

USABILITY TESTING PAYROLL SYSTEM CASE STUDY GAJIHUB

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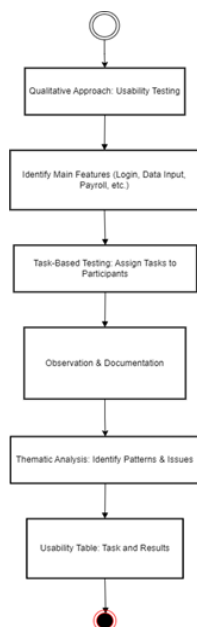
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GRAPHICAL ABSTRACT



ABSTRACT

A cloud-based human resource management (HR) application, GajiHub, was launched in Indonesia in 2020 to assist companies in managing personnel administration, especially in the aspect of payroll and employee attendance monitoring. This study aims to evaluate the usability of the main features of the GajiHub application, such as login, employee data input, payroll component settings, salary payments, and promotion management. This study uses the usability testing method with a task-based testing approach, where participants are asked to complete certain tasks on each feature tested. The test results show that most of the features work fine, but some issues related to the user interface and data validation are still found. Recommendations for improvement are proposed to improve the user experience and effectiveness of the application in supporting the company's HR management.

Keywords: Usability Testing, GajiHub, HR Management, Payroll, Task-Based Testing

ABSTRAK

Aplikasi manajemen sumber daya manusia (SDM) berbasis cloud, GajiHub, diluncurkan di Indonesia pada tahun 2020 untuk membantu perusahaan dalam mengelola administrasi kepegawaian, terutama dalam aspek penggajian dan pemantauan kehadiran karyawan. Studi ini bertujuan untuk mengevaluasi kemudahan penggunaan (usability) fitur utama aplikasi GajiHub, seperti login, input data karyawan, pengaturan komponen penggajian, pembayaran gaji, dan manajemen kenaikan pangkat. Penelitian ini menggunakan metode usability testing dengan pendekatan task-based testing, di mana partisipan diminta menyelesaikan tugas tertentu pada setiap fitur yang diuji. Hasil pengujian menunjukkan bahwa sebagian besar fitur berfungsi dengan baik, tetapi beberapa kendala terkait antarmuka pengguna dan validasi data masih ditemukan. Rekomendasi perbaikan diajukan untuk meningkatkan pengalaman pengguna dan efektivitas aplikasi dalam mendukung manajemen SDM perusahaan.

Kata kunci: Usability Testing, GajiHub, Manajemen SDM, Penggajian, Task-Based Testing

INTRODUCTION

The introduction of sophisticated technology into the field of human resource management has transformed how companies manage payroll systems [1][2]. Payroll systems, which today include several regulatory criteria and employee benefit schemes and are becoming more complex, demand immediate attention on usability to improve user happiness and operational effectiveness [3][4]. Payroll systems not only guarantee correct compensation for staff members but also are rather important for preserving local labor law compliance [5][6]. As such, the evaluation of usability becomes a top concern since the efficiency of these systems can greatly affect employee morale and organizational success [7][8].

This paper focuses on the GajiHub payroll system, a modern tool meant to simplify payroll handling for different sized companies [9]. By means of methodical observation and study of the functionality of the system, comprising payroll component configurations, employee payroll systems, and salary payment procedures, the purpose is to fully evaluate the user experience connected with GajiHub. The user experience consists in several elements, including general user happiness, navigational intractiveness, feature accessibility, and general usability of navigation. Examining several user scenarios will help to synthesis understanding of the simplicity of use and possible areas for improvement inside the GajiHub system.

The dynamic character of payroll operations, which always adjusts to changes in labor laws and organizational policies, emphasizes the relevance of this study. Effective payroll systems that satisfy changing needs of companies depend on user-centered design and usability assessment, according past research. This study not only adds to the current conversation on usability testing in the field of human resource management but also seeks to offer practical insights that can guide future updates and enhancements to the GajiHub system by investigating the usability of this system via direct observation and participant comments. The ultimate aim of this research is to improve the general functioning of the GajiHub payroll system so that it satisfies the needs of its users and promotes a more effective and satisfying payroll administration experience.

