3. 117-S.et al-JEME

By Tazkya Calissa S

Income Tax Calculation Application 21
(Case Study of a Company in The Field of Door Closer Production and Management in Bandung)

Tazkya Calissa S[1], Muhammad Syukri[2], Rizal Parghani[3], Feri Alfiyasin[4]

[1,2,3,4] *STMIK Mardira Indonesia, Bandung*
Email: 20030038@stmik-mi.ac.id[1], syukri@stmik-mi.ac.id[2], rizal.parghani@stmik-mi.ac.id[3], feri@stmik-mi.ac.id[4]

Abstract

According to Law No. 36 of 2008 on Income Tax, Income Tax (PPh) is a tax that individuals and corporations must pay based on the total annual income they receive. Deficiencies in the data management process have been highlighted by researchers, specifically in the calculation of income tax, which still needs to be included in an application. Bandung's production and management firm utilizes semi-computerized methods, specifically Excel, for income tax calculations. However, the company still needs to optimize its current computerized system fully. As a result, both the process of gathering data and calculating income taxes need to be improved in effectiveness and efficiency, resulting in time-consuming procedures for retrieving data.

Hence, there is a requirement for application software to facilitate the computation of Income Tax, thereby optimizing activities and operational procedures. Therefore, this study is named "Income Tax Calculation Application (PPh) 21 Case Study PT Dong Kwang IND." It employs an object-oriented development approach, specifically Unified Modeling Language (UML) and Object-Oriented Analysis and Design (OOAD), prioritizing Usecase with the PHP MyAdmin database.

Keywords: *Calculation Application, Income Tax (PPh) 21, Web*

Tazkya Calissa S[1], Muhammad Syukri[2], Rizal Parghani[3], Feri Alfiyasin[4]

Introduction

In the present era, knowledge has become indispensable in our daily lives, playing a vital role. Therefore, numerous highly clever individuals endeavor to acquire, gather, analyze, and provide facts that many may require. The presentation process has progressed with time, and nearly all presentation processes have been digitized. This process functions as an information system. Data is an indispensable asset that firms require to thrive in the fiercely competitive global landscape.

Information operates as input and output in executing operational and management tasks within a corporation. If a corporation wants the most effective advantage in competition, then information technology is the groundbreaking tool to provide them with the necessary information. An organization is only able to operate effectively in the presence of information. Accounting information is paramount among the several types of information required by management. (Yunita, 2018)

Companies must prioritize efficiency, effectiveness, and cost-effectiveness when selecting operational expenses, as this is crucial for competing with other companies in a rapidly growing market. Efficient execution of corporate operations necessitates competent individuals backed by effective company management. The organization employs a rigorous selection process to assess the potential of these individuals, considering their intelligence, ethics, and competency. The corporation offers salary as compensation for the potential of these people. (Meliana et al., 2014; Somantri et al., 2023; Wardany et al., 2019)

Salaries are remunerations employees provide for administrative and leadership responsibilities, typically set at a predetermined monthly rate. (Hasti et al., 2020; Suharyanto et al., 2017) Responsible individuals must adhere to the relevant legislation, including the requirement for all citizens with earnings, as established by the government, to fulfill their income tax obligations. An employee must fulfill their obligation of paying income tax, generally referred to as PPh 21 (Income Tax Article 21), on the earnings they get from their employment with the company. Income tax is imposed on

taxpayers by their earnings, regardless of whether they are individuals or business entities.

Comprehending Applications

An application is a user-created program designed to execute a specific function (Puspita et al., 2020). (Samuel Mayowa et al., 2022) defines an application program as a pre-built program or a program specifically created to do a task for the user or another application. An application can be defined as the practical utilization or execution of an idea that is the central subject of conversation or as computer software designed to aid humans in carrying out duties. Software applications tailored for specialized professionals can be roughly categorized into two distinct groups:

a. Specialized Software Applications: Software programs with built-in documentation specifically designed to carry out activities.

b. Package Applications: Software applications that include comprehensive documentation designed to address particular problems.

An application can be defined as a structured collection of commands or code designed to carry out specific tasks as directed by users through computer hardware, enabling the execution of application programs. Therefore, it can aid humans in identifying and resolving their requirements.

Comprehending PPh 21 (Income Tax Article 21)

PPh 21 is a form of withholding tax levied on the income received by an Individual Taxpayer (WPOP) within the country. This tax applies to various types of payments, such as salary, wages, honorarium, allowances, and any other payments associated with employment, services, or activities performed. The PPh payer, also known as the taxpayer, is responsible for paying taxes, referred to as the Tax Object. (Damayanti & Jaya, 2018; Randy Saputra et al., 2023)
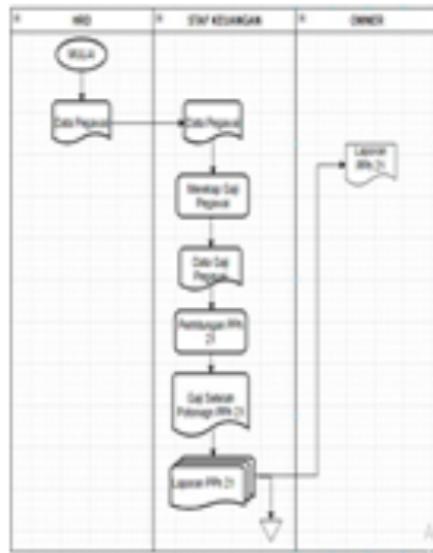
Tazkya Calissa S[1], Muhammad Syukri[2], Rizal Parghani[3], Feri Alfiyasin[4]

