TITLE

Project: DEMO

Document: SRS

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1. Introduction

In maintaining a competitive advantage in the marketplace, firms must balance their physical, organizational, and human resources to achieve, profit, and survive. Leading management thinkers (Porter, 1990; Drucker, Dyson, Handy, Saffo & Senge, 1997) argue that human resource management (HRM) will be the most critical and challenging area for organizations in the 21st century. The most effective and well-respected companies today have innovative and valuable people practices. These organizations know that human resources (HR) cannot afford to simply focus on completing day-to-day activities, instead, they should focus on outcomes and capabilities that align with the broader organizational goals (Ulrich, Younger & Brockbanks, 2008).

But to do this, they need timely and accurate information on current and potential employees. The ability of organizations to do this has been dramatically enhanced through the use of human resource information systems (HRIS).

1.1 Purpose

The purpose of human resources is to attract, motivate, develop, and retain employees. Typical HR responsibilities involve things such as record keeping, recruiting, selection, training, performance management, employee relations, and compensation. Within each functional area, activities can be classified as transactional, traditional, and transformational (Wright, McMahan, Snell & Gerhart, 1998).

1.2 Scope

HRIS system will centralize employee database, payroll, performance management, career development, and other HR operations. With the new system, the recruitment process will be automated with a searchable database and capable of accessing opportunities available in the job portal.

1.3 Overview

Human Resources Information System, is software designed to help businesses meet core HR needs and improve the productivity of both managers and employees. This is in large part possible because of automation and synchronized data, which may reduce costly redundancies and provide a trusted source of decision-making, respectively.

1.4 Product Functions

HRIS will include basic features that assist with recruiting and talent acquisition, compensation, organizational management, and absence management (such as vacation, sick leave, and personal time off)additional features can be layered on to meet business needs. By automating GR-related tasks and providing self-service access to procedures and policies, the system creates standardizations and consistency across the organization while increasing HR operational efficiency and providing a better employee experience.

1.5 User Characteristics

Everyone within the company is an HRIS user simply by being an employee, the power users of the HRIS are HR administrators, payroll specialists, talent management specialists, and recruiters. A significant portion of these employees' jobs involves interacting with the HRIS regularly.

1.6 Limitations

HRIS systems have built-in tools that allow companies to meet core HR needs while improving employee retention and streamlining the recruiting process. While this can undoubtedly be exciting these implementations can be challenging.

1. Expensive in terms of finance and manpower requirements.

2. Inconvenient to those who are not comfortable with computers, particularly top bosses.

3. Computers cannot substitute human beings, individual decision-making, and intuition.

4. System needs updating, in many a situation, stale information is as good as no information.

2. System Overview

2.1 System Function

An HRIS should be able to meet not just the challenges of today, but also those that arise in the future. After all, most businesses wouldn't want to purchase a new system every few years.

-Have service plans that extend beyond implementation
-Invest in innovation and regularly enhance their products
-Use internal and external benchmarks to measure performance
-Provide consultative services and define best practices.

2.2 Usability Requirements

An HRIS should have the ability to meet not just the challenges of today, but also those that arise in the future. After all, most businesses wouldn't want to purchase a new system every few years.

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2.3 Performance Requirements

is a functional method of assessing your team members' effectiveness and finding ways to develop their skills in service of company objectives. Done correctly, it can lead to much higher satisfaction levels, helping you build a happier team who can grow and develop. Assessing performance across large teams with the power of an HRIS can help you identify trends or wider skills gaps, and progress your productivity, retention, and engagement company-wide. Following performance management best practices will lead you to an HRIS platform that allows you to track performance, and then effectively plan and action a strategy for maintaining and improving it.

2.4 Software Requirements

A software requirement specification (SRS) document lists the requirements, expectations, design, and standards for a future project. These include the high-level business requirements dictating the project's goal, end-user requirements and needs, and the product’s functionality in technical terms. Simply put, an SRS provides a detailed description of how a software product should work and how your development team should make it work. Software requirement specifications are living documents, they can also act as a communication point between every stakeholder involved in the product development process.

2.5 Hardware Requirements

The most common set of requirements defined by any operating system or software application is the physical computer resources, also known as hardware, A hardware requirements is often accompanied by a hardware compatibility list (HCL), especially in cas of operating systems. An HCL lists tested, compatible, and sometimes incompatible hardware devices for a particular operating system or application.

