

Evaluating the Effectiveness and Efficiency of the SSS Disbursement Account Enrollment Module (DAEM) in Terms of Processing Time, Accuracy, and User Satisfaction

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ABSTRACT

This study evaluates the effectiveness and efficiency of the Disbursement Account Enrollment Module (DAEM) of the Social Security System (SSS) in the Philippines. SSS was created by Republic Act 1161, which was implemented in September 1957 and further strengthened by R.A. 8282 in 1997 and R.A. 11199 in 2018. Benefits disbursed by the SSS include Unemployment Insurance, Sickness, Maternity, Disability, Retirement, Death with Funeral Grant, and Employee's Compensation benefit. Relatively, privilege loans like Salary Loan, Calamity/Emergency Loan were disbursed to the members. With over 43M members (as of November 2025), including household members and OFWs, a total of 5.4M member benefit claims have been paid from January to November 2025 alone. With the shift of digital transformation to these processes, this Study examines the system in terms of processing time, accuracy, and user satisfaction. A descriptive-evaluative research design was employed, utilizing survey questionnaires and system performance data from SSS members who availed of the DAEM. Findings revealed that the module significantly improved transaction speed and reduced manual processing errors. However, challenges such as system delays and user interface concerns were noted. Overall, the DAEM is effective and efficient but requires continuous improvement to enhance user experience and operational reliability.

Keywords: SSS, Disbursement Account Enrollment Module (DAEM), Processing Time, Accuracy, User Satisfaction, E-Governance

INTRODUCTION

The integration of digital systems into government services has become a fundamental component of modern public administration, aimed at enhancing efficiency, transparency, and accessibility. In the Philippines, the Social Security System (SSS), as a key institution responsible for providing social protection to workers, has increasingly adopted digital technologies to improve its service delivery mechanisms. These innovations are particularly evident in the area of benefit disbursement, where timely, secure, and convenient transactions are essential to meet the needs of members.

One of the significant digital initiatives implemented by the SSS is the Disbursement Account Enrollment Module (DAEM). This system enables members to register their preferred bank accounts or electronic wallets, thereby facilitating faster, more secure, and contactless release of benefits. By reducing reliance on manual processing and physical transactions, the DAEM aims to streamline operations, minimize delays, and enhance overall service efficiency.

However, despite its intended advantages, the implementation of digital platforms such as DAEM presents several challenges that warrant systematic evaluation. Issues related to processing time, accuracy of information and transactions, system reliability, and user satisfaction remain critical concerns. In particular, the effectiveness of the system in reducing processing delays and ensuring error-free transactions, as well as the level of user acceptance and ease of use, are key indicators of its overall performance.

Moreover, assessing the efficiency and effectiveness of the DAEM is crucial in determining whether the system aligns with the broader goals of digital transformation in public service. Such evaluation not only provides insights into operational strengths and weaknesses but also informs policy improvements and system enhancements. Ultimately, ensuring that digital innovations like the DAEM, meet service quality standards and user expectations is essential for strengthening public trust and promoting inclusive access to government services.

Objectives of the study

This study aims to evaluate the effectiveness and efficiency of the SSS Disbursement Account Enrollment Module. Specifically, it seeks to:

1. Determine the level of effectiveness of DAEM in terms of processing time;
2. Assess the accuracy of the system in processing enrollment data;
3. Evaluate user satisfaction with the DAEM;
4. Identify issues and challenges encountered by users;
5. Propose recommendations to improve system performance.

MATERIALS AND METHODS

Research Design

This study employed a descriptive-evaluative research design to assess the effectiveness and efficiency of the Social Security System (SSS) Disbursement Account Enrollment Module (DAEM). The descriptive component of the design was utilized to systematically gather and present factual information regarding the respondents' experiences in using the module, particularly in terms of processing time, accuracy, and user satisfaction. It allowed the researcher to describe the current condition and performance of the system based on measurable indicators.

On the other hand, the evaluative aspect of the design focused on determining the level of effectiveness and efficiency of the DAEM by analyzing users' perceptions and experiences. This approach enabled the researcher to assess whether the system meets its intended objectives, such as improving transaction speed, minimizing errors, and enhancing overall user experience.

