Support System

This system facilitates an **efficient decision making process** for managers is called management support system. Management support systems are essentially categorized as management information system, decision support system, and expert system and accounting information system. Management information system provides information to manager facilitating the routine decision-making process.

![Figure 1.5:- Contribution of Information System to A Business](image)

Source: - O’Brien and MARAKES in 2008, Human Resource Information System at different Levels of Organisation
The above diagram shows the contribution of Information System to a Business. Information system plays a very important role in business.

Information Storage Analysis:- Information systems store, update, analyze the information which the company can then use to pinpoint the solutions for current or future problems. Information systems can integrate data from various sources, inside and outside the company, keeping the company up to date with internal performance and external opportunities and threats.

Decision Making: - An organization’s management team uses information systems to formulate strategic plans and make decisions for the organization's longevity and prosperity. The business uses information systems to evaluate information from all sources, including information from external references such as Reuters or Bloomberg, which provide information on the general economy. This analysis of and comparison to market trends helps organizations analyze the adequacy and quality of their strategic decisions.

Assists with Business Process: - Information system aids business in developing a larger number of Business Value Added System in company. Information System simplifies business Processes, ensuring that only users with the applicable rights can perform certain tasks. It allow employees to concentrate on more high Level Functions.
1.6 EVOLUTION OF HRIS

In 1960s, companies decided to centralize their personal data in mainframe computers. The data will only be used for payroll purpose. In 1980 Human Resource Management System (HRMS) came and there was shift from Mainframe computer to the client server technology. All the tier One Enterprise Resource Planning (ERP) software vendors such as Oracle, PeopleSoft, and SAP included human resource management applications. Human Resource Information System (HRIS) includes sets and functional capabilities aimed at attracting, retaining and properly compensating the workforce.

1.6.1 Stages in the Evolution of Human Resource Technology

Stage I: Human Resource system work was done on papers by the employees which were operated independently. Data is stored on mainframe computers and the response was limited and human resource was responsible for data. Managers gave duty to employees to get personal information of all the employees in the organization.

Stage II: - information has been stored in personal computer. Human resource system includes employee basic information. Advances in database include employee tracking system and payroll system. The human resource data stored on client

Stage III: - Electronic Database System:-This stage is the stage where advance functions have taken place. New technology came in this stage that collaborate
together to provide a comprehensive solution for managing the creation, capture, indexing, storage and retrieval of information for organisation. Human resource of an organization purchase enterprise wide system that include human resource related module.

**Stage IV: Web Based Technology:** - this stage tells about companies that use Information Technology. Web Based Applications are used for giving information. Many Tablets have been used for providing information. The Human Resource department is the owner of the information and the reports generated from the information are easy to make because all the Information have been collected and stored.

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**HRIS SYSTEM DEVELOPMENT LIFECYCLE**

Major steps involved

- Identify Objectives
- Identify various HRIS projects
- Analyze various Alternatives
- Select the best alternative
- Analyze resource requirement
- Develop HRIS plan
- Analyze the plan
- Design HRIS system
- Implement HRIS
- Maintain HRIS

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**Figure: 1.6 - HRIS System Development Lifecycle**

1.7 HRIS IS ESSENTIAL IN ORGANIZATION

Entire management activity cycle revolves around human resource. The human factor enjoys the position of centrality amongst all the factors of production. The information resource, rightly used by and for this dynamic factor of production can enhance his efficiency and effectiveness. People through HRIS can help business to improve its operations, promote innovations, increase profitability and productivity and maximise satisfaction of its employees. It helps in developing and maintaining the integrated work culture and environment. No organization works without information. Therefore, every organization has some sort of information system, no matter in what form and shape. This system may be fragmented in departmental or sectional segments. More often, these sub-systems are non-integrated and inefficient. When these piece-meals of information are made coherent and coordinated, they can bring wonderful results. Same is the case with the information management of HRD department.
Figure: 1.7 - HRIS System Component
Source:-www.medium.com

Human Resource and Human Resource Information System

**Human Resource Information system**

**HR Planning and Analysis**
- Organizational Chart
- Staffing Projections
- Skill Inventories
- Turnover Analysis
- Absenteeism Analysis

**Equal Employment**
- Affirmative Action Plan
- Applicant Tracking
- Work Force Utilization

**Staffing**
- Recruitment Process
- Applicant Tracking
- Job Offer Refusal Analysis

**HR Development**
- Employee Training Profiles
- Training Need Assessments
- Succession Planning

**Compensation and Benefits**
- Pay Structure, Leave Usage, Benefit Usage Analysis
- Wage Salary Costing, Health, Safety, Security
1.8 CONCEPT OF HUMAN RESOURCE INFORMATION SYSTEM

HRIS is an integrated system used to gather store, and analyze the information regarding organization’s human resources comprising of database, computer Applications, Hardware, Software necessary to collect, record, store, manage, deliver, present and manipulate the data for Human Resource Function. The application of HRIS provides the benefits not only to the human resource functions of an organization but overall organisation. The main purpose of maintaining HRIS is to gather information, classify the information, record of information which is required for effective and efficient management of human resources. Human Resource Information System is implemented at three levels

a. Publishing the Information

b. Automation

c. By transforming human resources into strategic partner in business

Human resource is promoted by Human Resource Information System (HRIS). HRIS is implemented in organizations in which information is automatically generated. The Information is used by managers and employees. HRIS gives information to the organization and that information is helpful in making strategic decisions.
Figure: 1.8 - Human Resource Information System: - Data Base Approach to Data Base Management


1.9. HUMAN RESOURCE INFORMATION SYSTEM (HRIS) SUBSYSTEM

An HRIS is composed of several subsystems: a transaction-processing system, a workflow system, a reporting system, a decision support system, and an executive support system. The transaction-processing system contains records of employee activities, such as tracking time and attendance or enrolment in various benefits. This record-keeping repository feeds into other subsystems, such as the workflow subsystem and the reporting subsystem. The workflow subsystem facilitates the routing and transfer of forms or other work process information.
from person to person or department to department. Work processes, such as recruiting, selecting, and orienting new employees, are captured in this subsystem. An HRIS can be used in all functional areas of HR. The **recruiting function** can use an HRIS for **applicant tracking and correspondence**, **internal job posting and job-bidding processes**, and the identification of internal candidates when no job posting is used. Collecting and assessing information about job applicants can be linked directly to the HRIS, and the HRIS, in turn, can be used to match applicants with available jobs. **Performance appraisal** results (e.g., 360-degree appraisals) can be input directly into the HRIS, enabling rapid feedback and decision making. In addition, performance-rating distributions can be monitored within and between departments to maintain consistency of standards.

