

Evaluation of Accounting Information System Using Usability Testing Method and System Usability Scale

Rozza Maudina Ayuwan Putri^{1)*}, Wayan Gede Suka Parwita²⁾, I Putu Susila Handika³⁾, I Gede Iwan Sudipa⁴⁾, Putu Praba Santika⁵⁾

^{*1,2,3,4,5)}Fakultas Teknologi dan Informatika, Program Studi Teknik Informatika, Institut Bisnis dan Teknologi Indonesia

^{1)*}rozzamaudinaap@gmail.com, ²⁾gede.suka@instiki.ac.id, ³⁾susila.handika@instiki.ac.id,
⁴⁾iwansudipa@instiki.ac.id, ⁵⁾praba@instiki.ac.id

Submitted : Oct 30, 2023 | **Accepted** : Nov 5, 2023 | **Published** : Jan 1, 2024

Abstract: The computer-based accounting information system IBS Core has been used by Renon Pekraman Village Credit Institution since 2016 to facilitate all transaction processes. This study aims to evaluate the usefulness of the IBS Core accounting information system, determine the effectiveness, efficiency, and user satisfaction with the IBS Core accounting information system, and identify areas that need improvement in the IBS Core accounting information system. The method used in this study is Usability Testing using performance measurement and retrospective think aloud (RTA) as well as the System Usability Scale (SUS). Based on 2 trial process, the results show that the IBS Core system has a high effectiveness score of 92.50%. The average time required for participants to complete the task scenario is 68.9 seconds, and users feel that the available content is clear and consistent. In addition, the average System Usability Scale (SUS) score is 86.125, where the results were above the standard average SUS score. The IBS Core System Score was ranked B with the adjective ratings "Excellent" Next, the acceptability ranges are included in the "Acceptable" category, and finally the net promote score (NPS) is included in the "Promoter" category, showing that the use of the IBS Core system gets a very good assessment from its users. This shows that the IBS Core system is highly appreciated and considered very useful by its users.

Keywords: Usability Testing; Performance Measurement; Retrospective Think Aloud (RTA); System Usability Scale (SUS)

INTRODUCTION

The financial industry has rendered extensive use of accounting information systems. Accounting information systems consist of methods and systems that are typically computer-based and utilize information technology resources to monitor accounting activities (Setiawansyah, 2020; Turner et al., 2022). The primary objectives of this accounting information system are the following: amass and retain data pertaining to transactions and activities; transform data into decision-making-relevant information; and implement suitable controls over the assets of the organization. Since 2016, the IBS Core (Integrated Micro Banking System) computer-based accounting information system has been utilized to facilitate all transaction processes at the Renon Village Credit Institution. The implementation of this accounting information system has converted the previously manual transaction process to one that is processed electronically. Despite utilizing the IBS Core accounting information system for a period of six years, the system still has deficiencies that impede the work of employees at the Renon Village Credit Institution. As a result, it is imperative to assess the user experience of the accounting information

*Rozza Maudina Ayuwan Putri



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system in order to identify any shortcomings and propose enhancements that better support employee performance. In order to assess employee contentment regarding the utilization of the Core IBS accounting information system, an evaluation of the system's utility is required. This analysis will ascertain that the system consistently fulfills the requirements and gratifies the employees who utilize it. There are numerous approaches that can be employed to assess the efficacy of the IBS Core system, one of which is efficacy Testing.

Multiple studies (Itang, 2020; Purwandani et al., 2023) highlight the benefits of Usability Testing, which is an assessment technique that incorporates users in the evaluation procedure and yields insights regarding the overall efficacy, efficiency, and user satisfaction of the system (Utami, 2020). Usability testing employs performance measurement, retrospective think aloud (RTA), and the system usability scale (SUS), among other evaluation techniques. When considering LPD Perkruman Renon and the integration of the IBS Core accounting information system, it is critical to assess the system's efficacy in order to verify its ongoing ability to fulfill employee requirements and maintain their satisfaction. In order to conduct this assessment, the usability testing approach may be utilized, which entails the direct observation of users during their interactions with the IBS Core system.