3. System Configuration

3.1 System Components

It is the components defined as the software system designed to operate the computer's hardware; it provides a platform to run the application software and basic functions for the computer usage. It protects the application programmer from the complexity and specific details of a particular computer being used, especially the memory and the hardware features. The component of the software is a self-contained system with one or more inputs and outputs channels; it has nothing to do without the input and does not serve anything without the output.

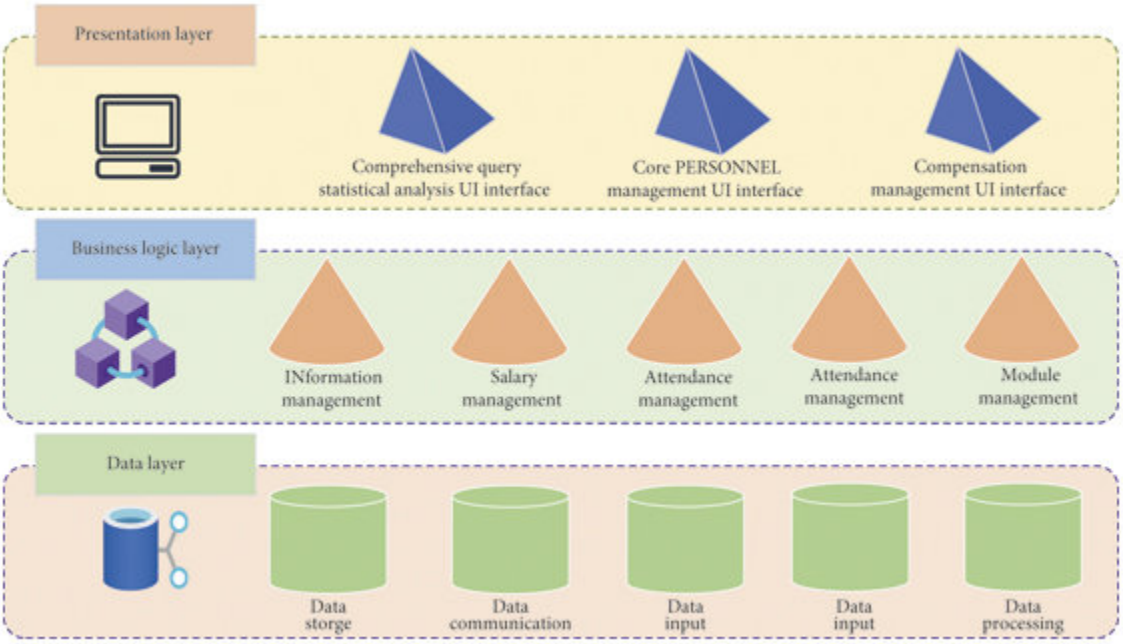
3.2 Network Topology

This is a physical arrangement through which various endpoints and links in an enterprise network communicate with each other. Organizations use network topology to define how their network nodes are linked to each other. The two major categories of topology are physical and logical. A physical network refers to the structure of the physical medium for data transmission.

On the other hand, logical network topology refers to how the network transmits data between devices, regardless of how these devices are connected physically.

3.3 System Interfaces and APIs

System interface allows you to share data from one application to another. A small software program is written to pull data from one application. When a company uses one vendor for its HR data and another for payroll, data does not flow between them naturally since they are two separate systems. This means that as your company hires and terminates employees you have to manually enter the data in each system. What an interface allows you to do, however, is pass the



data from one system to the other, eliminating the need to enter the data twice.

3.4 Waterfall Model

Requirements

The requirements define the required functionality and operation of the final package. These are driven by the end-user expects the system to provide

Design

Given a set of user and system requirements design often takes two steps, an overall system architecture followed by a detailed design of the system's module and interfaces

Implementation

Program units are developed according to the detailed design. These are often functionally tested as a unit before integration into the complete system

Testing

Testing is one of the most important phases of system development. It takes the form of testing the functionality of each component and then testing the complete integrated system.

Deployment

Setting up of the system or software after a pilot run and testing is done

Maintenance

Regular updating, verification, and debugging of the software.

