

Streamlining Salary Loan Transactions: A process Efficiency Study of a Regional Banking Institution

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Index Terms:

salary loan processing, technological systems support, interdepartmental coordination mechanisms, process efficiency, regional banking institution

Abstract. This study examined the efficiency of the salary loan process at DBP Dumaguete by identifying process deficiencies and assessing the contributions of technological systems and interdepartmental coordination to the efficient handling of salary loan applications. The research sought to determine how these factors influence service delivery and overall process performance within the bank. A descriptive-correlational research design was employed. Data were collected from 123 salary loan clients selected through simple random sampling and 30 DBP employees directly involved in loan processing chosen through purposive sampling. Expert-validated survey questionnaires were used as the primary data-gathering instruments. Statistical tools such as the mean, Shapiro-Wilk test of normality, and Spearman's rank-order correlation were utilized to analyze the data. The findings revealed that both clients and employees consistently perceived the salary loan process as efficient across all measured dimensions. Technological systems and interdepartmental coordination were viewed as important contributors to timely and effective loan processing. However, the study also identified the continued occurrence of minor delays, document resubmissions, and process bottlenecks, indicating opportunities for further improvement. These findings suggest that while existing technologies support operational efficiency, technology alone is insufficient to ensure optimal performance. Greater digital integration, enhanced validation mechanisms, seamless system interoperability, and increased automation are needed to further streamline processes and improve client satisfaction. The study underscores the importance of continuous innovation in maintaining fast, reliable, and trustworthy loan services. Furthermore, the results support the applicability of Lean Theory and Scientific Management Theory, emphasizing continuous improvement, process optimization, and productivity enhancement in the banking sector.

Introduction

In an era of rapid financial innovation and rising customer expectations, process efficiency has become a critical measure of banking performance, particularly in loan processing, where speed, accuracy, and customer satisfaction are essential (Sairam & Laxmi, 2025). Salary loan processing requires extensive documentation, verification, and transaction workflows, and delays or redundancies can reduce operational efficiency, increase borrower frustration, and limit financial inclusion (Mudunkotuwa, 2024). Banks that adopt automated document handling and streamlined verification achieve up to 70% faster approval times and reduce compliance costs by as much as 40% (Pingili, 2025). However, manual and paper-based loan processing remains common, with 63% of lenders reporting that document signing takes more than 30 minutes when done manually (Pelei et al., 2024). These findings highlight the importance of efficient salary loan processing in improving operational performance and customer service.

In the Philippines, documentation requirements and lengthy processing timelines remain challenges in salary loan transactions. The Development Bank of the Philippines (DBP) reports an average processing time of two to three weeks,

which may reflect bottlenecks in document verification and interdepartmental coordination (Rokhkin, 2025). Similarly, a study of microfinance institutions in Northern Mindanao found that documentation and procedural controls significantly affect operational efficiency (Penaso & Dagang, 2025), potentially delaying loan disbursement and limiting borrower access.

This study examined the efficiency of salary loan transactions at DBP Dumaguete, addressing a gap in research that largely focuses on large commercial banks, automated systems, or general banking efficiency rather than branch-level operations (Villar & Khan, 2021; Dioquino, 2025; Penaso & Dagang, 2025; Bhuiyan et al., 2023). Specifically, it explored how documentation volume and complexity, together with other operational factors, influence processing time and client satisfaction.

The study was conducted to identify opportunities for improving operational efficiency at DBP Dumaguete amid increasing competition from digital lenders. It also sought to enhance service quality, employee performance, and the bank's ability to fulfill its development mandate. Furthermore, the study supports the United Nations Sustainable Development Goals, particularly SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation and Infrastructure), by promoting efficient financial services, process innovation, and institutional capacity.

Research Questions

Despite the DBP's commitment to delivering timely and efficient financial services, the processing of salary loan transactions at its Dumaguete branch continues to pose significant challenges. To address this overarching issue, this study sought to answer the following specific sub-problems:

1. What extent do the technological systems support the processing of salary loan applications as perceived by the clients and employees in terms of the following variables:
 - 1.1 digital submission;
 - 1.2 tracking systems; and
 - 1.3 process efficiency?
2. What extent do employees perceive the efficiency of the implemented interdepartmental coordination mechanisms in processing salary loan applications in terms of the following variables:
 - 2.1 communication and information sharing;
 - 2.2 collaboration and teamwork; and
 - 2.3 system and process integration?
3. To what extent is the efficiency of processing salary loan applications at DBP Dumaguete as perceived by the clients and employees in terms of the following variables:
 - 3.1 application and documentary requirements submission;
 - 3.2 evaluation and processing; and
 - 3.3 release and disbursement?
4. Is there a significant relationship between the extent of technological systems support and the extent of efficiency in processing salary loans?
5. Is there a significant relationship between the extent of efficiency of interdepartmental coordination mechanisms and the extent of efficiency in processing salary loans?

