

Banking Service Automation and Customer Relationship Management of Universal Banks in Metro Manila: Inputs to Client Management Enhancement Plan

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ABSTRACT

The study assessed banking service automation and customer relationship management (CRM) among universal banks in Metro Manila as the basis for a proposed service enhancement plan. Specifically, it evaluated banking service automation in terms of ATM and Cash Deposit Machine reliability, queueing and appointment system efficiency, mobile banking features and functionality, internet banking accessibility, e-payment and fund transfer systems, and digital authentication and security features. Likewise, CRM was assessed through client profiling and segmentation, personalized client interactions, customer feedback collection, customer retention strategies, cross-selling and upselling initiatives, communication and follow-through, and relationship-building programs. Using a descriptive research design, data were collected from 585 respondents consisting of operations officers, 106 operations officers, 159 branch frontline employees, and 320 bank clients from eight universal banks in Metro Manila through a validated survey questionnaire. Statistical tools included frequency, percentage, weighted mean, ANOVA, and Pearson correlation. Findings revealed that banking service automation and CRM practices were generally implemented at a high level and significantly contributed to service quality, customer satisfaction, and operational efficiency. Based on the findings, a Service Enhancement Plan was developed to strengthen digital banking services and customer relationship practices.

Keywords: Banking Service Automation, Customer Relationship Management, Universal Banks, Digital Banking, Service Enhancement Plan

INTRODUCTION

The rapid advancement of digital technologies has significantly transformed the banking industry, compelling financial institutions to modernize their operations through service automation and customer relationship management (CRM). Universal banks continuously invest in digital platforms such as automated teller machines (ATMs), cash deposit machines (CDMs), mobile banking applications, internet banking services, electronic payment systems, automated queue management, and digital authentication technologies to improve operational efficiency, increase service accessibility, and enhance customer convenience. These innovations have enabled banks to provide faster, more accurate, and more secure financial services while addressing the evolving expectations of customers in an increasingly digital environment.

Despite these technological advancements, banking institutions continue to encounter operational challenges that affect service quality and customer satisfaction. System downtime, failed electronic transactions, delayed fund reversals, cybersecurity concerns, and a limited service personalization remain common issues experienced by banking personnel and customers. Such challenges may weaken customer trust and reduce the effectiveness of digital banking initiatives if not properly addressed.

Customer Relationship Management has become equally important in achieving organizational success. CRM enables banks to develop long-term relationships with clients by utilizing customer information to provide personalized services, effective communication, timely feedback mechanisms, and relationship-building activities. Previous studies have consistently emphasized that integrating technological innovation with

customer-centered relationship management improves customer satisfaction, loyalty, and organizational performance.

Although numerous studies have examined banking automation and CRM independently, limited empirical research has investigated both variables simultaneously from the perspectives of operations officers, branch frontline employees, and bank clients within universal banks in Metro Manila. Moreover, few studies have developed a comprehensive service enhancement plan based on the integration of banking service automation and CRM practices. Addressing this gap, the present study assessed the implementation of banking service automation and customer relationship management among selected universal banks in Metro Manila and developed a data-driven Service Enhancement Plan based on the findings. The results provide practical insights for bank administrators, policymakers, and financial institutions in improving digital banking services while strengthening customer relationships and organizational competitiveness.

LITERATURE-BASED RESEARCH FRAMEWORK

This study is anchored on the Technology Acceptance Model (TAM) by Davis (1989) and the Commitment-Trust Theory of Relationship Marketing by Morgan and Hunt (1994). These theories provide complementary perspectives for explaining how banking service automation and customer relationship management (CRM) contribute to improved service quality and organizational performance in universal banks.

The Technology Acceptance Model explains that the acceptance and continued use of technological innovations depend primarily on users' perceptions of usefulness and ease of use. In the banking sector, digital technologies such as automated teller machines, mobile banking applications, internet banking platforms, electronic payment systems, and digital authentication mechanisms are expected to enhance efficiency, accessibility, reliability, and transaction security. When customers and bank personnel perceive these technologies as useful and user-friendly, they are more likely to adopt and continuously utilize digital banking services, thereby improving service delivery and operational performance.