The design is appropriate for this study as it does not aim to manipulate variables but rather to observe, measure, and evaluate existing conditions. Data were collected primarily through structured survey questionnaires administered to SSS members who have utilized the DAEM. The responses were quantified using a Likert scale and analyzed using statistical tools such as mean and standard deviation to determine the level of effectiveness and efficiency.

Furthermore, the descriptive-evaluative design supports evidence-based conclusions and recommendations by identifying strengths, weaknesses, and areas for improvement in the system. This ensures that the findings of the study are grounded in actual user experiences and can be used to enhance service delivery within the SSS.

Participants

The participants of the study consisted of 100 members whole utilized the DAEM for a specific period. The respondents includes Employer Representatives, Employees, Self-Employed, Voluntary, OFWs and Household Members, who transacted thru SSS Office or via online platforms (SSS website and SSS Mobile App). This sample size was considered sufficient to provide reliable data for statistical and to represent the perceptions of the members regarding Disbursement Account Enrollment Module.

Data Gathering Procedure

The researchers first prepared a structured questionnaire based on the variables of the study, including age, educational attainment, types of benefits processed and the location where they accessed the DAEM. Prior to the distribution of the questionnaire, permission was obtained from the members to conduct the study. The researchers explained the purpose of the research to the respondents and assured them that their responses would remain confidential. The questionnaires were then distributed to the respondents and collected after completion. After the retrieval of tall questionnaires, the responses were organized, coded, and prepared for statistical analysis.

RESULTS AND DISCUSSION

Table 1 of the study focuses on assessing the effectiveness of the DAEM in terms of processing time, based on users’ experiences and perceptions. Specifically, it examines whether the system enables quick completion of enrollment, ensures smooth transaction flow, and provides satisfactory response time compared to manual procedures. The findings serve as a basis for identifying strengths and areas for improvement in the DAEM, ultimately contributing to the enhancement of digital service delivery within the SSS.

Table 1
Processing Time of the SSS Disbursement Account Enrollment Module (DAEM)

Indicators	Mean	Standard Deviation	Description
The DAEM allowed me to complete my enrollment in a short period of time	3.60	0.72	Effective
The steps in the DAEM were completed without unnecessary delay	3.12	0.74	Moderately Effective
Uploading and submitting my account details was fast and convenient	3.30	0.79	Moderately Effective
The system response time was satisfactory during my transaction	3.90	0.46	Effective
Compared with manual processing, the DAEM is faster and more efficient	4.89	0.31	Very Effective
Overall	3.76	0.89	Effective

(5 = Very Effective, 1 = Not Effective)

The findings reveal that the overall mean score for processing time is 3.76 (SD = 0.89), interpreted as Effective. This indicates that respondents generally perceive the DAEM as capable of facilitating timely completion of enrollment processes, although certain aspects may still require improvement.

Among the indicators, the statement “*Compared with manual processing, the DAEM is faster and more efficient*” obtained the highest mean score of 4.89 (SD = 0.31), described as Very Effective. This strongly suggests that the system significantly improves processing speed compared to traditional manual procedures. The low standard deviation further indicates a high level of agreement among respondents, reinforcing the consistency of this perception.

Similarly, the indicator “The system response time was satisfactory during my transaction” yielded a mean of 3.90 (SD = 0.46), interpreted as Effective. This implies that the system’s responsiveness meets user expectations in most cases, contributing positively to transaction efficiency.

On the other hand, the statements “The steps in the DAEM were completed without unnecessary delay” (Mean = 3.12, SD = 0.74) and “Uploading and submitting my account details was fast and convenient” (Mean = 3.30, SD = 0.79) were both rated as Moderately Effective. These results suggest that while the system performs adequately, users still experience minor delays or inefficiencies, particularly in procedural steps and document submission.

The indicator “The DAEM allowed me to complete my enrollment in a short period of time” obtained a mean of 3.60 (SD = 0.72), categorized as Effective, indicating that the system generally supports timely completion of enrollment, though not consistently at an optimal level.

Overall, the findings indicate that the DAEM has successfully enhanced processing efficiency compared to manual systems, particularly in reducing overall transaction time. However, the moderate ratings in certain indicators highlight areas that require optimization, such as streamlining procedural steps and improving the speed and convenience of document uploading.