Methodology

This section outlines the research design, research environment, research respondents, research instruments, ethical considerations, research procedure, and statistical treatment of data. Research design. The study employed a descriptive-correlational research design. It is descriptive because it sought to identify: (a) the clients' perceptions of the extent of technological systems support in the processing of salary loan applications at DBP Dumaguete; (b) the bank employees' perceptions of the extent of technological systems support; (c) the bank employees' perceptions of the extent of efficiency of interdepartmental coordination mechanisms; and (d) the clients' and bank employees' perceptions of the efficiency of processing salary loans at DBP Dumaguete. The study is also correlational because it examined the relationship between the extent of technological systems support and the extent of efficiency in processing salary loans, as well as the relationship between the extent of efficiency of interdepartmental coordination mechanisms and the extent of efficiency in processing salary loans.

Research design

The study employed a descriptive-correlational research design. It is descriptive because it sought to identify: (a) the clients' perceptions of the extent of technological systems support in the processing of salary loan applications at DBP Dumaguete; (b) the bank employees' perceptions of the extent of technological systems support; (c) the bank employees' perceptions of the extent of efficiency of interdepartmental coordination mechanisms; and (d) the clients' and bank employees' perceptions of the efficiency of processing salary loans at DBP Dumaguete. The study is also correlational because it examined the relationship between the extent of technological systems support and the extent of efficiency in processing salary loans, as well as the relationship between the extent of efficiency of interdepartmental coordination mechanisms and the extent of efficiency in processing salary loans.

Research environment

The study was conducted at DBP Dumaguete Branch, located in Dumaguete City, Negros Oriental. The Branch serves a diverse clientele, primarily composed of government employees, and manages a significant volume of salary loan transactions. At present, DBP Dumaguete maintains a largely manual process for loan origination, documentation, and disbursement, with only limited digital tools integrated into its operations. Its structural organization includes multiple units, such as the Credit Evaluation Department, Customer Service and Loan Processing Unit, Compliance and Risk Management Department, Transaction Processing Division, and Disbursement Unit, that coordinate throughout the salary loan lifecycle. This operational setting provided the researcher with a suitable environment for examining how technological systems and interdepartmental coordination workflows influence overall process efficiency.

Research respondents

The respondents of this study included both DBP Dumaguete branch employees and salary loan clients. To ensure that all relevant actors in the workflow were represented, DBP personnel from other regions who were directly involved in the processing of Dumaguete branch salary loan transactions were also included. Employee participants comprised those assigned to the Credit Evaluation Department, Customer Service and Loan Processing Unit, Compliance and Risk Management Department, Transaction Processing Division, and Disbursement Unit.

The study employed purposive sampling for employee respondents, selecting only those whose functional roles involved documentation handling and interdepartmental verification. Inclusion criteria included: (1) full-time employment status, (2) at least six months of experience in the current post, and (3) direct involvement in loan transaction processing.

Additionally, salary loan clients were surveyed to triangulate data on perceived processing efficiency and document submission experience, as well as overall service accessibility. To ensure fairness and equal representation, the client-respondents were selected through simple random sampling. The researcher obtained the official list of salary loan borrowers who completed transactions between July 01, 2025, and March 31, 2026. Each borrower in the list was assigned a unique identifier, and a random number generator was used to select participants.

The distribution of respondents is as follows:

Respondents	Population	Sample
DBP Employees directly involved in the Salary Loan Process of DBP Dumaguete	30	30
DBP Dumaguete Salary Loan Borrowers who completed salary loan transactions between July 01, 2025 to March 31, 2026	178	123
Total	208	153

Research instruments

The researcher used two self-constructed survey questionnaires: one for DBP Dumaguete salary loan clients and another for employees directly involved in salary loan processing. Both questionnaires contained a disclosure statement with informed consent and a tabular survey using a Likert scale. The client questionnaire measured perceptions of technological systems support and processing efficiency, while the employee questionnaire additionally assessed interdepartmental coordination mechanisms.

The instruments underwent content validation by three experts: the Head of DBP Dumaguete Branch, a Career Executive Service Eligible (CESE) and Statistics graduate; the Head of DBP Siquijor Branch, who holds a Master of Business Administration; and a Foundation University Method Specialist with a doctorate in Public Administration. Their expertise ensured the instruments' validity and relevance.

A dry run was conducted to evaluate the clarity, consistency, and reliability of the questionnaires, involving 10 DBP Siquijor employees and 20 salary loan clients. These participants were excluded from the final study.

The Cronbach's Alpha coefficients are presented as follows:

Variables	Cronbach's Alpha Coefficients
DBP Dumaguete Salary Loan Clients	
Digital Submission	0.939
Tracking Systems	0.950
Process Efficiency	0.909
Application and Documentary Requirements Submission	0.973
Evaluation and Processing	0.925
Release and Disbursement	0.951
DBP Employees	
Digital Submission	0.967
Tracking Systems	0.962
Process Efficiency	0.956
Communication and Information Sharing	0.957
Collaboration and Teamwork	0.977
System and Process Integration	0.990

Ethical considerations.