Evaluation techniques used may include Performance Measurement and Retrospective Think Aloud (RTA). Performance Measurement is used to measure the success and speed of task completion in the IBS Core accounting information system, providing quantitative data on user performance during usability testing. RTA is used to measure user satisfaction in using the IBS Core accounting information system. Usability testing has been used in other studies related to accounting information systems to evaluate systems. One of them is in a study on the evaluation of the usability of the personnel information system in Badung Regency (Astawa et al., 2020), the Performance Measurement technique and RTA were used to evaluate the effectiveness, efficiency, and user satisfaction in using the system.

In addition to usability testing, the System Usability Scale (SUS) method can be used to analyze the usability of the Core IBS accounting system. SUS is a method used to measure the usability of a product, service, or system. This method is based on user assessment of the usability aspects of a product. The SUS method has been used in various studies to evaluate the usability of accounting information systems and other systems. The purpose and contribution of the research is to evaluate the usability of the IBS Core accounting information system used by LPD Perkruman Renon, so that it can identify system features that need to be improved on the IBS Core accounting information system and can provide recommendations for improvements to the IBS Core accounting information system to ensure the system continues to meet user needs and satisfaction.

LITERATURE REVIEW

The first research (Kusumawardhana et al., 2020) discovered usability difficulties with the BNI Mobile Banking app, including trouble accessing transaction receipts, lack of decimal points when entering numbers, and misgrouped menu items. To solve these challenges, three-stage study was done. First-stage tests measured learnability, efficiency, error, and satisfaction using Usability Testing and System Usability Scale (SUS). The second stage offered improvements based on interview results and Google Material Design principles. The third stage entailed testing the recommended enhancements and comparing usability metrics to the initial test findings. Learnability rose from 68% to 88%, efficiency from 0.01 to 0.05 goals/second, mistakes from 30% to 5%, and satisfaction from 62.67 to 74.25 with the recommended modifications. According to (Iryanto et al., 2020), Puskesmas Tarik developed a smartphone platform named SIAP TARIK that allows appointment booking. The health center analyzed usability issues connected to system ease of use after two years of implementation according to user comments. Usability testing methodologies and the system usability scale were used for summative testing, including tasks, questionnaires, and interviews. SIAP TARIK's usability is okay, grade "D" and marginal high with a SUS score of 66.5, indicating that it can be improved. The guidelines will be used to recommend future SIAP TARIK application development. The Play Store users of Astra Credit Company's acc.one app have complained crashes, login issues, and abrupt errors, according to another study (Veni, 2020). The System Usability Scale questionnaire and scenarios were used to assess the application's user experience to address these issues. The app had a bad ease-of-use rate of 73.33%. The user speed was normal at 0.0467 goals/second. User error is 0.1230 total defects, which is low. The SUS

*Rozza Maudina Ayuwan Putri



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questionnaire shows low user satisfaction with the program, with an average score of 54.45945946. Application acceptance, grade scale, and adjective judgment rates are moderately low, F, and OK, respectively. Class D SUS percentile rank score. Further research by (Irdiaga & Perdanakusuma, 2020) addresses PT Bank Permata Tbk's PermataMobile X internet-based electronic banking solution. The app has significant usability difficulties, according to Play Store users and academics. Usability Testing technique and System Usability Scale were used to evaluate the application's usability, resulting in a below-average learnability aspect score of 68%. Efficiency was 0.01 goals/second, which is typical, and error was 0.41, which is below average compared to standard error rate of 0.70. The System Usability Scale questionnaire completed by 20 active users measured satisfaction, with an average score of 70.1. Usability testing and interviews found four difficulties, and usability principles were used to make improvements.

METHODS

Research Stages

The purpose of the research phases is to facilitate the identification of the issue and the selection of the most suitable methodology for conducting usability testing on the accounting information system of the credit institution in the village of Renon. The stages of the investigation are illustrated in Figure 1.

