[Human Resources Management System (HRMS) System]

Requirements Specification

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What is Human Resource (HR)?

[Human resources](https://th.jobsdb.com/th/jobs/admin-hr) may be defined as the total knowledge, skills, creative abilities, talents and aptitudes of an organization’s workforce, as well as the values, attitudes, approaches and beliefs of the individuals involved in the affairs of the organization. It is the sum total or aggregate of inherent abilities, acquired knowledge and skills represented by the talents and aptitudes of the persons employed in the organization.

          human resources are multi dimensional in nature. From the national point of view, human resources may be defined as the knowledge, skills, creative abilities, talents and aptitudes obtained in the population; whereas from the view point of the individual enterprise, they represent the total of the inherent abilities, acquired knowledge and skills as exemplified in the talents and aptitudes of its employees.

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# Executive Summary

## Project Overview

Human resources is used to describe both the people who work for a company or organization and the department responsible for managing resources related to employees. The term *human resources* was first coined in the 1960s when the value of labor relations began to garner attention and when notions such as motivation, organizational behavior, and selection assessments began to take shape.

Human resource management is therefore focused on a number of major areas, including:

* Recruiting and staffing
* Compensation and benefits
* Training and learning
* Labor and employee relations
* Organization development

Due to the many areas of human resource management, it is typical for professionals in this field to possess specific expertise in one or more areas. Just a few of the related career titles for HR professionals include:

* Training development specialist
* HR manager
* Benefits specialist
* Human resource generalist
* Employment services manager
* Compensation and job analysis specialist
* Training and development manager
* Recruiter
* Benefits counselor
* Personnel analyst

## Purpose and Scope of this Specification

          human resources are multi dimensional in nature. From the national point of view, human resources may be defined as the knowledge, skills, creative abilities, talents and aptitudes obtained in the population; whereas from the view point of the individual enterprise, they represent the total of the inherent abilities, acquired knowledge and skills as exemplified in the talents and aptitudes of its employees.

### Human Resource Management: Nature

Human Resource Management is a process of bringing people and organizations together so that the goals of each are met. The various features of HRM include:

* It is pervasive in nature as it is present in all enterprises.
* Its focus is on results rather than on rules.
* It tries to help employees develop their potential fully.
* It encourages employees to give their best to the organization.
* It is all about people at work, both as individuals and groups.
* It tries to put people on assigned [jobs](https://th.jobsdb.com/th/en/Search/FindJobs?KeyOpt=COMPLEX&JSRV=1&RLRSF=1&JobCat=1&JSSRC=JSRSB) in order to produce good results.
* It helps an organization meet its goals in the future by providing for competent and well-motivated employees.
* It tries to build and maintain cordial relations between people working at various levels in the organization.
* It is a multi-disciplinary activity, utilizing knowledge and inputs drawn from psychology, economics, etc.

### Human Resource Management: Scope

Human Resource [Management](https://th.jobsdb.com/th/jobs/management/general-management) is a process of bringing people and organizations together so that the goals of each are met. The various features of [HRM](https://th.jobsdb.com/th/en/Search/FindJobs?KeyOpt=COMPLEX&JSRV=1&RLRSF=1&JobCat=15&JSSRC=JSRAS&keepExtended=1) include:

* It is pervasive in nature as it is present in all enterprises.
* Its focus is on results rather than on rules.
* It tries to help employees develop their potential fully.
* It encourages employees to give their best to the organization.
* It is all about people at work, both as individuals and groups.
* It tries to put people on assigned [jobs](https://th.jobsdb.com/th/en/Search/FindJobs?KeyOpt=COMPLEX&JSRV=1&RLRSF=1&JobCat=1&JSSRC=JSRSB) in order to produce good results.
* It helps an organization meet its goals in the future by providing for competent and well-motivated employees.
* It tries to build and maintain cordial relations between people working at various levels in the organization.
* It is a multi-disciplinary activity, utilizing knowledge and inputs drawn from psychology, economics, etc.