Compensation and benefits can be managed more effectively with an HRIS.

![Figure: 1.9 Human Resource Management System (HRMS)/ Human Resource Information System (HRIS) Sub System](image)

**Figure: 1.9 Human Resource Management System (HRMS)/ Human Resource Information System (HRIS) Sub System**

**Source:** Michale J.Kavangh, Mohan Thite, Richard D.Jhonson; 1989, New York
### Table 1.3:- HRIS SUBSYSTEM, Source:- www.patriot software.com

<table>
<thead>
<tr>
<th><strong>Recruitment</strong></th>
<th>Recruitment is the most important subsystem of HRIS. It is the anchor of all human resource policies and systems. Under a computerized procedure the basic details of applicants can be put into computer and their progress through the recruitment procedure can be fed into the computer in the same way. This system provides management with a progress report on filling of vacancies and status of pending applications.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Self Service</strong></td>
<td>This helps employee to see their own leaves and manage their own payroll and HR Information. Each employee has their own log in Information to an Individual account. This Personal Self Service is a huge time saver. Employees can do more HR payroll Task and HR Task on their own. Employees can view and print their payroll information. They can access their payroll history to view previous paychecks. If employees need hard copies of their pay roll they can print copies directly from the payroll self-service software. To save time with tracking employee hours, employees have digital time cards in the software. Employees would then log into their account to either punch time or enter the total hours worked. Employees can also enter the vacation, sick, or other time off they use.</td>
</tr>
<tr>
<td><strong>Leave and Absence</strong></td>
<td>This system record leaves and compliance with management. It stores employee data, company record and document, instant reporting along all information stored. Leave is an online absence management system, providing a simple way for staff to submit leave requests and managers to approve. Employees can keep track of allowances, whilst Management</td>
</tr>
</tbody>
</table>
and HR are able to report on all forms of absence and plan for time-off and staff attendance.

<table>
<thead>
<tr>
<th>People Administration</th>
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</thead>
<tbody>
<tr>
<td>A basic component of an HRIS system is its administrative function. HRIS system finds information for each employee would include hire date, name, address, telephone, e-mail address, birth date, sex, salary, emergency contact information, department code, location, employment status (full-time, part-time, or contract), the start date of each position held, position titles, and benefit information.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compensation and Benefits</th>
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</thead>
<tbody>
<tr>
<td>Information regarding the company’s compensation and benefits plans and the policies relating to these plans are found in this subsystem. For example, policies on the type of increases allowable when an employee receives a promotion, data regarding pay grades and ranges for each position, positions that are entitled to a bonus, and bonus structure is included. In addition, information regarding the type of benefit plans, whether there is a cost-sharing arrangement, and what that arrangement would be if an employee took an unpaid leave would also be available in this subsystem</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training and Development</th>
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<tbody>
<tr>
<td>This subsystem includes data on an employee’s skills and competencies, training courses taken, costs of courses, developmental activities, and career planning in terms of which positions might be most appropriate for an employee based on skills and competencies.</td>
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</table>

<table>
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<tr>
<th>Performance Evaluation</th>
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<tr>
<td>This subsystem includes information regarding performance ratings, the date these ratings were received, the type of appraisals that were used, comments about the appraisal, and performance objectives and goals.</td>
</tr>
</tbody>
</table>
1.9.1. Stages in implementation of HRIS

A) **Determination of Information:** In this stage, Information enter into the HRIS. Data and Information are the basic input for taking decisions. Different information is required by the managers. Identification of the information is the most important part in designing of HRIS. A wide an In Depth Study is required for organization member.

B) **Designing Stage:** In this stage, the flow of information is structured which is economical and matches with the need of managers. HRIS is a subset of MIS. HRIS designing requires that techniques should be developed for desired data which is set by managers at different levels.

C) **Implementing HRIS:** In this stage, employees are imparted with the necessary skill through orientation and training programmes. Various facilities are provided and procedures are implemented to integrate HRIS with organization.

D) **Monitor and Evaluation:** This is the stage measuring the performance of HRIS with the organization human resource work. If the actual performance does not meet and there are more gaps between the actual performance and standard performance then corrective actions are taken to improve the performance. The system is evaluated on regular basis.
Fig. 1.9: Modules of HRMS

- Resource Allocation
- HR & Benefits Administration
- Training Administration
- Personal Data Management
- Resource Management
- Skill Management
- Performance Management
- Attendance Management
- Leave Management
- Payroll Management

Source: mypayroll.paysquare.com

Fig. 1.10 HR Payroll Management System

- User Friendly Interface
- Employee Self Service Portal (ESS)
- Biometric Integration
- Multi User Role based Solution
- Easy and Simplified Payroll Process
- Location & Department wise Access
- e-GOPAY reduces Time and Manpower
- Payroll Statutory Provisions
- Multiple Salary Structure

Source: mypayroll.paysquare.com
## Table 1.4: Modules of HRMS

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Allocation</td>
<td>Resource Allocation is assigning and managing assets in a manner that supports an organization’s strategic goals. In HRIS resource Allocation is the scheduling of activities and the resources required in HRIS like employee information, Information of Company, these resources allocated in HRIS.</td>
</tr>
<tr>
<td>Human Resource and Benefits Administration</td>
<td>HR administration program creates and maintains an enrolment profile for every employee, keeping track of information such as the date hired, marital status, number of dependents, total hours worked, and attendance records. The program offers flexibility, taking into account special employee needs, part-time and temporary hires, and changes in government regulations. The benefits administration program can function in tandem with tax preparation software, ensuring that all allowable deductions are taken and maintaining detailed records for reference in case of an audit.</td>
</tr>
<tr>
<td>Training Administration</td>
<td>The implementation of HRIS in the area of Training and Development depend upon factors which can be both organizational factors as well as employee oriented factors. Information is collected and analyzed on various parameters like employee personal information, pay scale, absenteeism rates; benefit analysis, etc from the HRIS database. Apart from this, various other factors like employee development needs, organizational culture, openness to feedback and change, cost or overall return on investment are taken into consideration, before implementing a robust HRIS framework in Training and</td>
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Human Resource and Human Resource Information System