Complementing this perspective, the Commitment-Trust Theory of Relationship Marketing emphasizes that trust and commitment are fundamental to establishing and sustaining long-term relationships between organizations and customers. Effective CRM practices—including customer profiling, personalized interactions, customer feedback management, communication, customer retention initiatives, and relationship-building programs—strengthen customer satisfaction, loyalty, and engagement. These practices enable banks to understand customer needs, deliver personalized financial services, and foster enduring relationships that support organizational competitiveness.

The integration of these theories provides the foundation for the present study. While banking service automation enhances operational efficiency through technology-enabled service delivery, CRM strengthens customer relationships by promoting personalized and responsive banking services. Together, these theoretical perspectives suggest that the effective implementation of digital banking technologies, supported by customer-centered relationship management practices, leads to improved service quality, customer satisfaction, and organizational effectiveness. Guided by this framework, the study examined the implementation of banking service automation and CRM among universal banks in Metro Manila and utilized the findings as the basis for developing a Service Enhancement Plan.

METHODOLOGY

Research Design

This study used a descriptive research design to examine banking service automation and customer relationship management in universal banks in Metro Manila. This research design allowed the researcher to describe how automation is applied in banking services, how customers experience these processes, and how these practices affect customer relationships.

This design enabled the researcher to better understand the current state of banking services and customer relationships, thereby generating relevant insights that will serve as the basis for proposing a comprehensive service enhancement plan.

Research Locale and Participants

The total population of this study consisted of 585 respondents of eight (8) selected Universal Banks operating within Metro Manila. This population is segmented into three distinct groups whose perspectives are crucial for a comprehensive analysis: Operation Officers, who oversee implementation and system performance; Branch Frontline Employees, who execute the processes and directly interact with clients; and Clients, who are the end-users and judges of the service quality. The participants were 106 operation officers, 159 branch frontline employees, and 320 clients.

Participants were selected through purposive sampling, a non-probability sampling technique that identifies respondents based on predefined characteristics relevant to the research objectives. Operations officers were selected because of their responsibilities in managing banking operations and digital systems, branch frontline employees because of their direct interaction with customers, and clients because they are the primary users and evaluators of banking services. This sampling approach ensured that the respondents possessed sufficient knowledge and experience to provide meaningful assessments of banking service automation and CRM practices.

Research Instrument

Data were collected using a survey questionnaire constructed from readings in books, the internet, and other sources. The instrument consisted of five major sections: respondent profile, assessment on banking service automation, assessment on customer relationship management, problems encountered, and acceptability of proposed inputs to service enhancement plan.

Prior to data collection, the questionnaire underwent expert validation to establish content validity. Revisions were incorporated based on the recommendations of the panel of experts. A five-point Likert scale was used to measure respondents' perceptions, where higher scores indicated greater levels of implementation.

Data Gathering Procedure

Approval to conduct the study was obtained from the appropriate school authorities before data collection commenced. Formal letters requesting permission were sent to the management of the participating universal banks. After approval, the researcher coordinated with the respondents in each bank to distribute the survey links using online platforms like Google Forms.

Participation in the study was voluntary, and respondents were informed of the purpose of the research before completing the questionnaire. Confidentiality and anonymity were maintained throughout the study, and all responses were treated solely for academic purposes.

Completed questionnaires were retrieved, checked for completeness, coded, and encoded for statistical analysis.

Statistical Treatment of Data

The collected data were coded, tabulated, and analyzed using Jamovi statistical software. Frequency and percentage distribution were used to describe the respondents' demographic profile. The weighted mean determined the level of banking service automation, customer relationship management, problems encountered, and the acceptability of the proposed Service Enhancement Plan. One-Way Analysis of Variance (ANOVA) was employed to determine significant differences among the assessments of operations officers, branch frontline employees, and clients. When significant differences were found, Tukey's Honestly Significant Difference (HSD) test was used for pairwise comparisons. The Pearson Product-Moment Correlation Coefficient (Pearson's r) was utilized to examine the relationship between banking service automation and customer relationship management. All statistical tests were conducted at the 0.05 level of significance.

RESULTS AND DISCUSSION

Profile of the Respondents

The demographic profile of the respondents was examined to provide a general description of the participants and to establish the basis for interpreting the study findings. The respondents consisted of 585 participants from eight selected universal banks in Metro Manila, comprising 106 operation officers (18.12%), 159 branch frontline employees (27.18%), and 320 clients (54.70%). The predominance of clients ensured that the study captured the perceptions of the primary users of banking services, while the inclusion of operation officers and frontline employees provided managerial and operational perspectives on banking service automation and customer relationship management.

