



## Effects of Integrating Advanced Technology and Financial Literacy on Customer Satisfaction and Retention in Retail Lending

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### Abstract

This study examined the effects of integrating advanced technology and financial literacy on customer satisfaction and retention in retail lending. Using a descriptive-correlational research design, data were collected from 165 respondents along Arnaiz Avenue, Legaspi Village, Makati City, through structured surveys administered to customers of various retail lending institutions. Findings revealed that advanced technology significantly enhanced customer satisfaction, with the highest-rated indicators being ease of use (mean = 4.43), speed of loan approval/processing (mean = 4.16), and responsiveness (mean = 3.94). Financial literacy programs also improved satisfaction, particularly in product awareness (mean = 4.16), interest rate/fees awareness (mean = 4.12), and emotional connection (mean = 4.02). The integration of both technology and financial literacy showed a strong, statistically significant effect on customer satisfaction and retention ( $p < .001$ ), with notable differences observed based on gender and employment status. The study concluded that combining digital innovation with financial education strengthened customer relationships and promoted long-term retention. These findings imply that financial institutions should invest in user-friendly technologies and incorporate financial literacy initiatives to enhance customer experience, build trust, and foster loyalty. By leveraging technological and educational strategies, retail lenders can improve operational efficiency, meet customer expectations, and maintain a competitive advantage in the financial industry.

**Keywords:** advanced technology, financial literacy, customer satisfaction, customer retention, retail lending



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## INTRODUCTION

Retail loans are pivotal drivers of individual welfare and macroeconomic growth, facilitating essential purchases such as housing, vehicles, and education while stimulating demand across diverse industries. Increased lending activity correlates with higher consumer confidence and institutional performance, provided that banks prioritize service quality and long-term client relationships (Pawar & Pawar, 2023; Federal Reserve, 2022). In the Philippines, a more open banking system and proactive policies by the Bangko Sentral ng Pilipinas (BSP, 2022) have fostered a competitive landscape characterized by diverse products like personal, auto, and housing loans. Consequently, the industry has shifted its focus toward customer satisfaction and retention as core determinants of success, largely

dependent on service innovation (Ayinaddis, et al., 2023), brand marketing (Fatma et al., 2023), and the cultivation of reliability and trust (Biswal, 2021; Karim, 2022).

The digital transformation of the Philippine financial landscape is most evident in Makati City, where traditional banks and FinTech startups leverage AI and machine learning to secure a competitive advantage. Despite this technological surge, a significant gap in financial literacy remains regarding interest rates and credit scores (Cacnio & Romarate, 2024; Cator, 2024). While digital platforms have increased accessibility, the specific impact of AI-driven tools—such as chatbots and automated processing—on customer satisfaction and retention remains under-explored. This study addresses this gap by evaluating the intersection of advanced

technology and financial literacy programs, grounded in Oliver's Expectancy Disconfirmation Theory, which posits that satisfaction emerges from the alignment of expectations with actual outcomes.

Modern retail lending is defined by evolving consumer expectations and the necessity of maintaining strong institutional ties to foster loyalty (Mistrean, 2023). Products such as personal loans (BSP, 2023), auto loans (AAP, 2023), housing loans, and revolving credit cards are now judged not just on accessibility, but on how well they suit specific consumer needs (Tilak, 2024). As banks embrace innovative risk management (Truby, 2020), their competitiveness increasingly hinges on a satisfied client base (Jia & Liu, 2024). Ultimately, marketing success and financial returns are driven by a combination of product excellence, branding (Fatima & Khan, 2023), and a genuine commitment to social responsibility, which collectively shape a company's image and ensure long-term stability (Biswas et al., 2021; Hawamdeh, 2022; Hidayat, 2023).

## LITERATURE REVIEW

**Customer Satisfaction.** Customer satisfaction serves as a critical performance metric that reflects how effectively financial institutions align their products and services with consumer expectations (Fida et al., 2020; Puri & Garg, 2023). Defined as the overall perception of happiness regarding a company's total experience, this concept allows for a precise evaluation of institutional performance and the identification of service gaps (Hidayat & Idrus, 2023). High service quality is intrinsically linked to satisfaction, fostering long-term loyalty and reducing the costs associated with customer acquisition. In a landscape defined by rapid technological shifts, prioritizing value creation and placing the customer at the center of operations is essential for business sustainability and commercial success (Henry, 2020; Hidayat & Idrus, 2023). Ultimately, by utilizing feedback to drive continuous improvement and maintaining a responsive, customer-centric approach, banks can better

address specific concerns, strengthen brand loyalty, and ensure long-term relevance within the competitive retail banking industry (Pawar & Pawar, 2023; Fida et al., 2020).