Presently, the management of a production and management company in Bandung utilizes Microsoft Excel to handle each employee's wage and personal income tax computations. The data is grouped and aggregated on each page, and the computation of PPH, 21 deductions on employee income taxes, frequently leads to inaccuracies owing to disorganized data. Another disadvantage is that the administrator must manually open each data sheet for calculation, which results in a time-consuming data search process. An integrated system is necessary to enhance the efficiency of managing PPh 21 tax deduction data for the admin.

To streamline the process of calculating income tax, the "Income Tax Calculation Application (PPh) 21 (Case Study at one of the production and management companies of Door Closers in Bandung)" has been developed. Its purpose is to address the concerns outlined earlier.
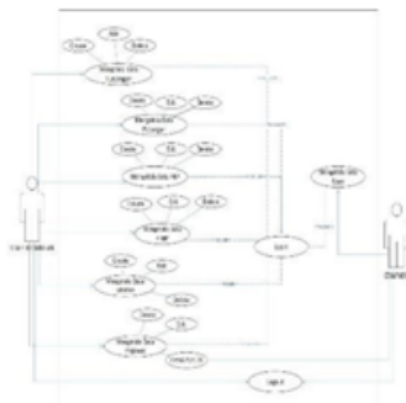
Research Method

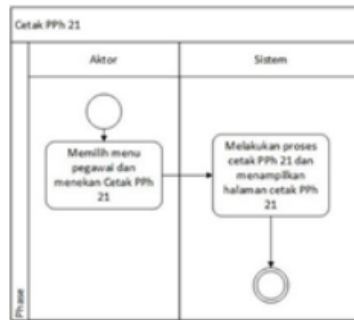System Analysis and Design

Proposed New System

i. Use cases

ii. Table Scenario

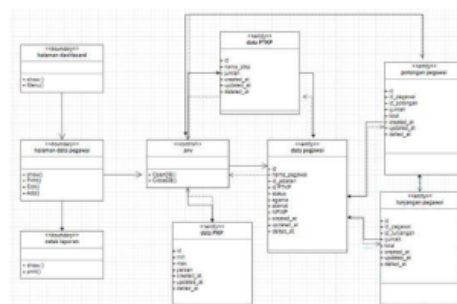| No	1
Name	Login
Description	The application is on the start page in the form
Actor	login display with the aim of limiting access to the application Finance Staff and Owner
Login Scenario	
Initial Conditions	The display is on the login page
Actor Action	**System Reaction**
1.The actor accesses the login page 3. The actor enters the username and password 5.The actor presses the login button	2.The system displays the login page 4. The system verifies the username and password to the admin table 6. System displays dashboard page
Final Condition	The display is on the dashboard page
Expect Scenario	If verification fails, you will return to the login page

Income Tax Calculation Application 21
(Case Study of a Company in The Field of Door Closer Production and Management in Bandung)

Tazkya Calissa S[1], Muhammad Syukri[2], Rizal Parghani[3], Feri Alfiyasin[4]

iii. Activity Diagrams

System planning
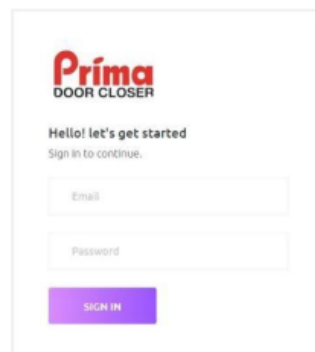### i. Database Design

ii. Interface Design

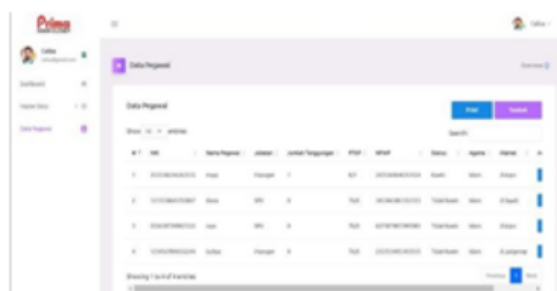### Result and Discussion
System Implementation

The system implementation stage involves a detailed description of an application system and preparation to ensure its operational readiness.