Most respondents belonged to the 26–30 years old age group (33.70%), followed by those aged 31–35 years (32.00%), indicating that the majority were economically active adults who regularly utilize digital banking services. Female respondents constituted 55.90% of the study population, while 64.40% were single. In terms of educational attainment, most respondents were bachelor's degree holders (87.90%), suggesting that they possessed adequate educational backgrounds to evaluate banking technologies and customer relationship practices objectively.

Banking Service Automation in Universal Banks

Banking service automation was assessed using six dimensions: ATM and Cash Deposit Machine Reliability, Queueing and Appointment System Efficiency, Mobile Banking Features and Functionality, Internet Banking Accessibility, E-Payment and Fund Transfer Systems, and Digital Authentication and Security Features. These dimensions represent the essential components of digital banking services that contribute to operational efficiency, accessibility, transaction security, and customer convenience.

ATM and Cash Deposit Machine Reliability

The study presents the respondents' assessment of ATM and Cash Deposit Machine (CDM) reliability. The dimension obtained a composite weighted mean of 4.59, verbally interpreted as Highly Evident, indicating that respondents perceived ATM and CDM services to be dependable and consistently available. Operation officers reported the highest assessment, followed by branch frontline employees and clients, reflecting a common perception that automated self-service banking facilities function effectively across the participating banks.

The highest-rated indicators emphasized the reliability of transaction confirmations, accessibility of ATM locations, operational availability of machines, and accuracy of cash withdrawal and deposit transactions. These findings suggest that automated banking facilities have become an integral component of service delivery by providing customers with continuous access to financial services while reducing dependence on over-the-counter transactions. Reliable ATM and CDM services improve operational efficiency by minimizing waiting time, reducing branch congestion, and enabling customers to perform banking transactions conveniently regardless of banking hours.

Although all indicators were interpreted as Highly Evident, the comparatively lower ratings on machine downtime and technical issue resolution indicate areas where banks may further improve maintenance practices and system responsiveness. Regular preventive maintenance, timely cash replenishment, and rapid resolution of technical problems remain essential for sustaining customer confidence and ensuring uninterrupted banking operations.

Overall, the findings demonstrate that ATM and Cash Deposit Machine reliability represents one of the strongest components of banking service automation among universal banks in Metro Manila, supporting efficient banking operations and enhancing customer convenience.

Queueing and Appointment System Efficiency

On the assessment of queueing and appointment system efficiency, the results indicate that respondents perceived this dimension as Highly Evident, with an overall weighted mean of 4.55. It demonstrates that digital queue management systems effectively improve service delivery and reduce customer waiting time.

Respondents recognized that electronic appointment scheduling and queue management systems facilitate orderly customer flow, improve operational coordination, and enable banks to manage client transactions more efficiently. The implementation of these technologies allows customers to schedule branch visits, receive queue notifications, and complete transactions within shorter waiting periods, thereby enhancing the overall banking experience.

Despite the favorable assessment, respondents also indicated opportunities for improvement in managing customer volume during peak banking periods and increasing system responsiveness. Continuous enhancement of queue management technologies and optimization of appointment scheduling procedures may further improve operational efficiency and customer satisfaction.

The findings suggest that effective queueing and appointment systems contribute significantly to improving service quality by promoting organized branch operations and minimizing delays in customer transactions.

Mobile Banking Features and Functionality

On the assessment of mobile banking features and functionality, the findings revealed that this dimension was likewise **Highly Evident**, with an overall weighted mean of 4.57, indicating that mobile banking applications effectively support customers' banking needs.

Respondents acknowledged that mobile banking platforms provide convenient access to essential banking services such as account inquiries, fund transfers, bill payments, and transaction monitoring. The availability of these digital services enables customers to conduct financial transactions at their convenience without visiting bank branches, thereby improving accessibility and operational efficiency.

The high assessment further demonstrates the growing acceptance of mobile banking technologies among customers and banking personnel. Continuous system upgrades, enhanced application performance, and integration of additional digital services may further improve user satisfaction and strengthen banks' digital transformation initiatives.

Internet Banking Accessibility

On the assessment of internet banking accessibility, respondents generally rated this dimension as Highly Evident, with an overall weighted mean of 4.54, indicating that internet banking services remain accessible, reliable, and convenient for customers.