The researcher adhered to the highest ethical standards throughout the study by ensuring the confidentiality of all collected data, using the information solely for research purposes, and allowing respondents to participate voluntarily with the right to withdraw at any time without penalty.

AI tools were also used to support the research process. Consensus AI assisted in gathering evidence-based literature, NotebookLM helped organize and synthesize research materials, while OpenAI's ChatGPT and Microsoft Copilot were used to improve the clarity, coherence, and contextual framing of the manuscript.

All AI-generated outputs were carefully reviewed, interpreted, and edited by the researcher to ensure accuracy, originality, and academic integrity. The researcher assumes full responsibility for the final content of the study and fully discloses the use of these tools.

Research procedures

The study followed a systematic process to ensure the credibility and reliability of its findings. After the design hearing, the researcher incorporated the panel's recommendations and secured approvals from the University Research Ethics Committee, the Heads of DBP Dumaguete and DBP Siquijor Branches, ensuring compliance with ethical and institutional requirements.

A pilot test was conducted among DBP Siquijor employees and salary loan clients, who were excluded from the final sample. Feedback from the dry run was used to improve the clarity, validity, and reliability of the survey instruments.

The finalized questionnaires were administered through Microsoft Forms to 30 DBP Dumaguete employees selected through purposive sampling and 123 salary loan clients selected through simple random sampling from borrowers who completed transactions between July 1, 2025, and March 31, 2026.

The collected data were compiled, analyzed, and interpreted based on the study's objectives and theoretical framework. The findings served as the basis for the conclusions and recommendations, after which the final manuscript was completed and submitted to the Foundation University Graduate School.

Results and Discussion

This presents, analyzes, and interprets the data collected from bank employees and salary loan clients. The data gathered are presented in tabular and textual forms and are systematically organized according to the sequence of the problems.

This technological system supports the salary loan processing as...	$\bar{x}$	EoS	SD
Clients' Perspective (n = 123)			
1. It helps reduce congestion and delays at the front desk.	4.46	VH	0.72
2. It improves accessibility by allowing applications without the need for physical appearance.	4.38	VH	0.75
3. It allows faster initial screening of loan applications.	4.35	VH	0.77
4. It makes salary loan application forms easier to file and process.	4.33	VH	0.80
5. It minimizes errors and delays compared to manual submission.	4.24	VH	0.83
Composite	4.35	VH	0.77
Employees' Perspective (n = 30)			
1. It helps reduce congestion and delays at the front desk.	4.50	VH	0.68
2. It reduces manual intake and paperwork.	4.41	VH	0.82
3. It improves accessibility by allowing applications without the need for physical appearance.	4.40	VH	0.72
4. It allows faster initial screening of loan applications.	4.33	VH	0.80
5. It minimizes errors and delays compared to manual submission.	4.23	VH	0.77
Composite	4.38	VH	0.76

Table 1.1 Extent of Technological Support in Salary Loan Processing in terms of Digital Submission as perceived by the Clients and Employees

Table 1.1 shows that both clients ($\bar{x} = 4.35$) and employees ($\bar{x} = 4.38$) perceived technological support in salary loan processing, particularly digital submission, as Very High, indicating a faster, more convenient, and organized application process. This finding supports Kumar (2024), who highlighted the transformative role of digital submission systems in loan processing.

The highest-rated indicator was the reduction of front-desk congestion and delays (clients $\bar{x} = 4.46$; employees $\bar{x} = 4.50$), suggesting that digital submission streamlines transactions and improves service efficiency. This is consistent with Munira and Siddquee (2025), who found that digital submission reduces paperwork and approval time.

Accessibility, faster screening, ease of application, and reduced paperwork also received Very High ratings, supporting the findings of Thekkethil et al. (2021), Otosi et al. (2024), and Verma et al. (2023), who emphasized that digital systems automate processes and accelerate verification and approval.

Although minimizing errors and delays received the lowest ratings (clients $\bar{x} = 4.24$; employees $\bar{x} = 4.23$), it remained Very High, indicating that digital systems substantially reduce errors while still requiring continuous improvement, as noted by Yoraeni et al. (2025).

Overall, the findings confirm that digital submission enhances salary loan processing by improving accessibility, reducing congestion, and streamlining workflows.

