

# *Website-Based Gajiku Design at Koperasi Agro Niaga Indonesia Syariah Malang East Java*

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**Abstract**—This research aims to analyze and design an accounting information system for the financial institution research object of the Koperasi Agro Niaga Indonesia Syariah Malang East Java. The system design method uses the ADDIE model while the analysis technique uses the Business Process Management (BPM) framework. The BPM framework was chosen because it can provide more comprehensive measurements in assessing the implementation of the use of information technology in accounting information system processes. There are four stages of research. The first is the problem analysis stage. At this stage, observation data, documentation and interviews are collected to obtain information related to company problems. Then the second stage is the data presentation stage using a matrix and the Business Process Management Notation (BPMN) model. The third stage is the stage of designing a website-based employee payroll accounting information system which is created based on the company's needs to improve the quality of business processes. And the last is the stage of formulating conclusions with evaluation. Based on the research results, it can be seen that the implementation of an employee payroll accounting information system that has been designed has the benefit of simplifying processes, saving cycle time, preventing errors, increasing standardization, and large-scale improvements by automating company processes.

**Keywords**— Design, Payroll, Business Process, Website, Koperasi Agro Niaga Indonesia Syariah)

## I. INTRODUCTION

The business process of a company is a series of business activities that are continuous with each other to realize the company's goals. Each company has its own business processes that are adapted to the company's environment and characteristics, such as company financial activities, organizational development, and company human resource management (Sudjiman, 2020). One of the company's various business activities is financial administration activities. Financial administration activities are one of the company's main activities which show how the company manages company documents and information well as well as financial management therein. Payroll is a process that is important for the survival of the company because it covers an integral part of the company's operations. Employee payroll process at Koperasi Agro Niaga Indonesia (Kanindo) Syariah Malang East Java itself is currently still limited to sending online documents manually via email or social media. Planning, control, and reporting evaluation are still carried out people to people. So this poses a high risk for the company. Moreover, the payroll activities in this company are quite complex, where all payroll components have been calculated in Microsoft Excel, but the possibility of errors in the process of calculating and inputting employee salaries is also a risk. This process certainly has quite an impact on the lack of effectiveness and efficiency of payroll activities at the Koperasi Agro Niaga Indonesia (Kanindo) Syariah Malang East Java. Advances in information technology have resulted in fast and accurate information processing capabilities in all types of companies (Suwarni et al, 2022). However, there are still agencies or companies that only rely on a payroll system based on manual calculations (Siregar, 2020).

Business processes are not only used as operational standards but are one of the determining factors in the smooth use of time and costs to become more efficient. Information systems and technology have become very important components for the success of businesses and organizations. An organization must have business processes that support existing business activities within the organization to achieve the identified vision and mission. In this research, researchers will use tools in the form of Business Process Model and Notation to analyze business processes in objects, and make improvements if needed. The aim of BPMN is to support business process management, both for technical users and business users, by providing a notation that is intuitive for business users, but can represent complex processes (Wagiu, 2018). This research provides a solution to existing problems by creating a website-based application using MySQL. It is hoped that the results of this research can improve the payroll business process at the Indonesian Agro Niaga Cooperative (Kanindo) Syariah Malang, East Java.

## II. LITERATURE REVIEWS

### 2.1. Payroll

Payroll systems are designed to process transactions related to payroll and employee payments. This system is used to record calculations, payments and salaries for employees who pay a fixed salary every month (Mulyadi, 2001:285). The payroll system plays an important role because this system determines how much salary employees should receive. However, this system must be able to deliver results at the right level and on time. Companies pay their employees to motivate their employees to work well (Heidjrachman and Husnan, 1996: 8). Salary is the laborer's right that is received and expressed in the form of money as compensation from the employer or employer to the laborer, as determined and paid according to a work agreement (Rahmanto & Hotijah, 2020), agreements or legal regulations including allowances for laborers and their families for work and/or services that have been or will be performed (Permata & Abidin, 2020).

### 2.2. Business Process

A business is an organizational unit that manages resources to provide the products and services customers need. Meanwhile, the process is a series of actions in carrying out business activities to produce a certain result. Thus, a business process is a series of activities that use one or more inputs and produce outputs that are useful for customers. A business process is a set of tools for organizing activities and improving understanding of the interrelationships of activities. According to Weske (2007), business processes consist of a series of activities carried out in coordination within the business and technical environment. This series of activities together realizes the company's strategy. Business processes are usually implemented within an organization, but can also interact with business processes implemented by other organizations.