The IIS University, Jaipur
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<table>
<thead>
<tr>
<th>Human Resource and Human Resource Information System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development. Role of Training Administration in HRIS is scheduling, ordering and tracking of all training courses organized in the company.</td>
</tr>
<tr>
<td>Personal Data Management</td>
</tr>
<tr>
<td>Resource Management</td>
</tr>
<tr>
<td>Skill Management</td>
</tr>
<tr>
<td>Human Resource and Human Resource Information System</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td><strong>Performance Management</strong></td>
</tr>
<tr>
<td><strong>Attendance Management</strong></td>
</tr>
<tr>
<td><strong>Leave Management</strong></td>
</tr>
</tbody>
</table>
the employer the power to create and manage leave policies easily. Customization of policy rules regarding accrual calculations, half day permissions, clubbing of leaves, over utilization of leaves etc. must be made available.

| Payroll Management | A payroll system is software designed to organize all the tasks of employee payment and the filing of employee taxes. These tasks can include keeping track of hours, calculating wages, withholding taxes and deductions, printing and delivering checks and paying employment taxes to the government. Payroll software often requires very little input from the employer. The employer is required to input employee wage information and hours—then the software calculates the information and performs withholdings automatically. Most payroll software is automatically updated whenever a tax law changes and will remind employers when to file various tax forms. |

1.10. TYPES OF HUMAN RESOURCE INFORMATION SYSTEM

1. **Operational HRIS**: Operational HRIS provides information to the managers which are helpful. It provides information about the routine data for support so that managers can take human resource decisions. Two Major sub Divisions under HRIS are:

a. **Employee Information System**: It is a part of operational HRIS. Employees. All the information of employees is stored in it.
b. **Position Control System:** It is a concept introduced so that position of each and every employee can be identified. The position control system includes the job title of an employee. Position is identified by human resource managers.

c. **Performance Management Information System:** This includes performance Appraisal data and productivity information data. This system is useful to collect the evidence of employee grievance matters. Performance Management system includes decisions like retaining an employee, promoting an employee, transfer of employee and termination of employee.

II) **Tactical Human Resource Information System:** Tactical HRIS provides support to managers that emphasize the allocation of resources. Tactical HRIS include recruitment decisions, job analysis decisions, designing decision and training and development decision of employees.

III) **Strategic Human Resource Information System:** Strategies are formed which focuses on workforce planning and specialized human resource software. The main purpose of strategic HRIS is to have an idea about labour resources and workforce planning.

IV) **Comprehensive HRIS:** HRIS is an integrated database system of human resource file. All the files are constructed and coordinated in a manner using software’s of database management so that all the programmers can produce reports from all the files.
### Table 1.5 : Types of Human Resource Information System

<table>
<thead>
<tr>
<th><strong>Operational Human Resource Information System</strong></th>
<th>Operational HRIS is of immense help to the manager. It provides the manager with all the required data to support routine and repetitive human resource decisions. Many operational level human resource systems collect and report human resource data. These systems usually include information about the organization’s employees and position and also about governmental regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tactical Human Resource Information System</strong></td>
<td>Tactical human resource information systems provide managers with support for decisions that emphasize the allocation of resources. Within the domain of HR, these include recruitment decisions, job analysis, and design decisions, training and development and also employee compensation plans.</td>
</tr>
<tr>
<td><strong>Strategic Human Resource Information System</strong></td>
<td>Strategic HRIS focuses on supporting labour negotiations, workforce planning, and certain specialized human resources software. The main purpose of this is to have an overall good idea about labour resources and workforce planning.</td>
</tr>
<tr>
<td><strong>Comprehensive Human resource Information System</strong></td>
<td>The computerization of HRIS has resulted in an integrated database of human resource files, employee files, position, skills inventory files, affirmative action files, job analysis and design files, occupational health and safety 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.</td>
</tr>
</tbody>
</table>
Figure 1.11: Types of Human Resource Information System

Source: - Prof. Dr. Angelina Njegus “Human Resource & Information System”, 19 November, 2013, Associate Professor at Singidunum University (USA)
The Above Diagram Shows That Three major types of Information are contained in HRIS. Information about human resources is collected when individuals apply for jobs (e.g., completing an application form) and then added to or modified throughout an employee’s tenure with an organization. Information about jobs, work processes, and other organizational issues is collected from managers and subject-matter experts for input into the HRIS. Larger organizations are more likely to use specialized applications, such as ABRA, that provide greater data integration and HR functionality. Larger organizations also use enterprise resource planning (ERP) systems, such as SAP, which integrate HR information with financial, operational, and strategic information.

1.11. ROLE OF HRIS AND HR PAYROLL SYSTEM IN ORGANISATION

The function of Human Resources departments is generally administrative and not common to all organizations. Organizations may have formalized selection, evaluation, and payroll processes. The HR function consists of tracking existing employee data which traditionally includes personal histories, skills, capabilities, accomplishments and salary. A payroll system involves everything that has to do with the payment of employees and the filing of employment taxes. This includes keeping track of hours, calculating wages, withholding taxes and other deductions, printing and delivering checks and paying employment taxes to the government. A basic payroll service will collect wage and hour information from the employer and use that information to calculate gross wages,
subtract all pertinent withholdings and deductions, print checks, make direct deposits and prepare all employment tax filings. **Payroll software does** a lot of the heavy lifting of payroll management for us. Like outsourced payroll services, payroll software requires very little input from the employer, just employee wage information and hours. All of the tricky calculations and withholdings are calculated by the software, which receives automatic updates every time tax laws are changed. The software can also fill out employment tax forms and reminds when to file them.

Figure 1.12:- HR Employee Enquiry Payroll, Source: - [www.sumrhr.com](http://www.sumrhr.com)
Figure 1.13: - Integrated Database, HR and payroll share all current employee information, working from one and the same database.

Source: www.sumhr.com

Fig 1.14:- Human Resource software like Payroll Software, Attendance Software, e Leave, Online Claim Software for wide variety of industries. Source: - www.e-hr.com
1.12. HUMAN RESOURCE INFORMATION SYSTEM AND
HUMAN RESOURCE PLANNING

Human Resource planning is a process that identifies the need of human resources for organization to achieve its goals. HRIS is an excellent tool for Human Resource Planning (HRP). It enhances the identification of unfilled positions accurately and analyzes each job position with its title in an organization. It also provides insight into organizational training needs, selects the right persons to be trained and evaluates the effectiveness of training programs, but has the challenges of forecasting demand and supply of labour, access to information, cost of recruitment and workforce shortage.