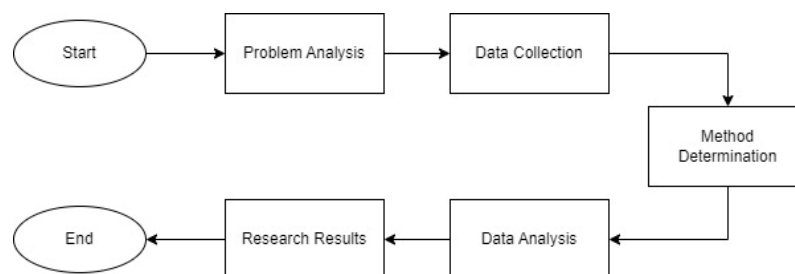


Fig. 1 Research Flow Diagram

As illustrated in Figure 1, the research phase commences with a problem analysis, specifically the assessment of the Renon LPD accounting system's quality through the implementation of usability testing and the utilization of a system usability scale. A number of data collection methods were utilized to obtain information for this study, including direct observation of the subject of research, the Integrated Micro Banking System (IBS), to determine its appearance and the features it offers; interviews with employees of credit institutions in Renon village; and the administration of a system usability scale questionnaire to 30 active IBS Core users. In addition to undertaking documentation and literature reviews, it is necessary to ascertain the most suitable methodological approach for carrying out evaluations. In addition, conduct an analysis of the data obtained from the distribution of questionnaires in order to derive conclusions from evaluations of usability testing.

Usability Testing

Usability testing is among the methods of evaluation. Usability issues are identified through observation of users as they interface with the system (Yumarlin MZ, 2020). Researchers can determine which issues users encounter when interacting with the IBS Core system through usability testing. This research makes use of performance measurement and retrospective think aloud (RTA) as its usability testing methodology. This is due to the fact that the two are complementary. The evaluation of performance will yield metrics for effectiveness and efficiency. In contrast, retrospective think aloud (RTA) yields a satisfaction value that corresponds to users' genuine perceptions. Moreover, these two techniques are simple to master and require no specialized instruments (Armstrong et al., 2019).

Performance Measurement

The purpose of performance measurement is to ascertain the degree to which the IBS Core system operates effectively and efficiently. Screen capture is utilized to evaluate the participant's performance during the task scenario of the examination. Video data constitutes the output of screen recording. Following this, the researcher will replay the video while determining the participants' task scenario completion times and evaluating their progress. In order to ascertain the processing time, the researcher

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employed a chronometer. In this methodology, any form of interaction between researchers and participants is strictly prohibited, as it has the potential to introduce bias into the test data (Bacon, 2023). Participant selection was conducted through straightforward random sampling, in which all users of the application were eligible to participate (Ashby & Valentin, 2018).

The intended performance evaluation consisted of five participants, and the eligibility criteria requirements were determined in this trial based on the characteristics of the use of the IBS Core system by the participants. The results of these eligibility criteria were also obtained from the results of interviews with 5 participants who were users of the IBS Core System, so that in this evaluation experiment 5 criteria were obtained for this stage detailed in Table 1.

Table 1. Participant Criteria

No	Criteria
1	Have used the IBS Core accounting system actively for at least 1 year
2	Have a good understanding of the main functions and features in the IBS Core accounting system
3	Has the ability to express thoughts and feelings
3	Willing to participate in research

Retrospective Think Aloud

Usability testing utilizing retrospective think aloud involves end users expressing their views while using a system (Nurul Shifa, 2022). Think aloud helps individuals discover their true thoughts. Retrospective think aloud includes 5 performance measurement participants. Researchers can calculate IBS Core user satisfaction using this method. Qualitative data is produced. Concurrent and retrospective think aloud methods exist. The time required to express thoughts distinguishes the two. Concurrent think aloud when people speak while doing the job. After completing the activity, participants will say what they thought (Giang et al., 2021). Retrospective think aloud couples well with performance measurement. This performance measuring method prohibits researcher-participant contact (Bacon, 2023). Speaking while working on task situations may distract participants and distort data. According to (Utami, 2020), participants cannot communicate their thoughts while working on the task situation and prefer to do so afterward. In the retrospective think aloud method, the researcher plays back screen recording results from the previous stage and asks subjects to speak their thoughts and feelings. The researcher captured the participant's voice to understand their thoughts and feelings using the IBS Core system. The voice memos app records participants' voices. Verbal behavior analysis will evaluate retrospective think aloud outcomes. A verbal behavior analysis shows the percentage of favorable, neutral, and negative comments (Albert & Tullis, 2022). Verbal behavior analysis determines user needs.