### 2.3. Website

A website is a collection of pages consisting of several pages which contain information in the form of digital data in the form of images, video, audio, text and other animations provided via an internet connection (Abdullah, 2015:1). According to Arief (2011: 8) a website is a collection of web pages that have been published on the internet and have a URL (Uniform Resource Locator) which can be accessed by all internet users by typing the address. Prasetyo (2015:21) states that a website is a collection of various information media pages in a domain that can be accessed by anyone using the internet network. Initially, the web was built only using a language called HTML (Hypertext Markup Language) and the protocol used was called HTTP (Hypertext Transfer Protocol).

### 2.4. Bizagi Modeler

Bizagi is a tool for creating, optimizing and displaying workflow diagrams in business modeling to improve efficiency and governance processes in all parts of the organization. Once the data is available, business process modeling is carried out using BPMN. All aspects related to the production business process will be modeled to make it easier for stakeholders to see where problems exist in the BPMN model. The business process model will be created using the Bizagi Modeler application. Bizagi Modeler is a free application used to model business processes using BPMN standards. Bizagi can be used to create diagrams, documents, and carry out simulations of a work process (workflow) using standard BPMN notation (Bizagi, 2017).

### 2.5. Previous Research

Research conducted by Annurfaida (2020) designed a web-based payroll accounting information system at the Bandung Sneaklin Shoe Laundry. This research produces a website-based system that can help administrative staff to process employee

data and payroll data more easily. Laila and Santoso (2022) who carried out an analysis and design of an employee payroll information system for the Inkopal Sabu Padang Cermin Cooperative Unit, where this system is expected to be able to help simplify the work process of the finance department and leadership so that they can connect and share information in processing employee salary payment data. Noviana, Mutia and Acep (2022) created a computerized system for the payroll information system application at the Mitra Sejahtera Employee Cooperative. In this computerized system, the computer-based payroll information system at the Mitra Sejahtera Employee Cooperative can handle financial work quickly and accurately and can be updated easily and with this system it is hoped that it will facilitate company activities that require speed and accuracy. information

### III. RESEARCH METHOD

The type of research used is applied research. Applied research is research aimed at finding a solution to a problem that exists in society, industry, government as a continuation of basic research (Muhammad, Rohayati and Hairi, 2020). This research procedure adapts the ADDIE development model which consists of five stages which include analysis, design, development, implementation and evaluation (Sugiyono, 2015:200). Researchers chose the ADDIE model because the ADDIE development model is effective, dynamic and supports the performance of the program itself (Warsita, 2011: 7). The research steps for developing ADDIE in this research, presented in chart form, are as follows:

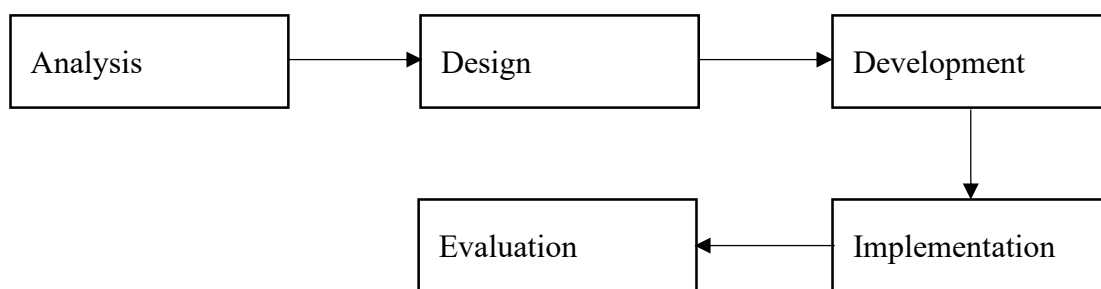


Fig 1. ADDIE Development Model Steps

### IV. RESULT AND DISCUSSION

#### 4.1. Analysis Results

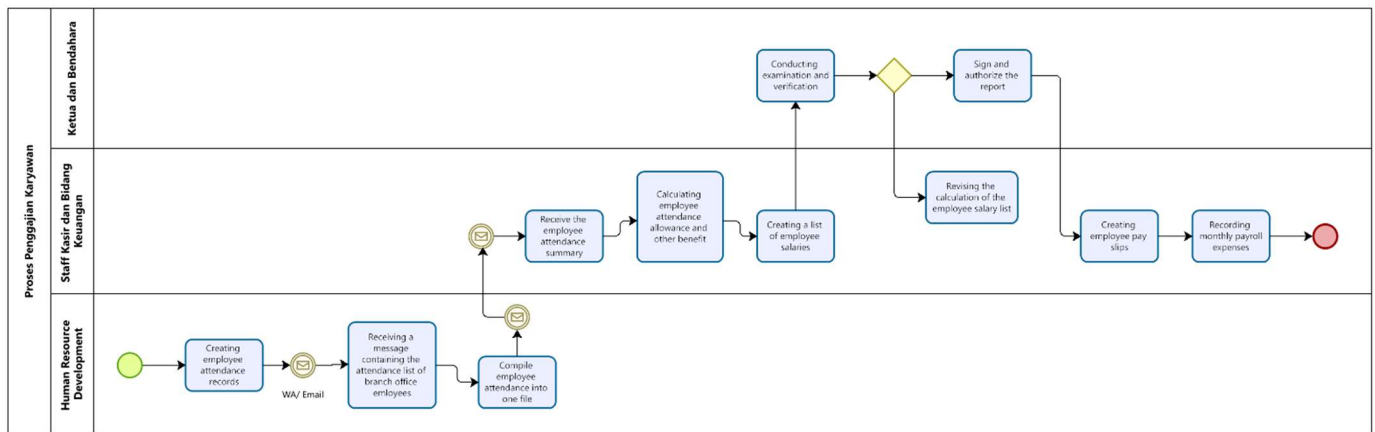
Analysis of employee salaries at the Koperasi Agro Niaga Indonesia (Kanindo) Syariah Malang East Java itself is based on the standard basic salary of an institution, then added allowances/bonuses and overtime pay, then reduced by salary deductions such as BPJS health costs, absenteeism and other deductions. The payroll data processing process at the Koperasi Agro Niaga Indonesia (Kanindo) Syariah Malang East Java already uses Microsoft Excel but there are still weaknesses that occur, but it is better than using a manual process with less efficient book records.

In the Koperasi Agro Niaga Indonesia (Kanindo) Syariah Malang East Java, payroll procedures are currently still limited to sending online documents manually via email or social media. Starting with making employee attendance for 12 cooperative branches as well as daily attendance calculations carried out by the internal control or human resource development section, employee attendance documents are taken directly by the internal control section in each cooperative branch and then making a recap of employee attendance lists. This document is then given to the cashier and finance staff to be used as a reference in calculating employee attendance allowances. The next stage is that the salary calculation details are returned to internal control to check whether the calculations are in accordance with the attendance data. Not only are they given to the internal control section, but the chairman and treasurer will also carry out checks regarding the salary details. If the salary details document is correct, the chairman and/or treasurer will authorize the cashier and finance staff to proceed to the next stage, namely creating a salary list

#### 4.2. BPMN Design Results

In the proposed business model for the new employee payroll process, activities for using an accounting information system will be included. By using this accounting information system, the employee payroll process will be more effective and efficient.

The figure depicts business process modeling with the help of a payroll information system in a company that is proposed to improve the quality of the payroll process.



Powered by Bizagi Modeler

Fig 2. BPMN Design

### 4.3. Implementation Results

The first function on the login page is the opening page to enter the payroll accounting information system. On this page the user must first register a username and password. Once registered, enter your username and password to then enter the system.

