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DATA MANAGEMENT OF TALENT MANAGEMENT INFORMATION SYSTEM FOR PROMOTION AND MUTATION OF CONSTITUTIONAL COURT EMPLOYEES BASED ON WEBSITE

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ABSTRACT

This research highlights the importance of implementing ASN Talent Management in accordance with Article 8 paragraph (2) of PANRB Ministerial Regulation Number 3 of 2020, which requires government agencies to implement talent management based on needs analysis to support the achievement of the vision, mission, and priorities of national development. This system is designed to implement a Merit System that supports succession patterns and career development in a transparent and accountable manner. By utilizing information technology, the talent management system becomes more efficient, accountable, and easily accessible, helping to compare employee qualifications, competencies, and performance with position requirements. The research uses Research and Development (R&D) methodology with waterfall method and Unified Modeling Language (UML) modeling to produce design diagrams, such as Use Case, Activity, Sequence, and Class Diagram. System validation is done through User Acceptance Testing (UAT) with a Likert scale to assess aspects of design, usability, efficiency, and reliability. The test results show an average score of 81.67%, which is classified as very good, indicating the system meets the needs of information-based performance appraisal with accurate results and supports the implementation of talent management as a whole.

KEYWORDS *Development, UML, Data Management, Talent Management, Merit System*

INTRODUCTION

The Constitutional Court (MK) plays an important role in upholding law and justice, with the main functions of examining laws against the 1945 Constitution, deciding disputes over the authority of state institutions, dissolving political parties, and handling disputes over election results. However, the promotion and transfer process of the State Civil Apparatus (ASN) within the Constitutional Court is still carried out manually, involving the collection of physical files, competency assessments, and time-consuming decision meetings. This process has weaknesses

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such as the risk of administrative errors, inefficiency, and lack of transparency, potentially reducing public trust in the policies taken.

To overcome this problem, ASN talent management based on the merit system is implemented in accordance with Law Number 5 Year 2014. This system aims to create a highly qualified and competent ASN through a strategy of talent acquisition, development, retention, and placement nationally and agency-wide. The implementation of talent management includes talent needs analysis, competency development through various training programs, and transparent monitoring of employee performance. This information technology-based system is designed to accelerate ASN career development, support accountable succession patterns, and optimize organizational performance amid the challenges of the industrial revolution 4.0.

The use of technology in talent management also supports the Constitutional Court's vision to realize a modern and trusted judiciary. With an information technology-based system, data management becomes more efficient, accountable and easily accessible. This approach not only strengthens the implementation of the merit system but also motivates employees to improve competence and performance. The author proposes the development of a Unified Modelling Language (UML)-based talent management system to integrate fair, transparent, and technology-based assessment variables and parameters, in order to support the achievement of the organization's vision, mission, and strategy in a sustainable manner.

This research aims to overcome the weaknesses of the manual system in making ASN promotion and transfer decisions within the Constitutional Court, which tends to take a long time and is prone to errors. By designing a website-based talent management information system using the Unified Modeling Language (UML) method, this research also adopts system functionality testing (blackbox testing) and surveys to users through the User Acceptance Testing (UAT) method. The system is designed as a secure internal platform with limited access through special credentials, to support more transparent, accountable, and free from collusion, corruption, and nepotism practices.

The results of this research are expected to provide operational benefits in the form of increased efficiency, effectiveness, and accountability in the process of employee performance appraisal based on the merit system. In addition, the academic benefits of this research are expected to be a reference for further research related to the development of the ASN talent management system, including relevant variables and parameters for performance evaluation. Thus, this research not only supports the modernization of the employee management process at the Constitutional Court but also makes a significant contribution to the development of a technology-based ASN management system.

RESEARCH METHOD

This study uses the Research and Development (R&D) method which involves researching, developing, and testing products to ensure their effectiveness according to the needs of the work unit. Sukmadinata states that R&D is the process of developing new products or improving products that can be accounted for, in line with Sugiyono's opinion that this method produces and tests the effectiveness of certain products (Askari Z., Afriani, & Zakariah, 2020). This research aims to develop a website-based performance appraisal management system at the Constitutional Court, especially in the work units of the Information and Communication Technology Center and the Bureau of Human Resources and Governance Organization. This system is expected to support transparent and accountable merit-based HR management, with a waterfall development methodology.

The research stages used the ADDIE model (Analyze, Design, Develop, Implementation, Evaluation), which offers a systematic approach to product development (Syahid, Annisa I., & Azwary, 2024). In the analysis stage, researchers collected data through observations, interviews, and surveys to understand regulations and system needs. The design stage includes evaluating business processes, designing using the Unified Modeling Language (UML), and determining hardware and software requirements. System development is based on this design, including initial testing to ensure compliance with requirements. Implementation involves system installation and testing to optimize use in employee performance appraisal, while evaluation ensures the system functions effectively through functionality testing and user feedback.

The talent management system developed aims to provide solutions to problems in employee performance appraisal, with the final result in the form of performance scores and potential talents that support data-based decision making. System evaluation is carried out using User Acceptance Testing (UAT) and blackbox testing methods to identify weaknesses or the need for updates, so that the system can adapt to changing regulations. With this approach, the research is expected to produce a website-based talent management system that is effective, efficient, and relevant to support the achievement of organizational goals in a sustainable manner.

RESULT AND DISCUSSION

1. System Requirements

The results of observations and interviews show that the development of a talent management information system is urgently needed to support the implementation of ASN Talent Management in accordance with the mandate of

Law Number 5 of 2014 concerning Merit System. This system is designed to ensure that the process of promotion, transfer, and placement of employee positions is carried out transparently, accountably, and based on qualifications, competencies, and performance without discrimination. With features such as open access for employees to view the Nine Box Value (NBV), this system makes it easier for policy makers, such as the Secretary General of the Constitutional Court, to manage talent and succession plans more efficiently. Therefore, the development of this system is an important step to improve accountability, transparency, and effectiveness in ASN talent management.

2. System Process Design

The development of an employee performance appraisal system at the Constitutional Court uses a merit-based approach that utilizes information technology to effectively manage employee data. This system integrates various data sources, such as the online attendance application, Dynamic Archive Information System (SIKD), and other systems through Application Programming Interface (API), direct access to the database, and manual input by the admin. The data collected is processed automatically using formulas and weightings in accordance with the Regulation of the Secretary General of the Constitutional Court No. 40 of 2024. The system runs on a scheduled basis and provides systematic, transparent and real-time evaluation of individual performance. With automation features, such as data retrieval, score calculation, and final report, the system facilitates decision-making regarding career development and employee placement.

