

## **Payroll Management System**

### **OBJECTIVE:**

You are to design and implement a payroll system that should accept employee hours worked compute net pay and record all the payroll data for subsequent processing. The system should prepare pay cheques and a payroll ledger, and maintain data on a sequential payroll file.

To assist and ease the works of the Retail Outlet of Any Type of Companies, in particular, Payroll Management System is being developed. This would comprise the features that can be operated easily. Payroll Management System would take care of the day to day Attendance of All Employee. It covers activities from keeping the details of day to day In, Out, OD etc. The master and transaction activities are divided in modules so that the activities can be operated easily. The regular backup to the data can be taken and the backup data can be restored effectively. So, the Payroll Management System assists the employees of Company in each and every aspect of In and Out. The Payroll Management System is customized software and developed according to the needs of Any Type Company.

### **Proposed Application should do**

To accomplish these tasks, we had to meet with the client to find out exactly what the program is meant to do. Here are the sub stories that we were able to get from the client:

- The program accepts employee hours worked
- The program computes net pay
- The program record all the payroll data for subsequent processing
- The program should prepare pay cheques
- The program should prepare a payroll ledger
- The program should maintain data on a sequential payroll file
- Non-statutory deductions such as union dues and pension plans to be made
- Year-to-date total should contain earnings, federal tax, pension plan, and union dues
- Payroll data are employee number, employee name, pay rate, and union member flag

### **Why the proposed system?**

- The existing system only provides text-based interface, which is not as user-friendly as Graphical user Interface.

- Since the system is implemented in Manual, so the response is very slow.
- The transactions are executed in off-line mode, hence on-line data capture and modification is not possible.
- Off-line reports cannot be generated due to batch mode execution. Hence, there is a need of reformation of the system with more advantages and flexibility. The Payroll System eliminates most of the limitations of the existing software. It has the following objectives.

The user uses MS Excel, and maintains their records, however it is not possible them to share the data from multiple system in multi user environment, there is lot of duplicate work, and chance of mistake. When the records are changed they need to update each and every excel file. There is no option to find and print previous saved records. There is no security; anybody can access any report and sensitive data, also no reports to summary report. This Payroll System is used to overcome the entire problem which they are facing currently, and making complete atomization of manual system to computerized system.

### **Benefits**

- To improve the efficiency.
- Quickly find out information of an employee details.
- To provide easy and faster access information.
- To provide user friendly environment.

An automated payroll system enables the employer to process its payroll through a computerized system. A manual payroll system requires that the payroll be processed by hand and is therefore a considerably slower procedure than an automated system. The former makes payroll processing simpler, and reduces errors, which are more likely with the manual system.

The most obvious benefit of payroll software is that payroll calculations can be completed in a fraction of the time that they take to work out manually. Year-end reporting is also usually automated, and both payslips and annual reports are archived in case copies are needed later. But payroll systems can offer much more than the ability to calculate statutory deductions - for instance tax and National Insurance - and keep running totals. They can also incorporate, or integrate with, timesheet systems that record employee attendance or time worked. In this way, information about hours worked, whether collected automatically as a user or operator logs into a system, or manually entered into an electronic form, can be automatically transferred into the payroll system. Using basic payroll data, together with data on attendance and hours worked, payroll systems can provide a wealth of reports.

Payroll software offers lots of different advantages – for the user, the employees and the company (of all sizes).

1. Employee calendars
2. Cost Effective
3. Tax updates
4. Create Payslips
5. Reminders
6. Save Time
7. Added Security
8. Avoid Making Mistakes
9. No Need for Expertise
10. Customer Services

It is very simple in nature & doesn't provide much functionality, thus reducing complexity of the system. It doesn't require employees to know about computers at all i.e. it doesn't require training its employees any special technique except of simple bill preparation and book keeping. Because of manual work it doesn't require any investment in computers or any other peripherals. Since there is no system at all there is no need to keep available the facilities like 24- hour power backup or other facilities.

### **BACKGROUND:**

While administrating the monthly payroll basic salary, HRA, conveyance, another special allowance such mobile, etc are considered. There are some deductions.

Allowances, incentives, bonuses and reimbursements are based on organizational policies. Some organizations provided the allowances on a fixed rate say 10% or 12% of the basic salary. Some organizations go for performance based incentives.

## **Payroll Management Processes**

Calculation of gross salaries and deductible amounts is a tedious task which involves risk. Some of the organizations use the traditional manual method of payroll processing and some go for the advanced payroll processing software. An organization opts for any of the following payroll processing methods available:

- a) Manual System: - Manual payroll system is the traditional payroll system which involves pen and ink, adding machine, spreadsheet, etc instead of computers, software and other computerized aids. The process was very popular when there were no computerized means for payroll processing.
- b) Accountant: Accountant is a professional having a degree or diploma in finance or accountancy. He /she are responsible for all activities related to payroll accounting. He/she has sound knowledge of accounting principle and globally accepted standards. The processes add cost and value to the organization.
- c) Pay roll: - Pay roll outsourcing involves a third party in the calculation of salaries and deduction. It save time and cost for the organization. If there is more number of employees, say more than 900-1000, in the organization, payroll outsourcing must be very beneficial.