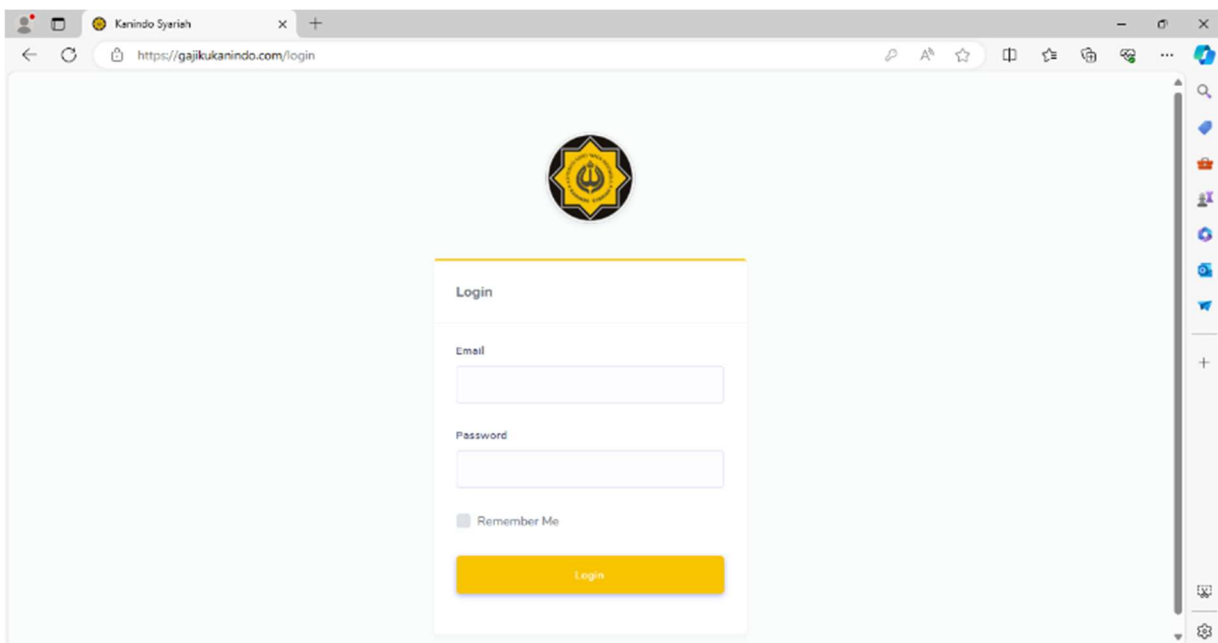


Fig 3. Website Application Design Login Menu Display

The main / home page has two main menus that represent the function and objectives of designing an employee payroll accounting information system in this research. There are three main menus consisting of Employee Data, Payroll Data and Add Admin. Employee Data has three sub menus including Employee HR, Management and Supervisor HR and Inactive Data. Meanwhile, Payroll Data has two sub menus, namely Employee Salaries and Management and Supervisory Salaries.

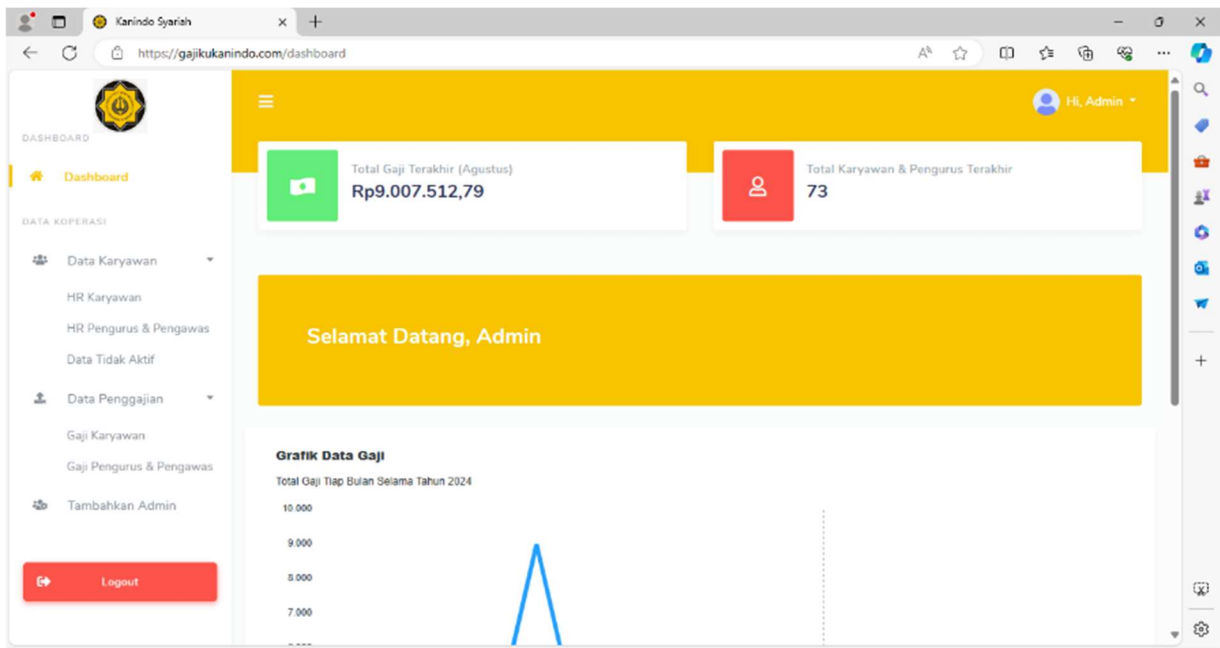


Fig. 4 Website Application Design Home Page Display

This page contains data related to human resource development in the form of important information that is useful for supporting the employee payroll calculation process.

