

DESIGN OF INFORMATION SYSTEM FOR PAYMENT OF WORKERS' WAGES AND PREPARATION OF FINANCIAL REPORTS ON GARMENT UD KELAMBI ANYAR

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ABSTRACT

Information technology developments are beneficial to businesses worldwide, particularly in Indonesia. Businesses that use information technology effectively can store and manage data, expedite business operations, and manage data. Information systems used in accounting are one area where technology is crucial. The purpose of this project is to develop and construct an information system application for the UD Kelambi Anyar clothing firm that will be used for financial report preparation and worker salary payment. For worker salaries, this company historically used manual records, which presented a number of challenges including the possibility of errors, information delays, and difficulty in finding data. This application was developed using the Software Development Life Cycle (SDLC) approach using the Waterfall paradigm. Planning, analyzing, designing, implementing, testing, and implementing are the stages of system development. Microsoft Access 2019 was used to create the database for this application, while Visual Basic Applications (VBA) was used to write the code. An information system application that facilitates the recording of worker service payments and the preparation of financial reports, such as profit and loss statements and balance sheets, is the outcome of this research project for UD Kelambi Anyar. In addition to a filter menu to make data searching for employee salary reports easier, this program has a username and password feature to ensure user security. It is envisaged that using this application will improve the financial transaction process' accuracy and efficiency and speed up the process of making management choices.

Keywords : Wage Information System; Financial Report; Information Technology; Microsoft Access 2019; Visual Basic for Applications (VBA)

ABSTRAK

Perkembangan teknologi informasi bermanfaat bagi bisnis di seluruh dunia, khususnya di Indonesia. Bisnis yang menggunakan teknologi informasi secara efektif dapat menyimpan dan mengelola data, mempercepat operasi bisnis, dan mengelola data. Sistem informasi yang digunakan dalam akuntansi adalah salah satu bidang di mana teknologi sangat penting. Tujuan dari proyek ini adalah untuk mengembangkan dan membangun sebuah aplikasi sistem informasi untuk perusahaan pakaian UD Kelambi Anyar yang akan digunakan untuk pembuatan laporan keuangan dan pembayaran gaji karyawan. Organisasi ini secara tradisional menyimpan catatan manual untuk gaji karyawan, yang memiliki berbagai kelemahan seperti potensi ketidakakuratan, keterlambatan informasi, dan masalah dalam melakukan pencarian data yang efektif. Pendekatan Software Development Life Cycle (SDLC) dengan model Waterfall digunakan untuk membangun aplikasi ini. Tahapan pengembangan sistem yang dilakukan adalah perencanaan, analisis, desain, implementasi, pengujian, dan

implementasi. Basis data aplikasi ini dibuat dengan menggunakan Microsoft Access 2019, dan pemrogramannya ditulis dengan menggunakan Visual Basic Applications (VBA). Proyek penelitian untuk UD Kelambi Anyar ini menghasilkan sebuah aplikasi sistem informasi yang mempermudah pencatatan pembayaran jasa pekerja dan pembuatan laporan keuangan, seperti laporan laba rugi dan neraca. Program ini menawarkan opsi username dan password untuk melindungi keamanan pengguna selain menu filter untuk mempermudah pencarian data laporan upah karyawan.. Diharapkan dengan adanya aplikasi ini akan meningkatkan akurasi dan efisiensi proses transaksi keuangan serta mempercepat proses pengambilan keputusan manajemen.

Kata kunci : Sistem Informasi Pengupahan; Laporan Keuangan; Teknologi Informasi; Microsoft Access 2019; Visual Basic for Applications (VBA)

INTRODUCTION

According to (Syam et al., 2022), the wage and salary system is a method used by businesses to create a set of protocols that help them recruit, hire, and retain employees and manage salaries and benefits. Research by Azizah et al. (2017) shows that technological advances will be a very useful tool for developing payroll information systems. However, the situation that occurs in the field is quite the opposite. As noted by (Agatha dan Mulyadi, 2018; Gustina dan Leidiyana, 2020; Irawan dan Hasni, 2017; Mocnir dan Yuliyanto, 2017) and other authors, some companies still maintain manual payroll recording on paper. Applying this manual recording approach will complicate the delivery of payroll information, and if it continues, it will also make the operating system less effective. (Susanto et al., 2022).