The findings suggest that online banking platforms effectively provide customers with continuous access to banking services regardless of location. Internet banking enables customers to monitor accounts, transfer funds, pay bills, and perform various financial transactions securely through web-based platforms.

Although respondents expressed favorable perceptions, improvements in website performance, system stability, and accessibility during periods of high transaction volume may further enhance customer experience and encourage greater utilization of internet banking services.

E-Payment and Fund Transfer Systems

On the respondents' assessment of electronic payment and fund transfer systems, the results indicate that respondents perceived these services as Highly Evident, with an overall weighted mean of 4.56, reflecting confidence in the efficiency and reliability of digital payment platforms.

Electronic payment systems facilitate secure and timely financial transactions while minimizing the need for physical cash handling. Respondents recognized that efficient fund transfer systems improve customer convenience, accelerate transaction processing, and support the increasing adoption of cashless financial services.

Nevertheless, maintaining transaction accuracy, minimizing failed transfers, and ensuring prompt reversal of unsuccessful transactions remain important operational priorities for banks to sustain customer trust and confidence.

Digital Authentication and Security Features

On the respondents' assessment of digital authentication and security features, the findings indicate that respondents considered banks' security mechanisms as Highly Evident, with an overall weighted mean of 4.56, demonstrating strong confidence in the protection of digital banking transactions.

Respondents highly valued authentication measures such as secure login procedures, multi-factor authentication, biometric verification, and fraud prevention systems. These security measures play a critical role in safeguarding customer information and maintaining confidence in digital banking platforms.

As cyber threats continue to evolve, universal banks should continuously strengthen cybersecurity infrastructure, update authentication technologies, and educate customers regarding safe digital banking practices.

Summary of the Assessment of Banking Service Automation

The respondents' overall assessment of banking service automation revealed an overall composite weighted mean of 4.56, verbally interpreted as Highly Evident, indicating that banking service automation has been extensively implemented among selected universal banks in Metro Manila.

The results demonstrate that universal banks have successfully integrated automated technologies into their banking operations. The extensive implementation of digital banking systems has enabled financial institutions to deliver faster, more secure, and more accessible banking services while strengthening customer confidence and operational performance. At the same time, the relatively lower ratings for internet banking accessibility and queue management suggest opportunities for continuous technological improvement to meet the increasing expectations of digital banking users.

These findings provide empirical support for the proposed Digital Banking and Customer Relationship Enhancement Plan, which aims to sustain existing strengths while addressing identified areas for improvement.

This finding supports the Technology Acceptance Model, which explains that users are more likely to adopt technologies that are perceived as useful and easy to use. It is likewise consistent with the findings of Fares et al. (2023), who reported that digital technologies improve operational efficiency and service delivery in financial institutions, and Gigante et al. (2022), who emphasized that customers increasingly prefer banks offering reliable and convenient digital banking services.

Summary on Banking Service Automation in Universal Banks

Dimensions	Interpretation
ATM and Cash Deposit Machine Reliability	Highly Evident
Queueing and Appointment System Efficiency	Highly Evident
Mobile Banking Features and Functionality	Highly Evident
Internet Banking Accessibility	Highly Evident

E-Payment and Fund Transfer Systems	Highly Evident
Digital Authentication and Security Features	Highly Evident
Overall Mean = 4.56	Highly Evident

Differences in the Assessment of Banking Service Automation

The results revealed statistically significant differences in the assessments of operations officers, branch frontline employees, and clients across all dimensions of banking service automation ($p < .05$). These findings indicate that the three respondent groups differed in their perceptions of the implementation and effectiveness of automated banking services.

The variation in assessment may be attributed to the distinct roles and experiences of each respondent group. Operations officers evaluate automation from an operational and system management perspective, branch frontline employees focus on service delivery and customer interaction, while clients assess automation based on their actual banking experiences. Despite these perceptual differences, all respondent groups recognized that banking service automation has been effectively implemented in universal banks.

Customer Relationship Management

Customer Relationship Management (CRM) was evaluated through seven dimensions: Client Profiling and Segmentation, Personalized Client Interactions, Customer Feedback Collection, Customer Retention Strategies, Cross-Selling and Upselling Initiatives, Communication and Follow-Through, and Relationship-Building Programs. These dimensions determine how effectively universal banks establish, maintain, and strengthen long-term relationships with their clients while complementing banking service automation.