From a technical perspective, the system was designed using modern technologies to support operational reliability and efficiency. The user interface (front-end) part is developed using HTML, CSS, and JavaScript, while the business logic (back-end) uses Java, PHP, and JavaScript. Development and operational integration is supported by DevOps with GIT, GitHub, and NGINX, and MariaDB database for data management. The system utilizes JSON format for data integration between applications and uses two Virtual Machines with a minimum specification of 8 cores processor and 16 GB memory for the back-end server and database. With this integrated design, the system is expected to create a fair, efficient performance evaluation, and support the organization's productivity in a sustainable manner.

3. Related Information Systems

The developed talent management system requires integration with various applications to effectively process employee performance and potential data. This integration allows employee performance and talent parameters to be accessed in one platform, creating a more objective, transparent, and accountable assessment

process. The system also gives employees access to monitor individual progress, receive regular feedback, and improve performance on an ongoing basis. The integrated systems include SIKD, attendance application, e-Kinerja, Assessment Center, 360° appraisal mechanism, and secondary data from the HR Bureau. Each of these applications provides important data, such as official documents, attendance, performance appraisals, intellectual and emotional potential, and 360° assessments from superiors, subordinates, and peers.

The data integration process is done through various mechanisms, including data retrieval from databases, APIs, and manual uploads by admins. For example, the mobile-based attendance application uses APIs to provide data such as work time and attendance location in JSON format, while data from e-Kinerja and Assessment Center is manually uploaded to the talent management system. All these data are merged into the talent management system to support data-driven decision-making. This integration logic design ensures that all data components from various applications are well connected, enabling more efficient and productive employee performance management.

4. Management Assessment Parameters and Variables

Employee performance appraisal at the Constitutional Court is based on the parameters specified in the Regulation of the Secretary General and includes two main parameters: Performance and Talent Potential. The Performance parameter consists of eight variables, including Employee Performance Targets (SKP), e-Kinerja, attendance, excess working hours, meeting attendance, SIKD workload, tardiness, and SIKD response time. Meanwhile, the Talent Potential Parameter includes four sub-parameters: Potential, Competence, Track Record, and Miscellaneous, with variables such as integrity, cooperation, educational qualifications, work experience, and foreign language skills. Data for each variable is collected through integration with various related information systems, ensuring the assessment is conducted comprehensively and objectively.

5. Data Source and Assessment Weighting

The talent management system at the Constitutional Court adopts a weighting approach stipulated in the Decree of the Secretary General, with performance parameters and talent potential each having a weight of 50%. Performance parameters include eight main variables, such as Employee Performance Targets (SKP), e-Kinerja, attendance, excess working hours, meeting attendance, workload, tardiness, and response time. Each variable is assessed using a specific calculation formula based on data from applications such as online attendance and SIKD, ensuring objectivity and accountability in the evaluation process. This allows for

proportional assessment of employee performance, reflecting the transparency of the system.

In addition, talent potential parameters include sub-parameters such as potential, competence, track record, and awards, which are measured based on data from psychological assessments, 360-degree assessment mechanisms, and personnel records. Variables such as education, job experience, foreign language skills, and collaborative awards are also an important part of assessing individual potential. These variables are designed to be adaptable to the needs of the organization, ensuring the system remains relevant to regulatory developments and the talent management needs of the Constitutional Court.

The system also considers other supporting aspects, such as competency development, disciplinary offenses, and contribution to collective achievement. Relevant training and certifications add value to employees, while disciplinary offenses reduce the score according to the level of misconduct. This holistic approach makes the talent management system an effective tool in supporting career development, promotion, and data-driven talent management. With a flexible and comprehensive design, the system drives productivity, professionalism, and accountability, creating a more transparent and human capital development-oriented work environment. Talent management parameters and Variables used as the basis for assessment, can be changed as long as they are measurable, customizable, proven, and relevant to the talent management assessment.

6. *Logical* Design of System Architecture

The developed Talent Management System Architecture design is an internal system, limited to authorized users or within a certain network and can only be accessed from the internal network, although it can also be accessed externally using a VPN *client* (Virtual Private Network). *Logically*, the architecture of this system can be depicted in Figure 4.2.

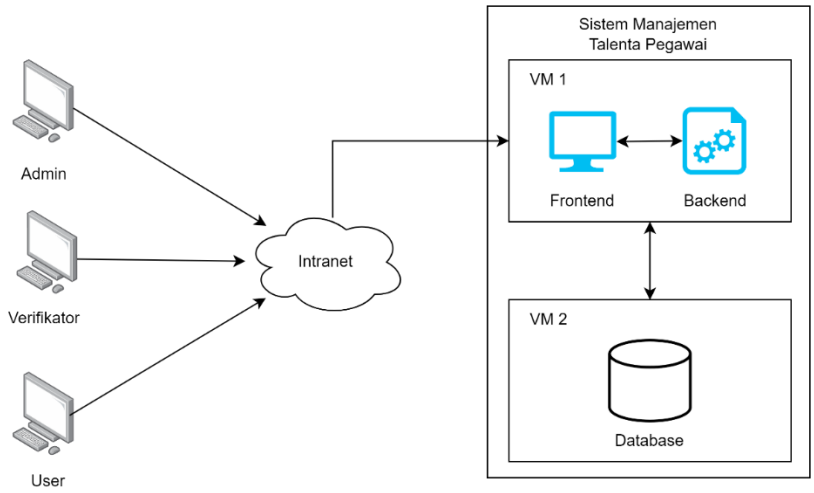

Figure 4.2 *Logic* Design of Information System Architecture

Figure 4.2 explains that the Employee Talent Management System is divided into two parts, namely the *front-end* for the Web-UI or front view that is accessed by users and *the back-end* as a *generator* or engine processing performance appraisals on talent management connected to the SIKD Server, Assessment Center, 360^0 Application, and the use of APIs that connect to the Absensi Online database server. *The Virtual Machine* uses the Ubuntu Operating system with a minimum *Proccessor* specification of 4 cores, 16 GB RAM to run the *front-end* and *back-end*, separating the two virtual machines so that they can run in isolation, making it easier to analyze if there is an error or damage to one of the VMs and to maximize *load performance* when the system is running.