UD Kelambi Anyar is one of the businesses that still keeps its records on paper. The manufacturing sector is where this company operates. This company still uses handwritten bookkeeping records and relies on a trust system in running its business. The company, located at Jalan Tukad Anyar 9, Sanur Kauh, Denpasar, keeps records by requesting records from both parties. Therefore, the records are compared and checked in advance when the wage payment procedure is carried out after the work is completed. Wages will be paid and, if verified accurate, the records of both parties will be cleared to avoid future misunderstandings. In other situations, the owner will assign workers to document things that have been completed well in case the worker wants to request his or her wages at a certain time. When a worker wants to collect their wages, they give their records to the owner, and the owner will immediately calculate how much wages they will receive. Of course, it is possible that both scenarios will result in accumulated wages; the exact amount will not be known until the end.

The owner would also find it difficult to remember the amount of wages incurred consistently as the evidence is not clear. The owner stated that since electronic record-keeping is considered to result in cost overruns, record-keeping is still done manually. Hand recording is currently considered easier and more efficient. The findings of the study by Handayani et al. (2022), the owners' opinions are supported by the statement that MSMEs do not document their business transactions because it is burdensome, time-consuming, problematic, and not important.

Accounting computerized systems are needed as a result of these issues to help businesses record transactions and create financial reports. Computerized information systems can be created using two programs: Visual Basic for Applications (VBA) for the programming language and Microsoft Access to create the database. (Razaluddin dan Evayani, 2019). The program is easy to use and will undoubtedly assist users in tracking down the required documents.

The completed project is entitled "Design of Information System for Payment of Wages for Workers' Services and Preparation of Financial Statements at UD Kelambi Anyar Garment" and is based on the explanation of the background of the problem. This approach will be very useful and directly related to solving problems that may occur within the company. Supporting the design and development of information system applications for payment of worker services and preparation of financial reports at UD Kelambi Anyar is the goal of this development research project. This can be seen from the application that will be used in the process of documenting the labor provided and the wages paid. To perfect the current recording system and make it more well structured, this application will also be tailored to the needs of the company.

LITERATURE REVIEW AND STUDY FOCUS

In their study " *Sistem Informasi Penggajian dan Pengupahan Berbasis Web pada PT Patriot Intan Abadi*," Faldy et al., (2022) reported the findings of their investigation against the backdrop of a manual recording system. This supports the author's intention to investigate the efficacy of a web-based payroll and wage information system. However, some of the drawbacks include the high price, which may deter customers or third parties from using the system.

In their study " *Pengembangan Sistem Informasi Perhitungan Upah Lembur Karyawan Berbasis Web di PT Sugar Labinta*," Sulistiani et al. (2022) handle the

database using MySQL development and use UML as a tool for system analysis. The procedure for recording salaries that is still manual and inefficient due to lack of resources is the impetus for this research.

The research study " *Perancangan Sistem Informasi Akuntansi Penggajian Menggunakan Microsoft Visual Studio*" by Nurqalam et al. (2021) revealed that manual recording using Microsoft Excel as a data processor takes a long time when compiling annual financial reports. The waterfall model will be used to carry out the system development process.

According to research study by Abdillah and Halim, (2018) "*Aplikasi Penerimaan Kas dari Simpanan Anggota pada Koperasi Pegawai Dinas Koperasi 12 Juli Provinsi Jawa*" he concludes that by using an application, the recording process that previously required time and effort can be automated through computer usage. This means that every transaction entered will be automatically recorded, ultimately enhancing overall effectiveness and efficiency. Additionally, in his research, Albert also adopts the Microsoft Access application and applies the waterfall development method to address issues within the company under study.