Client Profiling and Segmentation

On the assessment of customer relationship management in terms of client profiling and segmentation. The results indicate that this dimension was Highly Evident, with an overall weighted mean of 4.51. It demonstrated that the selected universal banks effectively utilize customer information to understand client characteristics, financial needs, and banking preferences.

The respondents recognized that banks employ systematic customer profiling to classify clients according to demographic characteristics, financial capacity, transaction behavior, and service requirements. Effective segmentation enables banks to develop customized products, improve service delivery, and provide targeted financial solutions that correspond to the specific needs of different customer groups.

The findings suggest that client profiling has become an essential strategy for improving customer experience and strengthening long-term banking relationships. Through effective customer segmentation, banks can allocate resources efficiently, anticipate customer needs, and provide more personalized banking services that increase customer satisfaction and loyalty.

Personalized Client Interactions

On the assessment of personalized client interactions, the findings revealed that respondents perceived this dimension as Highly Evident, with an overall weighted mean of 4.50, indicating that universal banks consistently demonstrate customer-centered service through personalized communication and individualized assistance.

Respondents acknowledged that bank personnel provide timely responses, professional assistance, and customized recommendations that address customers' financial concerns. Personalized interactions foster stronger relationships by making customers feel valued and understood, thereby increasing confidence in banking services.

The results further imply that effective interpersonal communication complements banking automation by maintaining the human element of banking despite increasing digitalization. While technology improves operational efficiency, personalized interactions remain indispensable in developing customer trust and sustaining long-term relationships.

Customer Feedback Collection

On the assessment of customer feedback collection practices, the findings indicate that respondents considered this dimension Highly Evident, with an overall weighted mean of 4.50, suggesting that banks actively encourage customers to express their opinions regarding banking services.

The respondents recognized the availability of multiple feedback channels, including surveys, customer assistance desks, digital platforms, and complaint-handling mechanisms. These systems enable banks to identify service gaps, evaluate customer satisfaction, and implement appropriate improvements based on customer experiences.

The findings emphasize that effective feedback management supports continuous service improvement by allowing banks to respond proactively to customer concerns and adapt their services according to evolving customer expectations.

Customer Retention Strategies

The findings indicated that customer retention strategies were likewise assessed as Highly Evident, with an overall weighted mean of 4.46. Respondents perceived that universal banks actively implement programs designed to maintain customer loyalty and encourage long-term banking relationships.

Banks employ various retention initiatives, including loyalty programs, relationship banking services, preferential treatment for long-term customers, and continuous communication with existing clients. These strategies contribute to increased customer satisfaction by reinforcing trust and demonstrating the banks' commitment to maintaining enduring customer relationships.

The findings suggest that customer retention has become an important organizational objective because retaining existing customers is more cost-effective than continuously acquiring new ones. Effective retention strategies therefore contribute significantly to organizational sustainability and competitive advantage.

Cross-Selling and Upselling Initiatives

On the assessment of cross-selling and upselling initiatives, the results revealed that this dimension was Highly Evident, with an overall weighted mean of 4.47, indicating that banks appropriately recommend additional financial products and services based on customers' financial needs and preferences.

Respondents acknowledged that banks provide relevant recommendations regarding savings accounts, loans, investment products, insurance services, and digital banking solutions without compromising customer trust. Proper implementation of cross-selling strategies enhances customer value while simultaneously contributing to organizational growth and profitability.

These findings demonstrate that effective cross-selling depends largely on accurate customer profiling and personalized communication, enabling banks to recommend financial products that genuinely address customer requirements.

Communication and Follow-Through

The assessment on communication and follow-through was evaluated as Highly Evident, with an overall weighted mean of 4.45. Respondents perceived that banks consistently maintain communication with customers regarding account updates, transaction notifications, promotional activities, and service concerns.

Effective communication strengthens customer confidence by ensuring that customers receive timely, accurate, and relevant information regarding banking services. Follow-up communication after customer inquiries or complaints further demonstrates organizational commitment to service quality and customer satisfaction.

The findings indicate that communication serves as a vital component of customer relationship management because it promotes transparency, responsiveness, and trust between banks and their clients.