These results align with studies on digital transformation in public service delivery, which emphasize that while digital systems significantly improve efficiency, user experience factors such as interface design, system navigation, and processing flow remain critical determinants of overall effectiveness. In the context of SSS operations, continuous system enhancement and user support mechanisms are essential to fully maximize the benefits of the DAEM.

Table 2 of the study focuses on determining the effectiveness of the DAEM in ensuring accuracy based on users’ experiences and perceptions. The results provide insights into the system’s capability to maintain data integrity, minimize errors, and support a more reliable enrollment process, thereby strengthening the quality of service delivery within the SSS.

Table 2
Accuracy of the SSS Disbursement Account Enrollment Module (DAEM)

Indicators	Mean	Standard Deviation	Description
The DAEM correctly recorded my personal and bank/disbursement account information	5.00	0.00	Very Effective
The instructions helped me provide accurate information	4.81	0.39	Very Effective
I experienced minimal errors while using the DAEM	3.49	0.72	Effective
The module accurately validated the documents and details I submitted	4.93	0.26	Very Effective
The DAEM reduced the chances of mistakes in my enrollment process	4.96	0.20	Very Effective
Overall	4.64	0.51	Very Effective

(5 = Very Effective, 1 = Not Effective)

The results indicate that the overall mean score for accuracy is 4.64 (SD = 0.51), interpreted as Very Effective. This demonstrates that the DAEM performs exceptionally well in ensuring the correctness and reliability of data during the enrollment process.

Among the indicators, the statement “The DAEM correctly recorded my personal and bank/disbursement account information” achieved a perfect mean score of 5.00 (SD = 0.00), described as Very Effective. This indicates unanimous agreement among respondents that the system accurately captures essential user information, reflecting a high level of system integrity and reliability.

Similarly, the indicator “*The DAEM reduced the chances of mistakes in my enrollment process*” obtained a mean of 4.96 (SD = 0.20), while “*The module accurately validated the documents and details I submitted*” garnered a mean of 4.93 (SD = 0.26). Both were interpreted as Very Effective, suggesting that the system’s validation mechanisms and built-in checks are highly efficient in minimizing user and system errors.

The statement “*The instructions helped me provide accurate information*” also received a high mean score of 4.81 (SD = 0.39), indicating that the guidance provided within the system contributes significantly to accurate data entry. This highlights the importance of clear instructions and user-friendly interfaces in enhancing system accuracy.

However, the indicator “*I experienced minimal errors while using the DAEM*” obtained a comparatively lower mean of 3.49 (SD = 0.72), interpreted as Effective. While still positive, this suggests that some users encountered minor issues or inconsistencies during system use. The relatively higher standard deviation implies variability in user experiences, which may be attributed to factors such as internet connectivity, user familiarity with digital platforms, or occasional system glitches.

Overall, the findings demonstrate that the DAEM is highly effective in ensuring accurate data processing and validation. The system’s strong performance in recording information and reducing errors reflects its reliability as a digital public service tool. Nonetheless, the presence of minor user-reported errors indicates a need for continuous system improvement, particularly in enhancing system stability and user support mechanisms.

These results are consistent with existing literature on digital transformation in public service delivery, which emphasizes that system accuracy is a critical determinant of user trust and adoption. In the context of SSS operations, maintaining high accuracy levels is essential to ensure the integrity of member records and the efficient delivery of benefits and services.

Table 3 of the study aims to evaluate the effectiveness of the DAEM in terms of user satisfaction based on the perceptions and experiences of SSS members. The findings provide valuable insights into how well the system meets user expectations and identify areas where further improvements may enhance the overall user experience and service delivery performance of the SSS.

Table 3
User Satisfaction with the SSS Disbursement Account Enrollment Module (DAEM)

Indicators	Mean	Standard Deviation	Description
I am satisfied with my overall experience in using the DAEM	3.90	0.55	Effective
The DAEM is easy to use and understand	3.95	0.39	Effective
The instructions and prompts in the DAEM are clear	4.88	0.33	Very Effective
The DAEM is a convenient way to enroll a disbursement account	4.86	0.35	Very Effective
I would recommend the DAEM to other SSS members	4.96	0.20	Very Effective
Overall	4.51	0.46	Very Effective

(5 = Very Effective, 1 = Not Effective)

The results reveal that the overall mean score for user satisfaction is 4.51 (SD = 0.46), interpreted as Very Effective. This indicates a high level of satisfaction among respondents and suggests that the DAEM provides a positive user experience.