![HRIS Track](source: small business chron.com)
The Above diagram tells that Human Resource Information System (HRIS) facilitates human resource function so that organization can gain competitive advantage. Human Resource Information System is helpful for human resource planning because it reduces the cost of organisation. Some of Human Resource Information System is that HRIS skill inventory facilitates and store data in a skill database by selecting the suitable candidate for the job after analyzing their qualification. Training is given to the selected employee. Human Resource Information system facilitates for training need Analysis (TNA).Training Need
Analysis is a development programme that meets the need of employees and saves time and cost of organisation. Training is an important Human Resource tool which assist human resource people to maintain training need of employees before and after training. Human Resource Information System and Training Need Analysis Facilitates Succession Planning.

1.13. HUMAN RESOURCE TRANSFORMATION AND HRIS

HRIS focuses on making human Resource functions effective and efficient through the usage of Advance Technology. HRIS include Corporate Strategy and adding more value business that tells the challenges company is facing. Human Resource Transformation (HRT) gave rise to Enterprise Resource Planning. Enterprise Resource Planning system consists of number of Information Technology System from different functional areas of an organization which are integrated to form a single common database. Enterprise Resource Planning is the element of HRIS which keep the record of employee resources, their rewards and Training. Human Resource Information System (HRIS) stores the personal data of employees which in turn encourages transformation of both people and management.

1.14. INTEGRATING THE TECHNOLOGIES OF HUMAN RESOURCES

Management Information System has an important role in the functioning of HRIS because Management Information System coordinate and do planning
regarding the design of the system and improves the quality of all the functional areas. If there is no planning between Management Information System (MIS) and Human Resource Information System (HRIS) then goals are difficult to achieve by the organisation. Some studies shows that still some organizations struggle to integrate human Resource Information System (HRIS) with overall Information System. The Management associated with Human Resource Information System (HRIS) concerned with other functional areas of the organization where information system is independent from corporate Management Information System Area.

Figure1.17: - HR’s first fully integrated HR-as-a-Service solution

Source: - www.ngahr.com
The above Diagram shows the Human Resource Information system Through SAP. There are many software came for HRIS work one of them is SAP. Now Technology is integrating with Human Resource work. Earlier Human Resource work was done through paper but with the help of Software work becomes easy. SAP is made up of individual, integrated software modules that perform various organizational system tasks such as finance/accounting, controlling, project system, funds management, materials management, and sales distribution. One of SAP major modules is Human Resource Management Systems (HRMS/HRIS). HRIS is very sophisticated and SAP offers a full range of functionality, HR products, and Web-based offerings.

1.15 HUMAN RESOURCE INFORMATION SYSTEM AND E-HR

Human Resources work through HRIS. Human Resource Information System have been changed which transformed into e-HRM system. The use of web based self service in human resource and effectiveness of Human Resource Information System (HRIS) in organization is most widely used. In Human Resource function most widely used method is recruitment. In recruitment, Curriculum Vitae have been sent by the job seekers in the company and Curriculum Vitae is scanned by the company’s computer where the information is stored for future use. Web Based Training (WBT) is a popular approach in the organization. The e-Human Resource is of three types:
1) **Operational Human Resource Management:** In operational Human Resource Management there is choice between supporting recruitment through a human resource Website.

2) **Relational Human Resource Management:** Relational Human Resource Management supports business process by training, Recruiting and Performance Management.

3) **Transformational Human Resource Management:** The activities are of strategic nature achieve the company’s vision and Mission. In transformational Human Resource Management 5-15% of the time is devoted to form strategies and employees reduce activities in operational sector. Human Resource Information is different from e-Human Resources in following ways

1) Human Resource System is an Automatic system

2) Human Resource Information System is an Automatic system which is concerned with the functions like payroll, employee tracking, recruitment, selection of employees and making data interactive to staff working in other departments. Human Resource Information System (HRIS) has developed with the features of e-Human Resource so there is difficult to distinguish HRIS from E-HR
1.16. TRADITION HUMAN RESOURCE ROLE AND HUMAN RESOURCE SOURCING DECISIONS (HRSD)

Human Resource Management has a traditional approach which focuses on the activities like Human Resource Planning, job Analysis, Recruitment and Selection, Maintaining Employee Relations, performance Appraisal and training and development. Traditional role of personnel managers is to see the factors of compensation management, welfare of employees. Modifications are done in welfare schemes by the personnel manager. Traditional Human Resource Managers are innovative and they tell which are capable of retaining employees within the organisation. The role of Human resource was also to provide emotional support to improve the employee well being. Thus the traditional role of human Resource managers and employees was to link the, management with human Resource.

1.17 HUMAN RESOURCE OUTSOURCING DECISION

This decision is taken by Human Resource Manager. The reason of outsourcing is to reduce the labour cost. Manufacturing Firms have taken the decision of outsourcing because they expand their business in different locations to produce various components of final product and sub contractors also produce those products. Good Information technologies have expanded business and their outsourcing is possible. Much software is used for outsourcing the products. Outsourcing decision helps in reducing the operational cost. In human Resource
outsourcing risk management issues are considered in order to see that the source of supply can truly meet the need of operation moving forward. It has been found out that the Human Resource Information System (HRIS) implementation sourcing decisions is expected by the experiences of Human Resource Professionals and much effort is required in the implementation of the human resource outsourcing decision through the knowledge and experiences of experts.

![Figure 1.18: HR Outsourcing Functions and its Components](source: www.hrpractice.com)

**Figure 1.18:** HR Outsourcing Functions and its Components

1.18. **TRAINING AND DEVELOPMENT**

The training and development needs should be designed in such a way that organizational goals and strategies can be developed and achieved. Training is the process of increasing the knowledge and skills of employees for doing a particular job. The purpose of training is to bridge the gap between job requirement and
present competence of employees. The aim of the training is to improve the behaviour and performance of an employee. It is a never ending process.