This technological system supports the salary loan processing as...	$\bar{x}$	EoS	SD
Clients' Perspective (n = 123)			
1. It improves accessibility by enabling clients to check application status without visiting the branch.	4.38	VH	0.77
2. It provides timely updates on the status of loan applications.	4.37	VH	0.76
3. It minimizes congestion and waiting time by reducing the need for repeated follow-ups at the front desk.	4.37	VH	0.75
4. It allows clients to monitor the progress of their salary loan applications.	4.35	VH	0.77
5. It reduces uncertainty by keeping clients informed throughout the loan process.	4.28	VH	0.83
Composite	4.35	VH	0.78
Employees' Perspective (n = 30)			
1. It improves coordination by providing real-time status updates.	4.50	VH	0.73
2. It reduces follow-up inquiries and improves client communication.	4.40	VH	0.67
3. It helps monitor loan application progress across departments.	4.37	VH	0.76

4. It helps identify bottlenecks and delays in processing.	4.33	VH	0.76
5. It supports accountability and transparency in loan processing.	4.30	VH	0.75
Composite	4.38	VH	0.74

Table 1.2 Extent of Technological Support in Salary Loan Processing in terms of Tracking Systems as perceived by the Clients and Employees

Table 1.2 shows that both clients ($\bar{x} = 4.35$) and employees ($\bar{x} = 4.38$) perceived technological support through tracking systems as **Very High**, indicating improved transparency, accessibility, accountability, and coordination. This finding supports Sutha et al. (2025), who reported that tracking systems provide real-time visibility and reduce processing time. The highest-rated indicator was real-time status updates (clients $\bar{x} = 4.38$; employees $\bar{x} = 4.50$), supporting the findings of Nalini and Yuvasri (2024) and Vivorets et al. (2025), who emphasized that mobile banking, AI-powered tools, and real-time information enhance accessibility and customer experience.

Other indicators, including timely updates, reduced follow-up inquiries, minimized waiting time, loan progress monitoring, bottleneck identification, and improved accountability, also received **Very High** ratings, consistent with Mardhatilah and Awalia (2025), Sajquin and Dueñas (2023), Nallani and Chakravartula (2025), and Ugbaja et al. (2023), who highlighted the value of transparency, automation, workflow visibility, and AI-enabled monitoring.

Although reducing uncertainty received the lowest mean score ($\bar{x} = 4.28$), it remained **Very High**, supporting Abdulsalam and Tajudeen (2024), who stressed the importance of effective communication in automated systems.

Overall, the findings confirm that tracking systems enhance salary loan processing by improving transparency, accessibility, and coordination.

Technological systems support process efficiency because...	$\bar{x}$	EoS	SD
Clients' Perspective (n = 123)			
1. Technological systems help speed up loan processing by reducing manual verification tasks.	4.39	VH	0.76
2. Digital tools reduce the number of steps needed to complete an application.	4.37	VH	0.73
3. It improves coordination among staff, resulting in smoother and more consistent loan processing.	4.37	VH	0.73
4. It minimizes delays and bottlenecks, helping clients receive loan disbursements faster.	4.36	VH	0.78
5. Overall, technology makes the loan process more efficient.	4.46	VH	0.69
Composite	4.39	VH	0.74
Employees' Perspective (n = 30)			
1. Overall, technology makes the loan process more efficient.	4.43	VH	0.73
2. Digital tools reduce the number of steps needed to complete an application.	4.40	VH	0.77
3. Technological systems help speed up loan processing.	4.37	VH	0.81
4. Technology improves coordination among departments involved in loan processing.	4.33	VH	0.76
5. The use of technological systems minimizes delays and bottlenecks.	4.27	VH	0.74
Composite	4.36	VH	0.76

Table 1.3 Extent of Technological Support in Salary Loan Processing in terms of Process Efficiency as perceived by the Clients and Employees

Table 1.3 presents clients' and employees' perceptions of technological support in salary loan processing in terms of process efficiency. The composite mean scores of 4.39 and 4.36, respectively, indicate that both groups perceive technological systems as very efficient in streamlining loan processing. All indicators received Very High ratings, suggesting that technology effectively enhances operational efficiency. These findings support Fang (2024), Rey et al. (2024), and Yazici and Engin (2023), who emphasized that advanced technologies improve efficiency, transparency, security, and processing speed while reducing manual and error-prone procedures.

The highest-rated indicator was that technology makes the loan process more efficient (clients $\bar{x} = 4.46$; employees $\bar{x} = 4.43$), indicating that technological systems successfully streamline workflows and improve service delivery. High ratings for reducing manual verification, minimizing process steps, reducing delays, accelerating loan processing, and improving coordination further demonstrate technology's role in simplifying procedures and enhancing collaboration.

These results are consistent with Nanda (2024), who highlighted the benefits of AI-driven automation in improving accuracy and processing speed, and Liu et al. (2024), who noted that technological innovations enhance operational efficiency and decision-making. However, minimizing delays and bottlenecks from the employees' perspective ($\bar{x} = 4.27$) received the lowest rating, suggesting that some workflow and coordination challenges remain despite technological support. This finding aligns with Rodriguez et al. (2024), who reported that bottlenecks may persist due to interdepartmental coordination complexities.

Overall, the findings indicate that technological systems significantly improve process efficiency by reducing manual tasks, streamlining procedures, and enhancing coordination, although further integration and automation may help address remaining delays.