RESEARCH METODOLOGY

Emphasizing direct observation and user testing, a qualitative research approach was taken to fully study the usability of the GajiHub payroll system [10][11]. This method makes it possible to closely study user interactions with the system, therefore enabling the gathering of rich, qualitative data that can expose underlying user preferences and experiences. By means of a collection of structured scenarios reflecting common user tasks, such as employee payroll setups, the processing of salary payments, and the creation of

benefits, the research approach was intended to completely examine several functionalities inside the GajiHub system.

Two researchers guided participants through a sequence of key activities in a controlled atmosphere, therefore acting as facilitators. Selected participants guaranteed a basic knowledge of payroll procedures by their acquaintance with payroll systems. During the testing, observations were methodically noted with an eye on several factors including navigational ease, clarity of instructions, and user happiness [12]. Every scenario was purposefully meant to provide comments on particular GajiHub program functionalities, therefore enabling the researchers to gather both qualitative observations and quantitative measurements of user experience.

Participants in every observed situation were asked to autonomously negotiate the GajiHub interface, completing tasks including selecting the "Payroll" menu, picking monthly payslips, adjusting salaries, and verifying payroll payments. To fairly evaluate the participants' experiences, the activities were structured inside particular walkthrough questions. Questions concerning the clarity of visible options, the simplicity of choosing, and the user's confidence in successfully performing the tasks were asked, for example [13]. These kinds of inquiries helped to find situations of uncertainty or annoyance that might compromise a flawless customer experience.

Observation combined with interactive feedback offered a whole picture of the usability scene connected with the GajiHub payroll system. After finishing every chore, participants were requested to offer vocal comments on their experience; these were recorded and examined to identify areas for development and common themes. By means of this dual-faceted strategy of observation and user input, a thorough knowledge of usability difficulties is developed, therefore enabling actionable ideas that may propel improvements in the GajiHub system [14].

Using a thematic approach, further study of the gathered data revealed reoccurring problems and notable trends across several contexts. The results of this research approach not only help to identify possible usability issues in the GajiHub payroll system but also form the basis for well-founded suggestions meant to enhance user experience [15]. Through direct user interaction and methodical documentation of their experiences, the study emphasizes the crucial relevance of user-centered design in the evolution and improvement of payroll systems in a terrain of ever complexity.



Figure 1. 1 Workflow Research Metodology

RESULTS AND DISCUSSION

The results of this study show how the GajiHub program is used under several scenarios—including payroll component setups, employee payroll configurations, and salary payments—observation and analysis of which [13]. Every scenario was assessed for user happiness, navigation quality, and simplicity of use. The observations for every tested situation are summarized here together with comments.

3.1. Results of Observation of Employee Salary Payment Scenario

Users report that the "Payroll" menu and monthly payslip options are easily accessible. However, the display of two separate payment buttons can be confusing, even though they function the same. Users suggested that the interface design could be simplified to reduce confusion [8]. Successful payment notifications are displayed clearly, giving users confidence that the payment has been processed.

Table 1. Results of Observation of Employee Salary Payment Scenario

No	Steps/Tasks	User Purpose	Walkthrough Questions	Observation Results
1	Select the "Payroll" menu on the main menu	Access payroll menu for payroll management	Is the "Payroll" menu easily accessible?	The "Payroll" menu is clearly visible on large screens and is easily accessible, although on small screens it needs adjustment. The monthly payslip options are neatly arranged in a table, making it easier for users to choose the appropriate slip. Employee lists are easy to understand, with names and payment statuses clearly visible. The "ready to pay" button is easy to understand and well-organized, although there are adjustments based on the work period.
2	Choosing a monthly payslip	Choosing the monthly payslip option as the payroll basis	Can users choose monthly payslips easily?	
3	Make salary adjustments from employee lists	Determine employees who will be subject to salary adjustments	Can users choose employees easily?	
4	Change the payment status to "ready to pay"	Confirm salary payment for employees	Is the "ready to pay" button easy to find?	
5	Click the "pay salary" button	Process payroll payments	Can users distinguish the "pay salary" button?	The two payment buttons can be confusing due to their separate but similar positions. The company's account list is clear, but the confirmation button is hidden and only appears when hovered. Yes, the company can choose and add other accounts for the benefit of the company. The second confirmation popup is very clear, making it easy for users to confirm payment. Successful payment popup notifications are displayed clearly, providing reassurance to users.
6	Confirmation of payment to the company's bank account	Confirm payment to company account	Can users confirm payments easily?	
7	Click the "yes" button to confirm the payment	Confirm salary payment	Can users confirm payment easily?	
8	A successful payment notification appears	Get confirmation that the payroll was successful	Does the system notify me of a successful payment?	