7. System Design

The next stage in the design of the system to be developed is to describe the Business Process designed on the system in the *Unified Modeling Language* (UML) model which can be described in Figure 4.3:

1. *Use Case Diagram and Use Case description*

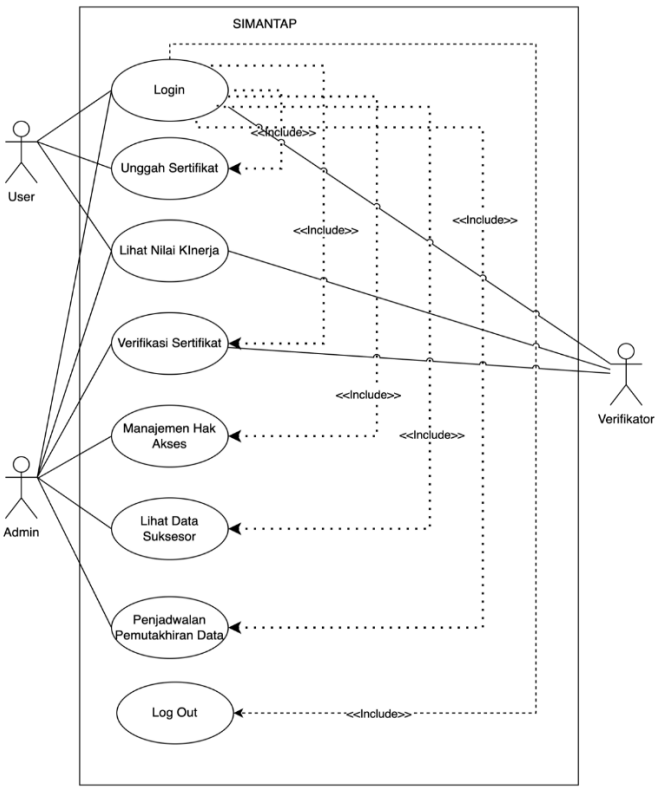

Figure 4.3 *Use Case Diagram*

After describing the *use case* diagram for the Employee Talent Management system, the next step is to provide a description of each *use case* using the *use case description*.

Table 4.1. Use Case *description* Login

Use Case Code	:	001
Use Case Name	:	*Login*
Description	:	*Use Case* describes the activities of *the actor* entering the username (NIP) and password to enter the Upload Certificate
Actor	:	1. User 2. Admin 3. Verifier
Precondition	:	The actor has opened the SIMANTAP system via the url https://simantap.mkri.id/leaderboard.
Trigger	:	*Use Case* starts after the actor opens the SIMANTAP system
Scenario	:	*1.* Actor accesses the SIMANTAP page 2. The system displays the employee performance appraisal page 3. Actor selects the upload certificate menu *4.* The system displays the *log in* page *5.* Actor enters NIP and *Password* *6.* System validates NIP and *Password* *7.* The system displays the certificate upload page
Alternative Scenario	:	Invalid NIP/Password 1. The system displays the notification *"error: Incorrect password, please check your password again* 2. Use case

Table 4.1 is a *Login Use Case* used to verify identity

2. *Activity* Diagram

Based on the *use case diagram*, an *activity diagram* is then created for the *use cases* formed. This *activity diagram* can include one or more *use cases*. This *activity diagram* provides a visual representation that helps in identifying the steps required to complete an activity.

a. *Login Activity Diagram*

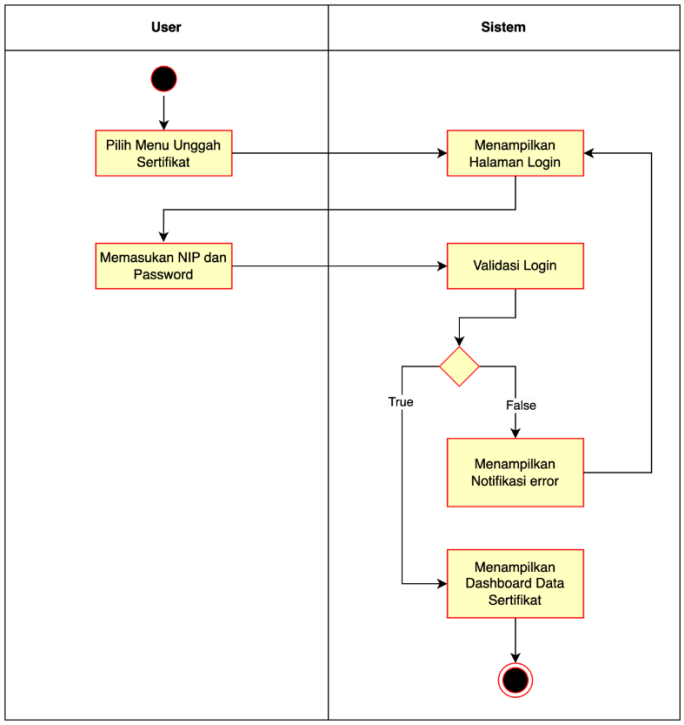

Figure 4.4 *Login Activity Diagram*

Figure 4.4 shows the talent management information system process carried out by employees. Users must be registered in the staffing system and login using a username and password.

3. *Sequence* Diagram

Sequence Diagrams describe the interactions between objects that are in the system and its surroundings, *Sequence Diagrams* are described against time or also known as *messages*.

a. *Login Sequence Diagram*

Figure 4.11, The process starts when the *User* enters the *username* and *password* through the user interface page, this information is sent to the database for validation, then if the login data is available then the system will create a session for the user, but if the login data is not available then the database will return to the interface page with the data status not available.

