

Transformative Banking Services and Clients' Financial Well-Being Among Semi-Urban Bank Clients

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ABSTRACT

This study examined the relationship of banking service quality and transformative banking services with the financial well-being of semi-urban bank clients in Tandag City, Surigao del Sur, Philippines. Using a quantitative descriptive-correlational research design, the study gathered data from 391 clients of selected government, commercial, rural, and savings-oriented banks. Banking service quality was measured using the SERVQUAL dimensions of reliability, responsiveness, assurance, empathy, and tangibility, while transformative banking services were assessed in terms of accessibility and inclusiveness, digital banking availability and usability, transparency and fairness, and customer empowerment and financial education. Clients' financial well-being was measured through financial security, ability to meet financial obligations, confidence in managing finances, and future financial outlook. Data were analyzed using frequency, percentage, weighted mean, Spearman's rho, and hierarchical multiple regression. Findings showed that respondents were mostly young adults, female, college-level, employed, lower-income clients, and had moderate banking experience. Banking service quality and transformative banking services were both rated very high, while clients' financial well-being was rated high. Spearman's rho revealed significant positive relationships between all banking service quality dimensions and financial well-being, and between all transformative banking service dimensions and financial well-being. Regression results showed that customer empowerment and financial education, accessibility and inclusiveness, digital banking availability and usability, and student employment status significantly predicted clients' financial well-being. Customer empowerment and financial education emerged as the strongest predictor. The study concludes that clients' financial well-being is strengthened when banking services are not only reliable and secure but also accessible, digitally usable, inclusive, and educationally empowering.

Keywords: banking service quality, transformative banking services, financial well-being, digital banking, financial inclusion, semi-urban clients, Philippines

INTRODUCTION

This study examined how banking service quality and transformative banking services influence the financial well-being of semi-urban bank clients in Tandag City, Surigao del Sur, Philippines. It focused on clients' perceptions of banking service quality in terms of reliability, responsiveness, assurance, empathy, and tangibility, and transformative banking services in terms of accessibility and inclusiveness, digital banking availability and usability, transparency and fairness, and customer empowerment and financial education. The study also assessed clients' financial well-being through financial security, ability to meet financial obligations, confidence in managing finances, and future financial outlook. In this context, the study is about understanding whether banking institutions contribute only to transaction convenience or whether their services also help clients become more financially secure, confident, and capable in managing their financial lives.

Previous studies emphasized that banking service quality remains a key determinant of customer satisfaction, trust, loyalty, and continued use of banking services. Raza et al. (2020) and Khan et al. (2021) found that digital and mobile banking service quality influences customer satisfaction and service loyalty. Similarly, Dangaiso et

al. (2024) reported that online banking service quality contributes to customer satisfaction, electronic word-of-mouth, and customer retention. In relation to digital banking, Prasetyo et al. (2023), Aji et al. (2025), and Saputra et al. (2025) highlighted that perceived usefulness, convenience, app quality, customer support, and digital service experience influence clients' continued use of mobile banking services. Studies on financial inclusion also suggest that mobile banking and fintech services can improve access among underserved clients when these services are affordable, usable, trusted, and supported by financial education (Sarkar & Thapa, 2021; Siddik, 2021; Endress, 2025).

Although many studies have already examined service quality, digital banking, and financial inclusion, there is still a need to understand how these factors work in semi-urban banking settings. Most existing studies focus on customer satisfaction, technology adoption, loyalty, and the quality of internet or mobile banking services (Raza et al., 2020; Khan et al., 2021; Prasetyo et al., 2023; Dangaiso et al., 2024; Aji et al., 2025). However, fewer studies look at whether these banking services actually help improve clients' financial well-being, particularly their financial security, ability to meet obligations, confidence in managing finances, and future financial outlook (Bialowolski et al., 2021; Sorgente et al., 2024; Anandhi & Velmurugan, 2024). This gap is important in the Philippine semi-urban context because clients may already have access to banks and digital platforms, but they may still face problems related to low income, documentation requirements, transaction fees, limited digital literacy, and weak financial security. Thus, financial inclusion becomes more meaningful when access to banking is supported by usability, affordability, trust, financial education, and consumer protection.

This study is significant because it provides quantitative evidence on the role of banking institutions in strengthening clients' financial well-being. For banks, the findings may guide improvements in service responsiveness, digital banking support, financial education, and inclusive access. For clients, the study highlights how banking services may support savings, financial confidence, and responsible use of financial products. For policymakers and financial inclusion advocates, the findings provide evidence on the need to move beyond access and digitalization toward client empowerment and financial resilience. For future researchers, the study offers a basis for further examining the link between transformative banking services and financial well-being in other semi-urban and rural banking contexts.

Research Objectives

This study generally aimed to examine the relationship of banking service quality and transformative banking services with the financial well-being of semi-urban bank clients in Tandag City, Surigao del Sur, Philippines.

Specifically, the study sought to:

1. Describe the demographic profile of the respondents in terms of age, sex, educational attainment, employment status, monthly income, and length of banking relationship.
2. Determine the level of banking service quality perceived by the respondents in terms of reliability, responsiveness, assurance, empathy, and tangibility.
3. Determine the level of transformative banking services perceived by the respondents in terms of accessibility and inclusiveness, digital banking availability and usability, transparency and fairness, and customer empowerment and financial education.
4. Determine the level of clients' financial well-being in terms of financial security, ability to meet financial obligations, confidence in managing finances, and future financial outlook.
5. Examine the significant relationship between banking service quality and clients' financial well-being.
6. Examine the significant relationship between transformative banking services and clients' financial well-being.

7. Identify which among the demographic profile, banking service quality dimensions, and transformative banking service dimensions significantly predict clients' financial well-being.

METHODOLOGY

This study employed a quantitative descriptive-correlational research design. The descriptive component was used to determine the demographic profile of respondents and their perceived levels of banking service quality, transformative banking services, and financial well-being. The correlational component was used to determine the relationships between banking service quality and financial well-being, and between transformative banking services and financial well-being. Hierarchical multiple regression was used to identify the significant predictors of clients' financial well-being.

The respondents were 391 bank clients from selected banking institutions in Tandag City, Surigao del Sur, Philippines. The participating institutions represented government, commercial, rural, and savings-oriented banks. The questionnaire measured the demographic profile of the respondents, SERVQUAL-based service quality, transformative banking services, and financial well-being. Data were analyzed using frequency, percentage, weighted mean, Spearman's rho, and hierarchical multiple regression. Spearman's rho was used because the data were not normally distributed based on the Kolmogorov-Smirnov test.