The research design of the worker service payroll information system at UD Kelambi Anyar was prepared using the Microsoft Access 2019 database and the Visual Basic for Applications programming language. This is done because previous research findings have shown the significant benefits of having a computerized system to improve business effectiveness and efficiency. The Software Development cycle using the Waterfall paradigm was the development methodology used. The integration of information systems used to prepare financial reports and provide compensation makes this research different from previous studies.

RESEARCH METHOD

The Software Development Life Cycle (SDLC) approach is used in this research development model, which is based on the Waterfall paradigm. The Waterfall model has several stages that need to be completed in research, according to Hamizan et al., (2020): 1) System planning; 2) System Requirements Analysis; 3) System Design; 4) System Implementation; and 5) System Testing. UD Kelambi Anyar will be the research subject used in the trial. Black Box Testing, which concentrates on the response given, is used in this test. The methods and tools used in this research to

collect data are observation, documentation, and interviews. See Figure 1.1 which shows the test design with Black Box Testing.

RESEARCH FINDING AND DISCUSSION

A. System Planning

The result of this planning stage is the minimum specification of the hardware needed to operate the wage information system application and the preparation of UD Kelambi Anyar's financial statements. In addition, the software specifications that will be used to prepare and create applications on the information system are also clearly determined.

B. System Analysis

After the planning stage, the next step is to analyze the system based on information from interviews, observations, and documents obtained. In making the application, flow charts and Data Flow Diagrams (DFD) are used to describe the system in a simple way. Finally, the database design is described using an Entity Relationship Diagram (ERD) which includes information about entities, attributes, primary keys, foreign keys, and relationships can be seen in Figure 1.2. Then, the DFD level 0 associated with this research can be seen in Figure 1.3.

C. System Design

The design stage is based on the previous analysis. The designs made at this stage include database, form, and report designs, which will use the Microsoft Access 2019 application.

D. System Implementation

In the system implementation stage, VBA is used to run the functions that have been created so as to ensure that the forms and reports function properly.

1. Form Display

a. Form Log In Display

The log in form display has a feature to enter the user's username and password, which can be seen in Figure 1.4.

b. Main Menu Form Display

Once users have successfully logged in, they will be directed to the Main Menu form. The Main Menu consists of three sections: Business Process, Master Data, and Accounting, which can be seen in Figure 1.5.

c. Job Form Display

The Job Form has been designed to make it easy for users to add, change, view, and delete job data specifically according to their needs, which can be seen in Figure 1.6.

d. General Journal Form

The Journal Form has been designed to inform and provide convenience to users in adding, changing, viewing, and deleting journal data specifically according to their needs, which can be seen in Figure 1.7.

2. Report Display

The output display of the information system used by UD Kelambi Anyar to make financial reports and pay salaries for worker services is what produces a report display.

In the data print form, it can be used to print employee wage slip reports and wage reports. As for other reports, it is on the print report form.

a. Wage slip report display

The wage slip report has the aim of displaying the details of the wage slip prepared by the accounting department and given to employees as proof of wage payment, which can be seen in Figure 1.8.

b. Profit/loss statement display

The income statement display is designed to display details about the profit and loss owned by UD Kelambi Anyar, which can be seen in Figure 1.9.

E. System Testing

In this study, testing was conducted using the Black Box Testing method. This method is used to test the functionality and usability of the application, including the validity of the features that have been implemented. This test is carried out together with one of the company parties who will operate this application. The results of this test can provide an overview of the entire testing process and the results obtained to ensure the quality and performance of the application.