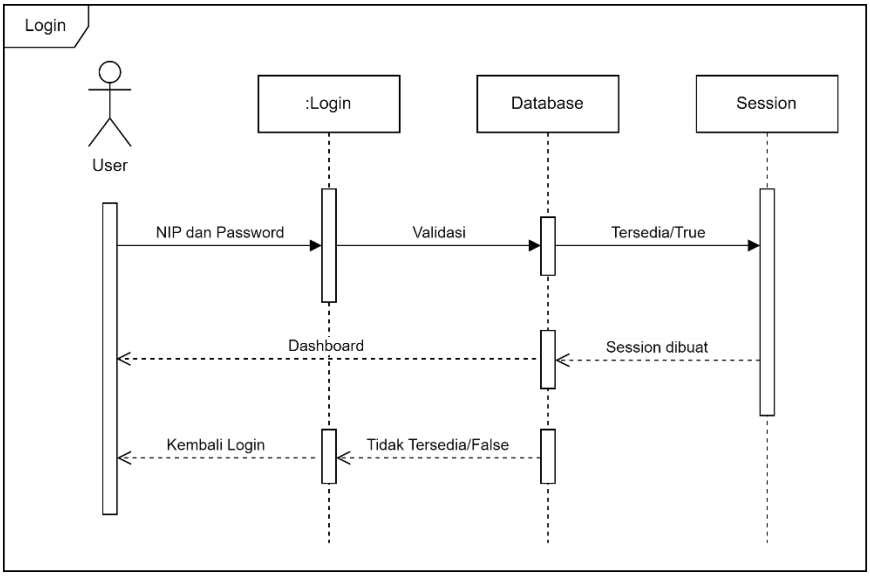

Figure 4.11 *Login Sequence Diagram*

4. *Class* Diagram

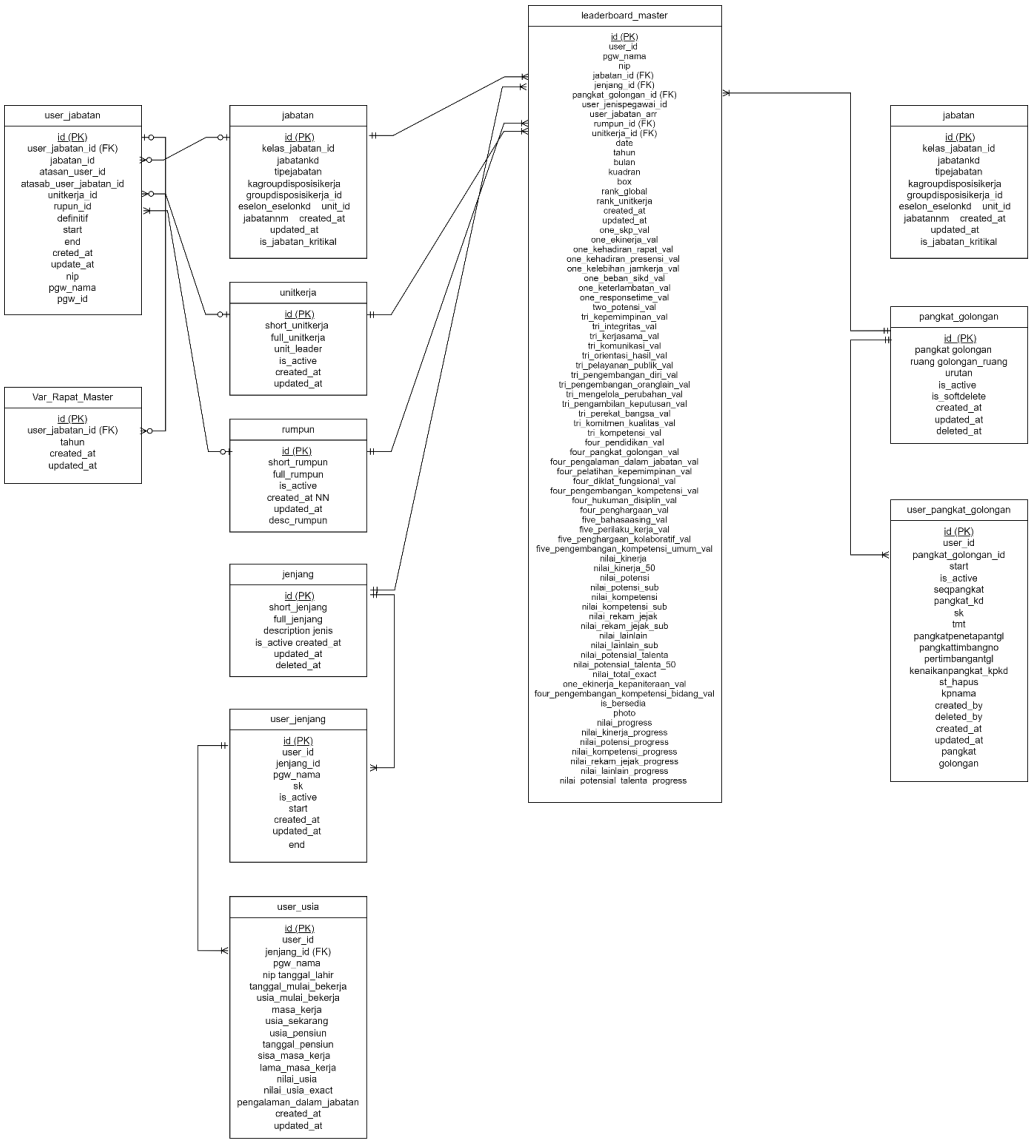

Figure 4.19 *Class Diagram*

Based on the *Class diagram* in Figure 4.19, the relationship between classes in which there are *attributes* and *methods* has been described, making it easier for developers to implement data management and maintain the system. Every object needed in the system exists in each of the designed classes. So this *class diagram* has met the needs and can be used in the next process.

5. Page *View*

User interface design for information system development plays an important role in ensuring optimal *user experience*. In the talent management information system, the interface is designed to support ease of information, and navigation accessibility, so that users can get information from the resulting system

process quickly. Here are the functions, description of the interface design of this system;

a. Talent Management System Home Page (*Leaderboard*)

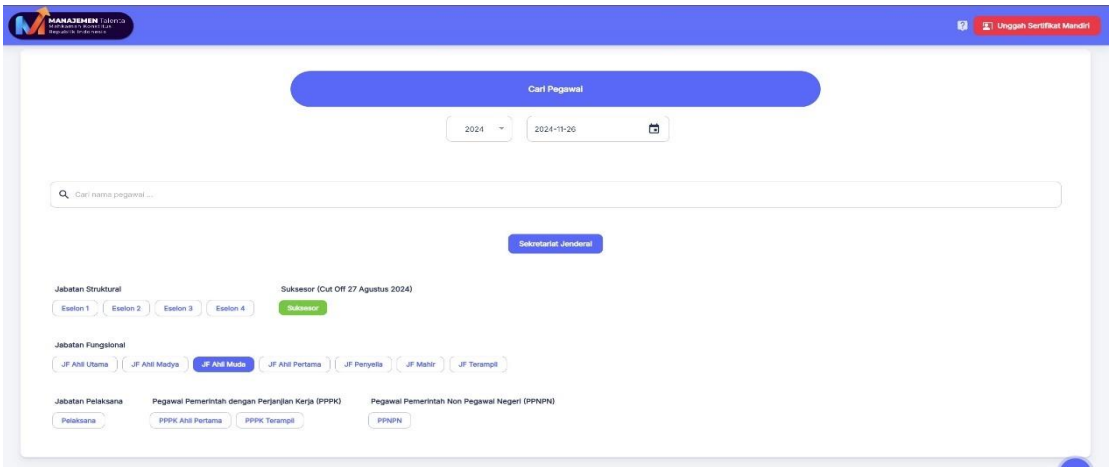

Figure 4.20 *Leaderboard* talent management information system page

Figure 4.20 is the main page that appears after the user accesses the system page, containing information on employee assessment rankings grouped according to their position.