The data is provided to the consultants/outsourcing firms. The various payroll functions undertaken by the outsourcing organizations are as follows:

- Analysis of Payroll records, payroll taxes
- Medical claim processing
- Employee Insurance & Provident fund processing
- Quality Audit procedures & planning

## **Drawbacks and Limitations of existing system**

The proposed Payroll System will cover many aspects of time keeping and payroll process. This includes the capture of information based on the employee's work schedule, daily time worked and daily time rendered. The payroll process encompasses all activities necessary to report employees' time worked. The system will convert the current company's time keeping and payroll into Automated Program.

- ❖ The system will have a file management where it covers the records of employee and system transaction log.
- ❖ The system also covers the Payroll Processing and Reporting which includes the pay calculation of salary slip and time off tracking.
- ❖ The employee will use biometrics to time-in and time-out for recording of timekeeping.
- ❖ The system will have a report consist of summary of time sheet, summary of Payroll

Computation.

## **Limitation**

The employee's salary will not be sent through Automated teller machine (ATMs) or cheques, for the reason that the company insisted that salaries must be on a cash basis. No other currencies are computed in the system. The proposed system cannot be accessed online and it focuses only on the employees' Time Keeping and Payroll System. The necessary required remittance form given by the current system will be remitted manually. This proposed system is only applicable and can only be used by the management of any company.

- Not supports web based operations
- Multiprocessing not allowed.
- Extensive help is not provided.
- Not support in the OS lower than windows

## **Product Functions**

### **Master Module**

- Designation
- Department

### **Employee Module**

- Employee Details

### **Search Module**

### **Attendance Module**

- Leave
- Attendance
- Managing Leave

### **Salary Module**

- Allowance
- Deduction
- Pay Slip

## **Report Module**

### **Desired Outcome of Proposed Application**

This Application works in Multiple PC's installed on multiple Computers but sharing same database by which users of different department can use it sitting at different locations simultaneously.

But in future we can make the Application where the database will be hosted in order to manage the all departments which will be located in different places and by keeping domain of Application as Online.

### **FUNCTIONAL REQUIREMENT:**

Requirements analysis is usually the first phase of large-scale software development project. It is undertaken after a feasibility study has been performed to define the precise costs and benefits of a software system.

The purpose of this phase is to identify and document the exact requirements for the system.

The customer, the developer, a marketing organization or any combination of the three may perform such study. In cases where the requirements are not clear e.g., for a system that is never been defined, more interaction is required between the user and the developer.

There requirements at this stage are in end-user terms.

**Masters:** This module helps the administrator to enter the designation and the related description. It also helps to add the department.

**Employee:** This module helps to add the details of the employee like the personal detail and the employee detail.

**Search:** This module helps to search the employee details department wise and designation wise.

**Attendance:** This module helps to different types of leave for different year. It also helps the employee

to enter their entry and exit time. Using the attendance module the employee can also check their remaining leaves and also apply for the leave.

**Salary:** This module helps to calculate the salary by adding the allowances and the basic salary and by deducting the deductions based on the leaves and also the PF, ESI. It also helps to generate the employee pay slip.

**Report:** This module helps to generate the administrative reports like the Salary Report, Attendance Report and the Employee Report which is in can be exported to word, pdf or excel.

### **NON-FUNCTIONAL REQUIREMENT:**

**Scalability** - Our Payroll System has user friendly interface, can be customized as per a business requirement and can be scalable for small to large business.

**Availability** – This system is designed to run 24/7 and be readily available to the user.

**Performance** – System can withstand even though many number of users requested desired service. As we are keeping office level server of the automated payroll system. And access is given to the only registered users of office who requires the services of viewing, Updating etc. It can withstand the load.

- The overall system should be fast and error free.
- It should have built in error checking and correction facilities.
- The system should be able to handle large amount of data comfortably.

**Reliability** – In order to ensure reliability, this system is being designed using software that is established to be stable and easy to use. By incorporating a robust and proven SQL into the system, reliable performance and integrity of data is ensured.

There must be a power backup for server system.

**Security requirement** - The access to the software is given only to valid operators. We need a specific ID and password to get access to the software. Sensitive data is protected from unwanted access by user's appropriate technology and implementing strict user- access criteria. Companies in this situation also struggle to secure data, a growing concern given some of the high profile cases reported in the media involving lost, breached and stolen data.