REVIEW OF RELATED LITERATURE

Banking Service Quality

Banking service quality refers to the extent to which banking institutions deliver services that meet or exceed client expectations. The SERVQUAL model remains a widely used framework in assessing service quality through reliability, responsiveness, assurance, empathy, and tangibility. Reliability concerns the bank's ability to deliver accurate and dependable services, while responsiveness refers to the willingness and speed of bank personnel in assisting clients. Assurance reflects competence, courtesy, trust, and security, while empathy refers to individualized attention and care. Tangibility covers the physical facilities, appearance of personnel, and visible service resources of the institution.

Recent studies show that banking service quality remains important in both traditional and digital banking settings. Raza et al. (2020) found that internet banking service quality influences customer satisfaction and loyalty. Khan et al. (2021) similarly emphasized that mobile banking service quality contributes to customer satisfaction. Bhuvaneswari and Maruthamuthu (2024) found that digital banking service quality significantly shapes customer satisfaction, while Dangaiso et al. (2024) showed that internet banking service quality contributes to e-satisfaction and customer retention. These studies suggest that clients continue to evaluate banks based on reliability, promptness, security, service confidence, and overall service experience.

Digital Banking and Transformative Banking Services

Digital banking has become a major component of transformative banking because it allows clients to access financial services beyond physical branches. Mobile banking, online transfers, bills payment, digital account monitoring, and app-based financial services provide clients with convenience, flexibility, and faster transaction processing. Prasetyo et al. (2023) found that mobile banking loyalty in the Philippines is influenced by perceived usefulness, service quality, and customer experience. Aji et al. (2025) also reported that trust, convenience, app attributes, customer support, and social influence are important determinants of mobile banking use. Similarly, Saputra et al. (2025) emphasized that mobile banking application quality affects customer satisfaction.

However, transformative banking should not be limited to digitalization. It also includes accessibility, inclusiveness, transparency, fairness, and customer empowerment. Sarkar and Thapa (2021) explained that financial inclusion has shifted from traditional development banking toward digital financial inclusion. Siddik (2021) emphasized that mobile banking can promote financial inclusion in developing economies, while Endress (2025) noted that financial inclusion in Southeast Asia still faces challenges related to access, usage, and

structural barriers. These studies imply that transformative banking becomes meaningful only when digital platforms are usable, affordable, trusted, and supported by client education.

Financial Education and Customer Empowerment

Financial education is a key element of transformative banking because access to banking products does not automatically result in sound financial decisions. Ansar et al. (2023) emphasized that financial education is important for the effective use of formal financial services. Birkenmaier et al. (2022) similarly found that financial capability interventions can improve individuals' capacity to manage financial decisions. Lone and Bhat (2022) also showed that financial literacy contributes to financial well-being through financial self-efficacy. These studies suggest that clients need knowledge, confidence, and practical guidance to use banking services in ways that improve their financial condition.

Customer empowerment in banking involves providing clients with the information, tools, and support needed to make informed financial decisions. This includes guidance on saving, budgeting, debt management, responsible borrowing, digital banking use, fraud prevention, and insurance awareness. Helen and Kurniawan (2025) found that digital literacy and user experience are linked with customer loyalty in AI-driven digital banking. Titin et al. (2024) also emphasized the role of financial knowledge and literacy in student financial management. These findings show that banks should become active partners in developing clients' financial capability, not merely providers of financial transactions.

Financial Well-Being

Financial well-being is a multidimensional concept that includes the ability to meet current financial obligations, confidence in managing finances, security against future shocks, and freedom to make choices that improve quality of life. Bialowolski et al. (2021) emphasized the role of financial fragility and financial control in well-being. Sorgente et al. (2024) described financial well-being as a multidimensional construct that includes subjective evaluations of financial security, control, and satisfaction. Anandhi and Velmurugan (2024) also highlighted financial stability as a major component of individual well-being.

In the banking context, financial well-being may be supported when clients can save regularly, monitor expenses, manage obligations, access financial tools, and receive guidance from financial institutions. Pomeranz and Kast (2022) showed that savings accounts can help individuals borrow less and develop financial discipline. Gupta et al. (2025) further argued that financial inclusion can support economic empowerment when banking services are accessible and responsive. Thus, banks can influence financial well-being not only through access to accounts but also through services that strengthen financial behavior, confidence, and resilience.

RESULTS AND DISCUSSIONS

Demographic Profile of the Respondents

Table 1 presents the demographic profile of the respondents in terms of age, sex, educational attainment, employment status, monthly income, and length of banking relationship.

The demographic profile showed that the respondents were mostly young adults, belonging to the 20–30 age group. This indicates that the findings largely represent clients who are more exposed to mobile banking, online transactions, fund transfers, digital wallets, and app-based financial services. Younger clients are generally more likely to appreciate speed, accessibility, convenience, and real-time transaction monitoring. This may explain why digital banking availability and usability later emerged as the highest-rated transformative banking dimension. However, the result also implies that banks should avoid designing digital banking systems only for younger and technology-oriented clients. Older adults, first-time users, and digitally hesitant clients may still need branch-based assistance, tutorials, and simple digital interfaces. Digital banking must therefore remain inclusive and supported by customer assistance and financial literacy mechanisms (Prasetyo et al., 2023; Sarkar & Thapa, 2021).

The respondents were also mostly female; this indicates that women were active users of banking services in the study locale. Their participation may reflect their role in household budgeting, savings management, bills payment, loan repayment, and day-to-day financial decision-making. This finding implies that banking institutions should recognize women not only as account holders but also as active financial managers in households. Banking products and education programs should therefore include practical tools for budgeting, savings, emergency funds, payment monitoring, and fraud prevention. Since financial well-being involves control, confidence, and stability in managing financial responsibilities, women's active participation in banking is important in improving household financial resilience (Bialowolski et al., 2021; Sorgente et al., 2024).

Table 1. Demographic Profile of the Respondents

Demographic Profile	Classification	Frequency	Percentage (%)
Age	20–30 years old	244	62.40
	31–40 years old	107	27.40
	41–50 years old	30	7.70
	51–60 years old	3	0.80
	61 years old and above	7	1.80
	Total	391	100.00
Sex	Female	221	56.50
	Male	170	43.50
	Total	391	100.00
Educational Attainment	High School Level	17	4.30
	Vocational	4	1.00
	College Level	313	80.10
	Master's Level	55	14.10
	Doctorate Level	1	0.30
	Others	1	0.30
	Total	391	100.00
Employment Status	Employed	311	79.50
	Self-Employed	38	9.70
	Unemployed	12	3.10
	Retired	4	1.00
	Student	25	6.40
	Others	1	0.30
	Total	391	100.00
Monthly Income	Below ₱20,000	222	56.80
	₱20,000–₱39,999	133	34.00
	₱40,000–₱59,999	28	7.20
	₱60,000–₱79,999	5	1.30
	₱80,000 and above	3	0.80
	Total	391	100.00
Length of Banking Relationship	Less than 1 year	98	25.10
	1–3 years	107	27.40
	4–7 years	107	27.40
	8–10 years	38	9.70
	More than 10 years	41	10.50
	Total	391	100.00

In terms of educational attainment, semi-urban bank clients are college-level. This suggests that the respondents had sufficient literacy to assess banking services, digital platforms, financial information, and customer support. However, college-level education does not automatically guarantee financial literacy. Clients may be academically educated but still need practical knowledge on savings, budgeting, interest rates, loan obligations, insurance, fraud prevention, and digital banking security. This finding implies that financial education remains necessary even among educated clients because the complexity of banking products and digital platforms requires applied financial capability. Banks should therefore provide client-friendly financial education that translates financial information into practical everyday decisions (Ansar et al., 2023; Birkenmaier et al., 2022; Lone & Bhat, 2022).