b. Employee Profile Page

Figure 4.21 Employee Profile Page

Figure 4.21 is the employee profile detail page after being selected on the home page, there is detailed information on the employee's assessment. The information on the page contains; *summary of* SIKD utilization (official correspondence), NBV quadrant, employee score bar graph and average employee NBV between work units.

c. Login Page

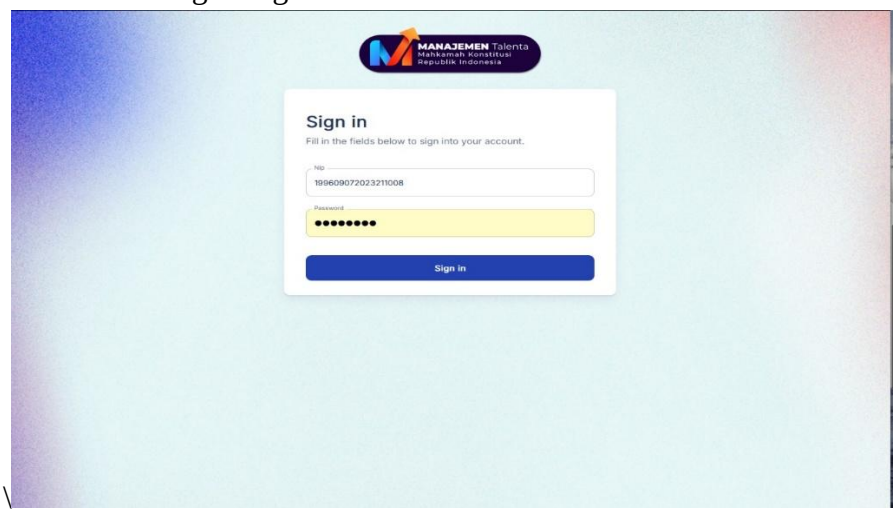

Figure 4.22 Login Page for Employees, Admins and Verifiers

Figure 4.22 is the employee login page after selecting upload certificate when on the home page, this page serves to fill in the username and password to access pages that have been divided by access rights previously by the admin.

d. Employee Certificate Upload Home Page

Figure 4.23 Certificate Upload Home Page

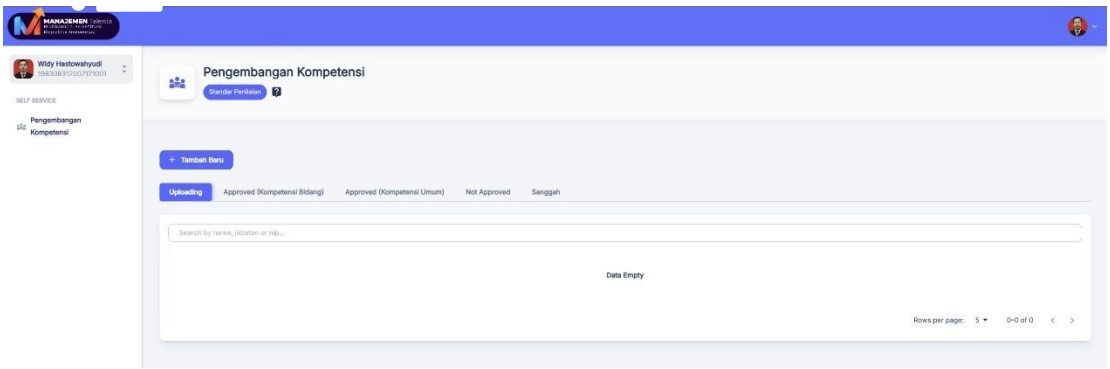

Figure 4.23 is the employee certificate upload page, this page functions for employees to fill out forms and upload certificate documents as a condition for employee performance appraisal.

e. Admin and Verifier Pages

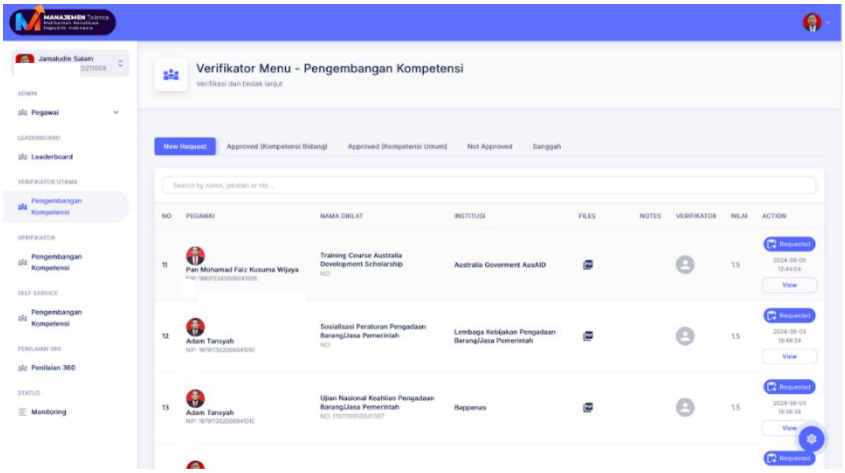

Figure 4.24 Admin and Verifier Page

Figure 4.24 is the admin and verifier page, this page is for admins and verifiers to verify the certificates that have been uploaded by each employee, to be given an assessment according to the weighted value that has been set.

f. Certificate Verification Admin and Verifier Page (1)