Login Page

Dashboard Page

Employee Data Page

Conclusion

From the conducted design and analysis of the application program, various conclusions may be inferred:

Utilizing the Income Tax Calculation Article 21 Application at the company in the field of door closer production and management in Bandung, which operates through a web-based platform, has

Income Tax Calculation Application 21
(Case Study of a Company in The Field of Door Closer Production and Management in Bandung)

Tazkya Calissa S[1], Muhammad Syukri[2], Rizal Parghani[3], Feri Alfiyasin[4]

optimized the entire process from computation to data aggregation .The implementation of the Income Tax (PPh) 21 Calculation Application has dramatically enhanced the efficiency and efficacy of searching for employee data and other related information while avoiding the need for needless time consumption. The systematic approach applied in the program has significantly reduced errors in calculating Income Tax (PPh) 21.

This online program has streamlined tax computations, improving the accuracy and speed of data retrieval. As a result, the Company in The Field of Door Closer Production and Management in Bandung now has a more efficient and error-resistant system.

References

Damayanti, D., & Jaya, T. S. (2018). The Design of a Web-Based Program for Reporting Incomes Tax Article 21 for Civil Servants. *JABM JOURNAL of ACCOUNTING - BUSINESS & MANAGEMENT*, 25(2), 50. https://doi.org/10.31966/jabminternational.v25i2.355

Hasti, N., Dekiki, D., Gustiana, I., Wahyuni, W., & Hartono, T. (2020). Web-Based Honorary Teacher Payroll Information System. *IOP Conference Series: Materials Science and Engineering*, 879(1), 012021. https://doi.org/10.1088/1757-899X/879/1/012021

Meliana, N., Nadhiroh, K., & Sugiharto, A. (2014). Sistem Informasi Manajemen Pph 21 Pada Pt Mesindo Tekninesia. *JURNAL SISTEM INFORMASI UNIVERSITAS SURYADARMA*, 10(1). https://doi.org/10.35968/jsi.v10i1.984

Puspita, F. M., Primadani, N. A., & Susanti, E. (2020). Application of Material Requirement Planning with ARIMA Forecasting and Fixed Order Quantity Method in Optimizing the Inventory Policy of Raw Materials of Sederhana Restaurant in Palembang. *Proceedings of the 5th Sriwijaya Economics, Accounting, and Business Conference (SEABC 2019)*. https://doi.org/10.2991/aebmr.k.200520.014

Randy Saputra, R., Sukmaaji, A., & Rahmawati, E. (2023). PENERAPAN METODE GROSS PAJAK PADA APLIKASI PENGGAJIAN BERBASIS WEB PADA UMKM KANTIN TANTE. *Rabit : Jurnal Teknologi Dan Sistem Informasi Univrab*, 9(1), 120–130. https://doi.org/10.36341/rabit.v9i1.3651

Samuel Mayowa, A., Samuel, A., & Temitope John, A. (2022). Design and

Implementation of a Web Based Leave Management System. *International Journal of Computer Applications Technology and Research*, 11(04), 123–144. https://doi.org/10.7753/IJCATR1104.1006

Somantri, Kharisma, I. L., & Junaedi, J. (2023). Perancangan Aplikasi Penghitungan Pajak Penghasilan Pasal 21 pada Kementrian Lingkungan Hidup dan Kehutanan Menggunakan Metode Extreme Programming. *G-Tech: Jurnal Teknologi Terapan*, 7(3), 1137–1148. https://doi.org/10.33379/gtech.v7i3.2797

Suharyanto, C. E., Chandra, J. E., & Gunawan, F. E. (2017). Perancangan Sistem Informasi Penggajian Terintegrasi Berbasis Web (Studi Kasus di Rumah Sakit St. Elisabeth). *Jurnal Nasional Teknologi Dan Sistem Informasi*, 3(2), 225–232. https://doi.org/10.25077/TEKNOSI.v3i2.2017.225-232

Wardany, Y., Suhendro, D., & Purba, F. A. (2019). SISTEM PERHITUNGAN PPH PASAL 21 ATAS PEMBAYARAN GAJI PEGAWAI KANTOR PADA PT. PERKEBUNAN NUSANTARA III SEI MANGKEI KABUPATEN SIMALUNGUN. *TECHSI - Jurnal Teknik Informatika*, 11(1), 157. https://doi.org/10.29103/techsi.v11i1.1403

Yunita, P. (2018). APLIKASI PERHITUNGAN PAYROLL DOSEN PADA STMIK DUMAI. *I N F O R M A T I K A*, 10(1), 18. https://doi.org/10.36723/juri.v10i1.56

3. 117-S.et al-JEME

3%
SIMILARITY INDEX

PRIMARY SOURCES

1 Baye, Michael R., Babur De los Santos, and Matthijs R. Wildenbeest. "Search Engine Optimization: What Drives Organic Traffic to Retail Sites? : Search Engine Optimization", Journal of Economics & Management Strategy, 2015.
Crossref

24 words — 2%

2 garuda.kemdikbud.go.id
Internet

11 words — 1%

3 journal.wima.ac.id
Internet

8 words — 1%

4 www.ftsm.ukm.my
Internet

8 words — 1%

EXCLUDE QUOTES	ON	EXCLUDE SOURCES	OFF
EXCLUDE BIBLIOGRAPHY	ON	EXCLUDE MATCHES	OFF