

Web-Based Human Resource Management System for SEDP Simbag sa Pag-Asenso Inc. with Scholarship Management System

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1 Introduction

1.1 Project Context

Technology is the artificial enhancement of human power [1]. It tells what is real, as it is becoming gradually more beyond the power of individuals. It undeniably influences all the manual activities of man. Nowadays, technology plays a massive role in daily human lives. It reduces workloads and enhances productivity performance. New technologies allow people to carry out activities easily.

Information Technology is widely used in various areas of Human Resource Management [2]. Today, the majority of the organizations present in our society use computers and the internet to manage and access all kinds of information. Majority of the society including the government, non-government offices, micro-finances groups, and many more uses technology to manage and retrieve data easily. Additionally, technology is being used to develop new systems that organize data of their personnel as well as to hire new employees. In this day, it is easy to connect and communicate with people using online systems.

The rapid growth in technology has increased the digital performance of the organization, its impact on society, and the workflow of the organization. The digital revolution has an impact on organizations at all levels. Furthermore, it puts pressure on organizations and their employees to adapt to the rapidly changing world and the increase of digital technology [[3]]. As human activities in organizations become more difficult, the need for developing a Human Resource Management System is a primary solution. These manual practices include managing personnel information, time and attendance monitoring, benefits administration, generation of reports and analytics, and lastly training and development programs.

Human resource management (HRM) is a comprehensive and coherent approach to the employment and development of people [4]. Human Resources is considered as main personnel of the agency and the SEDP microfinance group does the human resources activities in a manual process. Human resource management (HRM) is concerned with all aspects of how people are employed and managed in organizations. It covers the activities of strategic HRM, human capital management, knowledge management, corporate social responsibility, organization development, resourcing learning and development, performance and reward management, employee relations, employee well-being, and the provision of employee services [4]. Developing (hrms) for the SEDP microfinance group will help them to make their work easier. The Human Resource of SEDP Simbag sa Pag-Asenso Inc. has five functions which are recruitment and attendance monitoring, benefit administration, generating reports and analytics, and training development programs. It also has the functionality of an Employee Access Portal. These functions may assist the microfinance group to be productive and achieve its mission and vision.

The human resource management system gears to attain excellence in the field of hiring applicants, monitoring attendance, administrating benefits, generating reports and documents for enhanced decision-making, and giving essential training and development programs to improve the employee's performance. Hence, the proposed system, Human Resource Management System for SEDP Simbag sa Pag-Asenso Inc. aims to create an automated online system from their manual human resource activities.

In the context of our capstone project, the objective is to automate the human resources management system (HRMS) of SEDP Simbag sa Pag-asenso Inc., a socioeconomic development and empowerment NGO organization with 33 branches across the country, each has its own HR departments. Currently, the organization relies on manual processes for various HR functions, including recruitment, employee record-keeping, payroll management, and performance evaluation.

The proposed human resources management system automation project aims to address these challenges by developing a comprehensive software solution tailored to the specific needs of SEDP Simbag sa Pag-asenso Inc. The system will feature modules for recruitment management, employee information management, attendance monitoring, payroll processing, performance evaluations, training administration, and the unique feature, scholarship management. Importantly, the system will be designed to allow the main branch to have centralized access and oversight of all SEDP branch human resources management systems. Automating these processes is expected to greatly benefit both the organization and its employees. For the organization, it

promises improved accuracy, enhanced data security, reduced administrative burdens, and optimized HR management practices[5] [6]. Meanwhile, for employees, the system offers increased efficiency, transparency, and accessibility to important information and resources [7]. The employee access portal will enable employees to access frequently accessed information, such as personal data, salary, benefits, training, and deductions easily [8].

Regarding the systems and devices, the HRMS automation project will interact with SEDP Simbag sa Pag-asenso Inc.'s existing attendance monitoring system, specifically the fingerprint biometric system utilized for recording employee time in and time out. This integration is crucial for ensuring accurate attendance data [9], which will be utilized by the HRMS for payroll processing and other related functions. Additionally, the web-based nature of the HRMS allows it to be accessible through various devices such as mobile phones and desktops, enabling flexibility and convenience for users across different branches and departments. Users will communicate with the system by logging in through a web interface using their assigned credentials, which will grant them access to relevant features and functionalities based on their role within the organization.