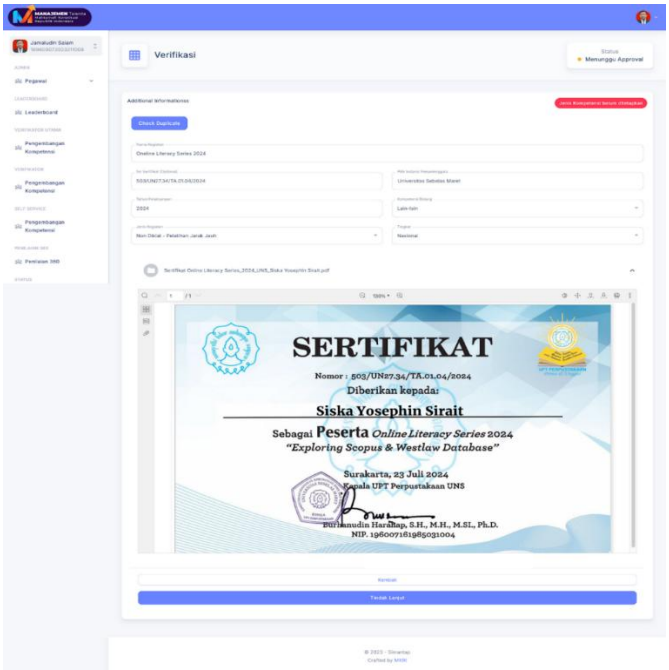

Figure 4.25 Certificate Verification Admin and Verifier Page (1)

Figure 4.25 is an admin and verifier page that displays employee certificates that will be verified. This page is only accessed by admins and verifiers.

g. Certificate Verification Admin and Verifier Page (2)

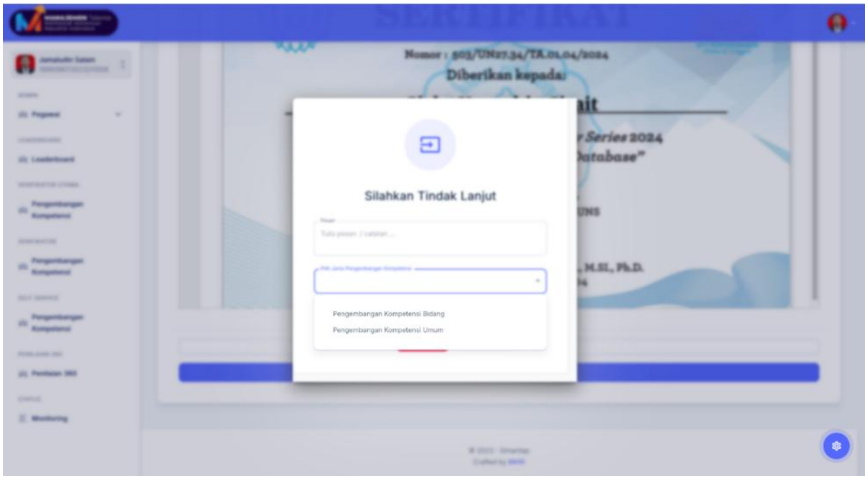

Figure 4.26 Certificate Verification Admin and Verifier Page (2)

Figure 4.26 is the admin and verifier page verifying employee certificates that have been uploaded. This page is only accessed by admins and verifiers.

h. Certificate Verification Admin and Verifier Page (3)

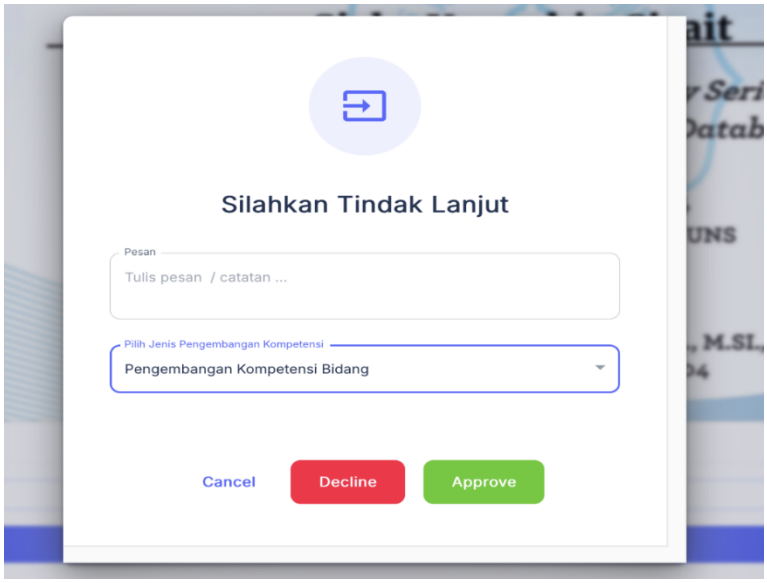

Figure 4.27 Certificate Verification Admin and Verifier Page (3)

Figure 4.27 is the admin and verifier page verifying the employee certificate that has been uploaded. This page admins and verifiers can execute to *decline* or *approve* certificates that have been uploaded.

i. Employee, Admin and Assessment Verifier Pages 360^0

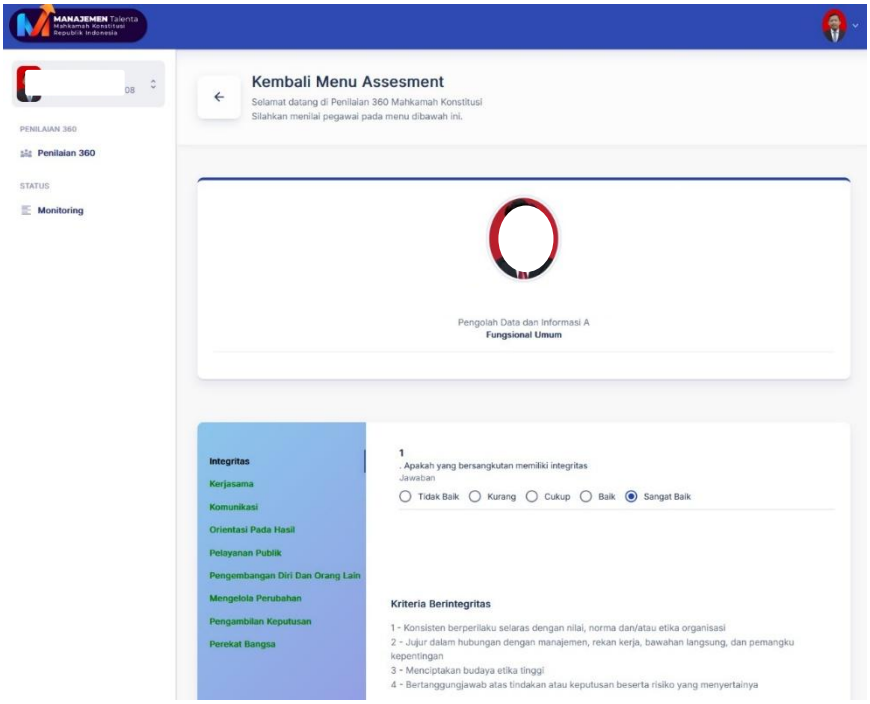

Figure 4.28 Employee, Admin and Assessment Verifier Pages 360^0

Figure 4.28 is a page for employees to fill in, provide *feedback, and* rate other employees.