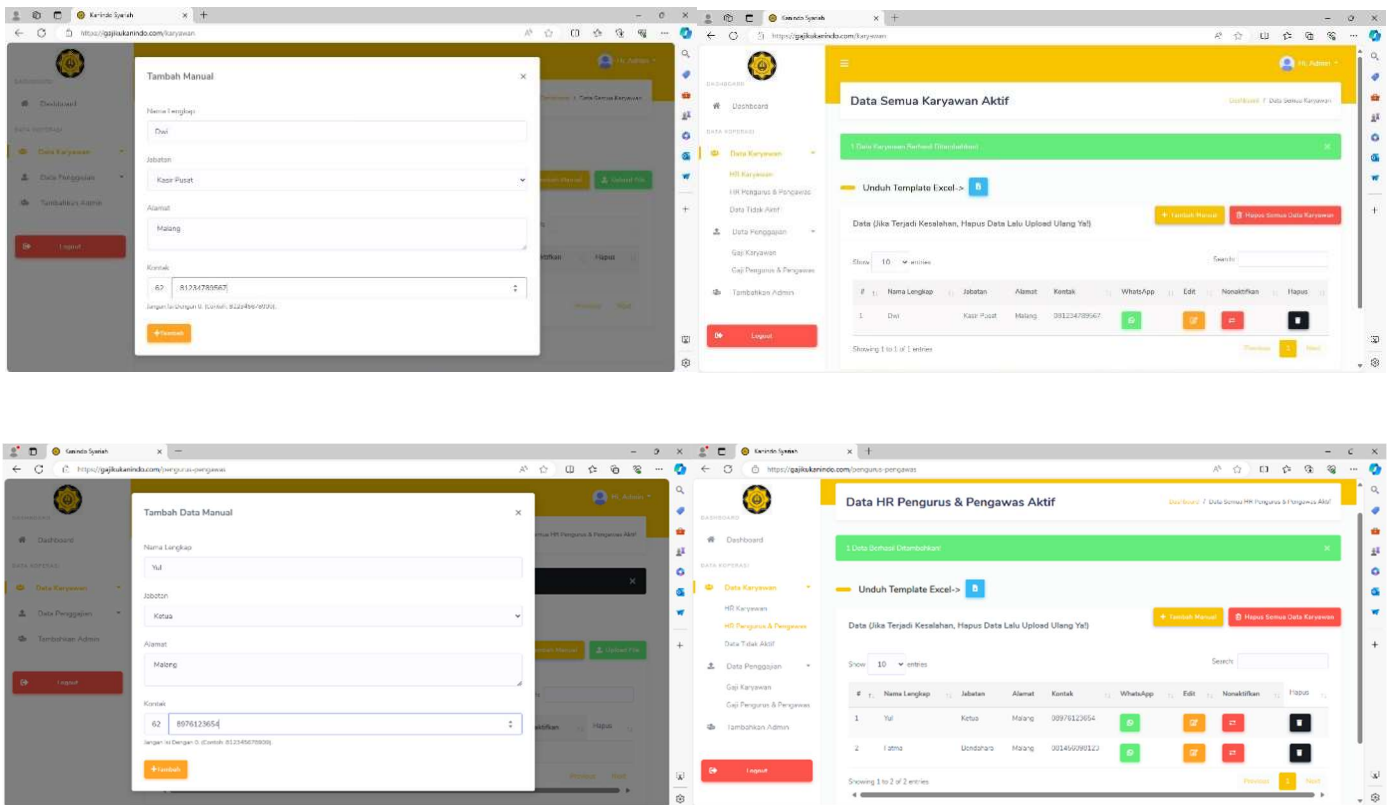


Fig. 5 Website Application Design for Employee Data Page Display

This page is used to view the results of employee payroll reports that have been input into the payroll system each period. On this page the user can enter information on the cooperative's payroll. As explained in the analysis, the cooperative employee

payroll in this study includes all employee salaries in each branch. In addition, a "detail and add data" function is provided for inputting employee salary calculation results files in Excel form for the purpose of printing pay slips.