The employment profile showed that semi-urban bank clients were employed. This suggests that the study mainly reflects clients who regularly use banks for salary deposits, withdrawals, bills payment, fund transfers, savings, and loans. Employed clients are likely to have recurring financial obligations, making them capable of

evaluating whether banking services help them manage payments and financial responsibilities. However, the limited representation of informal and irregular workers also implies that banks should not design services only for clients with stable employment. Informal workers, microentrepreneurs, students, and low-income earners may experience greater difficulty with documentation, income verification, and maintaining balance requirements. Banks should therefore provide simplified onboarding, low-cost accounts, micro-savings products, and flexible financial education for clients with unstable income sources (Khan et al., 2021; Mehta & Rani, 2023; Farukh et al., 2026).

In terms of income, semi-urban bank clients earned below ₱20,000 monthly. This finding is important because lower-income clients are more sensitive to fees, maintaining balance requirements, penalties, and transaction costs. For these clients, small banking charges may affect their ability to save, pay bills, or meet household needs. This implies that affordability is not only a service feature but a financial inclusion requirement. Banks should therefore provide low-cost accounts, no-maintaining-balance options, affordable fund transfers, and transparent fee disclosures. Since many respondents were lower-income clients, banking services should be designed to support financial protection, not merely transaction access (Endress, 2025; Gupta et al., 2025).

The respondents had moderate banking experience having 1–3 years of banking relationship and another group of respondents having 4–7 years. This means that many respondents had sufficient exposure to branch-based and digital banking services. Their responses are therefore grounded in actual banking experience rather than limited or occasional use. However, moderate banking experience does not mean that clients no longer need guidance. As banking becomes more digital and product-diverse, existing clients still need continuous engagement, financial check-ins, product education, digital support, and savings guidance. Sustained banking relationships can improve familiarity and trust, but only if banks actively maintain responsive and educational client relationships (Bhuvaneswari & Maruthamuthu, 2024; Gazi et al., 2024).

Level of Banking Service Quality Perceived by Respondents

Table 2 showed that the overall banking service quality was very high. This means that clients generally viewed the participating banks as reliable, responsive, trustworthy, empathetic, and professional. The result suggests that banks in the study locale have established a strong service quality foundation. Clients perceived that bank personnel, facilities, and services generally met their expectations. In a semi-urban banking environment, this is important because clients rely on banks for financial transactions that directly affect payments, savings, loans, salaries, and personal security. High service quality contributes to client satisfaction, continued use, and trust in formal banking institutions (Raza et al., 2020; Khan et al., 2021).

Table 2. Level of Banking Service Quality Perceived by Respondents

SERVQUAL Dimension	Mean	Verbal Interpretation
Reliability	4.48	Very High Service Quality
Responsiveness	4.33	Very High Service Quality
Assurance	4.50	Very High Service Quality
Empathy	4.40	Very High Service Quality
Tangibility	4.44	Very High Service Quality
Grand Mean	4.43	Very High Service Quality

Among the dimensions, assurance obtained the highest mean as interpreted as very high service quality. This indicates that clients had strong confidence in the banks' competence, courtesy, transaction security, and ability to protect their financial concerns. In banking, assurance is critical because clients entrust their money, personal

data, and financial decisions to the institution. A high assurance score implies that clients felt safe and confident when transacting with the banks. This is especially relevant in the current digital banking environment, where security, fraud prevention, and trust influence continued use of financial platforms. Banks should sustain this strength through competent personnel, clear communication, secure systems, and visible consumer protection mechanisms (Dangaiso et al., 2024; Lestari et al., 2024).

Responsiveness obtained the lowest mean, although it remained within the service quality. This result suggests that clients recognized the willingness of banks to assist them, but they still experienced some limitations in speed, timeliness, and accessibility of service. Responsiveness becomes particularly important when clients encounter failed transactions, long queues, delayed feedback, or digital banking concerns. The finding implies that banks should strengthen queue management, complaint resolution, live chat support, hotline response, and digital assistance desks. In digital banking, customer support and responsiveness are not secondary services; they directly affect confidence, satisfaction, and continued platform use (Aji et al., 2025; Saputra et al., 2025).

The very high service quality ratings across all SERVQUAL dimensions indicate that banking service quality is generally strong, but the relatively lower rating for responsiveness points to an area for strategic improvement. The implication is that banking institutions should not be satisfied with general client trust alone. They must also ensure that assistance is fast, clear, and available when clients need it. In modern banking, service quality combines both human interaction and digital responsiveness. Thus, banks should integrate traditional service excellence with technology-enabled support systems, including complaint dashboards, real-time advisories, automated queue systems, and branch-based digital help desks (Bhuvanewari & Maruthamuthu, 2024; Gazi et al., 2024).

Level of Transformative Banking Services Perceived by Respondents

Table 3 showed that the overall level of transformative banking services was very high level of transformative banking services, with a grand mean of 4.38. This indicates that clients perceived the banks as providing services that improve access, digital convenience, transparency, fairness, and financial empowerment. The result suggests that banking transformation is already visible in the study locale. Clients are not merely receiving traditional banking services; they are also experiencing digital channels, accessible financial services, and information-based support that can help them manage financial activities more conveniently (Siddik, 2021; Endress, 2025).

Table 3. Level of Transformative Banking Services Perceived by Respondents

Transformative Banking Services Dimension	Mean	Verbal Interpretation
Accessibility and Inclusiveness	4.39	Very High Level of Transformative Banking Services
Digital Banking Availability and Usability	4.43	Very High Level of Transformative Banking Services
Transparency and Fairness	4.38	Very High Level of Transformative Banking Services
Customer Empowerment and Financial Education	4.32	Very High Level of Transformative Banking Services
Grand Mean	4.38	Very High Level of Transformative Banking Services

Digital Banking Availability and Usability obtained the highest mean as interpreted as very high level of transformative banking services. This shows that clients highly valued mobile and online banking because these

platforms make financial transactions easier, faster, and more accessible. For semi-urban clients, digital banking reduces the need for frequent branch visits, saves transportation costs, supports time-sensitive payments, and allows clients to monitor balances and transactions. This finding supports previous studies showing that app quality, convenience, perceived usefulness, and customer experience are major factors in mobile banking adoption and continued use (Prasetyo et al., 2023; Aji et al., 2025; Saputra et al., 2025). The implication is that banks should continue improving mobile banking reliability, user interface, transaction speed, cybersecurity, and real-time assistance.