### Human Resource Management: Scope

The scope of HRM is very wide:

1. Personnel aspect-This is concerned with manpower planning, [recruitment](https://th.jobsdb.com/th/en/Search/FindJobs?KeyOpt=COMPLEX&JSRV=1&RLRSF=1&JobCat=15&JSSRC=JSRAS&keepExtended=1), selection, placement, transfer, promotion, [training and development](https://th.jobsdb.com/th/en/Search/FindJobs?KeyOpt=COMPLEX&JSRV=1&RLRSF=1&JobCat=15&JSSRC=JSRAS&keepExtended=1), layoff and retrenchment, remuneration, incentives, productivity etc.
2. Welfare aspect-It deals with working conditions and amenities such as canteens, cr?ches, rest and lunch rooms, [housing](https://th.jobsdb.com/TH/EN/Resources/JobSeekerArticle/th.jobsdb.com/th/en/Search/FindJobs?KeyOpt=COMPLEX&JSRV=1&RLRSF=1&JobCat=118&JSSRC=JSRAS&keepExtended=1), [transport](https://th.jobsdb.com/th/en/Search/FindJobs?KeyOpt=COMPLEX&JSRV=1&RLRSF=1&JobCat=265&JSSRC=JSRSB), [medical](https://th.jobsdb.com/th/jobs/medical-services) assistance, [education](https://th.jobsdb.com/th/jobs/education), [health](https://th.jobsdb.com/th/jobs/beauty-care-health) and safety, recreation facilities, etc.
3. Industrial relations aspect-This covers union-management relations, joint consultation, collective bargaining, grievance and disciplinary procedures, settlement of disputes, etc.

Human resources are undoubtedly the key resources in an organization, the easiest and the most difficult to manage! The objectives of the HRM span right from the manpower needs assessment to management and retention of the same. To this effect Human resource management is responsible for effective designing and implementation of various policies, procedures and programs. It is all about developing and managing knowledge, skills, creativity, aptitude and talent and using them optimally.

Human Resource Management is not just limited to manage and optimally exploit human intellect. It also focuses on managing physical and emotional capital of employees. Considering the intricacies involved, the scope of HRM is widening with every passing day. It covers but is not limited to HR planning, hiring (recruitment and selection), training and development, payroll management, rewards and recognitions, Industrial relations, grievance handling, legal procedures etc. In other words, we can say that it’s about developing and managing harmonious relationships at workplace and striking a balance between organizational goals and individual goals.

The scope of HRM is extensive and far-reaching. Therefore, it is very difficult to define it concisely. However, we may classify the same under following heads:

* **HRM in Personnel Management:** This is typically direct manpower management that involves manpower planning, hiring (recruitment and selection), training and development, induction and orientation, transfer, promotion, compensation, layoff and retrenchment, employee productivity. The overall objective here is to ascertain individual growth, development and effectiveness which indirectly contribute to organizational development.

It also includes performance appraisal, developing new skills, disbursement of wages, incentives, allowances, traveling policies and procedures and other related courses of actions.

* **HRM in Employee Welfare:** This particular aspect of HRM deals with working conditions and amenities at workplace. This includes a wide array of responsibilities and services such as safety services, health services, welfare funds, social security and medical services. It also covers appointment of safety officers, making the environment worth working, eliminating workplace hazards, support by top management, job safety, safeguarding machinery, cleanliness, proper ventilation and lighting, sanitation, medical care, sickness benefits, employment injury benefits, personal injury benefits, maternity benefits, unemployment benefits and family benefits.

It also relates to supervision, employee counseling, establishing harmonious relationships with employees, education and training. Employee welfare is about determining employees’ real needs and fulfilling them with active participation of both management and employees. In addition to this, it also takes care of canteen facilities, crèches, rest and lunch rooms, housing, transport, medical assistance, education, health and safety, recreation facilities, etc.

* **HRM in Industrial Relations:** Since it is a highly sensitive area, it needs careful interactions with labor or employee unions, addressing their grievances and settling the disputes effectively in order to maintain peace and harmony in the organization. It is the art and science of understanding the employment (union-management) relations, joint consultation, disciplinary procedures, solving problems with mutual efforts, understanding human behavior and maintaining work relations, collective bargaining and settlement of disputes.