j. Assessment Page 360^0 (1)

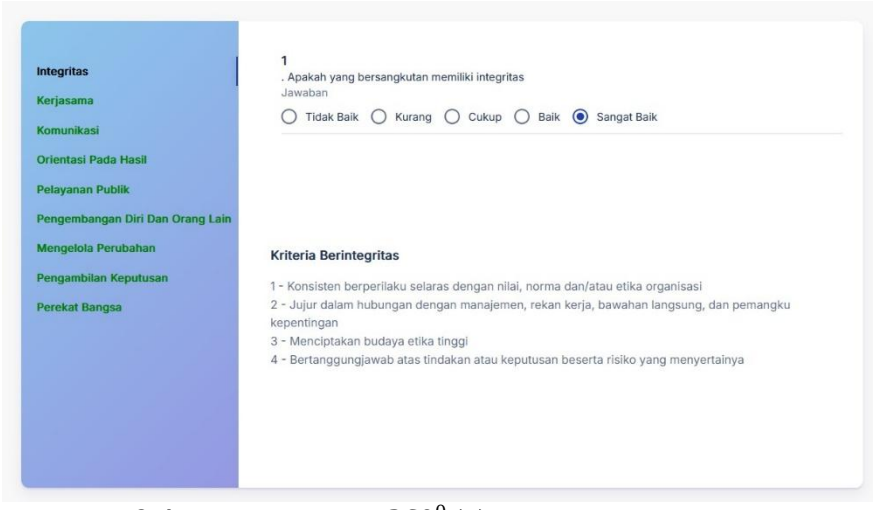

Figure 4.29 Assessment Page 360^0 (1)

Figure 4.29 is a question display page on the 360^0 assessment to be filled in by employees.

k. Assessment Page 360^0 (2)

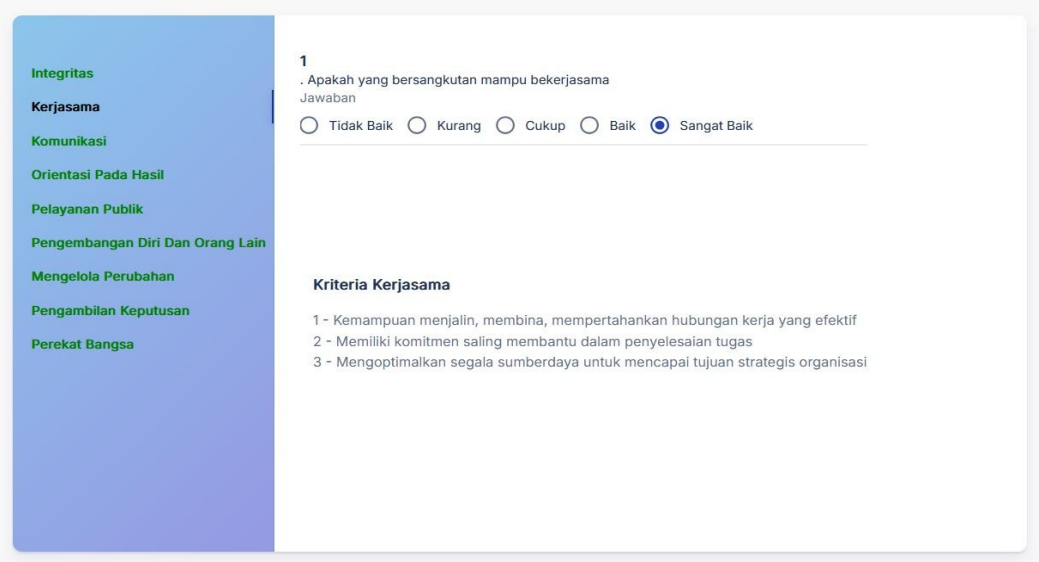

Figure 4.30 Assessment Page 360^0 (2)

Figure 4.30 is the question display page on the 360^0 assessment for employees to fill in.

8. System *Testing*

In the system testing process, researchers used the testing method *User Acceptance Test* (UAT) . UAT testing, commonly called user acceptance testing, is a testing process by users with the aim of knowing what the system can do and identifying the benefits and suitability of the system to user needs before the system is implemented or released. Yakub et al., 2024 stated that UAT testing has 2 types of testing, namely *alpha testing* which is carried out using *blackbox testing* and *beta testing* which is carried out by distributing questionnaires to potential users. (Andhyni, Arifiyanti and Wati, 2024)

1. *Alpha* testing or *blackbox* testing, focuses on testing the functionality of the system without paying attention to its internal structure or source code, this test is carried out limited to representing each user's access rights. can be seen in table 4.8

Table 4.8. *Blackbox* Method Testing

No.	Process	Result Status	Tester
1.	Test Name: Login Test Description: Verify access rights can only be accessed by registered users. Expected results:	Successful	- Admin - Verifier - Employee

	- If Successful will display the main page - If Failed, a notification will appear		
2.	Test Name: Certificate Upload Test Description: Accessing the "upload certificate" page Expected results: - Display a page with admin and verification menus for Admin and Verifier actors - Displays a page containing the Add certificate form for the actor	Successful	- Admin - Verifier - Employee
3.	Test Name: View Performance Value Test Description: Accessing the *Leaderboard* Page, to view employee scores and employee profile details. Expected results: - Display Talent Management scores of employees according to position grouping and successor order.	Successful	- Admin - Verifier - Employee
4.	Test Name: Certificate Verification Test Description: verification of certificates that have been uploaded by each employee Expected results: - Display a list of employees who have uploaded certificates - Select an employee's details to verify his/her certificate	Successful	- Admin - Verifier
5.	Test Name: View Successor Data Test Description: Accessing the Successor Menu, to view employee scores and employee profile details that are categorized as successors to the position. Expected results: Displays employee scores and employee profile details that are categorized as successors to positions in order of score.	Successful	- Admin - Verifier - Employee
6.	Test Name: Assessment Menu 360^0 Test Description: Accessing the "360 Assessment" Menu to provide scores or *feedback* to employees at the same level, superiors and subordinates. Expected results:	Successful	- Admin - Verifier - Employee

	Displays a list of employee names and questionnaire questions to be given employee ratings that are randomly selected by the system.		

Based on table 4.8, testing the functionality or *blacbox testing of* the system can be concluded that the Talent Management Information System built is in accordance with the expected system functionality and output. Where the required menu or features can function.