Customer Empowerment and Financial Education obtained the lowest mean, although still very high level of transformative banking services. This finding is important because it shows that the transformative role of banks is stronger in digital access than in financial capability-building. Clients may know how to use mobile banking for basic transactions, but they may still need guidance on saving, budgeting, borrowing, insurance, fraud prevention, and long-term financial planning. The implication is that banks should not rely on digital tools alone. They should institutionalize financial education as part of regular service delivery through micro-sessions, digital tutorials, savings reminders, budgeting tools, loan advisories, and anti-scam education. Financial education is essential because it helps clients use formal financial services effectively and responsibly (Ansar et al., 2023; Birkenmaier et al., 2022; Helen & Kurniawan, 2025).

The findings imply that transformative banking must be balanced. Digital banking provides convenience, but client empowerment gives direction and purpose to that convenience. A banking app may help clients transfer funds or pay bills, but financial education helps them understand why they should save, how to avoid excessive borrowing, and how to protect themselves from financial shocks. Therefore, banks should integrate digital platforms with financial literacy, consumer protection, and client coaching. In doing so, banking services can move from simple access to meaningful financial well-being (Sarkar & Thapa, 2021; Gupta et al., 2025).

Level of Clients' Financial Well-Being

Table 4 showed that clients had a high level of financial well-being, with a grand mean of 4.17. This means that respondents generally perceived themselves as capable of managing their financial responsibilities. However, the findings also show that financial well-being was not equally strong across all dimensions. This is important because financial well-being is not simply measured by account ownership or income. It includes financial security, ability to meet obligations, confidence in managing finances, and positive expectations about the future (Bialowolski et al., 2021; Sorgente et al., 2024).

Table 4. Level of Clients' Financial Well-Being

Financial Well-Being Dimension	Mean	Verbal Interpretation
Financial Security	4.02	High Financial Well-Being
Ability to Meet Financial Obligations	4.18	High Financial Well-Being
Confidence in Managing Finances	4.20	High Financial Well-Being
Future Financial Outlook	4.26	Very High Financial Well-Being
Grand Mean	4.17	High Financial Well-Being

Future Financial Outlook obtained the highest mean and was interpreted as very high financial well-being. This indicates that clients were optimistic about their financial future. Many respondents appeared to believe that their financial condition could improve through work, savings, planning, and continued use of banking services. This optimism may be related to the fact that most respondents were employed and had moderate banking experience. However, optimism should not be mistaken for actual financial resilience. Clients may feel hopeful but still

remain vulnerable to emergencies, income disruption, illness, or sudden expenses (Anandhi & Velmurugan, 2024).

Financial Security obtained the lowest mean, although still high financial well-being. This suggests that clients still had concerns about emergency savings, insurance protection, and the ability to handle financial shocks. This result is consistent with the income profile of respondents, where the majority belonged to lower-income groups. The implication is that banks should design services that help clients build present financial resilience, not only future optimism. These may include automatic savings programs, emergency fund accounts, goal-based savings, micro-insurance awareness, responsible borrowing support, and regular financial check-ins. Savings mechanisms are important because even small but regular savings can help clients reduce dependence on borrowing and improve financial security (Pomeranz & Kast, 2022).

The results imply that clients were future-oriented but not fully financially secure. This creates an important role for transformative banking services. Banks should help clients move from basic transaction use to financial preparedness. Digital banking can support monitoring and payment convenience, but financial security requires savings discipline, insurance knowledge, fraud protection, and debt management. Therefore, banks should combine access, usability, education, and protection to improve long-term financial well-being (Sarkar & Thapa, 2021; Gupta et al., 2025).

Relationship between Banking Service Quality and Financial Well-Being

Table 5 showed that all SERVQUAL dimensions were positively and significantly related to all financial well-being dimensions at the .001 level. This means that better perceived reliability, responsiveness, assurance, empathy, and tangibility were associated with stronger financial security, ability to meet obligations, confidence in managing finances, and future financial outlook. The result suggests that banking service quality is not merely a satisfaction indicator. It is also connected to how clients experience financial control, stability, and confidence in their daily financial lives (Khan et al., 2021; Raza et al., 2020).

Table 5. Relationship between Banking Service Quality and Financial Well-Being

Variables		Spearman's rho	p-value	Decision	Interpretation
Reliability	Financial Security	0.486	< .001	Reject H_0	Significant
	Ability to Meet Financial Obligations	0.531	< .001	Reject H_0	Significant
	Confidence in Managing Finances	0.460	< .001	Reject H_0	Significant
	Future Financial Outlook	0.492	< .001	Reject H_0	Significant
Responsiveness	Financial Security	0.526	< .001	Reject H_0	Significant
	Ability to Meet Financial Obligations	0.541	< .001	Reject H_0	Significant
	Confidence in Managing Finances	0.495	< .001	Reject H_0	Significant

	Future Financial Outlook	0.465	< .001	Reject H ₀	Significant
Assurance	Financial Security	0.470	< .001	Reject H ₀	Significant
	Ability to Meet Financial Obligations	0.491	< .001	Reject H ₀	Significant
	Confidence in Managing Finances	0.444	< .001	Reject H ₀	Significant
	Future Financial Outlook	0.418	< .001	Reject H ₀	Significant
Empathy	Financial Security	0.546	< .001	Reject H ₀	Significant
	Ability to Meet Financial Obligations	0.530	< .001	Reject H ₀	Significant
	Confidence in Managing Finances	0.500	< .001	Reject H ₀	Significant
	Future Financial Outlook	0.498	< .001	Reject H ₀	Significant
Tangibility	Financial Security	0.509	< .001	Reject H ₀	Significant
	Ability to Meet Financial Obligations	0.523	< .001	Reject H ₀	Significant
	Confidence in Managing Finances	0.483	< .001	Reject H ₀	Significant
	Future Financial Outlook	0.519	< .001	Reject H ₀	Significant

Reliability was strongly related to the ability to meet financial obligations, with $\rho = 0.531$. This indicates that dependable and accurate banking services help clients fulfill payments, manage deposits, access funds, and complete transactions on time. In practical terms, when clients trust that their bank transactions are accurate and timely, they can better manage recurring obligations such as bills, loan payments, transfers, and savings. This implies that banks should maintain transaction accuracy, system dependability, and consistent service delivery. Reliability is especially important in financial services because errors and delays can directly affect clients' obligations and financial confidence (Bhuvaneswari & Maruthamuthu, 2024).