**Customer Retention.** Maximizing profit remains the primary objective of financial institutions, a goal intrinsically linked to maintaining a high volume of long-term borrowers (Gabriel, et al., 2021). Research indicates that client retention is a direct byproduct of customer trust, which is built when bank staff demonstrate high levels of responsiveness, reliability, and engagement (Simanjuntak et al., 2020; Henry, 2020). In a competitive landscape, the ability to attract and retain consumers depends heavily on service quality, which serves as a pillar for growth and profitability (Dhawan & Gupta, 2024; Asnawi et al., 2020; Qomariah, 2021). Furthermore, consumer loyalty—characterized by consistent repeat purchases and a personal desire for a brand—is strengthened when customers have a positive impression of a brand's reliability and are willing to provide referrals (Mostafa & Kasamani, 2020; Sasikumar & Sundaram, 2024; Salehzadeh, 2023; Mursid & Wu, 2021). To remain viable, banks across all sectors must employ innovative marketing strategies and focus on boosting assurance and dependability to secure a lasting competitive advantage (Zephaniah, 2020; Henry, 2020).

**Artificial Intelligence.** The integration of big data, cloud computing, and AI has revolutionized the e-commerce and retail lending sectors, fundamentally transforming customer interactions (Verhoef, 2021). Lenders leveraging machine learning and AI can offer highly personalized experiences and real-time updates, which significantly boost customer satisfaction and retention rates (McKinsey & Company, 2021). Within the banking sector, AI optimizes diverse functional domains including back-end operations, fraud detection, CRM, and risk management. From a consumer perspective, this is most visible through AI-driven interfaces like chatbots and robo-advisors—pioneered by institutions such as Bank of America—which provide flexible, 24/7 financial support (Zahra, 2022; Hwang & Kim,

2021; Nejad, 2022). Furthermore, AI has streamlined credit decision-making, using complex algorithms to determine loan eligibility and credit limits. While this automation allows for faster, more accurate assessments that increase profitability and reduce costs, regulators emphasize that banks must ensure algorithmic transparency and interpretability to prevent bias and discriminatory practices (Ali & Estran, 2022; Mogaji & Nguyen, 2022; Estran, 2022).

**Customer and Financial Institution perspective of AI.** The primary driver for AI adoption in banking is the enhancement of customer experience, achieved through chatbots and robotic advisors that provide real-time responses and personalized marketing algorithms tailored to individual needs (Abu Daqar, 2020; Ashta & Herrmann, 2021). These innovations foster greater loyalty and profitability by automating repetitive tasks, reducing human error, and lowering operational risks in areas like fraud detection and credit decisioning (Dhote et al., 2020; Ashta & Herrmann, 2021). Furthermore, AI-powered mobile tools and fintech solutions offer 24/7 accessibility and flexibility, empowering users with convenient technology that encourages long-term retention (Nejad, 2022). However, the successful acceptance of these AI-driven services depends heavily on consumer attitudes and subjective norms, which are shaped by their understanding of the technology's benefits and security risks (Sheth et al., 2022; Flavián et al., 2022). Consequently, comprehensive financial education campaigns are essential to ensure that clients feel confident and informed enough to fully embrace these digital advancements (Payne et al., 2021).

**Consumer Behavior in Retail Loans.** Consumer decision-making in the retail loan market is shaped by a complex interplay of economic stability, interest rates, and personal financial circumstances, with periods of economic growth notably increasing borrowing confidence (Hurst & Stafford, 2020; Jaisi et al., 2024). In the Philippines, there is a growing reliance on retail loans for lifestyle, education,

and housing, a trend fueled by the convenience of digital banking platforms that particularly appeal to Gen Z and Millennial borrowers (Reyes & Tan, 2022). Beyond technical features, the quality of timely support remains vital in fostering positive bank-customer relationships (Dhawan & Gupta, 2024). Furthermore, social influence plays a significant role, as consumers are highly sensitive to the behaviors and recommendations of their immediate social circles (Gligor et al., 2020; Hassan, 2024). This "imitation effect" means that negative experiences among peers can deter potential borrowers, whereas satisfied, loyal customers act as powerful brand advocates who drive repurchases and long-term profitability by influencing the financial choices of friends and family (Razak & Shamsudin, 2020; Ghazzawi, 2020; Herhausen et al., 2020; Hamza & Shamsudin, 2020).