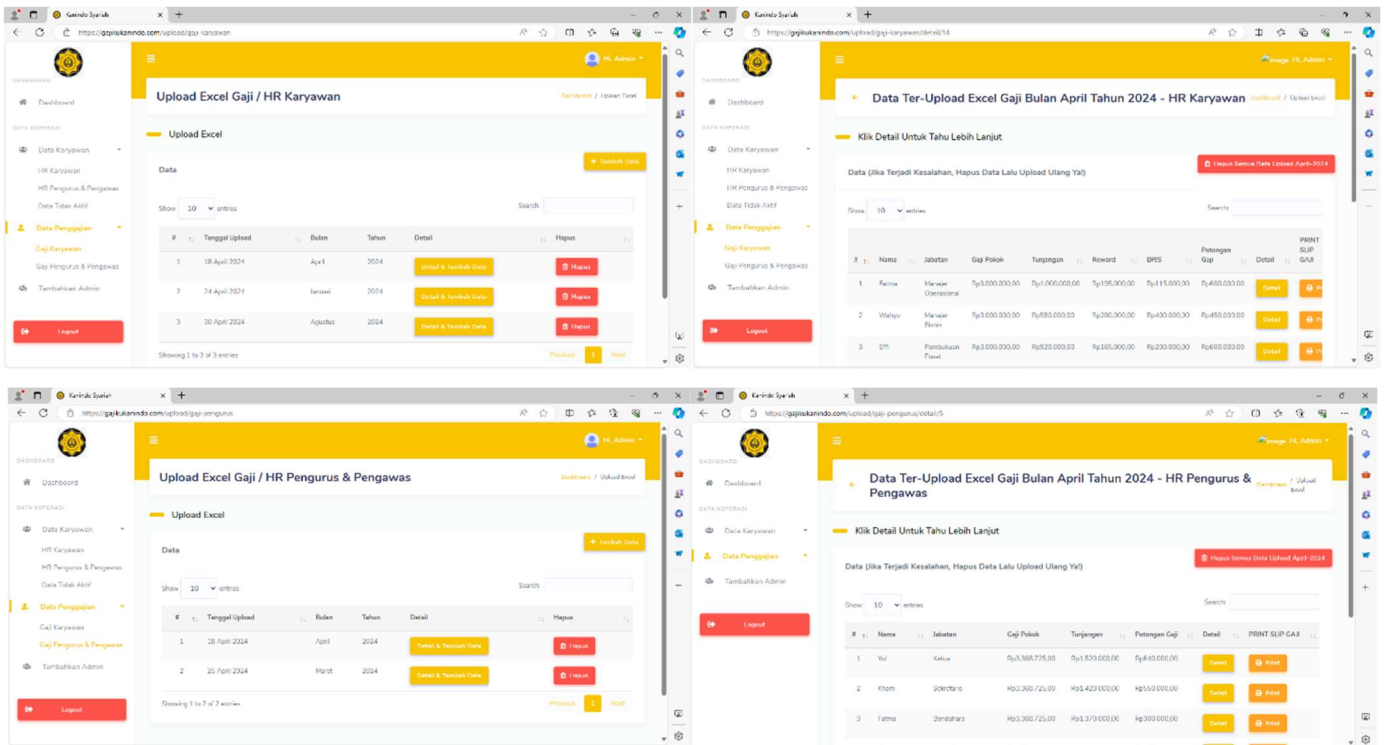


Fig. 6 Website Application Design for Payroll Data Display

In the end, modeling the employee payroll business process depicted in the picture above improves company management to make more optimal strategic decision making. This is because the financial and economic information produced from this business model is of higher quality. So that company management can more easily process company financial data more precisely. With the proposed business model, company management obtains relevant company financial information with real-time access to the company's financial system. This is important, considering that financial information is one of the crucial pieces of information to influence future management policies (Al-Dalabih, 2018).