Responsiveness was also strongly related to the ability to meet financial obligations, with $\rho = 0.541$. This means that prompt assistance from banks helps clients manage time-sensitive financial responsibilities. When banks respond quickly to concerns, clients can address failed transactions, payment issues, account problems, and urgent financial needs more effectively. This finding reinforces the importance of service speed and customer support. Banks should strengthen their complaint resolution systems, digital support channels, queue management, and response standards. In modern banking, responsiveness is a core part of financial well-being because delays may create financial stress and missed obligations (Aji et al., 2025; Saputra et al., 2025).

Empathy showed the strongest association with financial security, with $\rho = 0.546$. This indicates that clients who feel understood, respected, and personally assisted by bank personnel are more likely to feel financially secure. This finding is important because financial security is not only a technical issue but also a relational experience. Clients may feel more secure when bank personnel explain products clearly, respond patiently, and provide individualized support. In semi-urban banking contexts, where some clients may need help understanding digital banking, loans, fees, or savings products, empathetic service can reduce anxiety and improve confidence. Banks should therefore preserve human-centered service even as they expand digital channels (Dangaiso et al., 2024; Gazi et al., 2024).

Although assurance was significantly related to all financial well-being dimensions, its weakest association was with future financial outlook, with $\rho = 0.418$. This suggests that trust and security are necessary but not sufficient to strengthen long-term financial optimism. Clients may trust their banks, but their future outlook may still depend on savings growth, income stability, financial education, insurance, and debt management. The implication is that banks should combine secure service delivery with developmental support such as financial planning, savings guidance, and emergency preparedness programs. Service quality supports financial well-being, but its impact becomes stronger when linked with client empowerment and financial capability-building (Lestari et al., 2024; Ansar et al., 2023).

Relationship between Transformative Banking Services and Financial Well-Being

Table 6 showed that all dimensions of transformative banking services were positively and significantly related to all dimensions of financial well-being at the .001 level. This means that clients who perceived banking services as more accessible, inclusive, digitally available, transparent, fair, empowering, and educational also reported better financial well-being. The results support the argument that financial inclusion becomes meaningful when clients can not only access financial services but also use them confidently and effectively (Siddik, 2021; Endress, 2025).

Table 6. Relationship between Transformative Banking Services and Financial Well-Being

Variables		Spearman's rho	P-value	Decision	Interpretation
Accessibility and Inclusiveness	Financial Security	0.573	< .001	Reject H_0	Significant
	Ability to Meet Financial Obligations	0.604	< .001	Reject H_0	Significant
	Confidence in Managing Finances	0.559	< .001	Reject H_0	Significant
	Future Financial Outlook	0.545	< .001	Reject H_0	Significant
Digital Banking Availability and Usability	Financial Security	0.492	< .001	Reject H_0	Significant
	Ability to Meet Financial Obligations	0.549	< .001	Reject H_0	Significant
	Confidence in Managing Finances	0.503	< .001	Reject H_0	Significant

	Future Financial Outlook	0.552	< .001	Reject H_0	Significant
Transparency and Fairness	Financial Security	0.517	< .001	Reject H_0	Significant
	Ability to Meet Financial Obligations	0.548	< .001	Reject H_0	Significant
	Confidence in Managing Finances	0.522	< .001	Reject H_0	Significant
	Future Financial Outlook	0.572	< .001	Reject H_0	Significant
Customer Empowerment and Financial Education	Financial Security	0.616	< .001	Reject H_0	Significant
	Ability to Meet Financial Obligations	0.604	< .001	Reject H_0	Significant
	Confidence in Managing Finances	0.570	< .001	Reject H_0	Significant
	Future Financial Outlook	0.574	< .001	Reject H_0	Significant

Customer Empowerment and Financial Education showed the strongest relationship with Financial Security, with $\rho = 0.616$. This is one of the most important findings of the study. It means that clients who receive better financial education, guidance, and decision-making support from banks tend to feel more financially secure. Financial security requires more than having a bank account or using a mobile app. Clients need to know how to save regularly, prepare for emergencies, manage debt, avoid scams, understand insurance, and make informed decisions. Banks should therefore treat financial education as a core banking service rather than a peripheral activity (Ansar et al., 2023; Birkenmaier et al., 2022; Helen & Kurniawan, 2025).

Accessibility and Inclusiveness was strongly related to Ability to Meet Financial Obligations, with $\rho = 0.604$. This means that clients who experience banking services as accessible, affordable, and understandable are better able to manage financial responsibilities. For semi-urban clients, barriers such as branch distance, transportation costs, maintaining balance requirements, documentation demands, and limited digital skills can affect their ability to use banking services effectively. The implication is that banks should simplify onboarding, reduce cost barriers, offer low-cost accounts, expand assisted digital services, and strengthen community-based access. Inclusive banking should be measured not only by account ownership but also by actual usability and benefit to clients (Jain et al., 2022; Mehta & Rani, 2023; Khobragade et al., 2025).

Digital Banking Availability and Usability was significantly related to all financial well-being dimensions, with its strongest association with Future Financial Outlook at $\rho = 0.552$. This suggests that digital banking contributes to clients' future optimism by making financial management more convenient and efficient. When clients can monitor balances, transfer funds, pay bills, and review transactions, they may feel more in control of their finances. However, digital banking must be reliable, secure, and supported by customer assistance. If apps are difficult to use or unreliable, digital access may not translate into financial well-being (Prasetyo et al., 2023; Aji et al., 2025; Saputra et al., 2025).

Transparency and Fairness was also significantly associated with all dimensions of financial well-being and was strongest with Future Financial Outlook, with $\rho = 0.572$. This means that clear information on fees, charges,

policies, loan terms, transaction limits, and client rights contributes to clients' confidence about their financial future. When clients understand banking rules and costs, they can plan better and avoid unexpected financial burdens. The implication is that banks should strengthen transparent fee disclosure, client rights orientation, and consumer protection communication. Fair and transparent banking builds trust and supports more informed financial decision-making (Lestari et al., 2024; Gupta et al., 2025).

Table 8 presented the hierarchical multiple regression results. Model 1, which included only demographic profile variables, was not significant, with $R^2 = 0.027$, adjusted $R^2 = 0.001$, $F = 1.057$, and $p = .395$. This means that demographic characteristics alone did not meaningfully explain clients' financial well-being. Although age, sex, education, employment, income, and banking relationship provide useful context, they were not enough to account for how clients experience financial well-being.