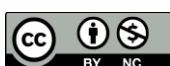
System Usability Scale

Inquiry is one of the additional evaluation methods. By communicating with users to gather information about usability issues, this method is implemented. A questionnaire was employed as the usability method in this study. The research employed the system usability scale (SUS) questionnaire. Despite utilizing a small sample size, the validity and reliability of the System Usability Scale (SUS) have been established (Holzinger et al., 2020). The total number of participants on the system usability scale (SUS) was fifteen; five of them were retrospective think aloud and performance measurement participants, while ten were newcomers who solely assessed the SUS. Utilizing this methodology, scholars ascertain the extent to which user satisfaction with the IBS Core system is valued. The generated information is quantitative. The distribution of written questionnaires to participants subsequent to their completion of usability testing. Table 1 contains the ten translated queries from the system usability scale (SUS) that are presented in Indonesian.

Table 1 SUS Questionnaire Questions

No	Statement	Answer Choices				
		1	2	3	4	5

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1	I feel that the features provided by IBS Core have met my needs.					
2	I feel confident in using IBS Core without needing additional help.					
3	I feel that IBS Core provides consistency in all aspects of appearance and function.					
4	I feel that the transaction processes and operations within IBS Core run smoothly.					
5	The features in IBS Core help me complete daily tasks efficiently.					
6	I feel that there are several areas in the IBS Core that are confusing or inconsistent.					
7	I feel that IBS Core needs improvement in terms of speed and responsiveness.					
8	I feel IBS Core has an attractive appearance and is easy to understand.					
9	Using IBS Core took me a relatively short time to understand and get used to.					
10	I need to get used to it first before I feel that there are some features in IBS Core that are not suitable for my tasks or needs. This system					

Based on table 1, it can be explained that in determining SUS questionnaire questions, it is obtained by communicating with users of the IBS Core system to obtain data on usability problems from the system. Furthermore, researchers compiled questionnaire questions based on Brooke's system usability scale (SUS) theory (Brooke, 2013) and have been validated by the head of the Renon Pekraman Village Credit Institution company.

RESULT

Usability Testing

During this phase, investigators will administer assessments to participants in the form of task scenarios. Researchers determine the efficacy, efficiency, and satisfaction level of the IBS Core system using this method. This research makes use of performance measurement and retrospective think aloud (RTA) as its usability testing methodology.

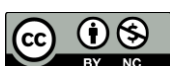
Performance Measurement

During this phase, the screen of the participant was captured by the researcher as they executed the task scenario in the test. After calculating the processing time and replaying the video, the researcher will evaluate the participant's performance in completing the task scenario. The efficacy of the intervention is assessed by the participants' accomplishments in fulfilling the task scenario. The participant's performance in the task scenario was evaluated and a binary value of "1" was assigned if effective completion occurred; otherwise, a binary value of "0" was assigned. In the course of executing the task scenario, failure resulted from actions, errors, or omissions committed by the participants. Table 3 displays the outcomes of the task scenario accomplishment by the five participants.

Table 3 Task Completeness IBS Core

Task Scenario (TS)	Task Complete				
	P1	P2	P3	P4	P5
TS1	1	1	1	1	1
TS2	1	1	1	1	1
TS3	1	1	1	0	1
TS4	1	1	1	1	1
TS5	1	1	0	1	0
TS6	1	1	1	1	1
TS7	1	1	1	1	1
TS8	1	1	1	1	1
TS9	1	1	1	1	1
TS10	1	1	1	1	1

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Task Scenario (TS)	Task Complete				
	P1	P2	P3	P4	P5
TS11	1	0	1	1	1
TS12	1	1	1	1	1
TS13	1	1	1	1	1
TS14	1	1	1	1	1
TS15	1	1	1	1	1
TS16	1	1	0	1	1
TS17	1	1	1	1	1
TS18	1	0	1	1	1
TS19	1	1	1	1	1
TS20	1	1	1	1	1
TS21	1	1	1	0	1
TS22	1	1	1	1	1
TS23	1	1	1	1	1
TS24	1	0	1	1	1
TS25	1	1	1	1	1
TS26	1	1	1	1	0
TS27	1	1	1	1	1
TS28	1	1	1	1	1
TS29	1	1	0	1	1
TS30	1	1	1	1	1
TS31	1	1	1	1	1
TS32	1	1	1	1	1
TS33	1	1	1	0	1
TS34	1	1	1	1	1
TS35	1	0	1	1	1
TS36	1	1	1	1	1
TS37	1	1	1	1	1
TS38	1	1	1	1	1
TS39	1	1	0	1	1
TS40	1	0	1	1	1
Amount	40	35	35	37	38
Total	185				