4. System Configuration

4.1 System Main Functions

1. CORE HR

Core HR refers to the basic functions carried out by the HR department related to employee information, like:

- Demographics
- History

- Job-role details
- Tax-withholdings
- Schedules

HR professionals save time when all employee information is stored in one streamlined location.

HR professionals save time when all employee information is stored in one streamlined location, and even more time with the enablement of employee self-service (employees can update their own info, book holiday etc).

An HRIS analyst (more on this later) can run various reports to give insights into project management, business trends, and future needs by analyzing CORE HR data like employee training history, job-role requirements, and planned leave.

2. Payroll
HRIS management software automates your employee's pay schedules and stores time and attendance data. This automation allows staff to enter their own leave information that's later approved by a supervisor – saving you valuable time to focus on other needs in your business.

This tool enables you to group together who's being paid on what schedule and allows for easy search capability. Notice the "Things I Can Do" section on the right – this quick-access menu serves as a reminder of things to be done and saves time with easy-to-use system links.

3. Employee Benefits

HRIS software provides self-service options for employees to review their benefits information and streamlines open enrollment periods. Employees have the ability to make approved changes to their benefit information when life changes occur.

This function also allows employees to look up benefit information when they have questions about things like

Medical coverage
Life Insurance
Disability benefits
Dependent benefit information

HRIS self-sufficiency among employees saves your HR team crucial time. Now instead of being responsible for fielding inquiries and researching information for individual employees, HR professionals can focus their time on more strategic tasks.

5. Performance Management

Performance management needs like goal-setting, developmental and training needs, self-assessments, and anonymous surveys are all options available through an HRIS. These features allow employees to complete training and surveys remotely. This encourages increased participation since staff are able to respond from the comfort of their own homes.

While it's important to have engaged evaluation meetings with your staff, some areas of performance evaluations can be completed by an employee on their own. Plus this saves time.

7. Onboarding

Onboarding is crucial for the success of both a new employee and the organization itself. HRIS implementation is a game-changer when it comes to onboarding because it allows you to:

- Reach large candidate pools when job opening occurs
- Apply selection standards to applications received
- Track candidate information resumes
- Allows HR analysts to match suitable candidates from an application pool
- Process new hires quickly through mobile accessibility,

This makes HRIS software especially beneficial for companies with high turnover rates because you can improve your hiring practices and expectations of employee standards without having to invest a lot of time and resources.

HRIS software has the ability to manage other HR needs as well, such as:

- Safety
- Performance and Goal Measures
- Learning and Development
- Succession Planning

4.1 Input formats and protocols

The input formats and protocols of a human resources information system (HRIS) will depend on the specific system in use, but some common examples may include:

1. Electronic forms: HRIS may use electronic forms for data entry or self-service tasks, such as submitting time-off requests or updating personal information. These forms may be designed using standard file formats, such as PDF or HTML, and may be submitted through the HRIS interface or via email.

2. Email integration: HRIS may allow users to send emails to specific email addresses to input data into the system or trigger specific workflows or processes. These emails may be automatically processed and added to the HRIS system.

3. Mobile apps: HRIS may have mobile apps that support data entry or self-service tasks, such as submitting time-off requests or scheduling appointments. These apps may use specific mobile device features, such as location tracking or push notifications, to enhance user experience and functionality.

4.2 Output formats and protocols

The output formats and protocols of HRIS may include:

1. Reports: HRIS may generate reports in various formats, such as PDF, Excel, or CSV, that provide summaries or details of HR metrics, such as headcount, turnover rates, or compensation data.

2. Email notifications: HRIS may send email notifications to employees or HR staff to inform them of events or actions related to HR processes, such as approvals, expirations, or reminders.

5. System Security

5.1 Security Features

HRIS systems need to have several security features in place in order to ensure that sensitive HR data is kept safe from unauthorized access or misuse. Some common security features of an HRIS include access controls, data encryption, regular vulnerability assessments, and physical security measures for servers. Access controls help ensure that only authorized personnel have access to certain data, while data encryption helps protect sensitive information from being intercepted and read by unauthorized third parties. Regular vulnerability assessments can help identify potential security risks and flaws in the system, while physical security measures such as securing server rooms or data centers can help prevent unauthorized access to the system. Other security features may include data backup and disaster recovery capabilities, as well as the ability to audit and track system activity to detect potential security breaches.