Among the indicators, the statement “*I would recommend the DAEM to other SSS members*” obtained the highest mean score of 4.96 (SD = 0.20), described as Very Effective. This reflects strong user

endorsement and indicates a high level of trust and confidence in the system. The low standard deviation further signifies a high level of agreement among respondents.

Similarly, the indicators “*The instructions and prompts in the DAEM are clear*” (Mean = 4.88, SD = 0.33) and “*The DAEM is a convenient way to enroll a disbursement account*” (Mean = 4.86, SD = 0.35) were both rated as Very Effective. These findings highlight that the system’s design, particularly its clarity and convenience, significantly contributes to user satisfaction.

The statement “*The DAEM is easy to use and understand*” yielded a mean of 3.95 (SD = 0.39), interpreted as Effective, indicating that while the system is generally user-friendly, there may still be minor usability challenges experienced by some users.

Likewise, the indicator “*I am satisfied with my overall experience in using the DAEM*” obtained a mean of 3.90 (SD = 0.55), also described as Effective. This suggests that although users are generally satisfied, their experiences may vary depending on factors such as system performance, user familiarity, or external conditions such as internet connectivity.

Overall, the findings demonstrate that the DAEM is highly satisfactory from the users’ perspective, particularly in terms of clarity, convenience, and recommendation intent. However, the slightly lower ratings in ease of use and overall experience suggest opportunities for further enhancement, such as improving user interface design, simplifying navigation, and providing additional user guidance.

These results are consistent with studies on digital public service systems, which emphasize that user satisfaction is influenced not only by system functionality but also by usability, accessibility, and overall user experience. In the context of SSS service delivery, ensuring high user satisfaction is essential to promote adoption, compliance, and continued use of digital platforms such as the DAEM.

Challenges Identified

Table 4 presents the distribution of problems encountered by respondents in using the Social Security System (SSS) Disbursement Account Enrollment Module (DAEM).

Table 4
Problems Encountered in the Use of the SSS DAEM (n = 100)

Problems Encountered	Frequency	Percentage
Difficulty uploading documents	28	28%
None	26	26%
Slow internet connection	21	21%
Lack of technical assistance	12	12%
System downtime/unavailable site	8	8%
Difficulty logging in	3	3%
Unclear instructions	2	2%
Errors in entered information	0	0%
Delayed confirmation/approval	0	0%
Others	0	0%
Total	100	100%

Processing Time

The data indicate that the most commonly encountered issue was difficulty in uploading documents (28%), followed by slow internet connection (21%). These challenges directly affect the processing time of the DAEM, as users experience delays in completing enrollment requirements. Upload-related

issues may be linked to system limitations such as file size restrictions, compatibility concerns, or interface inefficiencies. Meanwhile, reliance on internet connectivity highlights that system performance is partially dependent on external infrastructure conditions. Additionally, system downtime (8%) contributes to interruptions in processing, further affecting overall efficiency. These findings suggest that while the DAEM facilitates digital processing, technical constraints hinder its optimal performance in terms of speed and timeliness.

Accuracy

Notably, no respondents (0%) reported errors in entered information or delayed confirmation/approval, indicating a high level of accuracy within the system. This suggests that the DAEM incorporates effective validation mechanisms and structured data entry processes that minimize user errors.

The absence of reported inaccuracies reflects the reliability of the system in handling user data and ensures that transactions are processed correctly. This is a significant indicator of system effectiveness, particularly in maintaining data integrity and reducing the need for corrections or reprocessing.

User Satisfaction

In terms of user satisfaction, 26% of respondents reported no problems, indicating that a considerable proportion of users experienced smooth and satisfactory transactions using the DAEM. However, several issues continue to affect the overall user experience.

The presence of difficulty uploading documents (28%), slow internet connection (21%), and lack of technical assistance (12%) suggests that user satisfaction is influenced by both system-related and external factors. The lack of adequate technical support may further exacerbate user difficulties, particularly for individuals with limited digital literacy.