Model 2, which added banking service quality, was significant, with $R^2 = 0.364$, adjusted $R^2 = 0.338$, $F = 14.280$, and $p < .001$. This indicates that banking service quality substantially improved the model. The result implies that clients' financial well-being is shaped partly by their experience of reliability, responsiveness, assurance, empathy, and tangibility. Good banking service quality helps clients feel more confident, secure, and capable in managing financial activities (Raza et al., 2020; Khan et al., 2021; Dangaiso et al., 2024).

Model 3, which added transformative banking services, produced the strongest model, with $R^2 = 0.488$, adjusted $R^2 = 0.461$, $F = 18.578$, and $p < .001$. This means that the final model explained 48.8 percent of the variance in clients' financial well-being. The result shows that transformative banking services added meaningful explanatory power beyond demographic profile and general service quality. This implies that financial well-being is more strongly shaped by services that empower, include, and enable clients than by demographic characteristics alone.

Predictors of Clients' Financial Well-Being

Table 7 presents the predictors of clients' financial well-being using hierarchical multiple regression analysis. The predictors were entered according to three conceptual blocks: demographic profile, banking service quality dimensions, and transformative banking service dimensions

Customer Empowerment and Financial Education was the strongest significant predictor, with $B = 0.3496$, $\beta = 0.3518$, $t = 5.533$, and $p < .001$. This indicates that clients who receive better financial guidance and education from banks are more likely to report higher financial well-being. This is a central finding because it shows that banks influence financial well-being not only by providing accounts or platforms but also by building clients' financial capability. The implication is that financial education should be institutionalized through budgeting sessions, savings guidance, fraud prevention education, responsible borrowing orientation, and digital banking tutorials (Ansar et al., 2023; Lone & Bhat, 2022; Helen & Kurniawan, 2025). Accessibility and Inclusiveness was also a significant predictor, with $B = 0.1958$, $\beta = 0.1673$, $t = 2.379$, and $p = .018$. This means that clients who perceive banking services as accessible, affordable, and inclusive tend to have better financial well-being. For semi-urban clients, this finding is important because access barriers can prevent meaningful use of banking services. Banks should therefore reduce barriers related to fees, documentation, maintaining balances, digital hesitation, and branch distance. Financial inclusion becomes useful only when clients can practically and affordably use banking services (Sarkar & Thapa, 2021; Jain et al., 2022; Endress, 2025).

Digital Banking Availability and Usability was another significant predictor, with $B = 0.1777$, $\beta = 0.1565$, $t = 2.822$, and $p = .005$. This suggests that mobile and online banking contribute to financial well-being when clients find them available, convenient, and easy to use. Digital banking supports financial management by allowing clients to monitor transactions, transfer funds, pay bills, and save time. However, its positive contribution depends on system reliability, cybersecurity, usability, and customer support. Banks should therefore improve app performance, transaction confirmation, and digital support systems (Prasetyo et al., 2023; Aji et al., 2025; Saputra et al., 2025).

Employment Status: Student was the only significant demographic predictor, but in a negative direction, with $B = -0.2679$, $\beta = -0.0958$, $t = -2.399$, and $p = .017$. Since employed respondents served as the reference group, this means that student respondents had lower financial well-being than employed clients. This may be due to limited income, dependence on family support, and lower ability to save or access financial products. The implication is that banks may develop student-friendly financial programs such as low-cost youth accounts, budgeting tools, digital banking tutorials, and early financial literacy sessions. Financial literacy is particularly important for students because it can shape future financial behavior and confidence (Titin et al., 2024; Zen et al., 2023).

The remaining variables were not significant predictors in the final model. These included age, sex, educational attainment, monthly income, length of banking relationship, all SERVQUAL dimensions, and transparency and fairness. This does not mean that these variables are unimportant. Rather, their independent effect became weaker after the stronger predictors were considered. The implication is that financial well-being is more directly influenced by empowerment, access, and digital usability than by demographic profile or general service quality alone. This finding supports the need for banks to move from service delivery toward capability-building and inclusive financial support (Birkenmaier et al., 2022; Gupta et al., 2025).

Table 7. Predictors of Clients' Financial Well-Being

Predictor	B	SE	β	t	p-value	Decision	Interpretation
Age	0.0137	0.0416	0.0163	0.328	.743	Fail to reject H_0	Not significant
Sex: Female	-	0.0524	-0.0688	-	.071	Fail to reject H_0	Not significant
	0.0948			1.811			
Educational Attainment	0.0363	0.0470	0.0317	0.773	.440	Fail to reject H_0	Not significant
Employment Status: Self-employed	0.0368	0.0895	0.0159	0.411	.681	Fail to reject H_0	Not significant
Employment Status: Unemployed	0.2303	0.1518	0.0581	1.517	.130	Fail to reject H_0	Not significant
Employment Status: Retired	-	0.2874	-0.0080	-	.850	Fail to reject H_0	Not significant
	0.0546			0.190			
Employment Status: Student	-	0.1117	-0.0958	-	.017	Reject H_0	Significant predictor
	0.2679			2.399			
Employment Status: Others	-	0.5173	-0.0192	-	.615	Fail to reject H_0	Not significant
	0.2602			0.503			
Monthly Income	0.0059	0.0392	0.0065	0.150	.881	Fail to reject H_0	Not significant
Length of Banking Relationship	-	0.0264	-0.0590	-	.224	Fail to reject H_0	Not significant
	0.0322			1.219			
Reliability	0.0941	0.0876	0.0725	1.074	.284	Fail to reject H_0	Not significant
Responsiveness	0.0146	0.0715	0.0135	0.205	.838	Fail to reject H_0	Not significant
Assurance	-	0.0873	-0.0888	-	.212	Fail to reject H_0	Not significant
	0.1091			1.250			
Empathy	0.0973	0.0743	0.0917	1.309	.191	Fail to reject H_0	Not significant
Tangibility	-	0.0896	-0.0410	-	.566	Fail to reject H_0	Not significant
	0.0514			0.574			
Accessibility and Inclusiveness	0.1958	0.0823	0.1673	2.379	.018	Reject H_0	Significant predictor
Digital Banking Availability and Usability	0.1777	0.0629	0.1565	2.822	.005	Reject H_0	Significant predictor
Transparency and Fairness	0.0755	0.0752	0.0663	1.003	.316	Fail to reject H_0	Not significant
Customer Empowerment and Financial Education	0.3496	0.0632	0.3518	5.533	< .001	Reject H_0	Significant predictor

Model Summary						
Model	Predictors Entered	R^2	Adjusted R^2	F-value	p-value	Interpretation
Model 1	Demographic Profile	0.027	0.001	1.057	.395	Not significant
Model 2	Demographic Profile + Service Quality	0.364	0.338	14.280	< .001	Significant
Model 3	Demographic Profile + Service Quality + Transformative Banking Services	0.488	0.461	18.578	< .001	Significant

CONCLUSION

Based on the demographic profile of the respondents, the study concludes that the bank clients were mostly young adults, female, college-level, employed, lower-income earners, and had moderate banking experience. This means that the respondents were already active users of formal banking services and were familiar with routine transactions and digital banking platforms. However, since many of them belonged to the lower-income group, they may still be affected by transaction fees, maintaining balance requirements, and other banking costs. Thus, banks need to ensure that their services are not only modern and digital but also affordable, inclusive, and suitable for clients with limited financial flexibility.