**Financial Literacy in Consumer's Decision Making.** Financial literacy serves as a multi-dimensional construct involving financial knowledge, management abilities, and psychological attitudes, all of which are strongly linked to superior financial decision-making and heightened consumer satisfaction (Lusardi, 2020). By possessing the drive and self-assurance to apply this understanding, individuals can better navigate complex loan terms and assess personal needs, ultimately fostering broader economic stability (Kumar & Rajesh, 2021). Research indicates that financial literacy significantly influences behavioral conduct and is positively correlated with financial inclusion (Firli & Fanesa, 2022; Winarto & Gunawan, 2022). For instance, specialized knowledge in interest calculations and loan applications directly improves access to banking services for sectors like MSMEs (Susan, et al. 2020). Furthermore, demographic factors such as age, education, marital status, and gender play critical roles in determining literacy levels (Sarsale, 2021; Bangco et al., 2022; Sanglay, 2021). Ultimately, an informed customer who understands interest rates and fees is more likely to develop the confidence and trust to maintain a satisfying, long-term loyal relationship with their lending institution.

**Theoretical Framework.** This study is grounded in Richard Oliver’s Expectancy Disconfirmation Theory, which posits that customer satisfaction is a result of the comparative process between pre-consumption expectations and the actual perceived performance of a service (Gabriel, et al., 2021). According to the model, satisfaction is categorized into four components: expectations, perceived performance, disconfirmation, and satisfaction; where expectations serve as the benchmark for evaluating service quality (Gabriel, et al., 2021). As noted by Henry (2020), positive disconfirmation occurs when the bank’s service exceeds expectations, leading to happiness, while negative disconfirmation—where performance fails to meet the expected standard—results in dissatisfaction. In the context of retail lending, this theory is instrumental for evaluating gaps in procedures such as the ease of application and approval speed, as identifying these discrepancies allows institutions to improve service delivery (Gabriel, et al., 2021). Ultimately, managing these expectations to ensure positive outcomes is crucial for fostering customer loyalty and increasing long-term retention rates (Henry, 2020; Gabriel, et al., 2021).

**Conceptual Framework.** This study’s conceptual framework illustrates a unidirectional relationship where Advanced Technology and Financial Literacy serve as independent variables (IVs) that influence the dependent variables of Customer Satisfaction and Retention. Grounded in Oliver’s (1980) Expectancy Disconfirmation Theory, the framework assumes that when service performance exceeds expectations, it results in a unified construct of satisfaction and loyalty. For Advanced Technology, dimensions such as ease of use, customer support, and loan process efficiency are adapted from Nejad (2022) to reflect how accessibility and convenience directly bolster satisfaction. Simultaneously, Financial Literacy focuses on product awareness, fee transparency, and decision-making confidence, drawing from Lusardi (2020) and Firlil & Fanesa (2022) to show how informed borrowers build deeper trust and emotional connections with their

lenders. Furthermore, demographic factors—including age, gender, employment, and income—act as moderating variables that may alter the strength of these relationships. By integrating these validated sub-variables, the study provides a structured approach to examining how technology and literacy interact with demographic characteristics to drive institutional success (Nejad, 2022; Lusardi, 2020; Firlil & Fanesa, 2022; Oliver, 1980).

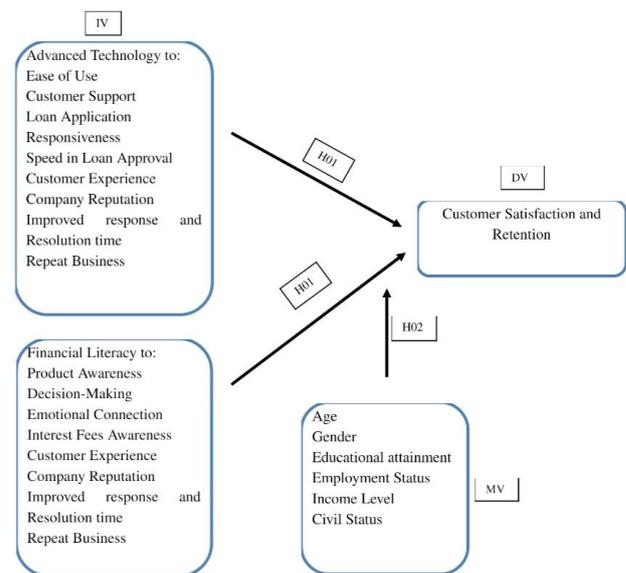


Figure 1  
 Conceptual Framework of the Study

This study evaluated how the integration of advanced technology and financial literacy programs influences customer satisfaction and retention within the retail lending sector of Makati City. Furthermore, it aimed to identify the specific technological and educational drivers that allow financial institutions to align actual service performance with consumer expectations, thereby fostering long-term loyalty and competitive advantage. Specifically, it sought answers to the following questions:

1. What is the demographic profile of the respondents in terms of the following:
  - 1.1 Gender;
  - 1.2 Age;
  - 1.3 Education Attainment;
  - 1.4 Employment Status;
  - 1.5 Income Level; and,
  - 1.6 Civil Status?

2. What is the level of customer satisfaction and retention with advanced technology in retail lending in terms of the following:
  - 2.1 Ease of use;
  - 2.2 Customer Support;
  - 2.3 Loan Application;
  - 2.4 Responsiveness; and,
  - 2.5 Speed in loan approval/process?
3. What is the level of customer satisfaction and retention with financial literacy in retail lending in terms of the following:
  - 3.1 Product Awareness;
  - 3.2 Decision-Making Confidence;
  - 3.3 Interest rates/fees awareness; and,
  - 3.4 Emotional Connection?
4. What is the effect of integrating advanced technology and financial literacy on customer satisfaction and retention in terms of the following:
  - 4.1 Customer Experience;
  - 4.2 Company Reputation;
  - 4.3 Improved response and resolution time; and,
  - 4.4 Repeat Business?
5. Is there a difference in customer satisfaction and retention when respondents are grouped according to demographic profile?
6. Based from the result of the study, what inputs can be derived as basis for the integration of advanced technology and financial literacy program in retail lending?

**Hypothesis.** Based on the relationships established, the following hypotheses were formulated to test the impact of advanced technology and financial literacy on customer outcomes:

**H<sub>01</sub>:** The integration of advanced technology and financial literacy has no significant effect on customer satisfaction and retention in retail lending.

**H<sub>02</sub>:** There is no significant difference among respondents on their customer satisfaction and retention when grouped according to profile.

## METHODS

**Research Design.** The study employed a descriptive-correlational research design to systematically observe and outline population characteristics without variable manipulation. The descriptive component summarizes demographic profiles and levels of satisfaction and retention, while the correlational aspect utilizes regression analysis to investigate the relationships between advanced technology, financial literacy, and customer outcomes. By focusing on the "what" rather than the "why," this approach provides a detailed contextual overview through structured surveys and existing data analysis.

**Instrumentation.** This research utilized a structured survey to gather information from a group of retail lending customers. This survey aimed to provide insights into how integrating advanced technology and financial literacy could improve customer satisfaction and retention in retail lending, offering actionable suggestions and recommendations for financial institutions to improve their services and strengthen customer relationships. The target population consisted of individuals who had interacted with different retail lending institutions. The survey questionnaire consisted of the following:

1. Demographics, such as age, gender, educational level, employment status, income level and civil status.
2. Level of customer satisfaction in loan application, responsiveness, ease of use and overall experience.
3. Level of confidence in decision making, product awareness, familiarity with terms, conditions and other fees.
4. Likelihood to continue with the same lender and to recommend the lender.

**Population and Sampling.** This study focused on 165 respondents aged 18 to 60 with retail lending experience along Arnaiz Avenue, Makati City, a

location chosen for its high concentration of diverse banking institutions. Utilizing a random sampling method, the study ensured that every eligible individual had an equal chance of selection, thereby minimizing selection bias and enhancing the generalizability of the findings across the broader financial landscape. Participants were selected without preference for specific banks to ensure balanced insights, while those outside the age range or without relevant borrowing experience were excluded. This approach provided a representative subset of the population, facilitating reliable statistical analysis of the various demographics and loan types present in the premier business district.

**Data Gathering Procedures.** The data gathering procedure commenced with identifying the target population along Arnaiz Avenue, where surveys were administered anonymously in public areas to ensure a broad representation of income levels and financial backgrounds. Participants were provided with consent forms detailing the study's purpose and the voluntary, confidential nature of their involvement before completing a structured questionnaire. To quantify customer perceptions, the study utilized a five-point Likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree, a tool selected for its efficacy in measuring the intensity of subjective attitudes regarding satisfaction and perceived value. This methodical approach facilitated the collection of measurable, comparable data, allowing for robust statistical analysis of the relationships between technological integration, financial literacy, and customer retention.