2. *User Acceptance Testing* (UAT), carried out after *blackbox* testing, the developer continues *beta* testing which aims to ensure that the talent management information system is in accordance with the requirements of user needs. researchers prepared several questions related to 4 aspects, namely *Design*, Usability, Efficiency and Reliabiity, can be seen in table 4.9. UAT testing involves respondents from several levels of positions and work units, with the number of respondents ± 10% of 239 users.

Table 4.9. List of Testing Questionnaire Questions

Design
Q1 The *layout* of the *User interface* page as a medium of interaction with the system is attractive to users?
Q2 Is the use of text, diagram and background colors appropriate?
Q3 The Talenta Management System website has provided a good experience and convenience when you access/use it?
Usability
Q4 In a short time, can you understand the menu or features when you first access the Talent Management System Website?
Q5 Is the Talent Management System performance assessment parameters and variables information easy to understand?
Q6 Is the use of charts or graphs in the Talent Management System easy to understand?
Q7 This Talent Management System can be used as a tool to see the value of your own Performance and Talent Potential?
Efficiency
Q8 The process of improving self-competency development through certificate upload can be done quickly and easily?
Q9 In providing competency assessments to superiors, subordinates and colleagues at the same level, can it be done more quickly and easily?
Q10 With this system, leaders/decision makers can more quickly evaluate employee performance?

Reliability
Q11 All menus and features in this system are running stably without problems according to their functions?
Q12 The performance appraisal information generated is in accordance with the weight of the parameters and assessment variables that have been determined?

In this study using a closed statement with a range of rating scales, namely: 1: Strongly Disagree, 2: Disagree, 3: Undecided, 4: Agree, and 5: Strongly Agree.

Table 4.10. Likert Scale

% Total Score	Criteria
0 % - 19,99 %	Strongly Disagree
20 % - 39,99 %	Disagree
40 % - 59,99 %	Undecided
60 % - 79,99 %	Agree
80 % - 100 %	Strongly Agree

Source: Sugiyono (2012)

The test results of each aspect tested against the talent management system are shown in Tables 4.11 - 4.14 using the formula:

% Actual Score = (Actual Score / Ideal Score) x 100%

Description:

- The actual score is the score of all respondents' choices from the questionnaire that has been given.
- The ideal score assumes that all respondents choose the highest score of all answers.

Table 4.11 Design Aspect Testing Table

Answer Criteria	Weight	Design			Total
		Q 1	Q 2	Q 3	
Strongly Agree	5	10	13	12	35
Agree	4	15	14	14	43
Undecided	3	3	1	4	8
Disagree	2	1	2	0	3
Strongly disagree	1	1	0	0	1
Number of Respondents		30	30	30	-
Actual Score		122	128	128	378

Ideal Score	150	150	150	450

% Actual Score = (Actual Score / Ideal Score) x 100%
= (378 / 450) x 100 %
= 84,00 %

From the calculation of table 4.11, it can be concluded that the Design Aspect developed in the system obtained very good criteria and a percentage value of 84.00%.

Table 4.12 Usability Aspect Testing Table

Answer Criteria	Weight	Design				Total
		Q 4	Q 5	Q 6	Q 7	
Strongly Agree	5	15	10	12	12	49
Agree	4	9	9	13	12	43
Undecided	3	5	7	3	2	17
Disagree	2	1	2	1	3	7
Strongly disagree	1	0	2	1	1	4
Number of Respondents		30	30	30	30	-
Actual Score		128	113	124	121	486
Ideal Score		150	150	150	150	600

% Actual Score = (Actual Score / Ideal Score) x 100%
= (486 / 600) x 100 %
= 81 %

From the calculation of table 4.12, it can be concluded that the Ease Aspect developed on the system obtained very good criteria and a percentage value of 81%.

Table 4.13 Efficiency Aspect Testing Table

Answer Criteria	Weight	Efficiency			Total
		Q 8	Q 9	Q 10	
Strongly Agree	5	14	15	10	39
Agree	4	10	11	10	31
Undecided	3	4	1	6	11
Disagree	2	1	2	2	5
Strongly disagree	1	1	1	2	4
Number of Respondents		30	30	30	-
Actual Score		125	127	114	366
Ideal Score		150	150	150	450

% Actual Score = (Actual Score / Ideal Score) x 100%

= (366 / 450) x 100 %
= 81,33 %

From the calculation of table 4.13, it can be concluded that the Efficient Aspect developed in the system obtained very good criteria and a percentage value of 81.33%.

Table 4.14 Reliability Aspect Testing Table

Answer Criteria	Weight	Design		Total
		Q 11	Q 12	
Strongly Agree	5	14	10	24
Agree	4	10	12	22
Undecided	3	4	3	7
Disagree	2	2	2	4
Strongly disagree	1	0	3	3
Number of Respondents		30	30	
Actual Score		126	114	240
Ideal Score		150	150	300

% Actual Score = (Actual Score / Ideal Score) x 100%
= (240 / 300) x 100 %
= 80 %

From the calculation of table 4.14, it can be concluded that the Reliabilty Aspect developed in the system obtained good criteria and a percentage value of 80%.

The recapitulation of the results in the *User Acceptance Testing* (UAT) test as a whole, produces very good criteria, where the percentage of assessment is 81.67%.

CONCLUSION

Based on the results of the analysis of the design of the application of the merit system in the performance assessment of employees through the employee talent management information system that has been carried out in this study, it can be concluded that the results of the analysis and development of the employee talent management information system at the Constitutional Court show that this system successfully meets the needs that have been designed based on the needs analysis, system objectives, and employee performance parameters. The design using UML modeling produces various diagrams, such as Use Case, Activity, Sequence, and Class Diagrams, which describe the functionality, workflow, and structure of the system. System testing is carried out using the Blackbox method and User Acceptance Testing (UAT), with the UAT results obtaining an average value of 81.67%, indicating the system has very good criteria in the aspects of design,

usability, efficiency, and reliability. This system is expected to be able to support the implementation of a merit system in a transparent and accountable manner, becoming a strategic contribution to the succession pattern and career development of information technology-based employees.

As a recommendation, this system design can be used as a reference in further development with adjustments to regulations and user input to improve the quality of performance appraisal. This system can also be developed by government and private institutions as a flexible performance appraisal solution, with parameters that can be adjusted according to their respective needs. This development is expected to expand the application of technology-based talent management and contribute to more effective and efficient human resource management.

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