V. CONCLUSION

This research aims to improve the quality of the company's business processes by analyzing and designing a website-based employee payroll accounting information system. From the results of the problem analysis, it was found that there was a need to improve the quality of the company's business processes which relied on two factors, namely human resources and technological resources. Some of the root causes of problems that often arise include sending online documents manually via email or social media. Planning, control, and reporting evaluation are still carried out people to people, so this poses a high risk for the company. Moreover, the payroll activities in this company are quite complex, where all payroll components have been calculated in Microsoft Excel, but the possibility of errors in the process of calculating and inputting employee salaries is also a risk. This process certainly has an impact on the lack of effectiveness and efficiency of payroll activities. The solution to solving the problem that can be done is holding discussions or communication between company parties, next, outreach for employees of the Koperasi Agro Niaga Indonesia (KANINDO) Syariah Malang Jawa Timur to use website-based applications to make it easier for the finance department to carry out bookkeeping related to payroll. This proves that the implementation of a new business process with an employee payroll information system in it is able to increase the effectiveness and efficiency of the business processes of the Koperasi Agro Niaga Indonesia (KANINDO) Syariah Malang Jawa Timur.

REFERENCES

- [1] Al-Dmour, A. H., Abbod, M., & Al Qadi, N. S. (2018). The impact of the quality of financial reporting on non-financial business performance and the role of organizations demographic' attributes (type, size and experience). *Academy of Accounting and Financial Studies Journal*.
- [2] T., M.-K., A., S., S., F., R., K., & A., K. (2012). An electronic management system for quality management. *Transfusion Medicine and Hemotherapy*.
- [3] Al-Dalabih, F. A. N. (2018). The Impact of the Use of Accounting Information Systems on the Quality of Financial Data. *International Business Research*. <https://doi.org/10.5539/ibr.v11n5p143>.
- [4] Laila, F. A., & Santoso, A. B. (2022). Analisis dan Perancangan Sistem Informasi Penggajian Karyawan Unit Koperasi Inkopal Sabu Padang Cermin.
- [5] Abdullah. (2015). *Web Programing is Easy*. Jakarta: Elek Media Komputindo.
- [6] Noviana, E., Mutia, I., & Acep, A. (2022). Sistem Informasi Penggajian di Koperasi Karyawan Mitra Sejahtera Berbasis Java. *Jurnal Riset dan Aplikasi Mahasiswa Informatika (JRAMI)*, 3(03), 387-394.
- [7] Bizagi. (2017). Bizagi Process modeler User's Guide. Retrieved from [http://download.bizagi.com/docs/modeler/2408/en/Modeler\\_user\\_Guide](http://download.bizagi.com/docs/modeler/2408/en/Modeler_user_Guide)
- [8] Annurfaida, R. (2020). Perancangan Sistem Informasi Akuntansi Penggajian Berbasis Web Pada Laundry Sepatu Sneaklin Bandung. *Journal Accounting and Finance*, 4(2).
- [9] Arief, M. R. (2011). *Pemrograman Web Dinamis menggunakan PHP dan MySQL*. C.V ANDI OFFSET. Yogyakarta: Sunarfrihantono Bimo, ST. 2002.
- [10] Weske, M., (2007). *Business Process Management Concepts Languages, Architectures*. New York: Springer.
- [11] Muhammad, Said. Rohayati. Hairi, Said Alwi Zulfikri. (2020). Aplikasi Game Media Pembelajaran Bahasa Inggris Pada Anak-Anak SDN Melayu 2 Banjarmasin Menggunakan Adobe Flash CS6. *Jurnal Sistem dan Teknologi Informasi* E-ISSN 2460-9552 Volume 6, No.1, 2020 P-ISSN 2620-3227.
- [12] Sudjiman, P. E., & Sudjiman, L. S. (2020). ANALISIS SISTEM INFORMASI MANAJEMEN BERBASIS KOMPUTER DALAM PROSES PENGAMBILAN KEPUTUSAN. *TelKa*. <https://doi.org/10.36342/teika.v8i2.2327>.
- [13] Heidjrachman dan Husnan. 1996. *Konsep Perancangan Sistem Absensi dan Penggajian*. Jakarta: Widya Guna.
- [14] Wagi, E. B. (2018). *Pemodelan Proses Bisnis dengan BPMN (Studi Kasus: Departemen Procurement Universitas Advent Indonesian) Business Process Modeling With BPMN. Case Study: Procurement Department of Universitas Advent Indonesia*.
- [15] Mulyadi. 2001. *Sistem Akuntansi*. Edisi Ketiga. Cetakan Ketiga. Jakarta: Salemba Empat.
- [16] Sugiyono. (2015). *Tahap teori pengembangan*.
- [17] Warsita, Bambang. 2011. *Pendidikan Jarak Jauh (PJJ)*. Bandung. PT Remaja Rosdakarya