Relationship-Building Programs

On the assessment of relationship-building programs, the findings indicate that respondents perceived these programs as Highly Evident, with an overall weighted mean of 4.41 demonstrating that universal banks actively cultivate long-term relationships through customer engagement activities and relationship management initiatives.

Banks implement relationship-building activities by providing financial education programs, customer appreciation events, digital engagement campaigns, and dedicated relationship managers for selected customer segments. These initiatives strengthen customer loyalty while fostering meaningful relationships beyond routine financial transactions.

The results indicate that relationship-building programs complement technological innovation by reinforcing customer trust, emotional connection, and organizational commitment to customer-centered banking.

Summary of the Assessment of Customer Relationship Management

The overall assessment of customer relationship management among selected universal banks in Metro Manila demonstrated that all seven dimensions were evaluated as Highly Evident, with an overall weighted mean of 4.47, reflecting the banks' effective implementation of customer-centered strategies that strengthen customer engagement and satisfaction.

Among the CRM dimensions, the highest-rated indicators demonstrate the importance of personalized service delivery, effective communication, and systematic customer profiling in establishing long-term banking relationships. Although all dimensions received favorable evaluations, relatively lower-rated aspects provide opportunities for banks to further enhance customer engagement through improved digital communication, more responsive feedback systems, and expanded relationship-building initiatives.

Overall, the findings demonstrate that customer relationship management has been successfully integrated into the operations of universal banks and effectively complements banking service automation. While automated technologies improve operational efficiency, CRM practices ensure that customer needs remain central to banking operations. The integration of technological innovation with customer-centered service enables universal banks to improve customer satisfaction, strengthen customer loyalty, and achieve sustainable organizational performance.

Summary on Customer Relationship Management

Dimensions	Interpretation
Client Profiling and Segmentation	Highly Evident
Personalized Client Interactions	Highly Evident
Customer Feedback Collection	Highly Evident
Customer Retention Strategies	Highly Evident
Cross-Selling and Upselling Initiatives	Highly Evident

Communication and Follow-Through	Highly Evident
Relationship-Building Programs	Highly Evident
Overall Mean = 4.47	Highly Evident

Relationship Between Banking Service Automation and Customer Relationship Management

The analysis revealed statistically significant positive relationships between all dimensions of banking service automation and customer relationship management ($p < .0001$). This finding indicates that improvements in banking service automation are associated with stronger customer relationship management practices.

The results imply that technological innovation and relationship management are complementary organizational strategies. As banks improve digital banking platforms and automated services, they also enhance customer engagement, personalized service delivery, and relationship-building initiatives.

The finding supports the Commitment-Trust Theory of Relationship Marketing, which emphasizes that customer trust and commitment are strengthened when organizations consistently deliver efficient and reliable services. It also agrees with previous studies indicating that integrating digital banking technologies with CRM contributes to improved customer satisfaction and organizational performance.

Problems Encountered in Banking Service Automation and Customer Relationship Management

Problems Encountered in Banking Service Automation

On the assessment of the problems encountered in relation to banking service automation, the findings revealed an overall weighted mean of 3.27, verbally interpreted as Moderately Encountered, indicating that although universal banks have successfully implemented digital banking technologies, operational and technical issues continue to affect service delivery to a moderate extent.

Among the identified concerns, frequent system downtime disrupting automated banking services obtained the highest composite mean (3.38), followed by technical glitches causing delays or errors in automated transactions (3.36) and limited system capacity leading to slow processing during peak banking hours (3.34). These findings indicate that system availability, transaction reliability, and processing capacity remain the primary operational challenges experienced by respondents. Such issues may reduce customer confidence, interrupt financial transactions, and negatively influence the overall digital banking experience.

Other concerns included inadequate integration of automated systems across banking channels, temporary service interruptions during system updates, delays in resolving automation-related technical issues, recurring errors resulting from insufficient system testing, and customers' difficulty in navigating automated banking platforms. Although these indicators received relatively lower ratings, they were likewise interpreted as Moderately Encountered, suggesting that continuous improvements in infrastructure integration, preventive maintenance, technical support, and user-centered system design remain necessary.

Across respondent groups, clients reported the highest overall level of problems (3.35), followed by branch frontline employees (3.31) and operation officers (3.14), all within the Moderately Encountered category. This finding implies that customers are more directly affected by technical interruptions because they experience the operational consequences of service disruptions during actual banking transactions. Overall, the results demonstrate that while banking service automation has been effectively implemented, addressing system stability, transaction reliability, and processing efficiency remains essential to sustaining high-quality digital banking services.