CONCLUSION

Application testing conducted using the Black Box Testing method shows that the creation of financial reports and payroll information systems functions effectively and meets the expectations that have been set. There are still limitations on the types of reports that can be made by the payroll information system and the process of making

financial reports, especially those related to employee salary cards, profit and loss statements, and balance sheet reports. Therefore, there is still much to be done on this system, especially in terms of handling employee data such as employee debt cards. The statement of changes in capital, cash flow statement, and notes to the financial statements should also be included in the resulting financial statements.

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BIBLIOGRAPHY

- Abdillah, J., & Halim, S. (2018). Aplikasi Penerimaan Kas Dari Simpanan Anggota Pada Koperasi Pegawai Dinas Koperasi 12 Juli Privinsi Jawa Barat. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 2(2), 15–28. <https://doi.org/10.31955/jimea.vol2.iss2.pp15-28>
- Agatha, C. K., & Mulyadi. (2018). Analisis Sistem Informasi Akuntansi Atas Penggajian Dan Pengupahan Pada Pt . Batik Arjuna Cemerlang Sukoharjo. *Advance Journal of Accounting*, 5(2), 7–19. <https://e-journal.stie-aub.ac.id/index.php/advance/article/view/411>
- Azizah, N., Yuliana, L., & Juliana, E. (2017). Rancang Bangun Sistem Informasi Penggajian Karyawan Harian Lepas Pada Pt Flex Indonesia. *SENSI Journal*, 3(1), 14–21. <https://doi.org/10.33050/sensi.v3i1.756>
- Faldy, E., Nurhalimah, F., Simatupang, D. S., Insany, G. P., Studi, P., Informatika, T., & Teknik, F. (2022). *Jurnal Computer Science and Information Technology (CoSciTech)*. 3(3), 406–414.
- Gustina, R., & Leidiyana, H. (2020). Sistem Informasi Penggajian Karyawan Berbasis Web Menggunakan Framework Laravel. *Jurnal Sistem Informasi*, 7(1), 34–40. <https://core.ac.uk/download/pdf/327232559.pdf>
- Hamizan, A., Mayasari, Saputri, R., & Pohan, R. N. (2020). Sistem Informasi Penggajian di PT. Perkebunan Nusantara IV. *Jurnal Manajemen Informatika (JAMIKA)*, 10(April), 29–38. <https://doi.org/10.34010/jamika.v10i1>
- Handayani, P., Syarifudin, & Nurhayati. (2022). Pemanfaatan Aplikasi Akuntansi Berbasis Android Dalam Pembukuan Sederhana UMKM (Pada Anggota UMKM Pondok Petir Sejahtera). *Jurnal Masyarakat Merdeka*, 1(5), 35–42. <https://doi.org/http://dx.doi.org/10.51213/jmm.v5i1.104>
- Irawan, M. D., & Hasni, L. (2017). Sistem Penggajian Karyawan Pada Lkp Grace Education Center. *Jurnal Teknologi Informasi*, 1(2), 125–136. <https://doi.org/https://doi.org/10.36294/jurti.v1i2.286>
- Mocnir, A., & Yuliyanto, F. (2017). Perancangan Sistem Informasi Penggajian Berbasis Web dengan Metode Waterfall pada PT. Sinar Metrindo Perkasa (Simetri). *Jurnal Informatika Pamulang*, 3(5). http://epub.imandiri.id/repository/docs/journal/Jurnal_361562014.pdf
- Nurqalam, G., Jaelani, M. H., Murweni, I., & Abdussalaam, F. (2021). Perancangan Sistem Informasi Akuntansi Penggajian Dengan Menggunakan Microsoft Visual