Description: 1 (Success), 0 (failure)

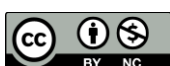
Next, calculate the effectiveness value from the IBS Core Task Completeness results with the following equation (2):

$$\text{Nilai Efektivitas} = \frac{185}{200} \times 100\% = 92.50\% \quad (1)$$

The effectiveness value of the IBS Core System is 92.50%. The average recommended effectiveness value is 78%. This shows that the effectiveness value of the IBS Core System is above average. Efficiency is measured based on the average time it takes participants to complete the task scenario in seconds. The time required for five participants to work on the task scenario is shown in Table 4 below.

Table 4 Execution Time IBS Core

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Task Scenario	Participant Code					Average
	P1	P2	P3	P4	P5	
ST1	67	74	56	81	76	70.8
ST2	54	47	61	49	57	53.6
ST3	58	64	78	67	54	64.2
ST4	80	53	92	69	102	79.2
ST5	75	105	67	59	62	73.6
ST6	47	52	60	45	76	56
ST7	91	54	46	101	44	67.2
ST8	104	45	66	71	89	75
ST9	55	67	89	99	87	79.4
ST10	90	56	31	44	98	63.8
ST11	78	109	56	78	85	81.2
ST12	90	88	32	33	109	70.4
ST13	109	42	33	88	90	72.4
ST14	100	54	33	59	98	68.8
ST15	56	33	45	110	58	60.4
ST16	45	90	54	109	34	66.4
ST17	116	63	35	43	119	75.2
ST18	109	45	73	95	55	75.4
ST19	56	36	54	90	85	64.2
ST20	99	105	90	80	77	90.2
ST21	33	95	85	75	65	70.6
ST22	98	65	46	35	77	64.2
ST23	78	56	118	87	45	76.8
ST24	34	119	66	90	89	79.6
ST25	56	90	104	45	78	74.6
ST26	39	117	98	67	44	72
ST27	37	96	56	58	66	62
ST28	67	78	36	56	94	66.2
ST29	48	90	35	45	67	57
ST30	35	106	87	35	98	72.2
ST31	54	67	55	66	67	61.8
ST32	87	98	45	95	56	76.2
ST33	45	64	97	111	67	76.8
ST34	78	45	34	56	86	59.8
ST35	45	39	69	33	106	58.4
ST36	36	79	70	69	119	74
ST37	114	96	59	43	45	71.4
ST38	119	66	47	79	38	69.8

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Task Scenario	Participant Code					Average
	P1	P2	P3	P4	P5	
ST39	49	63	43	67	42	52.8
ST40	67	45	33	56	61	52.4
Average						68.9

Retrospective Think Aloud (RTA)

Thinking Aloud was carried out to see the problems felt by respondents while using the IBS System. The number of respondents taken was 5 people, where verbal comments from respondents were used to identify problems in the IBS Core System and also recommendations from respondents regarding designing a system that is easy to use and users do not need to search and think for a long time to find information on the IBS Core System.

Table 5 is the opinion of respondents during Thinking Aloud.

No	Question
1	Do you find it difficult to complete tasks?
2	What do you think about the system
3	Do you feel there is something that needs to be improved about the system?

Table 6 Thinking Aloud Results regarding Respondents' Opinions

No	Opinion
1	The layout is good and easy to find
2	The required information displayed is quite appropriate
3	There is consistency in the use of type and size of letters
4	The content available is quite clear
5	The colors used are consistent throughout the system

System Usability Scale (SUS) Questionnaire

Based on the questionnaires distributed and calculations carried out, the results of the SUS score for each respondent and the average SUS score of all respondents are obtained as in Table 4.4 below:

Table 7 SUS IBS Core Score Results

Participants	SUS Score	Participants	SUS Score
P1	92.5	P11	95
P2	87.5	P12	92.5
P3	90	P13	85
P4	75	P14	92.5
P5	87.5	P15	85
P6	92.5	P16	87.5
P7	80	P17	75
P8	75	P18	82.5
P9	90	P19	82.5
P10	90	P20	85

Table 8 SUS scale categories

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Average SUS Score	86,125
Category	Excellent

Several studies require a score above 68 to get a usability score for the system, while a score below 68 indicates that there are still deficiencies in the system so improvements need to be made.