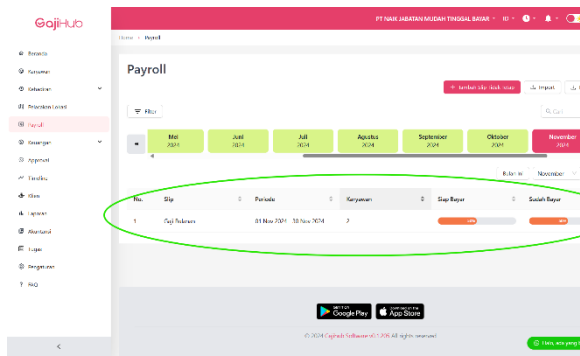


Fig 1. Payroll Dashboard (Table 1 No.[2])

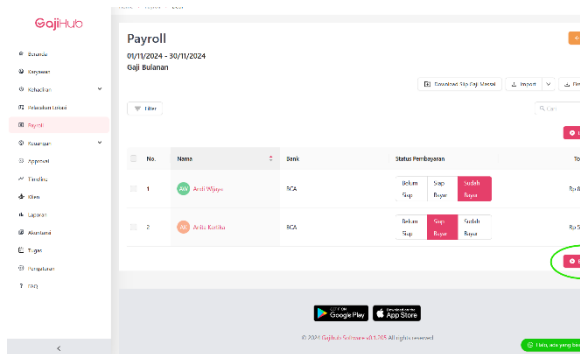


Fig 2. Payroll Monthly Payslip (Table 1 No. [3])

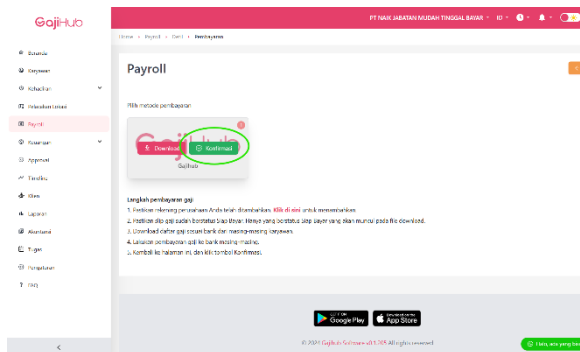


Fig 3. Payroll Payment Method (Table 1 No. [3])

3.2. Results of BPJS Scenario Observation

Users can easily access the BPJS category and activate the BPJS Employment or Health settings. The process of saving settings also runs smoothly with an auto-save feature that makes it easier for users. However, some users want more explanation regarding the difference between BPJS Employment and BPJS Kesehatan to help them in their decision-making.

Table 2. Results of BPJS Scenario Observation

No	Steps/Tasks	User Purpose	Walkthrough Questions	Observation Results
1	Click the "Settings" menu from the main menu	Accessing payroll options	Is the "Settings" menu easy to find?	The "Settings" menu is clearly visible on large screens and easy to access, although on small screens it needs adjustment.
2	Enter the payroll category	Manage payroll settings	Can users find payroll categories easily?	Payroll categories are easy to find with fast loading times.
3	Select the payroll menu	Open the payroll menu for further settings	Is the payroll menu easy to find because it uses bold fonts that help with navigation.	The payroll menu is easy to find because it uses bold fonts that help with navigation.
4	Select the BPJS category	Determine the company's BPJS arrangement	Is the BPJS category easy to find?	The BPJS category is neatly arranged, making it easier for users to find it.
5	Activate BPJS Employment or BPJS Kesehatan	Choosing the type of BPJS to be regulated	Can users activate BPJS features easily?	Users can easily activate the BPJS feature because it is displayed in a large size.
6	Fill in and complete BPJS arrangements	Adjusting BPJS settings	Can users set BPJS fields easily?	Users can make settings easily as all menus are created in drop-downs.
7	Save settings	Save BPJS settings that have been set	Can users save settings easily?	Settings can be saved easily as the system performs auto-saves.