Problems Encountered in Customer Relationship Management

On the assessment of the problems encountered in customer relationship management (CRM), the findings indicate an overall weighted mean of 3.13, verbally interpreted as Moderately Encountered, suggesting that CRM-related concerns exist but do not substantially hinder the implementation of customer relationship initiatives among universal banks.

The most frequently encountered concern was delays in responding to customer inquiries or complaints, followed by communication gaps that reduce effective follow-through with clients and the limited use of customer data to support personalized service delivery. These findings indicate that responsiveness and effective communication remain the principal challenges affecting customer relationship management. Delays in addressing customer concerns may reduce customer satisfaction, while ineffective communication and limited use of customer information may hinder banks' ability to deliver personalized banking experiences.

Respondents also identified incomplete integration between CRM systems and digital banking platforms, inconsistent updating of customer information, limited continuity of relationship-building initiatives, and insufficient utilization of customer feedback as areas requiring improvement. Although insufficient staff training in CRM tools and relationship management received the lowest composite mean (3.06), it remained Moderately Encountered, indicating that additional capability-building initiatives may still contribute to improving customer relationship practices.

Among the respondent groups, clients again reported the highest level of CRM-related concerns (3.33), followed by branch frontline employees (3.22) and operation officers (2.85). The findings suggest that customers are more sensitive to service responsiveness, communication quality, and personalized interactions because these factors directly influence their banking experiences. Overall, the results emphasize the importance of strengthening communication systems, improving complaint resolution processes, integrating CRM platforms with digital banking services, and maximizing customer information to enhance customer engagement and long-term relationship development.

Acceptability of the Proposed Service Enhancement Plan

The proposed Service Enhancement Plan was assessed as Highly Acceptable, with an overall weighted mean of 4.61. Operations officers provided the highest assessment (WM = 4.68), while branch frontline employees and clients both rated the plan highly acceptable (WM = 4.58). These findings indicate strong stakeholder support for the proposed interventions aimed at improving banking service automation and customer relationship management.

The findings further indicate that the proposed enhancement plan provides a practical and evidence-based response to the challenges identified in the study. By integrating technological improvements with customer-centered management strategies, the plan supports continuous service innovation, strengthens operational performance, and enhances customer satisfaction and loyalty. Consequently, the proposed framework may serve as a valuable guide for bank administrators and decision-makers in sustaining digital transformation initiatives and maintaining competitiveness within the Philippine banking industry.

CONCLUSIONS

This study demonstrated that banking service automation and customer relationship management (CRM) are both highly implemented among universal banks in Metro Manila. The findings indicate that digital banking technologies have significantly enhanced operational efficiency, service accessibility, and transaction security, while CRM practices have strengthened customer engagement, satisfaction, and long-term relationship building. Despite the high level of implementation, respondents identified moderate operational challenges, including system downtime, transaction delays, and communication gaps, which may affect service quality if left unaddressed.

The study further established significant differences in the assessments of operations officers, branch frontline employees, and clients, reflecting their varying roles and experiences in the banking environment. Moreover, a significant positive relationship was found between banking service automation and customer relationship

management, confirming that effective technology adoption complements customer-centered service strategies. Overall, the findings highlight the importance of integrating digital innovation with relationship management practices to enhance organizational performance and customer satisfaction. The proposed Service Enhancement Plan provides a practical and evidence-based framework for improving banking operations and sustaining service excellence among universal banks in Metro Manila.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are proposed:

1. Universal banks should continue investing in the enhancement of digital banking infrastructure to improve system reliability, minimize transaction failures, and ensure uninterrupted banking services.
2. Bank management should strengthen customer relationship management initiatives by expanding personalized services, improving customer feedback mechanisms, and enhancing communication channels to increase customer satisfaction and loyalty.
3. Continuous training and capacity-building programs should be provided to operations officers and branch frontline employees to improve digital competencies, customer service delivery, and the effective utilization of banking technologies.
4. Banks should regularly monitor and evaluate the performance of banking service automation and CRM programs to identify operational gaps and implement timely service improvements based on customer needs and technological advancements.
5. Future researchers may replicate or extend the study by including other banking institutions, geographical locations, or emerging digital banking technologies to further validate and expand the findings.

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