1.18.1 Training process consists of following stages:-

1) **Training Need Analysis:** - It involves the study of entire organization and includes objectives of training, resources and resource allocation. The purpose of Training Need Analysis is to determine the organization’s training need and its objectives are analyzed. Specific goals and strategies of various departments are considered in achieving the objectives. Without the advice of Senior Management and managers training programme cannot be successful.

2) **Task and Role Analysis:** - It is a detailed analysis of jobs which identifies job contents, knowledge, skills and aptitude required at the work behaviour. Particular attention is paid by the job holder in performing the task.

3) **Implementation Stage:** - HRIS is implemented with the help of instructor. The instructor should cover all the pertinent information required to conduct a training programme. In training incentive should be given to employees so that they work with enthusiasm.

4) **Training Evaluation:** - In this stage, training should be effectively implemented. An assessment is done by collecting data to know whether participants are satisfied with the training programme. Participants have
learned something from the training and are able to apply these skills at their workplace.

Figure 1.19: Training and Development Process

Source: Kirkpatrick, Donald L. and Kirkpatrick, James D. Evaluating Training Development Process
Figure: 1.20- Training and Development Need Assessment Model

Source: - Al Khayyat and ELgamal, 1997 Training and Development Model

Training and Development need Assessment

In Above Model it has been identified that, Evaluation and feedback element as one of the most important elements of training and development. The evolution of Training means any attempt to obtain information on the effects of training program and to assess the value of that training. Primary aim of Evaluation is to improve training by discovering which training processes are successful in achieving their stated objectives. Evaluation data obtained prior to training, during Training and immediately after training. Training leads to reaction, which leads to
1.19. SUCCESSION PLANNING

Succession Planning is the process in which the qualified persons are available on managerial positions when there is vacancy due to resignation of employee, death of employee, premature hiring of employee and retirement of employee. The aim of succession planning is to ensure that there should be smooth transition and organization work efficiently. Succession planning provides opportunities to the employees to grow in their careers.

1.19.1 Role of HRIS in Succession Planning

HRIS plays a very important role in Succession Planning. Through HRIS managers can see which employee lies in the list of succession planning. HRIS gave the solution to organize employee Information in an easy format. Organisation identifies the employee that which employee and their training schedule made by senior managers so that they can perform well on that position. With the help of Human Resource Information System scheduled changes can be made in the duties of the concerned employees. Succession planning gave opportunities to the employees in whom he feels more valued and sees more opportunities for growth. These help the organisation in reducing the employee turnover and gives satisfaction to employees. Succession planning can help to reduce.
<table>
<thead>
<tr>
<th>Table 1.6:-Role of HRIS in Succession Planning</th>
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<tbody>
<tr>
<td><strong>Identifying Employee Eligibility</strong></td>
</tr>
<tr>
<td>HRIS solutions may provide information about which employees are eligible for open positions and which employees need more training or have not met standards needed to move forward. Some HRIS solutions will automatically identify employee next steps, so that managers can easily assign training modules or schedule cross-training or mentoring. With fully integrated HRIS solutions, it may be possible to assign tasks and make schedule changes right from the same dashboard with a few clicks.</td>
</tr>
<tr>
<td><strong>Employee Succession Planning Benefits</strong></td>
</tr>
<tr>
<td>Employees benefit from working at a company in which succession planning is used, as they are constantly learning new skills and knowledge that can help them in their career in the future. Succession planning can help employees move into leadership roles quickly and comfortably. Once in new leadership roles, employees are also more likely to be productive and may be less likely to leave than when they are rushed through training and into the position.</td>
</tr>
<tr>
<td><strong>Employee Engagement and Contentment</strong></td>
</tr>
<tr>
<td>Many employees say that a key reason for disengagement or discontent is that companies do not offer enough development opportunities. By having a succession plan in place from the moment an employee starts with the company, employees are likely to feel more valued and see more opportunity for growth. This can help companies to reduce turnover and enjoy higher employee satisfaction levels.</td>
</tr>
</tbody>
</table>
Figure 1.21: - Example of Succession Planning of A Company showing details of Staff in HRIS

Source:-www.Succession Wizard.com

The "Staff Details" screen shows all the information on each individual held on the database. The top half of the screen shows key personal information relating to the individual, with the bottom half showing a series of tabs holding further information. Clicking on the various tab heading brings that information to the front, to view or edit. The various tabs hold information on Job History, Notes, Document links, Competencies and Assessments as well as displaying roles the currently displayed individual could move into.
This is an example of one of the reports available and it is a particularly useful snapshot to see where succession issues exist. It shows all entries on the database (unless a filter has been applied) and the number of potential successors by classification. It shows the number of possible moves the same individual could be eligible for. Scanning the report for an individual indicates where issues may arise. The report menu-bar in the top left hand corner gives the available options i.e., whether to print the report, edit the filter, sort the report into a different order for
printing, export it to MS Word or MS Excel or close the report and return to the "Home Screen".

### 1.20. ROLE OF HUMAN RESOURCE INFORMATION SYSTEM IN CAREER PLANNING AND DEVELOPMENT

There is the role of Human Resource Information System in Career Planning and Development for the benefit of the organisation. Training and Development is delivered effectively and cost efficiently to the employee to work with Human Resource Information System (HRIS). It helps the organization in determining essential competencies on the basis of performance of employees identify the gaps of competencies and enable decision makers to implement alternative means for closing the gaps in areas such as hiring employees from outside and retaining current employees.

### 1.21. HUMAN RESOURCE INFORMATION SYSTEM (HRIS) HELPS THE ORGANIZATION IN DECISION MAKING AND HUMAN RESOURCE PLANNING

Companies have started integrating Human Resource Information System (HRIS) with human Resource work like payroll, leave travel, expense time, attendance, career Planning, skills Inventory to store the data, updating of data and analyze the data easily. The integration of Data with other system has enabled Human Resource Information System to provide detailed information on all Human
resource System. With new and Advance Technology, Like Fast Information Generation and Greater Information Accuracy, Fast decision making and greater human resource planning is possible for decision maker

1.22. HUMAN RESOURCE INFORMATION SYSTEM MODEL

a. Hyde Shafritz Model

This model is given by C.Hyde and Jay M. Shafritz in 1977.He had identified that this model has the capability of exchanging data .In this model, personal data and Positional Data are entered into Human Resource Management. Human Resource Information System produces reports of employees which are accountable. The storage unit can reside in an Information System, Human Resources and other locations

Figure 1.23:- Albert C.Hyde and Jay M.Shafritz HRIS: Introduction of Human Resource Information System (HRIS) 1997
b. **Simon Input Data Maintenance Output Model:** This model is given by H. Simon in 1983. In this model input function provides the capability for entering data into Human Resource Information System (HRIS). It includes the procedures that tells data gathering and includes how data is processed.