5.2 Authentication and access control

Authentication and access control are important security features of an HRIS. Authentication refers to the process of verifying the identity of users attempting to access the system. Common methods of authentication include user ID and password, biometric identification, or multi-factor authentication (MFA), which requires users to provide two or more verification factors, such as a password and a security token.

Access control, on the other hand, refers to the system's ability to control and manage user access to different levels of data and functionality within the system based on their roles and permissions. This feature ensures that employees only have access to data and applications that are necessary for their job role while preventing unauthorized access to sensitive data.

In order to ensure effective authentication and access control in an HRIS, it is important to have proper authorization procedures in place. This includes regular monitoring and auditing of user access to identify and address potential security threats. HRIS managers should also ensure that passwords are stored and transmitted securely, and that user access requests are approved by authorized personnel. Regular training and awareness programs can also help educate employees

on the importance of complying with security policies and using the HRIS system safely and securely.

5.3 Encryption and data protection

Encryption and data protection are important aspects of HRIS security. HRIS systems should ensure that sensitive HR data is encrypted both during storage and transmission. This helps protect the data from unauthorized access or interception by third parties. HRIS systems should also have proper access controls in place, such as user authentication and role-based access permissions. Other security features such as regular vulnerability assessments and physical security measures for servers may also be necessary to ensure effective data protection. Additionally, HRIS users should be trained on best practices for data protection, such as using strong passwords, avoiding phishing scams, and adhering to company security policies.

HR managers, IT professionals, and front-line managers should all undergo some type of security training. These individuals all have access to sensitive employee data, so it's critical to make sure they understand the importance of keeping this data secure. Vendor representatives may be helpful when it comes to teaching employees the best ways to use the features of an HRIS to improve safety.

5.4 Auditing and logging

HRIS systems should have auditing functionality to track system activity and user access. This enables HRIS administrators to monitor system usage, identify potential security threats, and troubleshoot any issues that arise. Audit logs should capture information such as user logins, data modifications, and system errors. Data logs should also be encrypted and protected to ensure the integrity and confidentiality of the data.

When implementing auditing and logging functionality in an HRIS, it is important to define what data is captured in the logs and who has access to them. HRIS administrators should also regularly review the audit logs and data logs for any signs of suspicious activity or attempts to gain unauthorized access to the system. Additionally, HRIS users should be trained on the importance of complying with security policies and procedures, including proper use of system logs and notifications of any security incidents or concerns.

6. System Performance

6.1 Description and Metrics of performance requirements

A Human Resources Information System (HRIS) is designed to meet the needs of HR management and facilitate HR operations. Performance requirements for an HRIS may include providing real-time tracking of employee data, automating administrative tasks, streamlining HR processes, and improving data accuracy and consistency. Some common HR performance metrics that an HRIS can track include:

1. Time-to-hire: This metric measures how long it takes to fill a job opening from the time the job is posted to the time the candidate is hired.
2. Turnover rate: This metric measures how many employees leave an organization over a given time period.
3. Absenteeism rate: This metric measures how frequently employees are absent from work.
4. Employee engagement: This metric measures how committed and satisfied employees are with their work, team, and organization.
5. Training and development effectiveness: This metric measures how effective training programs are in improving employee knowledge, skills, and capabilities.

Performance requirements for an HRIS should focus on delivering these metrics and providing HR management with greater visibility into HR operations, greater accuracy and consistency in HR data and reporting, and more efficient HR processes. The specific performance metrics and requirements may vary depending on the organization's size, industry, and HR goals.

6.2 Optimization strategies

Optimization strategies for a human resources information system (HRIS) may include:

1. Streamlining workflows: Identify ways to streamline HR processes, such as recruitment or onboarding, by automating tasks, simplifying forms, or reducing redundancy.

2. Data cleanup and standardization: Ensure that HR data is accurate, complete, and standardized across the organization to improve data integrity and reduce errors.

3. Role-based access control: Implement role-based access controls and user permissions to control data access and minimize data breaches or unauthorized data modification.

4. Continuous improvement: Establish a process for ongoing system optimization and identify areas for improvement through regular usage analysis, end-user feedback, and benchmarking against industry standards.

5. Security and data privacy: Ensure that the HRIS platform meets the organization's security and data privacy requirements and is regularly updated to address new risks and threats.