This interdepartmental coordination mechanism supports the processing of salary loan because...	$\bar{x}$	EoP	SD
1. There is clear authority for approving salary loan transactions.	4.43	VH	0.63
2. Information related to loan processing is shared accurately among departments.	4.23	VH	0.86
3. Communication channels between departments are clear and effective.	4.23	VH	0.68
4. Timely updates are provided regarding the status of loan.	4.23	VH	0.82
5. There is a feedback mechanism that helps resolve interdepartmental issues quickly.	4.13	H	0.86
6. Miscommunication rarely occurs in the loan process.	3.87	H	0.86
Composite	4.19	H	0.78

Table 2.1 Employees' Perceived Extent of Efficiency of Interdepartmental Communication and Information Sharing

Table 2.1 shows that employees perceive interdepartmental communication and information sharing as highly supportive of efficient salary loan processing, as reflected by the composite mean of 4.19. This indicates that clear authority structures, accurate information exchange, effective communication channels, and timely updates contribute to smoother loan processing. The finding supports Zhytar et al. (2025), who emphasized the importance of interdepartmental coordination in efficient service delivery, as well as Jeel-Ojuade (2024) and Cflow (2025), who identified seamless communication and information sharing as key drivers of process efficiency.

Among the indicators, clear authority in approvals ($\bar{x} = 4.43$) received the highest rating, followed by accurate information sharing, effective communication channels, and timely updates ($\bar{x} = 4.23$ each). These results align with Aziz et al. (2025), Munira et al. (2025), and Kowsar and Mintoo (2025), who found that digital infrastructure enhances information sharing, reduces delays, and strengthens interdepartmental coordination.

However, feedback mechanisms for resolving interdepartmental issues ($\bar{x} = 4.13$) and minimizing miscommunication ($\bar{x} = 3.87$) received comparatively lower ratings, indicating areas for improvement. This is consistent with Hadi et al. (2025), who reported that poor communication can delay banking workflows, and with Rokhkin (2025) and Adepoju et al. (2022), who noted that inconsistent information flow contributes to operational inefficiencies. Overall, while communication practices are viewed positively, strengthening feedback systems and communication clarity could further improve processing efficiency.

This interdepartmental coordination mechanism supports the processing of salary loans because...	$\bar{x}$	EoP	SD
1. Roles and responsibilities in loan processing are clearly defined.	4.47	VH	0.73
2. Teamwork among departments helps prevent delays in loan processing.	4.47	VH	0.63
3. Departments coordinate effectively to meet deadlines.	4.30	VH	0.70
4. Cooperation among staff from different departments improves workflow.	4.30	VH	0.70
5. Employees willingly assist other departments when problems arise.	4.30	VH	0.75
Composite	4.37	VH	0.70

Table 2.2 Employees' Perceived Extent of Efficiency of Interdepartmental Collaboration and Teamwork

Table 2.2 presents employees' perceptions of the efficiency of interdepartmental collaboration and teamwork in processing salary loans. The composite mean of 4.37 indicates a very high level of efficiency, suggesting that clear roles, effective coordination, and mutual support contribute to streamlined loan processing.

This finding is consistent with Berber et al. (2020), Lawrence (2024), and Fundingo (2024), who identified interdepartmental collaboration and teamwork as key drivers of banking efficiency, improving turnaround time, customer service, and lending operations.

The highest-rated indicators were clearly defined roles and responsibilities ($\bar{x} = 4.47$) and teamwork among departments ($\bar{x} = 4.47$), highlighting the importance of accountability and collaboration in reducing delays and improving coordination. These findings support Shrestha et al. (2020), as well as IIP Series (2024) and Fundingo (2024), which emphasized that effective communication and teamwork enhance organizational efficiency.

Coordination to meet deadlines, staff cooperation, and willingness to assist other departments each received a mean of 4.30, reinforcing Clayton's (2025) finding that interdepartmental collaboration leads to faster and more efficient workflows. Overall, the findings indicate that strong collaboration, teamwork, and clearly defined responsibilities are integral to efficient salary loan processing.

This interdepartmental coordination mechanism supports the processing of salary loan because...	$\bar{x}$	EoP	SD
1. There are standardized procedures followed across departments.	4.57	VH	0.63
2. Coordination tools (e.g., tracking systems, online portals) enhance process efficiency.	4.47	VH	0.78
3. Digital systems used by departments are compatible for sharing information.	4.27	VH	0.91
4. The existing system ensures a smooth process flow among departments.	4.17	H	0.91
Composite	4.37	VH	0.81

Table 2.3 Employees' Perceived Extent of Efficiency of Interdepartmental System and Process Integration

Table 2.3 presents the employees' perceptions of the efficiency of interdepartmental system and process integration in processing salary loans. The composite mean of 4.37 indicates a very high level of efficiency, suggesting that standardized procedures, compatible digital systems, and coordination tools effectively support loan processing. This supports Jayakumar (2025), the Bangko Sentral ng Pilipinas' *Manual of Regulations for Banks* (2021), and the findings of Valdmann (2024), Faster Capital (2025), and Participate Loan (2025), which emphasize that standardization, automation, and coordination improve banking efficiency.