Based on the level of banking service quality perceived by the respondents, the study concludes that the participating banks provided very high service quality in terms of reliability, responsiveness, assurance, empathy, and tangibility. Among these dimensions, assurance was the strongest, which shows that clients generally trusted the banks' competence, professionalism, and ability to protect their transactions. However, responsiveness received the lowest mean, although it was still rated very high. This suggests that clients continue to expect faster assistance, shorter waiting time, easier access to customer support, and quicker resolution of concerns. Therefore, while banks have already established trust and confidence among clients, they still need to improve the speed and promptness of their service delivery.

Based on the level of transformative banking services perceived by the respondents, the study concludes that transformative banking practices were already strongly evident among the participating banks. Digital banking availability and usability was the highest-rated dimension, which means that clients valued mobile and online banking because these services made banking more convenient, accessible, and efficient. However, customer empowerment and financial education received the lowest rating. This shows that although banks have improved their digital services, clients still need more practical guidance on savings, budgeting, responsible borrowing, fraud prevention, and digital banking use. Hence, banking transformation should not focus only on technology but should also include continuous client education and financial capability-building.

Based on the level of clients' financial well-being, the study concludes that clients generally had high financial well-being. They showed confidence in managing their finances, meeting financial obligations, and improving their future financial condition. However, financial security was the weakest dimension, which means that many clients may still be vulnerable to emergencies, unexpected expenses, unstable income, limited savings, and inadequate financial protection. This suggests that while clients may be hopeful about their financial future, they are not yet fully prepared for financial shocks. Therefore, banks should help clients strengthen financial security through emergency savings programs, goal-based savings, micro-insurance awareness, responsible borrowing support, and other financial resilience initiatives.

Based on the relationship between banking service quality and financial well-being, the study concludes that all dimensions of banking service quality were significantly and positively related to clients' financial well-being. This means that when clients perceived the banks as reliable, responsive, trustworthy, empathetic, and professional, they also tended to report better financial security, stronger ability to meet obligations, higher confidence in managing finances, and a more positive future financial outlook. The result shows that banking service quality is not only important for customer satisfaction but also for clients' financial confidence, control, and stability. Thus, banks should continue maintaining high service standards because quality service delivery can contribute to improved financial well-being.

Based on the relationship between transformative banking services and financial well-being, the study concludes that all dimensions of transformative banking services were significantly and positively related to clients' financial well-being. Accessibility and inclusiveness, digital banking availability and usability, transparency and fairness, and customer empowerment and financial education were all associated with better financial security, ability to meet obligations, confidence in managing finances, and future financial outlook. This means that clients benefit more when banking services are easy to access, affordable, understandable, fair, digitally usable, and empowering. Therefore, transformative banking should be viewed not merely as digital modernization but as a client-centered approach that helps improve clients' financial lives.

Based on the predictors of clients' financial well-being, the study concludes that demographic profile alone did not significantly explain clients' financial well-being. The strongest predictors were customer empowerment and financial education, accessibility and inclusiveness, digital banking availability and usability, and student employment status. Among these, customer empowerment and financial education emerged as the strongest predictor. This means that clients' financial well-being improves when banks provide financial knowledge, practical guidance, useful tools, and confidence-building support. Accessibility and digital usability also significantly predicted financial well-being, showing that clients benefit when banking services are easy to reach and easy to use. Therefore, banks should prioritize financial education, inclusive access, and reliable digital banking as major strategies for strengthening clients' financial well-being.

RECOMMENDATIONS

Banks should institutionalize financial education and customer empowerment programs because these emerged as the strongest predictor of clients' financial well-being. These programs may include practical sessions on savings, budgeting, responsible borrowing, insurance, digital banking, fraud prevention, and emergency fund preparation.

Banks should improve inclusive access by offering low-cost accounts, no-maintaining-balance products, assisted account opening, simplified documentation procedures, and digital access support. These measures are especially important for lower-income, semi-urban, informal-sector, student, and digitally hesitant clients.

Banks should strengthen digital banking usability and reliability by improving app stability, transaction confirmation, cybersecurity, interface design, and real-time customer support. Digital banking should be treated not only as a convenience tool but also as a financial management support system.

Banks should also improve responsiveness through queue management, service response standards, complaint tracking, digital help desks, and faster problem resolution. Although responsiveness was rated very high, it remained the lowest service quality dimension and therefore requires continued improvement.

Finally, future researchers may test the same model in other semi-urban and rural areas, compare results across different bank types, or use longitudinal designs to examine whether financial education, digital banking use, and inclusive access improve financial well-being over time.

REFERENCES

1. Aji, D. M., Setiaji, D. B., Syafitri, N. R., & Leonita, L. (2025). The determinants of m-banking apps usage: The role of trust, convenience, app attributes, customer support, social influence, and customer experience. *Proceeding - 2025 International Conference on Computer System, Information Technology, and Electrical Engineering (COSITE 2025)*, 13–18. <https://doi.org/10.1109/COSITE68330.2025.11414295>
2. Anandhi, E. D., & Velmurugan, G. (2024). Understanding individual financial stability: A systematic review and bibliometric analysis (1994–2023). *Multidisciplinary Reviews*, 7(9), Article 2024208. <https://doi.org/10.31893/multirev.2024208>
3. Ansar, S., Klapper, L., & Singer, D. (2023). The importance of financial education for the effective use of formal financial services. *Journal of Financial Literacy and Wellbeing*, 1(1), 28–46. <https://doi.org/10.1017/flw.2023.5>
4. Bhuvaneswari, C. M., & Maruthamuthu, K. (2024). Analysing the art of service quality and customer satisfaction of digital banking services: A SEM approach. *International Review of Management and Marketing*, 14(4), 202–209. <https://doi.org/10.32479/irmm.16234>
5. Bialowolski, P., Weziak-Bialowolska, D., & McNeely, E. (2021). The role of financial fragility and financial control for well-being. *Social Indicators Research*, 155(3), 1137–1157. <https://doi.org/10.1007/s11205-021-02627-5>