7. Training and support: Provide ongoing training and support for HR staff and other system users to improve adoption rates and ensure the system is used effectively.

Overall, optimization strategies for an HRIS should be tailored to the specific needs and priorities of the organization and may require ongoing monitoring and adjustment to ensure continued effectiveness over time.

7. System Maintenance and Support

7.1 Maintenance and support procedures

Maintenance and support procedures of a human resources information system (HRIS) can vary depending on the specific system and organization. However, there are some common procedures and best practices that can be followed to ensure that the HRIS is operating effectively and efficiently. These may include regularly checking the system for errors or bugs, ensuring that data is backed up and stored securely, monitoring system performance and making necessary upgrades or modifications, and providing ongoing training and support to users of the system. Additionally, it may be helpful to establish clear guidelines and procedures for how to handle any issues or problems that arise with the HRIS, such as who to contact for technical support or how to troubleshoot common errors. Ultimately, effective maintenance and support of an HRIS require a proactive and collaborative approach that involves ongoing communication and collaboration between HR staff, IT professionals, and other relevant stakeholders.

7.2. System backup and recovery

System backup and recovery is an essential aspect of maintaining a human resources information system (HRIS), as it helps to ensure that critical data is not lost in the event of a system failure, disaster, or other unexpected event. Backup procedures typically involve making a copy of all system data and storing it in a secure and accessible location, such as an external hard drive or cloud-based storage service. Recovery procedures, on the other hand, involve the steps that are taken to restore the system to a working state in the event of a system failure or other problems. This may include reinstalling software, restoring data from the backup, and running diagnostic tests to identify and resolve any underlying issues that may be causing the problem. Additionally, it is important to regularly test backup and recovery procedures to ensure that they are effective and that critical data can be recovered in a timely manner. Overall, a comprehensive backup and recovery plan is an essential component of effective HRIS maintenance and support and should be regularly reviewed and updated to ensure that it remains effective and up to date.

7.3 Troubleshooting and issue resolution

Troubleshooting and issue resolution of a human resources information system (HRIS) requires a systematic and structured approach to identifying and resolving problems. Some common steps that may be involved in this process may include:

1. Gather information: Collect as much information as possible about the problem, including any error messages, symptoms, or patterns, and any recent changes or updates to the system.

2. Describe the problem: Clearly and concisely describe the problem, including any specific details or factors that may be relevant.

3. Determine the most probable cause: Using the information gathered, identify the most likely cause of the problem (e.g., software glitch, data corruption, user error, network issue).

4. Create a plan of action and test a solution: Develop a plan for resolving the issue, which may involve restoring data from the backup, reinstalling software, running diagnostic tests, or involving IT professionals or technical support staff.

5. Implement the solution and monitor results: After implementing a solution, monitor the system closely to ensure that the issue has been resolved and that there are no new issues or problems that arise.

Overall, effective troubleshooting and issue resolution of an HRIS requires a combination of technical expertise, problem-solving skills, and effective communication and collaboration between HR staff, IT professionals, and other relevant stakeholders. Regular system maintenance, such as backup and recovery procedures, can help to prevent issues from arising in

the first place and ensure that critical data is protected and recoverable in the event of a system failure or other unexpected event.

7.4 System Documentation and training requirements

System documentation and training requirements are critical components of any human resources information system (HRIS) implementation project. System documentation may include technical and functional documentation, user manuals, system architecture and design documents, and other materials that provide a comprehensive overview of the system and its components. Training requirements may involve providing training for HR staff and other system users on how to effectively use the system, including how to input, retrieve, and analyze data, run reports, and troubleshoot common issues.

Effective documentation and training can help to ensure that HRIS users have the knowledge and skills necessary to effectively use the system and leverage its full range of functionalities. This can include providing ongoing support and training for ongoing system maintenance, upgrades, and modifications, as well as for new users or staff members who may be joining the organization.

To ensure effective documentation and training, it is important to involve HR staff, IT professionals, and other relevant stakeholders throughout the implementation process. This may involve working with third-party vendors, consultants, or other experts who have deep expertise in HRIS implementation and support. Ultimately, successful documentation and training require a collaborative and proactive approach that emphasizes ongoing communication, feedback, and engagement with stakeholders throughout the organization.