Standardized procedures across departments received the highest rating ($\bar{x} = 4.57$), followed by coordination tools ($\bar{x} = 4.47$) and compatibility of digital systems ($\bar{x} = 4.27$), highlighting the importance of consistent processes and technological integration. These findings are consistent with Sun et al. (2025), Markelova et al. (2024), and Lumenalta (2025), who emphasized that standardized procedures and coordination tools reduce bottlenecks and improve operational efficiency. The system's ability to ensure smooth process flow among departments received the lowest, though still very high, rating ($\bar{x} = 4.17$), indicating minor coordination gaps. This supports Mongkolrob et al. (2024), who identified fragmented interdepartmental communication as a barrier to process optimization.

Overall, the findings show that effective system and process integration significantly enhances salary loan processing efficiency, although continued improvements in interoperability and process monitoring may further strengthen performance.

The processing of the salary loan application is efficient because...	Clients			Employees		
	$\bar{x}$	EoE	SD	$\bar{x}$	EoE	SD
1. The list of required documents is clear and easy to understand.	4.44	VE	0.65	4.70	VE	0.47
2. The documents required are easy to secure.	4.40	VE	0.70	4.30	VE	0.53
3. Submitted documents seldom go back and forth for correction.	4.25	VE	0.75	4.23	VE	0.50
4. There are no redundant or unnecessary requirements.	4.41	VE	0.63	4.57	VE	0.50
5. There is sufficient assistance provided in completing the documentary requirements.	4.41	VE	0.63	4.57	VE	0.50
Composite	4.38	VE	0.67	4.47	VE	0.50

Table 3.1 Efficiency of Application and Documentary Requirements Submission for Salary Loan as perceived by the Clients and Employees

Table 3.1 presents the perceived efficiency of application and documentary requirements submission for salary loan processing. The composite mean scores of 4.38 from clients and 4.47 from employees indicate that both groups perceive this stage as Very Efficient, reflecting confidence in the clarity of requirements, accessibility, and assistance provided during document submission.

This finding is consistent with Novianti and Kartikasari (2025), who reported that streamlined loan applications reduced documentary requirements and processing time, and with Huang et al. (2020), who noted that alternative credit assessment methods lessen documentation requirements and improve operational efficiency.

Among the indicators, clarity of documentary requirements received the highest ratings (clients $\bar{x}$ = 4.44; employees $\bar{x}$ = 4.70), followed by the absence of redundant requirements, adequate staff assistance, and ease of obtaining required documents. These findings support Paramesha et al. (2024) and Shakil et al. (2025), who emphasized that AI, Machine Learning, Robotic Process Automation, and blockchain improve documentation processes by reducing delays and documentation burdens.

The lowest-rated indicator, though still Very Efficient, was the infrequency of document corrections (clients $\bar{x}$ = 4.25; employees $\bar{x}$ = 4.23), suggesting that occasional resubmissions remain a challenge. This aligns with Belbase and Chalise (2025), who identified complex documentation as a cause of loan processing delays.

Overall, the findings indicate that the application and documentary requirements submission stage is highly efficient, although strengthening document verification, guidance, and digital submission systems may further reduce corrections and improve efficiency.

The processing of the salary loan application is efficient because...	Clients			Employees		
	$\bar{x}$	EoE	SD	$\bar{x}$	EoE	SD
1. The evaluation and process flow is clear and organized.	4.41	VE	0.64	4.63	VE	0.49
2. The evaluation and processing time is reasonable.	4.41	VE	0.68	3.80	E	0.76
3. There are minimal delays in the approval of the application.	4.25	VE	0.75	3.70	E	0.79
4. The release of loan proceeds is timely.	4.36	VE	0.74	3.77	E	0.77
5. Overall, the evaluation and processing procedure is convenient.	4.40	VE	0.64	4.43	VE	0.50
Composite	4.38	VE	0.69	4.07	E	0.66

Table 3.2 Efficiency of Evaluation and Processing for Salary Loan as perceived by the Clients and Employees

Table 3.2 shows that clients rated the efficiency of salary loan evaluation and processing as Very Efficient ($\bar{x}$ = 4.38), while employees rated it as *Efficient* ($\bar{x}$ = 4.07). This indicates that clients generally experience a smooth process, whereas employees encounter operational challenges that affect their perception of efficiency.

These findings support Siddquee (2025), Sarisa (2023), Nanda (2024), and Arpasat (2022), who found that AI, ML, generative AI, and process mining enhance loan processing by improving approval rates, reducing risks, and shortening processing time.