Furthermore, the HRMS scholarship management module streamlines scholarship-related processes, including handling applications, managing scholar grants, coordinating event schedules, and facilitating online document submissions by scholars. This inclusion of scholarship management as an added feature distinguishes this HRMS from generic systems.

1.2 Purpose and Descriptions

The "Human Resource Management System" that is being proposed by the researchers aims to enable the SEDP Simbag sa Pag-Asenso Inc. microfinance group to maximize and improve their most important asset—their workforce. It automates manual human resource tasks into an online web-based system. The system will provide a centralized repository or single location for the employee and scholar's information such as personal details, employment and scholarship history, benefits, and performance metrics. Additionally, the system also aims to give workers means so that they can thrive, such as motivation, understanding of their roles and responsibilities, access to the required resources and environment, and acknowledgment of their contribution to the goals of the organization.

The Web-Based Human Resource Management System for SEDP is a comprehensive, unified, and user-friendly system for managing human resource functions in a loaning microfinance group. The propose system can store and manage employee and scholar's data. The Web-based HRMs can also facilitate the employment process using the recruitment of applicants' functionality where job postings will be available. It also allows the personnel to administrate the employee's benefits such as health insurance, retirement plans, and leave entitlements. Additionally, it may allow employees to access and manage their information in the Employee Access Portal. The propose Human Resource Management System can also generate and enhance reports, dashboards, and analytics using visual tools such as charts and graphs to provide insights into HR metrics, trends, and performance indicators for decision-making.

1.3 Objectives of the Study

The proposed capstone project aims to design and develop a web-based Human Resource Management System for managing HR Functions of SEDP Simbag sa Pag-asenso Inc. Specifically, it sought to:

1. To create a system based on these features:
 - (a) Recruitment and Applicant Tracking.
 - (b) Time and Attendance Monitoring
 - (c) Benefit Administration.
 - (d) Training and Development Program
 - (e) Generate Reports and Analytics
 - (f) Scholarship Management
2. To centralize access to employee information management of (SEDP) branches, and
3. To create an Employees and Scholars Access Portal

1.4 Scope and Limitations

This study entitled "Human Resource Management System for SEDP: Simbag sa Pag-asenso Incorporation" explores how human resources are centralized and enhance core human resource management system functions like recruitment, timekeeping, benefits administration, and reporting. We'll examine functionalities for screening applicants, tracking work hours, managing benefits enrollment, and generating reports with basic data visualizations.

This centralized human resource system is designed specifically for SEDP (Simbag sa Pag-asenso), employees, administrators, and scholars. It is important to note that this system excludes other non-personnel associated with SEDP. This way, the system is designed for their specific needs and avoids the extra work of managing data for people who don't work for the company.

The system did not include other functions like the HR Help Bot, an answering machine for HR questions, or a chat feature that would enable direct messaging between employee clients and administrators. The limited time frame and the security of the system for its creation are the main reasons for the exclusion of the stated functions.

The project system was limited to a website application running on a Windows operating system and would not contain a dedicated mobile application or desktop application. The proponent's skill set was limited to web-based applications. Yet mobile and desktop users may access the system using their mobile browsers because it was built to be responsive.

Furthermore, the scope and limitations of the system's features were as follows:

- Time and Attendance monitoring: It allows the admin to monitor employee attendance, working hours, leaves, absences, and overtime, and integrates with payroll for compensation calculations.

- Employee Information Management: This module stores and manages employee data, including personal details, employment history, contact information, performance evaluations, and more.

- Employee Self-Service Portal: Allows employees to access and manage their information, such as personal details, pay stubs, leave requests, training programs, and benefits enrollment.
- Recruitment and Applicant Tracking: It facilitates the recruitment process by managing job postings, applicant information, resumes, interview scheduling, and candidate evaluations.
- Training and Development: Organizes training programs, monitors employee skill development, manages training resources, and evaluates training effectiveness.
- Benefit Administration: Manages employee benefits such as health insurance, retirement plans, leave entitlements, and other perks, facilitating enrollment, tracking, and administration.
- Scholarship management module: Manages scholarship-related processes, including handling applications, managing scholar grants, coordinating event schedules, and facilitating online document submissions by scholars.

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