8. Conclusion

8.1 Summary of key points

8.2. Recommendations for further improvements and development

Recommendations for further improvements and development of a human resources information system (HRIS) may include:

1. User feedback: Solicit feedback from HR staff and other system users to identify areas where the system could be improved or enhanced. This may involve conducting surveys, focus groups, or other forms of engagement to collect feedback and suggestions for improvement.

2. Integration with other systems: Consider integrating the HRIS with other systems or platforms, such as payroll or performance management systems, to improve data flow and streamline workflows across the organization.

3. Data analytics and reporting: Explore ways to leverage data analytics and reporting functionalities to provide HR staff with more actionable insights and real-time data on key performance indicators, such as recruitment and retention rates, employee satisfaction, and training effectiveness.

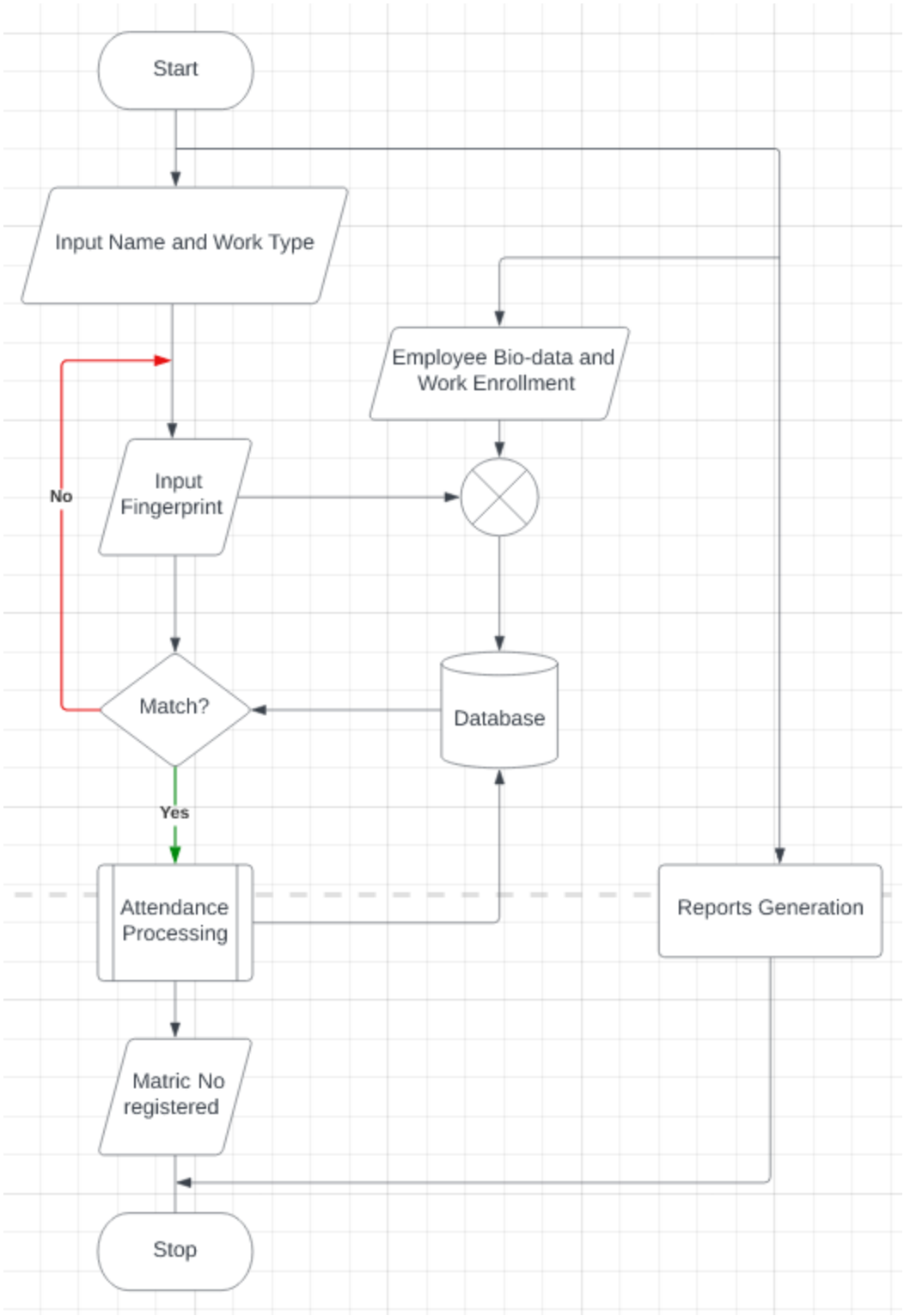
4. Mobile optimization: Consider optimizing the HRIS for mobile devices, such as smartphones and tablets, to support on-the-go access and greater flexibility for HR staff and other system users.