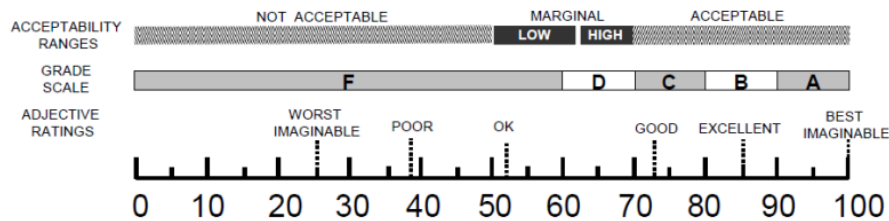


Fig 2 Grade of SUS results

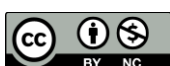
From the SUS score results, an average score of 86.125 was obtained, where the results were above the standard average SUS score. The IBS Core System Score was ranked B with the adjective ratings "Excellent". Next, the acceptability ranges are included in the "Acceptable" category, and finally the net promote score (NPS) is included in the "Promoter" category, showing that the use of the IBS Core system gets a very good assessment from its users. This shows that the IBS Core system is highly appreciated and considered very useful by its users.

DISCUSSIONS

As shown in Table 4 Execution Time IBS Core, Task Scenarios (ST) 1 through 10 pertain to the "Customer Service" and "Banking Operations" domains, respectively. ST1 requires participants to input new customer information, validate the customer's master data, and assess the customer's savings balance. ST2 required respondents to generate a report containing customer data within a specified time period. ST3 required participants to compute savings interest through the process of searching and accessing a catalog of savings transactions associated with a particular ID number. ST4 requires respondents to disable and enable savings associated with a particular account number. ST5 required participants to convert the "Inactive" savings status of a customer to "Active" by means of printing the passbook cover in PDF format. ST6 instructed participants to compute deposit interest by accessing and searching the list of deposit transactions using a particular deposit number. ST7 required participants to save the renewal deposit and renew a deposit with a unique deposit number for six months. For ST8, participants were instructed to duplicate a bill of deposit in PDF format and print a bill bearing a unique deposit number. Participants were requested to revise the deposit renewal date as necessary at ST9. ST10 required participants to generate a PDF of the deposit report and print it within a specified time frame.

"Credit Management" and "Banking Operations" comprised ST 11 through 20. ST11 required participants to modify the yearly interest rate of a client's loan to 8% and generate a PDF copy of the loan card. ST12 required participants to rectify the outstanding balance of interest associated with a specific loan number. In ST13, participants are required to exhibit a list of loan rescheduling transactions and rechedule the loan associated with a particular loan number. Participants are tasked with managing the list of estimates (COA) in ST14 through the addition of new accounts that possess distinct codes and names. ST15 requires participants to document specific details in a general journal and preserve the general journal. ST16 requires participants to document currency inflows and outflows with specific information and to save the cash records. ST17 requires participants to complete the concluding entry process by the specified period end date and to save the process. In ST18, on a specified period end date, participants are required to terminate the closing entry process and save the cancellation. ST19 requires participants to display the comprehensive summary savings report in PDF format and print it within a specified time frame. ST20 requests that participants generate a PDF version of a savings mutation report under specific conditions.

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ST 21–30 cover "Accounting" and "Financial Reporting". Participants in ST21 had to create a PDF report on a consumer's savings over a set time period. ST22 requires participants to generate a PDF savings statement using a savings account number and time period. ST23 required participants to create a PDF report of each collector's interest over time. ST24 asked members to submit a PDF report on program savings arrears within a certain timeframe. Participants in ST25 must create a PDF report showing dormant or transaction-free savings during a set time period. ST26 requires participants to prepare a PDF deposit transaction report utilizing deposit number data from a defined date period. ST27 asks participants to create a PDF nominative report of deposits maturing on a certain date. ST28 requires participants to create a PDF report on deposit interest rate history. Print this report using accurate deposit number data within a set timeframe. ST29 requires participants to prepare a PDF credit transaction report utilizing credit number data from a defined date period. ST30 requires participants to create a PDF credit installment report utilizing credit number-specific data and a time period.