**1.23 RESOURCE FLOW THEORY IN HUMAN RESOURCE INFORMATION SYSTEM**

Resource Theory is given by Raymond; 1995. In his theory he told that the potential employees go through screening process before joining the firm. They receive training and education to perform the task. The task is to keep the track of the human resources flow and use the data to produce information. The human Resource Service Provider provides a rich service data base for use in studying the extent to which the firms have implemented the Human Resource Information System Applications that can be used in a resource flow manner. **Hyde Shafritsu**, Simon and **Manzini** Gridley said that Human Resource Information System incorporates input components which is especially applicable in the designing of computer based system and is used in resource Flow Model.
The resource Flow Model of Human Resource Information System (HRIS) is given by Raymond in 1995. This model has three components that is Input subsystem, Human Resource Information System Database, Output Subsystem. Input subsystem contains three main subsystems that are Data Processing, Human Resource Research and Human Resource Intelligence. The second Component is Human Resource Information system database. This subsystem contains all the
data related to Human Resources like workforce planning and environmental report. This system is used for managing Human resource Work.

1.24 IMPORTANCE OF HUMAN RESOURCE INFORMATION SYSTEM (HRIS)

Human Resource Information System is an important source of competitive advantage (Wei & Fang, 2013). Human Resource Information System (HRIS) is an important tool for the organization (Carell et al; 1999). The human Resource data presented before managers helps in decision making. This concept is known as decision support system (DSS). Importance of HRIS has influence on cost management, time management, and managerial satisfaction with the system, human Resource functions and organizational effectiveness. These sources make the work of the human Resource Department easier. Importance of the following factors

1) Managerial Satisfaction: - HRIS system is a system that makes the human resource process more efficient and faster. Managerial Satisfaction increases when application of human resource Information System reduces cost, reduces the workload of administrative employees, decision making- Efficiently Improve control Budget and achieve organization’s vision.
2) **Time Management**: Human Resource Information System has been implemented so that the time can be saved. It enables Human Resources to focus on strategic tasks and becomes a strategic provider or professional consultant to the organization. Human Resource Information System (HRIS) incorporates self Service options where employees can access and update their own personal records, change or enrol in their own employee benefits plan and respond in time.

3) **Importance to organizational effectiveness**: HRIS brings Organizational effectiveness in such a way that human resource department is more efficient and employees and management can access any of their records online whenever they need. It removes the burden of human Resource department to carry out the human resource activities on the paper giving staff members more time to spend on strategic tasks. It is believed that HRIS will bring about informational efficiencies and time and costs savings that will enable HR department to turn their attention to provide current and accurate data upon which the strategic business decisions can made.
1.25. SCOPE OF HUMAN RESOURCE INFORMATION SYSTEM (HRIS)

HRIS scope has been increased from the past several years. The Importance of Human Resources work in the organization has increased the importance of the usage of advance technology. Through the usage of advance technology computers have started implemented new software in the computers. The managing of the Human Resource work through this software as well as making the work easier for employees through computer is all done through Human Resource Information System (HRIS). This system is widely used in organizations and banks all over the world. This system shapes an interaction between human Resources and information technology. **HRIS has been implemented in Service sector which include Banking Industry, Retail Sector, Real Estate Sector, Hospitality Industry, Medical Hospitals, Businesses, corporate sectors and government companies.** In the service sector as well as in the firm's HRIS contains the information about Job, Positions and people. The scope of HRIS applications have broadened in India. Managers and Employees perceive that the factors of Human Resource Information system (HRIS) applications i.e. **technical and strategic HRM, performance and reward management and corporate communication** were also applied quiet highly in the companies of India and are called sophisticated applications of HRIS.
1.26 FUNCTIONS OF HUMAN RESOURCE INFORMATION SYSTEM (HRIS)

Human Resource Information System plays an important role in the industry. The key functions of Human Resource Information System

1) **Benefit Administration:** Human Resource Information System (HRIS) helps in keeping the record of the employees which include perquisites, salary, insurance benefits, retirement benefits given to the employees.
2) **Payroll Function:** - It is the most important function of Human Resource Information System (HRIS) because employee’s basic salary is being recorded. This function includes calculating pay, generating file, pre check detail report for approval prior to payroll and the ability to track the progress of payroll. These functions offer important business value by reducing administrative work load. Employees have immediate security like access to information, including the most recent pay checks, year to date pay summaries, benefit summaries, key employment data, salary and performance review dates and assigned company property.

3) **Employee record:** - This function keeps the record of the employees from his past organization to the present organization, personal details and the details of the current company. This function manages all the documents related to the individual like offer letter, appointment letter, appraisal letter relieving letter from the past company and many other documents needs to be managed correctly with exact working dates. HRIS helps it by providing a feature like document generation and document management so that Human Resource Managers can control this activity with higher number of people.

4) **Recruitment:** - Recruitment is done on two bases i.e. Internal Recruitment and External Recruitment. External Recruitment is of many types like newspaper advertisement, job sites, and web portals. The internal source of recruitment is Employee referral. The external recruitment process takes lot of time and large amount of money spent in doing external recruitment.
5) **Training**: - training means utilizing the skills and efficiency of the employees to the maximum level. The Human Resource department is responsible for organizing the training programme. These training programmes are helpful for the employees as it tells about the learning ability and the knowledge of the employees. The training are of motivation of employees, Employee behaviour, focuses on employee work performance, focuses on employee’s current performance. HRIS helps in maintain all these records, keeping the appointment filtering the employee list based on their knowledge, weaknesses through which a session can be organized and proper identification can be done for the employees while managing the training.

6) **Appraisal and Performance Management**: - it is an evaluation of the performance of employees to understand the abilities of them. It is done to determine the wage structure, company package, and salary raises and to identify the strength and weakness of employees. These members collect the information about the employee’s performance, their contribution in company’s attaining objective, work in extracurricular activities and participations, learning reports.