The main aim is to safeguarding the interest of employees by securing the highest level of understanding to the extent that does not leave a negative impact on organization. It is about establishing, growing and promoting industrial democracy to safeguard the interests of both employees and management.

The scope of HRM is extremely wide, thus, can not be written concisely. However, for the sake of convenience and developing understanding about the subject, we divide it in three categories mentioned above.

# Product/Service Description

Deal with managing a service product across its complete life cycle. This organizational function is equally common between business-to-business as well as business-to-consumer businesses. A service product unlike hardware or software products, is intangible and manifests itself as pure professional services or as a combination of service with necessary software and/or hardware. The product management practice ensures management of a profitable service in the marketplace.

## Product Context

Every system in an ERP has different output but they are related to each other. All system are connected to other system but if one system in the ERP had a problem it doesn’t affect the other system.

## User Characteristics

Create general customer profiles for each type of user who will be using the product. Profiles should include:

* Admin/Manager/accountant
* User must have knowledge about the accounting system and the function inside the system.
* Good in financial management (Money)

## Assumptions

The basic or fundamental principle in a accounting are the cost principle, full disclosure principle, matching principle, revenue recognition principle economic entity assumption, monetary unit assumption, time period assumption, going concern assumption materiality, and conservation

## Constraints

Describe any items that will constrain the design options, including

* parallel operation with an old system
* audit functions (audit trail, log files, etc.)
* access, management and security
* criticality of the application
* system resource constraints (e.g., limits on disk space or other hardware limitations)
* other design constraints (e.g., design or other standards, such as programming language or framework)

## Dependencies

List dependencies that affect the requirements. Examples:

* This new product will require a daily download of data from X,
* Module X needs to be completed before this module can be built.

# Requirements

* General ledger - Any system that use in accounting should absolutely include a general ledger (GL) it is the master record of all financial operations.

-Chart of accounts

-Transaction Processing

-Month and year-End closing

-Custom Financial Statement

-Custom Sub-Ledgers

-Recurring Transaction

-Drill Down

* Accounts Payable – Accounts Payable (AP) is another core accounting feature that should be a top priority for any accounting system. Its module manages all the funds if the company owes to your vendors and other creditors

-Vendor Master File

-Purchasing Controls

-Payable Analysis

-Check Writing

-Automated Payment

-Domestic and Foreign Currency

* Account receivable – Functionality allows the business to manage all the revenue it’ due.

-Customer Master File

-Customer Relationship Management

-Online Invoicing

-Cash Receipts

-Debt Collection

-Recurring Revenue Management

-Bank Reconciliation

-Deferred Revenue Accounting

* Payroll – Some companies have decided that the risks associated with outsourcing payroll are too great, and have turned to payroll software instead.

-Employee Files

-Human Resource Management

-Country Specific Payroll Processing

-Payroll Check Writing

* Project accounting – let users see and manage finances associated with certain project, including cost, budgets, profitability, and reporting

-Project Management

-Billing and Invoicing

-Capital Management

-Time and Expense Management

-Budgeting

-Project Forecasting

* Fixed assets – Modules include sophisticated tools that ensure no part of the operation go unaccounted for even if they aren’t quick to return profit.

-Equipment Files

-Barcodes/ RFID Tracking

-Split Assets

-Maintenance Tracking

-Tax Benefit Management

-Depreciation Calculation

* Budget – plan the finance with robust budgeting tolls these tolls allow you to create budget and compare them to past version to see how you’ve progressed when it comes to managing your cost.

-Review Past Budgets

-Create New Budgets

-Forecasting

* Billing – automating the billing processes should be a no-brainer

-Automated billing

-Automated Transactions

-Credit Card Processing

-Purchase Orders

-Invoices

Priority Definitions

The following definitions are intended as a guideline to prioritize requirements.

* Priority 1 – The requirement is a “must have” as outlined by policy/law
* Priority 2 – The requirement is needed for improved processing, and the fulfillment of the requirement will create immediate benefits
* Priority 3 – The requirement is a “nice to have” which may include new functionality

It may be helpful to phrase the requirement in terms of its priority, e.g., "The value of the employee status sent to DIS **must be** either A or I" or "It **would be nice** if the application warned the user that the expiration date was 3 business days away". Another approach would be to group requirements by priority category.