ST 31-40 examined a range of financial management, reporting, and analysis-related topics. ST31 required participants to generate a PDF document containing a nominative report of particular customer loans issued within a specified time frame. ST32 required participants to generate a PDF document containing a nominative report detailing the non-collateralized financing of a particular consumer during a specified time period. ST33 requires participants to generate a PDF version of a nominative credit report detailing the number of upcoming installments due within a specified time frame. ST34 requires participants to generate a PDF of a daily ledger report for a particular account within a specified time frame. ST35 requires participants to generate and present a PDF version of a daily balance sheet report covering a specified time period. ST36 required participants to generate a PDF report of a daily profit and loss statement for a specified date. ST37 required participants to generate a PDF version of a trial balance report pertaining to a particular report date. ST38 required participants to generate a PDF of a credit sectoral report pertaining to a particular credit sector, which they were required to print and display within a specified time frame. Participants are obligated to generate a PDF version of a fresh LPD activity report that falls within a designated time frame as part of ST39. ST40 required participants to generate a PDF version of a newly printed monthly balance sheet report for a specified month.

Task Scenario (ST) 12 was the quickest to complete with an average time of 32 seconds per participant. This is due to its simple nature. ST 12 is an Accounting task where participants only need to cancel the closing entry process without involving complex data operations. The process was relatively straightforward, requiring only the action of canceling without any additional complex calculations or data manipulations.

On the other hand, ST 17 took the longest to complete with an average time of 119 seconds per participant. This task involved printing the Trial Balance Report in Accounting Reports with large data processing and additional complexity. As it involved larger data and more calculations, this task took longer to complete.

ST 39 was the easiest task, taking an average of 52.8 seconds per participant. This is because ST 39 only involves printing a report without the need to perform any additional complex calculations or data manipulations. This task was relatively simple and quick.

ST 13 was the most difficult task as it involved rechecking credit which required mathematical calculations and an in-depth understanding of credit procedures. Due to its complex nature, this task takes longer to complete than the other tasks.

CONCLUSION

Performance Measurement has been conducted involving five participants with 40 task scenarios to measure the effectiveness and efficiency of the IBS Core System. The effectiveness of the participants in completing the tasks reached 92.50% and the average time taken by the participants to complete the task scenarios was 68.9 seconds. Each task scenario was divided into categories based on its field, with ST 1 to 10 focusing on "Customer Service" and "Banking Operations", ST 11 to 20 focusing on "Banking Operations" and "Credit Management", ST 21 to 30 relating to "Accounting" and "Financial Reporting", and ST 31-40 relating to various aspects of "Financial Management", "Reporting", and "Analysis". ST 12 was the quickest task to complete with an average time of 32 seconds per participant, due to its simple nature. ST 17 was the longest task to complete with an average time of 119 seconds

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per participant, as it involved large data processing and additional complexity. ST 39 was the easiest task, taking an average of 52.8 seconds per participant, as it only involved printing reports. Whereas ST 13 was the most difficult task as it involved the process of credit rescheduling which required mathematical calculations and an in-depth understanding of credit procedures. The Retrospective Think Aloud involved 15 participants to measure user satisfaction with the IBS Core System. The results of the questionnaire showed an average score of 86.125, indicating that the IBS Core System has a high level of usability. The score of 86.125 indicates that users are very satisfied with the use of the system and fall into adjective ratings "Excellent" Next, the acceptability ranges are included in the "Acceptable" category, and finally the net promote score (NPS) is included in the "Promoter" category, showing that the use of the IBS Core system gets a very good assessment from its users. This shows that the IBS Core system is highly appreciated and considered very useful by its users. The research suggestion is to use two groups of participants with different categories, such as beginner and skilled categories in using the IBS Core system.

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*Rozza Maudina Ayuwan Putri



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