**Data Analysis.** To analyze the data and draw meaningful conclusions, a combination of statistical tools was employed. Frequency Analysis was used to summarize the distribution of responses and identify behavioral patterns, while the Weighted Mean provided a nuanced average of satisfaction scores by accounting for the varying influence of different service factors. To evaluate the relationship between variables, the Pearson Correlation (Pearson R) measured the strength and direction of associations—ranging from +1

(perfect positive) to -1 (perfect negative)—between technology usage, financial literacy, and customer outcomes. Furthermore, Regression Analysis was conducted to determine the predictive effect and statistical significance of the independent variables on satisfaction levels ( $H_{01}$ ). Finally, Analysis of Variance (ANOVA) was applied to test for significant differences in satisfaction across demographic groups ( $H_{02}$ ), allowing the researcher to pinpoint which factors most heavily contributed to variations in customer retention.

## RESULTS

**Demographic Profile of the Respondents in Terms of Gender, Age, Education Attainment, Employment Status, Income Level, and Civil Status.** The demographic data in Table 1 revealed that most of the respondents were female (63%), aged between 26–33 years old (52.1%), and possessed a Bachelor's degree (86.7%). Most were employed (90.3%), had an income level ranging from Php 26,000 to Php 35,000 (32.1%), and were predominantly single (67.9%).

Table 1  
*Demographic Profile of the Respondents*

Demographic Profile		Frequency	Percentage
Gender	Male	61	37
	Female	104	63
Total		165	100
Age	18-25 years old	20	12.1
	26-33 years old	86	52.1
	34-41 years old	20	12.1
	42-49 years old	25	15.2
	50 years old and above	14	8.5
Total		165	100
Educational Attainment	High School	1	0.6
	Bachelor's Degree	143	86.7
	Master's Degree	15	9.1
	Doctorate Degree	6	3.6
Total		165	100
Employment Status	Student	3	1.8
	Unemployed	10	6.1
	Employed	149	90.3
	Self-Employed	3	1.8
Total		165	100
Income Level	Less than Php 10,000	6	3.6
	Php 10,000 - Php 17,000	21	12.7
	Php 18,000 - Php 25,000	34	20.6
	Php 26,000 - Php 35,000	53	32.1
	Php 36,000 - Php 45,000	26	15.8
	Php 46,000 - Php 60,000	21	12.7
	Above Php 60,000	4	2.4
Total		165	100
Civil Status	Single	112	67.9
	Married	51	30.9
	Divorced / Annulled	2	1.2
Total		165	100

These findings align with Reyes and Tan (2022), who noted that younger Filipino consumers, particularly Millennials and Gen Z, are increasingly engaging with digital retail lending platforms due to their familiarity with online tools and greater exposure to financial technology. Additionally, Bangco et al. (2022) and Sanglay (2021) found that educational attainment and employment status are significant factors in determining financial literacy and behavior, which supports the profile of the study's respondents.

**Level of Customer Satisfaction and Retention with Advanced Technology in Retail Lending in terms of Ease of Use, Customer Support, Loan Application, Responsiveness, and Speed in Loan Approval/Process.** In Table 2, the computed overall mean of 4.02 suggests that respondents agree that financial literacy enhances their satisfaction and retention in retail lending. The highest-rated indicators were Product Awareness (4.16) and Interest Rate Awareness (4.12), indicating that value understanding financial products and associated costs.

Financial literacy equips customers with knowledge to make informed decisions, raising expectations of service quality. According to Expectancy Disconfirmation Theory, when lenders provide clear explanations of loan products, interest rates, and fees that meet or exceed customer expectations, satisfaction increases. Respondents' strong agreement indicates positive disconfirmation, which strengthens loyalty and trust. This outcome confirms the findings of Lusardi (2020) and Kumar & Rajesh (2021) that financial literacy significantly improves consumer decision-making and satisfaction. Respondents' awareness of interest rates, loan terms, and fees helps build trust and confidence in financial institutions—key elements highlighted by Firli & Fanesa (2022) and Winarto & Gunawan (2022) as drivers of responsible financial behavior and sustained engagement with lenders. The indicator Emotional Connection (4.02) reveals that financial education fosters not just rational decision-making but also strengthens the emotional bond between

customers and financial institutions. This emotional engagement, noted by Payne et al. (2021), plays a vital role in promoting loyalty and repeat usage of financial services.