6. Birkenmaier, J., Maynard, B., & Kim, Y. (2022). Interventions designed to improve financial capability: A systematic review. *Campbell Systematic Reviews*, 18(1), Article e1225. <https://doi.org/10.1002/cl2.1225>
7. Dangaiso, P., Mukucha, P., Makudza, F., Towo, T., Jonasi, K., & Jaravaza, D. C. (2024). Examining the interplay of internet banking service quality, e-satisfaction, e-word of mouth and e-retention: A post pandemic customer perspective. *Cogent Social Sciences*, 10(1), Article 2296590. <https://doi.org/10.1080/23311886.2023.2296590>
8. Endress, T. (2025). Challenges and progress: Financial inclusion in Southeast Asia. In *Business and management in Asia: Finance and investments in the digital age*. Springer. https://doi.org/10.1007/978-981-96-3452-1_12
9. Farukh, M. U., Taqi, M., Vemavarapu, K. R., Fadel, S. M., & Khan, N. A. (2026). Fintech innovations and the transformation of rural financial ecosystems in India. *FinTech*, 5(1), Article 3. <https://doi.org/10.3390/fintech5010003>
10. Gazi, M. A. I., Masud, A. A., Amin, M. B., Hossain, M. A., Senathirajah, A. R. B. S., & Abdullah, M. (2024). Evaluating customer satisfaction with the quality of online banking services after COVID-19: Developing country perspective. *Cogent Business & Management*, 11(1), Article 2423057. <https://doi.org/10.1080/23311975.2024.2423057>
11. Gupta, L., Shrivastav, R. K., Kumar, S., & Goel, R. (2025). Beyond banking: The future of financial inclusion and economic empowerment. In *Sustainable finance* (pp. 77–97). Springer. https://doi.org/10.1007/978-3-032-01677-5_4
12. Helen, & Kurniawan, R. (2025). AI driven digital banking: Linking service excellence, digital literacy, and user experience to foster customer loyalty. *Proceedings of the 7th International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS 2025)*, 260–265. <https://doi.org/10.1109/ICIMCIS68501.2025.11327383>
13. Jain, P., Sharma, B. K., Jain, R., Pandey, A. K., & Khare, S. (2022). Mobile banking adoption for digital financial inclusion. *ICBIR 2022: 7th International Conference on Business and Industrial Research*, 241–245. <https://doi.org/10.1109/ICBIR54589.2022.9786477>
14. Khan, A. G., Lima, R. P., & Mahmud, M. S. (2021). Understanding the service quality and customer satisfaction of mobile banking in Bangladesh: Using a structural equation model. *Global Business Review*, 22(1), 85–100. <https://doi.org/10.1177/0972150918795551>
15. Khobragade, A., Balachandran, R., Gupta, B., Saroy, R., Awasthy, S., Singh, G., Misra, R., & Dhal, S. (2025). Mobile banking adoption for financial inclusion: Insights from rural West Bengal. *Journal of Social and Economic Development*, 27(2), 525–543. <https://doi.org/10.1007/s40847-024-00376-y>
16. Lestari, S., Adawiyah, W. R., Alhamidi, A. L., Prayogi, J., & Haryanto, R. (2024). Navigating perilous seas: Unmasking online banking frauds, perceived usefulness, fear of cybercrime and distrust in online banking. *Safer Communities*, 23(4), 444–464. <https://doi.org/10.1108/SC-04-2024-0018>
17. Lone, U. M., & Bhat, S. A. (2022). Impact of financial literacy on financial well-being: A mediational role of financial self-efficacy. *Journal of Financial Services Marketing*, 29(1), 122–137. <https://doi.org/10.1057/s41264-022-00183-8>
18. Mehta, K., & Rani, A. (2023). How mobile banking resistance behaviour affects financial inclusion in India? *International Journal of Business and Globalisation*, 35(1–2), 32–47. <https://doi.org/10.1504/IJBG.2023.134391>
19. Pomeranz, D., & Kast, F. (2022). Savings accounts to borrow less. *The Journal of Human Resources*, 59(1), 70–108. <https://doi.org/10.3368/jhr.0619-10264r3>
20. Prasetyo, Y. T., Calino, E. M., Young, M. N., Ayuwati, I. D., & Persada, S. F. (2023). Determining factors affecting mobile banking loyalty in the Philippines: Integrating extended technology acceptance model and DeLone & McLean IS success model. *ACM International Conference Proceeding Series*, 403–409. <https://doi.org/10.1145/3625704.3625770>
21. Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: The modified e-SERVQUAL model. *The TQM Journal*, 32(6), 1443–1466. <https://doi.org/10.1108/TQM-02-2020-0019>
22. Saputra, Y. H., Yunita, I., Budianto, S., & Rahadian, D. (2025). An integration of WEBQUAL 4.0, customer satisfaction index, and importance performance analysis in assessing the quality of BNI mobile

- banking application. Quality - Access to Success, 26(208), 295–319. <https://doi.org/10.47750/QAS/26.208.31>
23. Sarkar, K. K., & Thapa, R. (2021). From social and development banking to digital financial inclusion: The journey of banking in India. *Perspectives on Global Development and Technology*, 19(5–6), 650–675. <https://doi.org/10.1163/15691497-12341575>
24. Shoaib, M., Alam, M. H., & Asghar, F. (2025). Impact of financial literacy and digital banking adoption on financial well-being: Mediating role of financial behavior. *Research Journal for Social Affairs*, 3(6), 529–538. <https://doi.org/10.71317/rjsa.003.06.0479>
25. Siddik, M. N. A. (2021). Mobile banking for financial inclusion in a developing economy: Evidence from Bangladesh. In *Doing business in emerging markets: Progress and promises*. Routledge. <https://doi.org/10.4324/9781003199168-9>
26. Sorgente, A., Atay, B., Aubrey, M., Bhatia, S., Crespo, C., Fonseca, G., Güneri, O. Y., Lep, Ž., Lessard, D., Negru-Subtirica, O., Portugal, A., Ranta, M., Relvas, A. P., Singh, N., Sirsch, U., Zupančič, M., & Lanz, M. (2024). One (financial well-being) model fits all? Testing the multidimensional subjective financial well-being scale across nine countries. *Journal of Happiness Studies*, 25(1–2), Article 11. <https://doi.org/10.1007/s10902-024-00708-z>
27. Titin, T., Marselina, S., Patimah, S., Haryadi, D., & Wahyudi. (2024). The role of financial knowledge and financial literacy in student financial management. *International Journal of Applied Finance and Business Studies*, 11(4), 853–859. <https://doi.org/10.35335/ijafibs.v11i4.233>
28. Zen, F., Purvitasari, S. H., Murdiono, A., & Istanti, L. N. (2023). Financial technology moderates the influence of financial literacy and financial self-efficacy on financial management behavior. *Advances in Economics, Business and Management Research*. https://doi.org/10.2991/978-94-6463-302-3_13