5. Security and data privacy: Ensure that proper security protocols and data privacy measures are in place to protect sensitive HR data and comply with relevant regulatory requirements and industry standards.

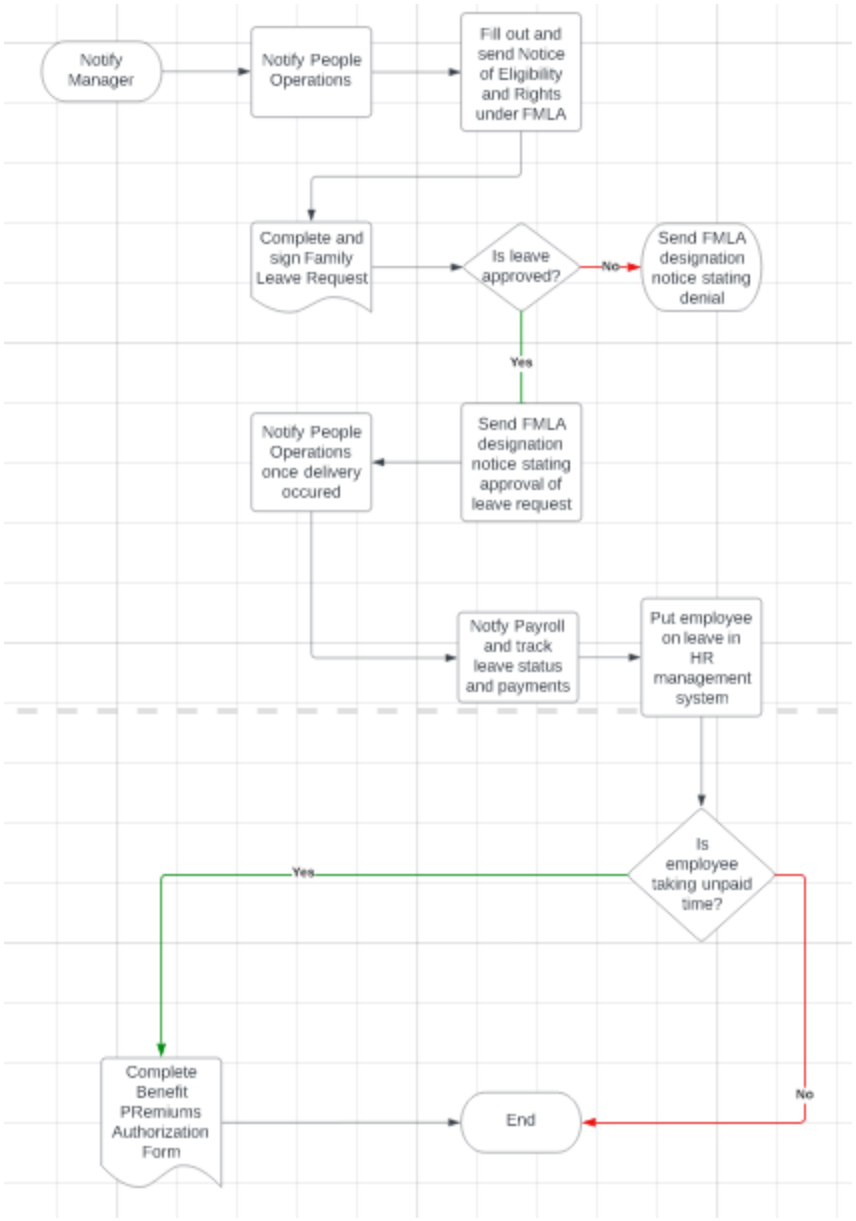
Ultimately, recommendations for further improvements and development of an HRIS should be based on the unique needs and priorities of the organization, as well as ongoing feedback from HR staff and other system users. Close collaboration and communication with IT professionals, vendors, or other experts may also be necessary to identify and implement effective improvements and enhancements over time.