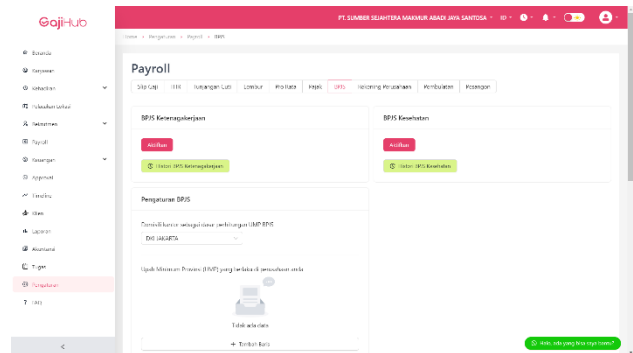


Fig 4. BPJS Dashboard (Table 2 No. [2])

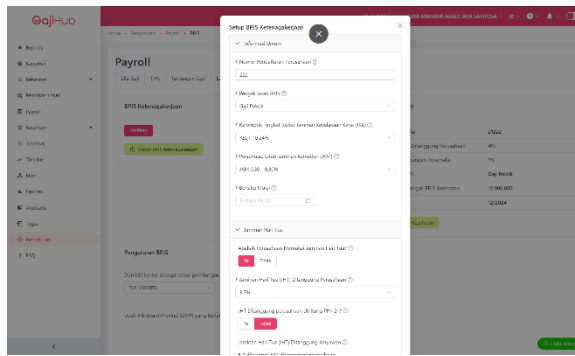


Fig 5. BPJS Ketenagakerjaan Setup Form (Table 2 No. [5])

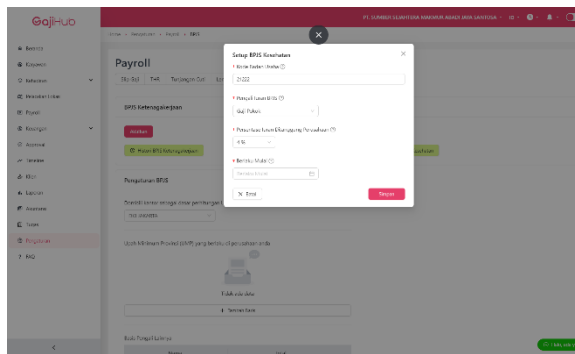


Fig 6. BPJS Company Setup Form (Table 2 No. [5])

3.3. Results of Tax Regulation Scenario

Users perform a series of steps to set employee taxes, starting with opening the "Settings" menu and selecting the "Payroll" category. The observation results show that the "Employee" menu is clearly visible on large screens and is easily accessible, although on small screens it needs adjustment. Payroll categories are easy to find with fast loading times, and Payroll menus are easy to identify with bold fonts that help with navigation. Tax categories are neatly arranged, making it easy for users to find them.

Table 3. Observation Results of Tax Regulation Scenarios

No	Steps/Tasks	User Purpose	Walkthrough Questions	Observation Results
1	Open the "Settings" menu from the main navigation	Searching for employee tax settings	Is the "Employees" menu easy to find?	The "Employees" menu is clearly visible on a large screen and easily accessible, though adjustments are needed on smaller screens.
2	Navigate to the "Payroll" category	Accessing employee payroll data management	Can users easily find the payroll category?	The Payroll category is easy to find with quick loading times.
3	Select the "Payroll" menu	Viewing detailed information on employee payroll	Is the payroll menu easily accessible?	The Payroll menu is easily identifiable with bold font, aiding navigation.