Table 2  
*Effect on Customer Satisfaction and Retention Integrating Advanced Technology*

Statement	Mean	SD	Interpretation
<b>Ease of Use</b>	<b>4.43</b>	<b>.95</b>	<b>Strongly Agree</b>
1. I can easily navigate the lender's mobile app and website.	4.31	.87	Strongly Agree
2. The technology is user-friendly and makes it simple to manage my account information and loans.	4.25	.93	Strongly Agree
3. I am satisfied with the ease of use of my lender's technology.	4.44	1.03	Strongly Agree
<b>Customer support / Service assistance</b>	<b>4.14</b>	<b>.97</b>	<b>Agree</b>
1. I find the online support resources (FAQs, chat, etc.) helpful.	4.09	1.01	Agree
2. I find it easy to understand the instructions provided by customer support.	4.16	.95	Agree
3. I am satisfied with the customer support of my lender's technology.	4.17	.96	Agree
<b>Loan application process</b>	<b>4.03</b>	<b>1.14</b>	<b>Agree</b>
1. The online loan application process is quick and user-friendly.	4.21	.99	Strongly Agree
2. I can easily upload required documents and track the status of my loan application online.	3.71	1.46	Agree
3. I am satisfied with the loan application process of my lender's technology.	4.18	.98	Agree
<b>Responsiveness</b>	<b>3.94</b>	<b>1.09</b>	<b>Agree</b>
1. I receive timely updates regarding my loan application status.	4.05	1.01	Agree
2. My concerns are prioritized and addressed promptly by my lender.	3.78	1.21	Agree
3. I am satisfied with the speed of responses from customer support	3.99	1.05	Agree
<b>Speed of the loan approval and processing</b>	<b>4.16</b>	<b>.97</b>	<b>Agree</b>
1. The loan approval process is quick and efficient.	4.12	.95	Agree
2. I find the electronic documentation process to be faster than traditional methods.	4.28	.90	Strongly Agree
3. I am satisfied with the speed of the overall loan processing.	4.08	1.05	Agree
<b>Weighted Mean</b>	<b>4.12</b>	<b>1.02</b>	<b>Agree</b>

**Effect of Integrating Advanced Technology and Financial Literacy on Customer Satisfaction and Retention in terms of Customer Experience, Company Reputation, Improved Response and Resolution Time, and Repeat Business.** The computed overall mean of 4.02 (Table 3) suggests that respondents agree that financial literacy enhances their satisfaction and retention in retail lending. The highest-rated indicators were Product Awareness (4.16) and Interest Rate Awareness (4.12), indicating that respondents value understanding financial products and associated costs.

**Table 3**  
*Effect on Customer Satisfaction and Retention Integrating Advanced Technology and Financial Literacy in Retail Lending*

Statement	Mean	SD	Interpretation
<b>Product awareness</b>	<b>4.16</b>	<b>1.00</b>	<b>Agree</b>
1. I understand the terms and conditions of the loan products available to me.	4.16	1.05	Agree
2. I regularly receive updates about new loan products from my lender.	4.15	1.00	Agree
3. I feel confident in my knowledge of the loan products available to me.	4.19	.95	Agree
<b>Decision-making confidence</b>	<b>4.09</b>	<b>.98</b>	<b>Agree</b>
1. I understand how to compare different loan products effectively.	4.08	.97	Agree
2. I feel knowledgeable about the impact of interest rates on my loan choices.	4.08	.99	Agree
3. Overall, I believe I can make sound financial decisions regarding loans.	4.10	.99	Agree
<b>Interest rates/fees awareness</b>	<b>4.12</b>	<b>.96</b>	<b>Agree</b>
1. I regularly review the fees and terms associated with my loan.	4.06	1.02	Agree
2. My lender discussed well the interest rates, fees, and payment default implications.	4.13	.92	Agree
3. I feel well-informed about the financial implications of interest rates, fees, and defaults.	4.15	.93	Agree
<b>Emotional connection</b>	<b>4.02</b>	<b>.98</b>	<b>Agree</b>
1. My lender understands my financial goals and needs.	4.03	.98	Agree
2. My lender shows genuine interest in helping me improve my financial literacy.	4.02	.95	Agree
3. I feel emotionally supported in my financial journey by my lender.	4.01	1.01	Agree
<b>Weighted Mean</b>	<b>4.02</b>	<b>.98</b>	<b>Agree</b>