- Studio (Studi Kasus PT. Wicaksana Berlian Motor). *Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, 5(3), 552–568. <https://doi.org/10.31955/mea.v5i3.1509>
- Razaluddin, M., & Evayani, E. (2019). Perancangan Sistem Informasi Persediaan Barang Menggunakan Microsoft Access. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi*, 4(2), 325–333. <https://doi.org/10.24815/jimeka.v4i2.12261>
- Sulistiani, H., Nuriansah, A., Wahyuni, E. D., Programming, E., Lembur, P. U., Informasi, S., Labinta, S., Studi, P., Informasi, S., & Indonesia, U. T. (2022). *Pengembangan Sistem Informasi Perhitungan Upah Lembur Karyawan Berbasis Web Pada PT Sugar Labinta*. 2(2), 69–76.
- Susanto, E., Susena, E., & Maozyonzyah, A. S. (2022). Rancang Bangun Sistem Informasi Penggajian Karyawan Di Toko Aston Printer Edy. *Jurnal INFORMA Politeknik Indonusa Surakarta*, 8.
- Syam, A., Hamid, H., Yansah, S., & Informasi, S. (2022). Rancang Bangun Sistem Informasi Penggajian Karyawan (Payroll) Berbasis Web Web-Based Employee Payment (Payroll). *Jurnal Informatika*, 11(1), 81–89.
- Uminingsih, Nur Ichsanudin, M., Yusuf, M., & Suraya, S. (2022). Pengujian Fungsional Perangkat Lunak Sistem Informasi Perpustakaan Dengan Metode Black Box Testing Bagi Pemula. *STORAGE: Jurnal Ilmiah Teknik Dan Ilmu Komputer*, 1(2), 1–8. <https://doi.org/10.55123/storage.v1i2.270>

APPENDIXES

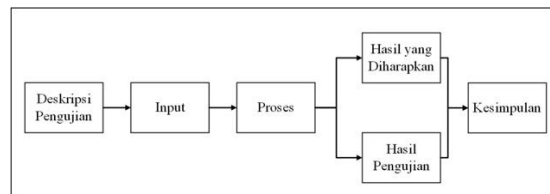


Figure 1.1. Black Box Testing Design
Source: Uminingsih et al., 2022

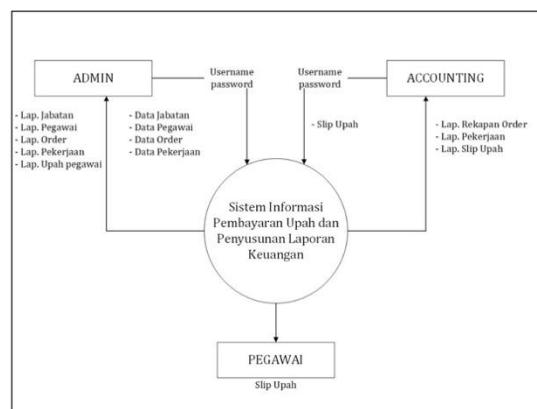


Figure. 1.2. Context Diagram of Information System Application Flow
Source: *Data primer diolah, tahun 2023*

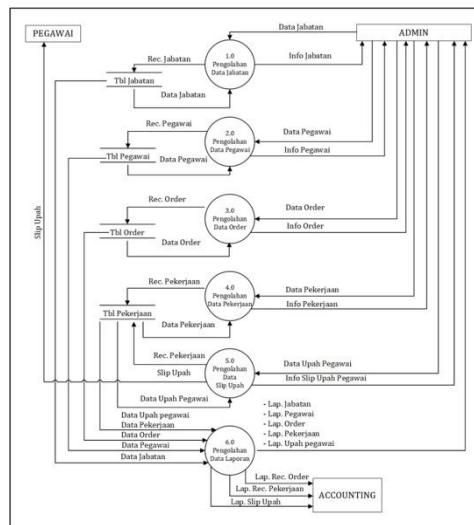


Figure 1.3. Data Flow Diagram Level 0
Source: *Data primer diolah, tahun 2023*

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Figure. 1.4. Form Log in Display
Source: *Data primer diolah, tahun 2023*