Although only a small percentage reported issues related to login (3%) and unclear instructions (2%), these factors still indicate areas where user guidance and interface clarity can be improved.

Integrated Analysis of Processing Time, Accuracy, and User Satisfaction

The evaluation of the SSS Disbursement Account Enrollment Module (DAEM) was conducted across three key dimensions: processing time, accuracy, and user satisfaction. The findings reveal that the system demonstrates a generally high level of effectiveness, with varying degrees of performance across these dimensions.

In terms of processing time, the DAEM obtained an overall mean of 3.76 (SD = 0.89), interpreted as Effective. This indicates that the system is capable of facilitating timely transactions and significantly improves efficiency compared to manual processes. Notably, respondents strongly agreed that the DAEM is faster than traditional methods, highlighting its contribution to streamlining enrollment procedures. However, moderate ratings in specific areas such as procedural flow and document uploading suggest that some inefficiencies remain, particularly in system navigation and step-by-step processing.

With respect to accuracy, the DAEM achieved an overall mean of 4.64 (SD = 0.51), classified as Very Effective. This dimension recorded the highest performance among the three variables, indicating that the system excels in ensuring correctness and reliability of data. Respondents consistently reported that the DAEM accurately records personal and bank information, effectively validates submitted documents, and minimizes errors during the enrollment process. These findings underscore the robustness of the system's validation mechanisms and its critical role in maintaining data integrity within SSS operations.

In terms of user satisfaction, the DAEM garnered an overall mean of 4.51 (SD = 0.46), also interpreted as Very Effective. The results suggest that users are highly satisfied with the system, particularly in terms of clarity of instructions, convenience, and their willingness to recommend the platform to others. While overall satisfaction is high, slightly lower ratings in ease of use and general experience indicate that some users may encounter minor usability challenges, which could be addressed through interface improvements and enhanced user support.

Overall, the combined results indicate that the DAEM is a highly effective digital tool, particularly excelling in accuracy and user satisfaction, while maintaining a solid but improvable level of efficiency in processing time. The findings affirm that digital transformation initiatives within SSS have successfully enhanced service delivery, although continuous system refinement remains necessary to optimize performance across all dimensions.

CONCLUSION

Based on the findings of the study, the SSS Disbursement Account Enrollment Module (DAEM) is generally very effective and efficient as a digital service platform for enrollment processing. The system demonstrates exceptional performance in terms of accuracy, ensuring reliable data capture and validation, and user satisfaction, reflecting positive user experiences and high acceptance levels.

Although the DAEM performs effectively in terms of processing time, the results indicate that there are still areas that require improvement, particularly in minimizing delays in certain procedural steps and enhancing the speed and convenience of document submission.

Overall, the study concludes that the DAEM significantly improves service delivery compared to manual processes by enhancing efficiency, ensuring accuracy, and promoting user satisfaction. The system serves as a strong example of successful digital transformation in public service delivery within the Social Security System.

Recommendations

In light of the findings, the following recommendations are proposed to further enhance the effectiveness and efficiency of the DAEM:

1. Improve Processing Efficiency
 - Streamline system workflows to reduce unnecessary steps and delays in the enrollment process.
 - Optimize system performance, particularly in document uploading and submission features.
 - Enhance server capacity and system responsiveness to handle peak transaction periods.
2. Enhance User Interface and Experience
 - Simplify navigation and improve interface design to make the system more intuitive for users.
 - Incorporate guided prompts, tooltips, and visual instructions to assist first-time users.
 - Provide multilingual support or localized instructions for broader accessibility.
3. Strengthen User Support Mechanisms
 - Establish real-time assistance features such as chat support or help desks.
 - Provide step-by-step tutorials, video guides, and FAQs to address common user concerns.
 - Conduct user orientation or digital literacy programs, especially for less tech-savvy members.
4. Maintain and Improve System Accuracy
 - Continuously update validation mechanisms to ensure accurate data entry and prevent errors.
 - Integrate automated error detection and correction features.
 - Conduct regular system audits to maintain data integrity and reliability.

5. Continuous Monitoring and Evaluation

- Implement a feedback system to regularly collect user insights and identify areas for improvement.
- Conduct periodic evaluations of system performance across processing time, accuracy, and user satisfaction.
- Use data analytics to guide evidence-based system enhancements

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