Select the "Tax" category	Managing and checking tax obligation information	Is the tax category easy to find?	The Tax category is neatly organized, making it easy for users to locate.
Activate the PPH 21/26 tax feature	Activating employee tax calculation feature	Is it easy to activate the PPH 21/26 tax feature?	The activation feature can be easily done through the "Yes/No" toggle button.
Fill in the taxpayer identification number (NPWP)	Inputting data for the business entity and its leader	Is the business name automatically listed in the form?	The business name automatically appears based on registered data.
		Can the business name still be changed?	The business name can be edited if necessary.
		Is there a character limit for business name input?	There is a maximum limit of 50 characters.
		Can the business name form accept special characters?	Input of special characters is only allowed for the period (.).
		Can the NPWP form for the business contain other characters?	The form does not allow characters other than numbers.
		Is there a warning that the NPWP number must have 15/16 digits?	The system provides a warning if the NPWP number does not meet the requirements.
		Is there a form for the name of the leader/authorized NPWP?	A warning appears if the NPWP number does not meet the required length.
		Can the NPWP form for the leader/authorized contain other characters?	The form does not allow characters other than numbers.
		Is there a warning below the form if the NPWP number must	There is a warning below the form if the NPWP is not 15/16 digits.
Choose the NPWP PPH 21/26 calculation method	Selecting the tax calculation method according to policy	How is the NPWP employee calculation method chosen?	The calculation is selected through a dropdown with choices of "Gross," "Gross Up," "Net."
Save data	Ensuring that data changes are saved	Is there a button to save data changes?	There is no save button, but the system automatically saves changes.

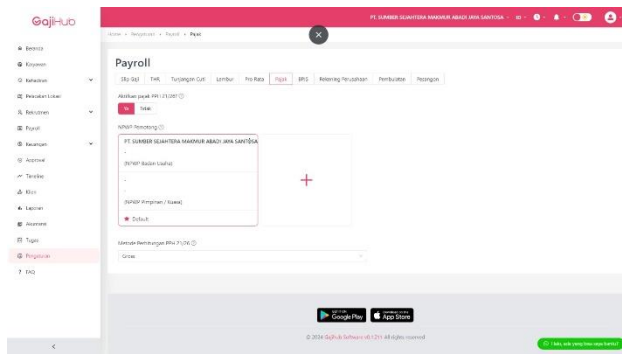


Fig 7. Tax Settings Dashboard (Table 3 No. [2])

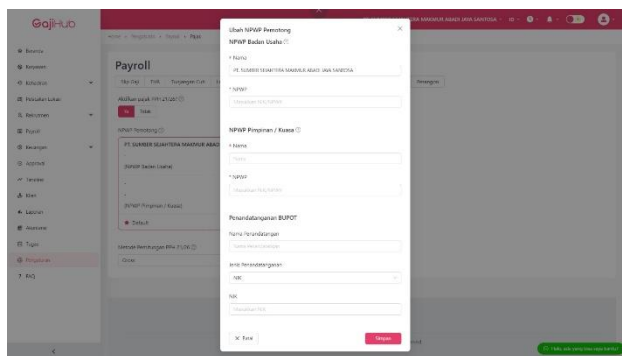


Fig 8. Tax Settings Form (Table 3 No. [4-7])

CONCLUSIONS

The cloud-based human resource management tool, GajiHub, is deemed successful in facilitating personnel administration, particularly in overseeing payroll and employee attendance. Nonetheless, several usability concerns require resolution to enhance the overall user experience. The interface's responsiveness on small displays is inadequate, resulting in navigation delays, and discrepancies in button placement and display lead to user confusion. Manual computations of overtime are susceptible to inaccuracies and inefficiencies, underscoring the necessity for automation. The essential confirmation button, visible solely while the cursor hovers over it, exacerbates the usability issue. Moreover, the BPJS feature lacks a definitive explanation, hindering users' ability to make informed judgments regarding BPJS Health and Employment. Data input validation, particularly for substantial numerical numbers, requires enhancement to avert errors. Despite enhanced transparency in payroll payments through clearer notifications, the interface design need simplicity for improved understanding. The autosave function operates effectively; nevertheless, the visual indication of a successful save is insufficient. Users require more intuitive advice for intricate functions like tax settings and BPJS administration, as well as a uniform interface design across menus to minimize misunderstanding. Rectifying these technical and design shortcomings is crucial for enhancing application performance, facilitating smoother navigation, and augmenting

overall efficiency in human resource management activities.

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