7) **Attendance and Record Management**: - HRIS is majorly used here in an automated fashion where HR keeps the record of all the employees’ attendance, leaves- paid or none paid, holidays granted or not granted. All these functions include HRIS. Thus it is due to HRIS, these functions are performed in the organization.
1.27. BENEFITS ARE AS FOLLOWS:-

1) Faster Information Process: - In HRIS, Information is stored in the HRIS; an employee can take the information and use it for their own purpose only with the help of security pin. Employee can take the information for its personal use from its own account and the higher management can also take the information about the respective employee by using the data already stored in the computer.
2) **Cost Reduction:** Human Resource Information System (HRIS) contains all the information regarding employee’s details, their past records, Salary and compensation reports, contains the record of performance evaluation and training sessions attended by each employee, including details regarding the group hiring practices such as comprehensive listing of all job practices, an up-to-date index of all job holdings and electronic copies of all employees on all paper work. These figures are in one data base so that the management can take decisions regarding the employee. These help in running the organization.

3) **Reduces Paper Work:** Human Resource Information System reduces the paper work of the employees. The information is stored in the computer and this information is relevant and can be used by the employee’s as when required. The information is qualitative.

4) **Improve Planning and Programme Development:** It improves planning system and also supports management in taking decisions of the organization. HRIS takes the help of decision support system (DSS) so that decision process as well as planning function takes place. DSS is a set of interacting and independent entities, with different characteristics having a constant communication with external environment. All of the automated tasks like data complete transmission, racking, sign off, query statistics and analysis can be done through decision support system. Decision on how, when and why to select, evaluate train and reward are supported through a Human Resource Decision Support System (HRDSS).
this is better than HRIS. Hence it helps in improving planning and programme Development.

5) **Enhance communication at all levels:** - HRMS software is of different types. This software performs different functions. The software knowledge is required by every employee in the department. With the usage of HRIS, the communication process increases and the HRIS system Qualities being discussed by the management. This way HRIS enhances the communication at all the levels. The Other thing is that the HRIS is used by the entire employee’s in the organization hence it becomes a tool to communicate with it in the organization and for the employee’s.

![Benefits of Human Resource Information System](source:-www.quora.com)
1.28 LIMITATIONS OF HRIS

1) **Cost:** - any new technology consumes lot of cost. The cost spent in buying a new technology should be done in a careful manner. The company should invest money carefully while purchasing the HRMS Software.

2) **Employee Privacy:** - The employee’s privacy hinders by using this system. Everything gets stored in a Human Resource Management System (HRMS). Several layers of management have an access to use that information. The non-management employee may engage in identifying theft and access a fellow employee’s sensitive data. This breach of security with management system can embroil the employee in a legal problem and create a poor employee relation.

3) **Difficulty for Analysis:** - System contains much data that it is difficult to get analyse. The organization needs a separate analysis system just to sort that data into a meaningful data. For Example if the manager wants to analyze the employee turnover in relation to the levels of compensation and the system is not sophisticated enough then it will be difficult generating reports that identify patterns. This will require additional Human Resource Management system (HRMS) which include lot of expenses for the company.
1.29 NAME OF THE SOFTWARE USED IN THE BANK

1) SAP: SAP is an Enterprise resource planning Software capable of integrating multiple business application representing a specific business area. It updates and process transactions in real time mode and has the ability to be configured to meet the needs of the business. SAP focuses on the following processes like Logistics, Financial and Human Resources. It offers a large number of standard ERP reporting features in all of its logistics and supply chain modules that business process owners can use to make important and timely decisions.

Figure 1.28: Example SAP Software for Managing Human Resource Work in Organisation

Source: www.hrpayroll.com
2) **Oracle:**- Oracle software offers a powerful combination of technology and comprehensive Pre-Integrated business Applications which includes the functions of the banks. This software upgrades as per the requirement of the market. This software empowers the customer for self-service. This software monitor, manage and regulate processes compliance and reporting. It delivers product extensibility and increase the product flexibility. Oracle include core banking deposit. It provides a comprehensive platform for retail banking i.e. a single deposit platform, optimizing services, Productivity and cost of back office processing. Oracle banking provides banking with multiple paths for progressive transformation, Vertical slice and creates new target.

3) **Flex cube:**- It is a banking Software which is used for financial purpose as well as handling the Human Resource Work. Software is used in HDFC Bank. Software is used for maintaining the record of finance, transactions done in the bank. It used in improving decision making. This is an information server which helps in monitoring the business information for monitoring business performance closely. The reports generated from the flex cube used to have a look on the vivid view of the problems in the business environment and identify the areas that require attention. Flex cube software extracts the information in a consumable format at all operational levels and management hierarchies. It gives the information based on product types and consumer types.
4) **Finacle**:- Finacle is software used in the banks. It is a banking solution designed on a web based programme. Finacle core banking solution offers comprehensive retail, corporate and trade finance Features in a highly secure and reliable environment. Finacle core solution supports product management and account management for the full range of core banking products such as Loans, Collateral Management, and Interest rate management. It can help banks in eliminating non productive processes.

![Functionality of HR Software Applications](image)

**Figure: 1.29 - Functions of Human Resource Software Applicants**

*Source: [www.softwareadvice.com](http://www.softwareadvice.com)*

The above of Software use for managing Human Resource Work have been widely used in Organisations. These software combines Work force Management with
Human Resource Management. It connects recruiting, new employees on boarding and Performance Management. Their Applicant Tracking System includes features for requisition templates and bulk emails, advanced corporate site integration, mobile career sites, social sharing tools, referral management and one-click background checks.

1.30. EMPLOYEE PRODUCTIVITY

Employee Productivity is an assessment of the efficiency of a worker or group of workers. Productivity is an output of employee in a specific period of time. Productivity of a worker is assessed relative to an average of employees doing similar work. In an organisation highly innovative employees are founder of productivity. The most important factor in workforce and team productivity is hiring and retaining employees with exceptional capabilities and self motivation. Working with team of managers, Human Resource managers can attract, hire, develop and retain individual employees who are high performers, continuous learners and Innovators. Good manager/Leader is the most important in increasing productivity. Leaders and managers play a critical role in defining the directions, purpose, priorities, goals and roles of the workforce. The capability of the managers to develop plans, hire effectively, coach, motivate and develop employees is crucial to success.
1.31 ROLE OF EMPLOYEE PRODUCTIVITY

1) **Planning**: Productivity is often confused with merely more work by the workforce. It is related to planning. It represents the improvement in the work quality of employees by innovations in planning and organizing the available resources. Improving performance is more a result of intelligent planning and effective implementation. The efficiency of the workers cannot be increased by overburdening them with work, but by reorganizing their work in such a way that they are able to apply their skills in the most effective manner. Maintenance relates to work conditions, intersex relationship vertical as well as horizontal and supervision. Good working conditions, a good relationship between superiors and the subordinates and among employees, may not in itself give motivation, but their absence certainly has an adverse effect on the efforts towards motivation of employees.