Figure. 1.5. Main Menu Form Display
Source: *Data primer diolah, tahun 2023*

Menerima pesanan: Baju Kaos, Bordir, Sablon, Spanduk, Jaritan
Jalan Tukad Anyar 9, Sanur Kauh, Denpasar 80227
HP: 08179795385, 081238468508, Telp: (0361) 9381622
e-mail: kelambianyar17@gmail.com

Detail Order KELUAR

Kode Detail Order: BDC6876E-4199-7746-9D75-51
Nama Barang: Oblong 20e Warna (Sari Rajut)
Qty Tersedia: 20

Pekerjaan Tambah Koreksi Hapus

Nama Pegawai	Qty	Harga Ongkos	Total	Deadline Seto	Tgl Setor	Denda
Nengah Wintari	35	Rp15.000.00	Rp525.000.00	31-Jul-23		Rp0.00

Selesaikan Pekerjaan

"Pastikan Seluruh Pekerjaan terdistribusi dengan baik"

Figure 1.6. Job Form Display
Source: Data primer diolah, tahun 2023

Menerima pesanan: Baju Kaos, Bordir, Sablon, Spanduk, Jaritan
Jalan Tukad Anyar 9, Sanur Kauh, Denpasar 80227
HP: 08179795385, 081238468508, Telp: (0361) 9381622
e-mail: kelambianyar17@gmail.com

Input Jurnal Umum KELUAR

Jenis Transaksi: Penjualan
No Transaksi: AAF486D2-F838
Kode Penjualan: 777E798D-DEEA-1
Periode: 07/2023
Tgl Transaksi: 30/07/2023
Keterangan: Pembelian Seragam untuk Guru

Input Detail Jurnal Koreksi Hapus

No Transaksi	NoKlaim	Nama Akun	DK	Debit	Kredit
AAAF486D2-F8 111		Pendapatan	K	Rp0.00	Rp3.300.000.00
AAAF486D2-F8 111		Kas	D	Rp3.300.000.00	Rp0.00

Tambah Debit Tambah Kredit

Control Balance: 3.300.000,00 3.300.000,00

Navigasi: Tambah Simpan Cetak Selesaikan Pencatatan

Figure 1.7. General Journal Form Display
Source: Data primer diolah, tahun 2023

Menerima pesanan: Baju Kaos, Bordir, Sablon, Spanduk, Jaritan
Jalan Tukad Anyar 9, Sanur Kauh, Denpasar 80227
HP: 08179795385, 081238468508, Telp: (0361) 9381622
e-mail: kelambianyar17@gmail.com

Kode Pegawai: PG 000003
Nama Pegawai: Nengah Wintari

Nama Barang dan Jasa	Qty	Total Penghasilan
Oblong 20's Putih (Sari Rajut)	1	Rp12.500.00

Dibayarkan: Rp12.500.00
Pengelola:

Nengah Wintari Kardana

Figure. 1.8. Wage Slip Report Display
Source: Data primer diolah, tahun 2023

UD KELAMBI ANYAR		LAPORAN LABA RUGI UD KELAMBI ANYAR PERIODE JULI 2023	
PENDAPATAN			
NoAkun	NamaAkun	LRDebit	LRKredit
41001	PENDAPATAN JASA	Rp0,00	Rp97.055.200,00
			→
	PENJUJUALAN BERSIH		Rp97.055.200,00
PEMBELIAN			
NoAkun	NamaAkun	LRKredit	LRDebit
51001	PEMBELIAN	Rp0,00	Rp30.250.000,00
		←	
	PEMBELIAN BERSIH		Rp30.250.000,00
BEBAN			
NoAkun	NamaAkun	LRDebit	
61001	BEBAN GAJI	Rp18.501.600,00	
61002	BEBAN LISTRIK	Rp150.000,00	
	TOTAL BEBAN		Rp18.651.600,00
LABA / RUGI BERSIH			Rp48.153.600,00

Figure. 1.9. Profit/Loss Statement Display
 Source: *Data primer diolah, tahun 2023*