

Human Resource Information System through Software Approach

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INTRODUCTION

In Indian context application of IT like ERP, SAP, Data warehousing and Data Mining are getting popularity in certain areas of industrial operations like production, maintenance, quality control and inventory, accounting and human recourse development. However, in HRD, not much attention is given. This is due to complex nature of human recourse information system. Today some industries are using application of information technology in industry are shown in Fig.1

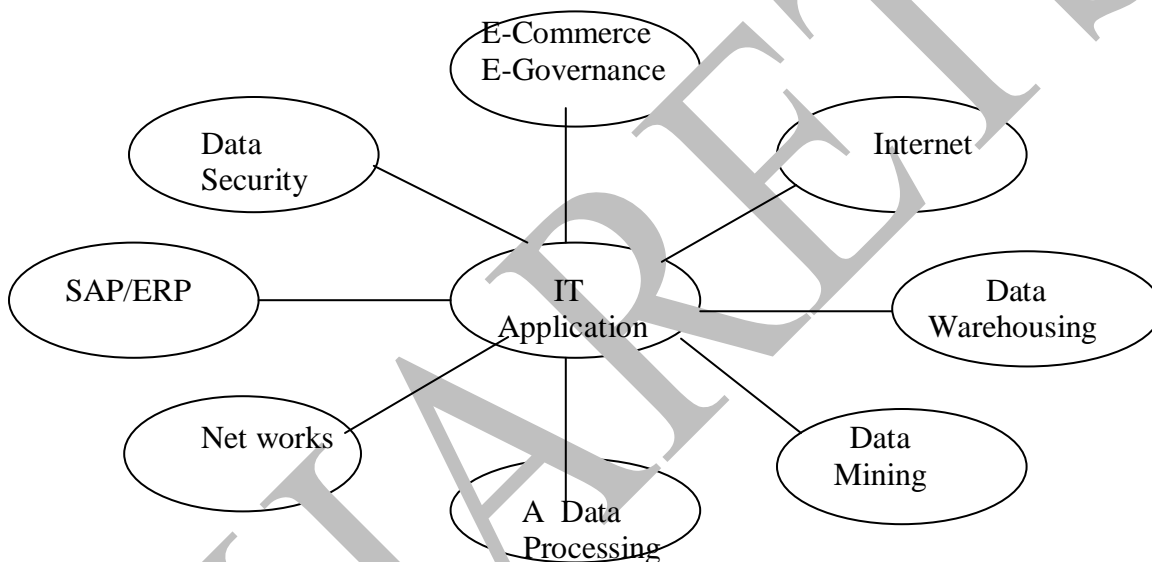


Fig.1: Network of IT Application used in Industry

HRM may be defined as a set of policies, practices and programmes designed to maximize both personal and organizational goals. In other words, HRM 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.”

GENERAL STRUCTURE OF HUMAN RESOURCE MANAGEMENT

Human resource information system is a system that supports planning, control, coordination administration and management of human resources of organizations. HRIS also includes a large Number of subsystems that address the information needs of various human resource functions. They provide managers with information, policies, and procedures concerning recruiting, layoffs, employee evaluation, promotion, termination, job descriptions and responsibilities, training, etc. The HRIS is derived from the strategic business plan, the strategic human resources plan, and the strategic information plans as shown below.