Financial literacy equips customers with knowledge to make informed decisions, raising expectations of service quality. According to Expectancy Disconfirmation Theory, when lenders provide clear explanations of loan products, interest rates, and fees that meet or exceed customer expectations, satisfaction increases. Respondents' strong agreement indicates positive disconfirmation, which strengthens loyalty and trust. This outcome confirms the findings of Lusardi (2020) and Kumar & Rajesh (2021) that financial literacy significantly improves consumer decision-making and satisfaction. Respondents' awareness of interest rates, loan terms, and fees helps build trust and confidence in financial institutions—key elements highlighted by Firli & Fanesa (2022) and Winarto & Gunawan

(2022) as drivers of responsible financial behavior and sustained engagement with lenders. The indicator Emotional Connection (4.02) reveals that financial education fosters not just rational decision-making but also strengthens the emotional bond between customers and financial institutions. This emotional engagement, noted by Payne et al. (2021), plays a vital role in promoting loyalty and repeat usage of financial services.

**Effect of Integrating Advanced Technology and Financial Literacy on Customer Satisfaction and Retention in terms of Customer Experience, Company Reputation, Improved Response and Resolution Time, and Repeat Business.** Table 4 illustrates that the integration of advanced technology and financial literacy has a highly positive effect on customer satisfaction and retention, yielding a grand weighted mean of 4.33, interpreted as "Strongly Agree." Among the four assessed dimensions, Improved Response and Resolution Time achieved the highest mean of 4.46, indicating that borrowers place the greatest value on the speed and efficiency of institutional support. This is followed by Company Reputation (4.39) and Repeat Business (4.29), suggesting that a lender's market standing and the convenience of their digital processes are fundamental drivers of trust and long-term loyalty. Customer Experience, while still rated positively with a mean of 4.19, reflects that while technology makes information more accessible, there is still room to further empower clients in their personal financial decision-making.

The data further highlights specific areas of strength, particularly in the responsiveness of lenders. Respondents expressed the highest level of agreement regarding the importance of fast resolution times (4.47), noting a significant hesitancy to utilize lenders known for slow communication. Similarly, the company's reputation was shown to have a direct impact on the perceived reliability of financial products (4.42). In terms of retention, the ease of online application processes (4.32) and the accessibility of loan information through technology (4.27) were identified as key factors

that encourage repeat business and referrals to friends and family. Collectively, these findings suggest that the synergy between technological efficiency and informed consumer awareness creates a robust foundation for maintaining a satisfied and loyal clientele in the competitive retail lending market of Makati City.

Table 4  
*Effect on Customer Satisfaction and Retention Integrating Advanced Technology and Financial Literacy in Retail Lending*

Statement	Mean	SD	Interpretation
<b>Customer experience</b>	<b>4.19</b>	<b>.92</b>	<b>Agree</b>
1. I find it easier to access information about my loans using technology.	4.27	.88	Strongly Agree
2. I am knowledgeable to make better financial decisions because of the information I receive from my lender.	4.15	.96	Agree
3. I am satisfied with the level of service I receive from my lender.	4.16	.90	Agree
<b>Company reputation</b>	<b>4.39</b>	<b>.91</b>	<b>Strongly Agree</b>
1. I trust lenders with a strong reputation more than those with a lesser-known reputation.	4.36	.92	Strongly Agree
2. I consider a lender's reputation important when evaluating loan options.	4.39	.91	Strongly Agree
3. The company's reputation affects my overall trust in their financial products.	4.42	.88	Strongly Agree
<b>Improved response and resolution time</b>	<b>4.46</b>	<b>.87</b>	<b>Strongly Agree</b>
1. I am more likely to trust a lender that provides timely responses to inquiries.	4.44	.86	Strongly Agree
2. I would be hesitant to choose a lender with a reputation for slow response times.	4.47	.87	Strongly Agree
3. Fast response and resolution times are key factors in my decision to avail a loan.	4.47	.88	Strongly Agree
<b>Repeat Business</b>	<b>4.29</b>	<b>.99</b>	<b>Strongly Agree</b>
1. The convenience of online services encourages me to choose my lender for future loans.	4.30	.89	Strongly Agree
2. I am likely to refer my lender to friends and family due to positive experiences.	4.24	.94	Strongly Agree
3. The ease of the loan application process makes me more likely to return to my lender.	4.32	.88	Strongly Agree
<b>Weighted Mean</b>	<b>4.33</b>	<b>.90</b>	<b>Strongly Agree</b>