* A good requirement is:
* Correct
* Unambiguous (all statements have exactly one interpretation)
* Complete (where TBDs are absolutely necessary, document why the information is unknown, who is responsible for resolution, and the deadline)
* Consistent
* Ranked for importance and/or stability
* Verifiable (avoid soft descriptions like “works well”, “is user friendly”; use concrete terms and specify measurable quantities)
* Modifiable (evolve the Requirements Specification only via a formal change process, preserving a complete audit trail of changes)
* Does not specify any particular design
* Traceable (cross-reference with source documents and spawned documents).

## Functional Requirements

The following core functional requirements have been identified by key human resource and payroll functional areas and are expected to be integrated with MSIU function unique requirements in a manner that best supports the MSIU function’s programs, operations, technical environment, and management philosophy. The requirements listed for each functional area are not intended to be exhaustive, but are aimed at providing a high-level description of the major information and processing capabilities needed to have modern human resources and payroll systems.

For Example:

| Req# | Requirement | Comments | Priority | Days Completed | Date Rvwd | Reviewed / Approved |
| --- | --- | --- | --- | --- | --- | --- |
| BR\_LR\_05 | The system should associate a supervisor indicator with each job class. | Business Process = “Maintenance | 3 |  | 7/13/04 | Bob Dylan, Mick Jagger |
| BR\_LR\_08 | The system should handle any number of fees (existing and new) associated with unions. | Business Process = “Changing Dues in the System”  An example of a new fee is an initiation fee. | 2 |  | 7/13/04 | Bob Dylan, Mick Jagger |
| BR\_LR\_10 | The system should capture and maintain job class status (i.e., active or inactive) | Business Process = “Maintenance”  Some job classes are old and are no longer used. However, they still need to be maintained for legal, contract and historical purposes. | 2 |  | 7/13/04 | Bob Dylan, Mick Jagger |
| BR\_LR\_16 | The system should assign the Supervisor Code based on the value in the Job Class table and additional criteria as specified by the clients. | April 2005 – New requirement. It is one of three new requirements from BR\_LR\_03. | 2 |  |  |  |
| BR\_LR\_18 | The system should provide the Labor Relations office with the ability to override the system-derived Bargaining Unit code and the Union Code for to-be-determined employee types, including hourly appointments. | April 2005 – New requirement. It is one of three new requirements from BR\_LR\_04.  5/11/2005 – Priority changed from 2 to 3. | ~~2~~  3 |  |  |  |

## User Interface Requirements

In addition to functions required, describe the characteristics of each interface between the product and its users (e.g., required screen formats/organization, report layouts, menu structures, error and other messages, or function keys).

## Usability

Include any specific usability requirements, for example,

Learnability

* The user documentation and help should be complete
* The help should be context sensitive and explain how to achieve common tasks
* The system should be easy to learn

(See <http://www.usabilitynet.org/>)

## Performance

Specify static and dynamic numerical requirements placed on the system or on human interaction with the system:

* Static numerical requirements may include the number of terminals to be supported, the number of simultaneous users to be supported, and the amount and type of information to be handled.
* Dynamic numerical requirements may include the number of transactions and tasks and the amount of data to be processed within certain time period for both normal and peak workload conditions.

All of these requirements should be stated in measurable form. For example, "95% of the transactions shall be processed in less than 1 second" rather than “an operator shall not have to wait for the transaction to complete”.

### Capacity

Include measurable capacity requirements (e.g., the number of simultaneous users to be supported, the maximum simultaneous user load, per-user memory requirements, expected application throughput)

### Availability

Include specific and measurable requirements for:

* Hours of operation
* Level of availability required
* Coverage for geographic areas
* Impact of downtime on users and business operations
* Impact of scheduled and unscheduled maintenance on uptime and maintenance communications procedures
* reliability (e.g., acceptable mean time between failures (MTBF), or the maximum permitted number of failures per hour).

### Latency

Include explicit latency requirements, e.g., the maximum acceptable time (or average time) for a service request.