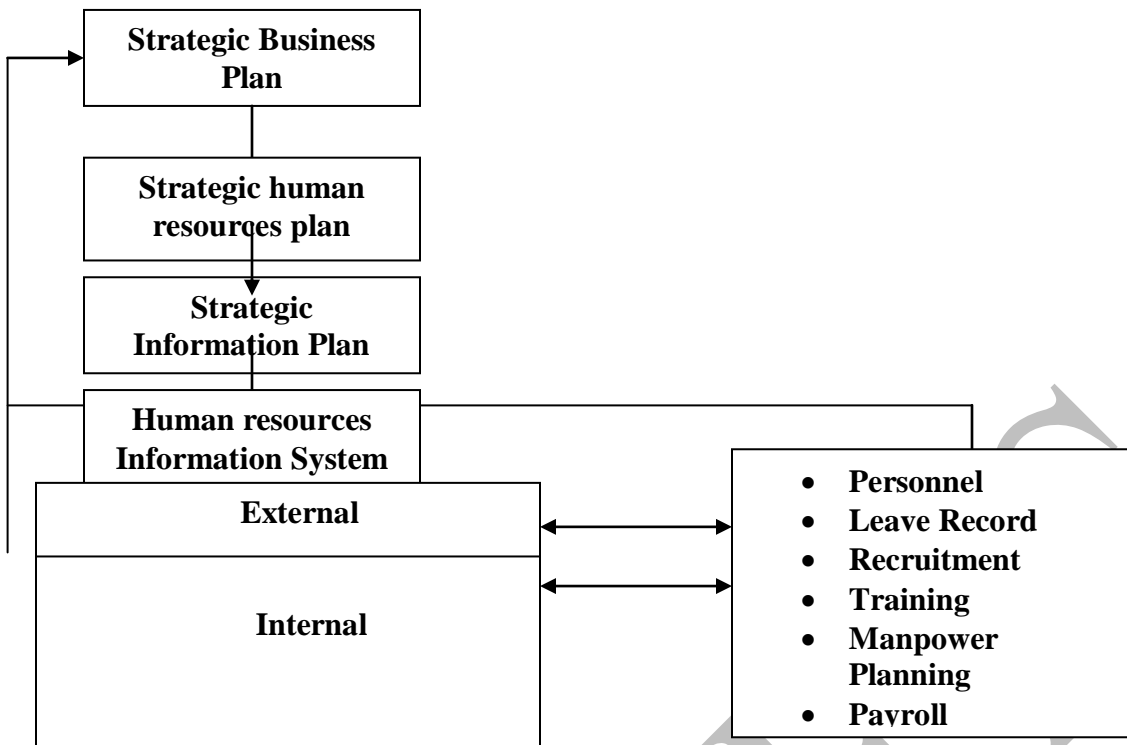


Fig. 2: Context Analysis Diagram for Human Resource Management

Some subsystems within the HRIS are personnel data, payroll, benefits, administration, equity monitoring, processing job applications, monitoring positions, training and development, safety, employee compensation, union negotiations and collective bargaining. The core of an HRIS is a database that contains detailed personal and professional information about each employee in the organization. Personal data include name, age, gender, address, and social security number; professional data include educational level, job title, job description, department code, years of employment, number of promotions, performance evaluations and so on. All other human resource subsystems derive their information from this core database.

An important subsystem of the HRIS is the compliance system, which closely tracks and monitors the organizations record of compliance with government laws and regulations, such as affirmative action, equal employment opportunities and others. In the last two decades, the amount of regulatory paperwork has increased manifold and organizations are actively looking for ways to cut down the time and money they spend on these activities. One way to achieve this objective is through compliance subsystems.

Another vital HRIS subsystem manages records and, generates information regarding recruitment, transfer, promotion, layoff and termination of employees. Often, when any of the above situations occur, a large amount of information is generated and the Organization needs a system that processes it. As the number of lawsuits for improper hiring, promotion and firing policies increases, accurate and timely record keeping becomes even more important.

Other subsystems of the HRIS include systems that develop and maintain job titles and job descriptions for all jobs in the firm, compensation and benefits information systems, and manpower planning systems. A

performance appraisal system that provides employees with real-time information or corporate performance measurements, thus making continuous performance improvement a way of corporate life rather than an annual chore, is another important subsystem in an HRIS. Pre-testing compensation policies, ensuring that employees meet certification requirements, identifying problem areas in employee turnover, and providing training and employee empowerment programs are some other functions of an HRIS.

Taking the above points into consideration, we have developed user-friendly software on “**Human Resource Information System**”.

GENERAL STRUCTURE OF THE SOFTWARE

The existing reports maintained by them are either generated through spreadsheets or manually, by hand on the paper. Reports generated through spreadsheets have enormous disadvantages as compared to software generated reports, such as:

- The data cannot be accessed as once.
- Present integrated status of the employee cannot be known.
- Back data cannot be accessed and summarized by a key press.
- Employee wise Leave, training, personnel information cannot be known.
- Manpower analysis cannot be known at any time.

This software provides the following reports of the Human Resource Management:

- Summary of balance leave status
- Period wise detail leave status
- Short list status of new recruitment
- Employees wise personnel information
- Employees wise training record

This software is divided into five sections through which we can maintain the employee wise record of leave status, personnel data, recruitment and training, etc. The some input data screens are shown in Fig. 4 and Fig 5. Some of the period wise reports generated by the Software are also shown in Tables: 1,2,3 and 4.

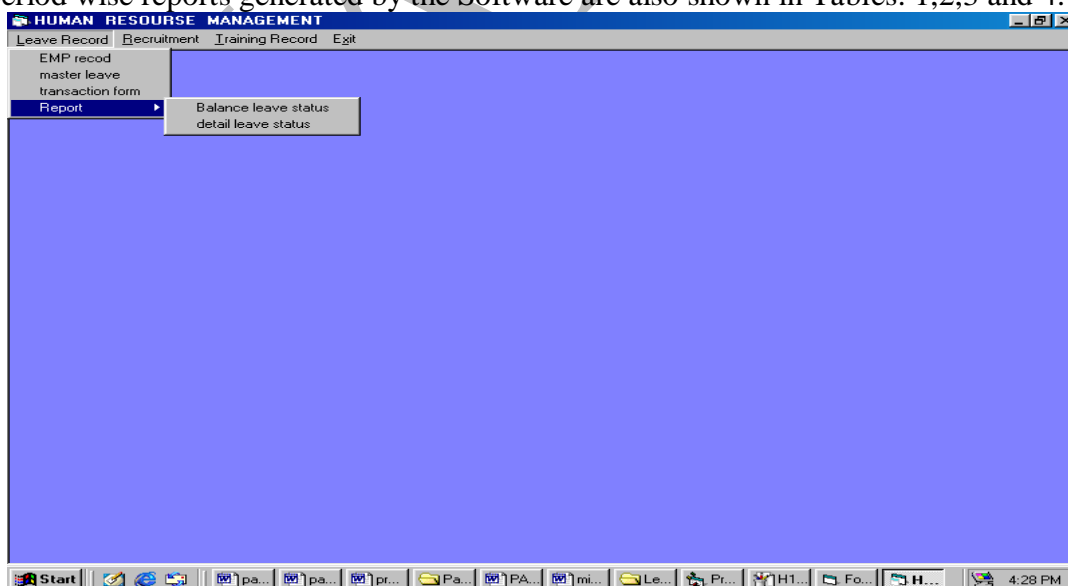


FIG. 3: Input Data Screen of Main Menu

HUMAN RESOURCE MANAGEMENT - [Form1]
 Leave Record Recruitment Training Record Exit