The highest ratings were given to the clear and organized evaluation process (clients $\bar{x}$ = 4.41; employees $\bar{x}$ = 4.63) and overall convenience (clients $\bar{x}$ = 4.40; employees $\bar{x}$ = 4.43), reflecting the benefits of standardized procedures and user-friendly systems. While clients also rated processing time, approval delays, and loan release as Very Efficient, employees rated these indicators only as *Efficient*, suggesting opportunities to improve workload management, coordination, and system integration. This is consistent with Pingili (2025), who highlighted the impact of extensive paperwork and compliance requirements, and Ramamoorthy and Balamurugan (2025), who noted that outdated financial infrastructure limits efficiency.

Overall, the findings indicate that salary loan evaluation and processing is efficient, although greater automation, transparency, and digital integration can further improve service quality.

The processing of the salary loan application is efficient because...	Clients			Employees		
	$\bar{x}$	EoE	SD	$\bar{x}$	EoE	SD
1. Loan proceeds are released promptly once applications are approved.	4.48	VE	0.64	3.90	E	0.71
2. The release and disbursement process is simple and requires minimal steps from clients.	4.48	VE	0.66	4.53	VE	0.51

3. Clients are informed clearly and on time about the schedule and status of loan release.	4.50	VE	0.63	4.13	E	0.63
4. The released loan amount is accurate, with clear computation and deductions.	4.55	VE	0.60	4.77	VE	0.43
5. The release and disbursement process is convenient, reducing long waiting times and repeated follow-ups.	4.50	VE	0.63	4.77	VE	0.43
Composite	4.50	VE	0.63	4.42	VE	0.54

Table 3.3 Efficiency of Release and Disbursement for Salary Loan as perceived by the Clients and Employees

Table 3.3 presents the perceived efficiency of the release and disbursement stage of salary loan processing. The composite mean scores of 4.50 from clients and 4.42 from employees indicate that both groups perceive this stage as Very Efficient, reflecting confidence in its timeliness, accuracy, simplicity, and convenience.

This finding is consistent with Kowsar (2025) and Raza (2026), who emphasized that digital technologies, process automation, and cross-functional coordination improve loan release and disbursement while maintaining compliance. The highest-rated indicator was the accuracy and clear computation of released loan amounts (clients $\bar{x} = 4.55$; employees $\bar{x} = 4.77$), followed by convenience (clients $\bar{x} = 4.50$; employees $\bar{x} = 4.77$) and process simplicity (clients $\bar{x} = 4.48$; employees $\bar{x} = 4.53$). These findings support Thekkethil et al. (2021), who found that Robotic Process Automation (RPA) accelerates loan processing and reduces costs, and Tungu and Mangana (2025), who reported that digital applications, automated approvals, and real-time monitoring improve loan disbursement efficiency.

Employees gave lower ratings than clients for prompt loan release after approval (clients $\bar{x} = 4.48$; employees $\bar{x} = 3.90$) and timely release updates (clients $\bar{x} = 4.50$; employees $\bar{x} = 4.13$), indicating possible coordination or system constraints. This is consistent with Siddquee (2025), who highlighted AI's ability to reduce processing time, and Sutha et al. (2025), who found that blockchain-based smart contracts can significantly accelerate loan processing.

Overall, the findings indicate that the release and disbursement stage is highly efficient, although improvements in digital systems, workflow coordination, and communication may further enhance performance.

Extent of Efficiency in Processing Salary Loans	Extent of Technological Systems Support		
	Digital Submission	Tracking System	Process Efficiency
Application & Document Requirements Submission	$r_s = .772$ $p < .001$ (significant)	$r_s = .738$ $p < .001$ (significant)	$r_s = .743$ $p < .001$ (significant)
Evaluation and Processing	$r_s = .817$ $p < .001$ (significant)	$r_s = .810$ $p < .001$ (significant)	$r_s = .779$ $p < .001$ (significant)
Release and Disbursement	$r_s = .739$ $p < .001$ (significant)	$r_s = .748$ $p < .001$ (significant)	$r_s = .724$ $p < .001$ (significant)

Note: Data are not normally distributed; Spearman's Rank-Order Correlation at $\alpha = 0.05$; $n = 123$

Table 3.3 Efficiency of Release and Disbursement for Salary Loan as perceived by the Clients and Employees

Table 4 presents the relationship between technological systems support and the efficiency of salary loan processing. The findings show significant positive relationships across all processing stages, with high correlation coefficients and p-values below .001, indicating that stronger technological support consistently improves loan processing efficiency.

For application and documentary requirements submission, digital submission ($r_s = .772$), tracking systems ($r_s = .738$), and process efficiency ($r_s = .743$) were strongly related, indicating that digital tools streamline documentation. These findings support Verma et al. (2023), Siddquee (2025), Belbase and Chalise (2025), and Pingili (2025), who reported that digital technologies reduce paperwork, improve accuracy, and shorten processing time.