## Manageability/Maintainability -SKIP

### Monitoring

Include any requirements for product or service health monitoring, failure conditions, error detection, logging, and correction.

### Maintenance

Specify attributes of the system that relate to ease of maintenance. These requirements may relate to modularity, complexity, or interface design. Requirements should not be placed here simply because they are thought to be good design practices.

### Operations

Specify any normal and special operations required by the user, including:

* periods of interactive operations and periods of unattended operations
* data processing support functions
* backup and recovery operations
* safety considerations and requirements
* disaster recovery and business resumption

## System Interface/Integration -SKIP

Specify the use of other required products (e.g., a database or operating system), and interfaces with other systems (e.g., UWHires package interfaces with PubCookie and ODS, HEPPS system interfaces with Budget system). For each interface, define the interface in terms of message format and content. For well-documented interfaces, simply provide a reference to the documentation.

Outline each interface between the product and the hardware or network components of the system. This includes configuration characteristics (e.g., number of ports, instruction sets), what devices are to be supported, and protocols (e.g., signal handshake protocols).

### Network and Hardware Interfaces -SKIP

Specify the logical characteristics of each interface between the product and the hardware or network components of the system. This includes configuration characteristics (e.g., number of ports, instruction sets), what devices are to be supported, and protocols (e.g., signal handshake protocols).

### Systems Interfaces

Example systems interface requirements:

1. System1-to-System2 Interface

The <external party> will create and send a fixed length text file as an email attachment to [System2mail@u.washington.edu](mailto:heppsmai@u.washington.edu) to be imported into the System2 system for payroll calculation. This file must be received on EDIT day by 4:00 PM in order to be processed in the EDIT night run. The requirements below document the file specifications, data transfer process, and specific schedule. This file is referred to as "FileName" in this document.

File Structure and Format

* 1. The FileName file is a fixed length text file.
  2. The FileName file is an unformatted ASCII file (text-only).
  3. The FileName file contains a batch totals record and several detail records.

File Description: Batch Totals Record

* 1. The batch totals record can be placed at the beginning, in the middle, or at the end of the file.
  2. The batch totals record contains the following:

Record Type (value: XA)

Process Type (value: A)

Batch Number (3 digit number assigned by Payroll Dept)

Origin Code (AIG)

Total number of detail records

Total deduction amount

File Description: Detail Records

* 1. The FileName file contains a row for each record meeting xxx criteria.
  2. Each row in the FileName file contains the following fields, comma-delimited and encased in double-quotes where the data includes commas or spaces:
* Employee Id
* Record Type
* Process Date (MMDDYY)
* XYG Number
* Element Code
* Amount
* Amount Sign
* Year Flag
* Total Amount
* Total Amt Sign

## Security

### Protection

Specify the factors that will protect the system from malicious or accidental access, modification, disclosure, destruction, or misuse. For example:

* encryption
* activity logging, historical data sets
* restrictions on intermodule communications
* data integrity checks

### Authorization and Authentication

Specify the Authorization and Authentication factors. Consider using standard tools such as PubCookie. Using Security Assertion Markup Language (SAML). How valid users can access the application, and avoid alteration of codes

## Data Management

Specify the requirements for any information that is to be placed into a database, including

* types of information used by various functions
* frequency of use
* data access rules
* data entities and relationships
* integrity constraints
* data retention
* valid range, accuracy, and/or tolerance
* units of measure
* data formats
* default or initial values

## Standards Compliance

Specify the requirements derived from existing standards, policies, regulations, or laws (e.g., report format, data naming, accounting procedures, audit tracing). For example, this could specify the requirement for software to trace processing activity. Such traces are needed for some applications to meet minimum regulatory or financial standards. An audit trace requirement may, for example, state that all changes to a payroll database must be recorded in a trace file with before and after values.

## Portability

If portability is a requirement, specify attributes of the system that relate to the ease of porting the system to other host machines and/or operating systems. For example,

* Percentage of components with host-dependent code;
* Percentage of code that is host dependent;
* Use of a proven portable language;
* Use of a particular compiler or language subset;
* Use of a particular operating system;
* The need for environment-independence - the product must operate the same regardless of operating systems, networks, development or production environments.