Recruitment Process

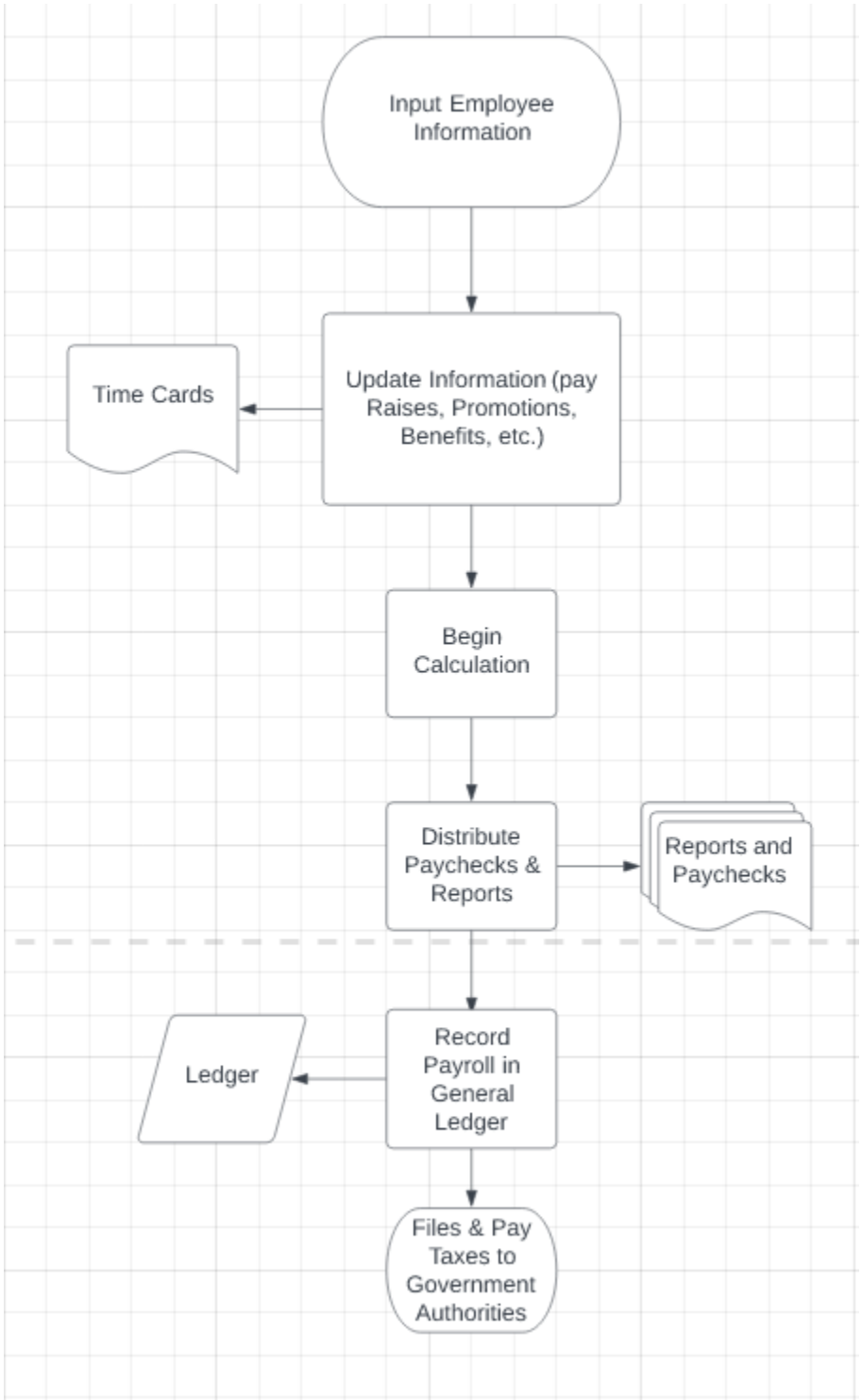
Attendance Management



Leave Management



Payroll Process Flowchart


Input Employee Information
Update Information (pay Raises, Promotions, Benefits, etc.)
Time Cards
Begin Calculation
Distribute Paychecks & Reports
Reports and Paychecks
Record Payroll in General Ledger
Ledger
Files & Pay Taxes to Government Authorities