Evaluation and processing also showed strong relationships with digital submission ($r_s = .817$), tracking systems ($r_s = .810$), and process efficiency ($r_s = .779$), consistent with Siddquee (2025), Sarisa (2023), Iković and Radonjić (2025), and

Nanda (2024), who found that AI, machine learning, and automated systems improve verification, decision-making, and processing speed.

Similarly, release and disbursement were significantly related to digital submission ($r_s = .739$), tracking systems ($r_s = .748$), and process efficiency ($r_s = .724$). These findings align with Sutha et al. (2025), Thekkethil et al. (2021), Otosi et al. (2024), and Pillai (2025), who emphasized that AI, blockchain, RPA, and digital lending platforms accelerate loan disbursement and improve operational efficiency.

Extent of Efficiency in Processing Salary Loans	Extent of Interdepartmental Coordination Mechanisms		
	Communication & Information Sharing	Collaboration and Teamwork	System & Process Integration
Application & Document Requirements Submission	$r_s = .763$ $p < .001$ (significant)	$r_s = .710$ $p < .001$ (significant)	$r_s = .757$ $p < .001$ (significant)
Evaluation and Processing	$r_s = .682$ $p < .001$ (significant)	$r_s = .662$ $p < .001$ (significant)	$r_s = .536$ $p < .001$ (significant)
Release and Disbursement	$r_s = .662$ $p < .001$ (significant)	$r_s = .621$ $p < .001$ (significant)	$r_s = .614$ $p < .001$ (significant)

Note: Data are not normally distributed; Spearman's Rank-Order Correlation at $\alpha = 0.05$; $n = 123$

Table 5 Relationship between the Extent of Efficiency of Interdepartmental Coordination Mechanisms and the Extent of Efficiency in Processing Salary Loans

Table 5 presents the relationship between the efficiency of interdepartmental coordination mechanisms and salary loan processing efficiency. Significant positive relationships were found across all processing stages, with high correlation coefficients and p-values below .001, indicating that effective interdepartmental coordination consistently improves salary loan processing.

For application and documentary requirements submission, significant relationships were observed with communication and information sharing ($r_s = .763$, $p < .001$), collaboration and teamwork ($r_s = .710$, $p < .001$), and system and process integration ($r_s = .757$, $p < .001$). These findings support Jeleel-Ojuade (2024), Cflow (2025), Hadi, Abdulzahra, and Hazen (2025), Aziz et al. (2025), Berber et al. (2020), Loan Advisor Online (2024), Sun et al. (2025), and Markelova et al. (2024), and are consistent with Lean Theory by Womack and Jones (1996), which emphasizes coordinated and streamlined processes.

Similarly, evaluation and processing showed significant relationships with communication and information sharing ($r_s = .682$, $p < .001$), collaboration and teamwork ($r_s = .662$, $p < .001$), and system and process integration ($r_s = .536$, $p < .001$). These findings align with Rokhkin (2025), Adepoju et al. (2022), Munira et al. (2025), Lawrence (2024), Shrestha et al. (2020), Valdmann (2024), and FasterCapital (2025), and support Scientific Management Theory, which highlights standardized procedures and coordinated workflows.

For release and disbursement, significant positive relationships were likewise found with communication and information sharing ($r_s = .662$, $p < .001$), collaboration and teamwork ($r_s = .621$, $p < .001$), and system and process integration ($r_s = .614$, $p < .001$). These results are consistent with Finance Magnates (2024), Kowsar and Minto (2025), Munira et al. (2025), Fundingo (2024), McKinsey et al. (2025), and Lumenalta (2025), reinforcing Lean Theory and Scientific Management Theory by demonstrating that effective coordination and integrated systems enhance salary loan processing efficiency.

Conclusion and Recommendations

The study demonstrated that efficiency in salary loan processing at DBP Dumaguete is shaped by the combined support of technological systems and interdepartmental coordination mechanisms. Findings revealed that digital submission, tracking systems, and process automation have streamlined workflows and improved accuracy, while communication, teamwork, and process integration across departments have reduced miscommunication and strengthened accountability. These results affirm that efficiency is not driven by technology alone nor by coordination in isolation, but by their integration, where advanced systems accelerate processes and organizational collaboration ensures reliability and transparency.

The persistence of minor delays, resubmissions, and bottlenecks stresses the need for deeper digital integration, stronger validation tools, seamless interoperability, and enhanced automation, alongside reinforced coordination protocols and cooperative norms. This implies that DBP Dumaguete must continuously innovate by aligning technological capacity with interdepartmental collaboration to deliver loan services that are not only fast and accurate but also trusted and resilient. In doing so, the institution can sustain efficiency, elevate client satisfaction, and strengthen its competitiveness in the evolving banking landscape.

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Competing Interests Statement

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Data Availability Statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study; all data used were obtained from previously published sources as cited in the reference list.

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Appendices

No appendices are attached to this study.