INPUT DATA SCREEN FOR EMPLOYEE RECORD

Employee Code: 9001

Employee Name: Mr. Vinnet Sharma

Date of Joining: 10/06/2000

Present Basic Salary: 8000.00

Department: SDC

Designation: PROGRAMM

Date of Birth: 03/06/1971

Buttons: Add, Edit, Delete, Exit, <, >

FIG. 4: Input Data Screen of Employee Master Record

Form10
 EMPLOYEE DETAIL LEAVE STATUS

E_code: BK01

E_name: BK SHARMA

Leave Type: CL

From: 1/1/2004 To: 10/6/2004

Buttons: Show, Exit, Report

T_Dates	Credit	Debit	Balance	Desc
17/05/2004	12	3	9	march 2004
17/05/2004	30	3	27	16/05/2004

FIG. 5: Input Data Screen of Employee wise Leave Status

Form7: Appliers Record System

Applier_code: P001

Applying_post: System Analyst

Applier_name: Mr. Anil Sharma

Fathers_name: Sh. Ram Rattan Sharma

Date_of_birth: 03/10/1970

Sex: Male

Qualification: M.TECH

University_name: Delhi Univrsity

Experience_in_years: 8

Buttons: ADD, SUBMIT, EXIT

FIG. 6: Input Data Screen of Appliers Information

Form8: Sort Listing Of The Appliers

Applying_Post: system analyst

Qualification: MCA

Experience_in_years: 1

A_Code	A_Name	F_Name	Date_Of_Bir	University
s-01	Shyamveer	Shri N singh	03/01/1980	UPTU
s02	Aanil	shri ram Cha	01/02/1980	IIT delhi
s03	Mohan	shri vn singh	01/01/1980	IIT Kanpur

Buttons: SHOW, REPORT, EXIT

FIG. 7: Input Data Screen of Sort Listing of the Appliers

TRAINING RECORD ENTRY FORM

E_code: BK01
 E_name: BK SHARMA
 Department: SDC
 Designation: SSO
 Area/Subject Identified As Training Needs: TECHNICAL
 Training_period: One Month
 No_Of_Days (Training): 30
 Feedback status from employee: Training on VB.NET will be use full for software development on NET
 Feedback status from H.O.D: Recommended

Buttons: Add, Save, Exit

FIG. 8: Input Data Screen of Training Record Status

Table -1: Output Employee Training Record

EMPLOYEE TRAINING RECORD

Date: 10/06/2004

E_CODE	E_NAME	DEPT	DESG	AREA/SUB TRAINING	TRAINING PERIOD	NO_OF DAYS	FEEDBACK FROM TRAINEE	FEEDBACK FROM HOD
m01	mohit	MPD(S)	SSO	BEHAVIOUR	1 mar to 15 apr	46	fair	avg

Table –2: Output Report of Sort List Candidates

The screenshot shows a window titled "DataReport4" with a zoom level of 100%. The report content is as follows:

SORT LIST OFCANDIDATE

DATE: 10/06/2004

Applyer_Code	A_Name	F_Name	Date_Of_Birth	University
s-01	Shyamveer singh	Shri N singh	03/01/1980	UPTU
s02	Aanil	shri ram Chandra	01/02/1980	IIT delhi
s03	Mohan	shri vn singh	01/01/1980	IIT Kanpur

Pages: 1

Table –3: Output Report of Balance Leave Status

The screenshot shows a window titled "DataReport2" with a zoom level of 100%. The report content is as follows:

BALANCE LEAVE STATUS OF EMPLOYEE

DATE: 10/06/2004

E_CODE: m01 **E_NAME:** _____

BALANCE_ON_DATE: 10/6/2004

EL	21
MEDICAL	2
CL	7
RH	5
COMP	14
MATERNITY	27

Windows taskbar shows the time as 5:09 PM.

KEY FEATURES OF THE SOFTWARE

- Optimum utilization of working capital
- Smooth flow of information in the areas of management.
- Helps the management to decide upon the manpower study.
- Better control of the system.
- One billion data records can be handled by the system and therefore the past data can be handled and accessed by a key press.
- Immediate leave status of each employee can be viewed/printed very easily, which is not there in the present system.
- Employee wise personnel data can be viewed/printed by a single key press.
- Accurate results are ensured as compared to the conventional manual report generation.
- Proper co-ordination between employee training record, leave status, retirement, and personnel data and top management, hence better team work with common objectives.

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