2) **Satisfaction**: An uninterested or disgruntled employee can never give his best. He will remain submerged in his own worries and problems. Such an employee has a very demoralizing effect on the rest of the workforce. If, the problems affecting his performance are job-related, then resort to job redesigning, replacement, job enrichment or even job rotation will be helpful. In the case of emotional and psychological problems, the medium of counselling provides the best solution. **Motivational needs** of an employee cover the range of physical and financial well-being.
companionship, love and affection, self-respect, self-accomplishment, autonomy, and prospects.

3) **Delegating Responsibility**: Delegating Responsibility means handling work to the lower levels of management and the subordinates in organisation. It is must for the organisation. Management must pursue the objective of higher productivity not merely for its own benefit; it should see it as a source of continuous improvement in the lives of employees. Matching the needs of the workforce to the achievement of organizational objectives is key. This provides the right kind of impetus for peak performance. The employees began to attach themselves to the successes of the organization. It is, therefore necessary that company’s prosperity is reflected in the living standards of its employees.

4) **Setting High Performance Standards**: Management must set very high-performance standards for its own work if it warns its workforce to follow suit. Inefficiencies in the form of ill planning, inadequate safety arrangements, worn out equipment, irregular supply of raw material, inability to take a decision at the right time result in the management becoming a target of ridicule and affect the morale of employees. The foremost step in this connection would be the very concept of work. Work should not remain only as a mode of earning a livelihood, but a source of self-satisfaction and self-realization. Thus, careful job-design and placement taking into account worker’s ability, skills, mental orientation, and versatility is of paramount importance. It is necessary to follow the
principle of the right person at the right job at the right time. Workers should also have complete knowledge of the job they are doing not only in the sense of its immediate implications but its wholesome effect and contribution towards the company’s objectives.

1.32 IMPACT OF HRIS ON EMPLOYEE PRODUCTIVITY

The vast majority of HR organizations have made significant investments in HRIS. The focus has been on improving employee satisfaction levels with HR services, while enabling HR staff to reduce administrative burdens and perform a more strategic role for the organization. The rapid progression toward HRIS would produce direct improvements in HR efficiencies and employee satisfaction levels. HRIS’ efficiency can only by measured with reference to its causality on overall business performance. Efficiencies created by technology can allow the Human Resources Department to focus on strategic issues: for most companies this includes knowledge management. One example of a system to capture knowledge is the HR knowledgebase. It combines self-service concepts with smart systems. These systems put all the details at the fingertips of the call centre staff or the employees themselves.

Human Resource Information System helps in increasing the Productivity of organisation through online recruiting and Applicant Tracking. The information is customized according to the company eligibility rules, demographic data about the individual in the HRIS and information in the knowledgebase. Through Software
that support employee tracking, Employee details are stored in HRIS. When an employee came for job purpose, the Application form filled by the recruiter and online Details were filled by HR in HRIS with the help of software. This keeps a record with company in future. Through HRIS Applicant tracking is done and Recruiting can be done easily which helps the organisation to do work in less time. More work in less time increase Productivity and organisation can focus on administrative task to achieve their objectives. Below Diagram tells about how HRIS improves Productivity

![Diagram: Improving Productivity Through HRIS]

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Figure 1.30:-Employee Productivity through HRIS

Source:-www.citeman.com
Figure:-1.31 -Improved Productivity through HRIS: - An Integrated Technology Approach to Recruiting

1.33 SATISFACTION OF EMPLOYEES FROM HUMAN RESOURCE INFORMATION SYSTEM (HRIS)

On influence of user satisfaction on the human resource information systems in the organization, the interviewees indicated that user satisfaction is the only criterion which considers attitudes, beliefs; cultural and behavioural issues as key areas that influence successful implementation of information systems. The respondents also indicated that data necessary for employee management, knowledge development, career growth and development, and equal treatment is facilitated. It is also used by managers to access the information they need to
Human Resource and Human Resource Information System

legally, ethically, and effectively support the success of their reporting employees.

**Payroll System** automates the entire payroll process by gathering and updating employee payroll data on a regular basis. It also gathers information such as employee attendance, calculating various deductions and taxes on salaries, generating automatic periodic pay checks and handling employee tax reports. With updated information this system makes the job of the human resource department very easy and simple as everything is available any time, and all the information is just a click away.

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<tr>
<th>Table 1.7. Factors of Job Satisfaction through HRIS</th>
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<tbody>
<tr>
<td>Cost per employee</td>
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<td>Work Life Balance</td>
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employees view their work performance so they can analyse as to how they have performed at work, and even decide whether they would need more time to concentrate on their personal lives if they work too much.

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<thead>
<tr>
<th>Employee Benefits</th>
<th>Record of employee benefits maintained in HRIS. This record is helpful for Human Resource staff. On this basis, Salary is maintained and recorded in the organisation</th>
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<tbody>
<tr>
<td>Job Security</td>
<td>Information secured in HRIS does not leaked. They assist with the technological aspects of recordkeeping, database management, and monitoring employees. The tasks performed by HRIS administrators include the development, building, testing, and implementation of human resources databases and tools, as well as evaluating the security of human resources information. In HRIS information is secured and maintained by HR administrator.</td>
</tr>
<tr>
<td>Growth Opportunities for employees</td>
<td>Career planning is a continuous process that allows you to move from one stage to another stage as your life changes. HRIS maintains the record and give chances to new employees and other employees in organization to provide new career path. This improves employee Morale and Motivation</td>
</tr>
</tbody>
</table>
Figure 1.32. HRIS Software “SNAP” gives the details of employee self, Family Details

Source: -www.research gate.net

Figure 1.33. Apex Software of Company is showing details of employee.

Source: - www.research gate.net
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