The regression analysis presented in Table 5 confirms that the integration of advanced technology and financial literacy exerts a statistically significant effect across all measured dimensions, including customer experience, company reputation, improved response time, and repeat business. With all computed p-values falling below the 0.001 threshold, the null hypotheses were rejected,

establishing a robust predictive relationship between these independent variables and institutional outcomes. These findings align with the research of Ashta & Herrmann (2021) and Dhote et al. (2020), which underscores how AI and automation optimize turnaround times and operational accuracy to elevate the consumer experience. Furthermore, the results validate the assertions of Gabriel, et al. (2021) and Simanjuntak et al. (2020), who noted that consistent, technology-driven service and educational support are fundamental to building a reliable company reputation and securing a competitive advantage in the financial sector.

Table 5  
*Regression Analysis of the Effect of Advanced Technology and Financial Literacy to Customer Satisfaction and Retention in Retail Lending*

Variables	Computed-z	P-value	Decision	Conclusion	
Advance Technology	Customer Experience	15.88	.001	Reject Ho	Significant
	Company Reputation	13.57	.001	Reject Ho	Significant
	Improve Response	13.42	.001	Reject Ho	Significant
	Repeat Business	14.76	.001	Reject Ho	Significant
Financial Literacy	Customer Experience	14.80	.001	Reject Ho	Significant
	Company Reputation	14.32	.001	Reject Ho	Significant
	Improve Response	13.98	.001	Reject Ho	Significant
	Repeat Business	18.31	.001	Reject Ho	Significant

This significant correlation strongly supports Oliver's Expectancy Disconfirmation Theory, demonstrating that the synergy of digital innovation and financial awareness ensures that service performance consistently meets or exceeds customer expectations. The data illustrates that high service quality, improved accessibility, and enhanced consumer knowledge are direct drivers of satisfaction and institutional loyalty (Dhawan & Gupta, 2024; Henry, 2020; Nejad, 2022). By empowering borrowers with the tools to navigate financial products while providing the speed of automated processing, lenders can effectively transition from simple service delivery to fostering deep-seated engagement. Ultimately, these results provide empirical evidence that the strategic alignment of technological and educational initiatives is essential for promoting long-term customer retention and maintaining a satisfied clientele in the modern retail lending landscape.

**Difference Between Customer Satisfaction and Retention When Respondents are Grouped According to Demographic Profile.** The statistical analysis in Table 6 reveals that gender and employment status significantly influence customer satisfaction and retention regarding advanced technology and financial literacy. Specifically, the p-values for gender ( $p = .042$  for technology;  $p = .007$  for literacy) and employment status ( $p = .013$  for technology;  $p = .049$  for literacy) fell below the significance threshold, leading to the rejection of the null hypotheses. Conversely, no significant differences were found based on age, educational attainment, income level, or civil status, as all associated p-values exceeded the significance level (ranging from .139 to .925).

Table 6  
*Difference in the Level of Customer Satisfaction and Retention according to demographic profile*

Variables	Computed-F	P-value	Decision	Conclusion	
Advance Technology	Gender	2.05	.042	Reject Ho	Significant
	Age	.44	.776	Do Not Reject Ho	Not Significant
	Educational Attainment	1.48	.227	Do Not Reject Ho	Not Significant
	Employment Status	9.87	.013	Reject Ho	Significant
	Monthly Income	1.48	.227	Do Not Reject Ho	Not Significant
	Civil Status	1.27	.397	Do Not Reject Ho	Not Significant
	Financial Literacy	Gender	2.72	.007	Reject Ho
Age		1.31	.281	Do Not Reject Ho	Not Significant
Educational Attainment		1.81	.139	Do Not Reject Ho	Not Significant
Employment Status		5.36	.049	Reject Ho	Significant
Monthly Income		1.81	.139	Do Not Reject Ho	Not Significant
Civil Status		.08	.925	Do Not Reject Ho	Not Significant

These results align with research by Bangco et al. (2022) and Sanglay (2021), which identifies gender and employment as pivotal factors in shaping financial behaviors. The data suggests that employed individuals may engage more frequently with technology-driven lending services, while gender-based variations likely stem from differing levels of digital comfort and financial engagement. Consequently, while some demographic traits are neutral, gender and employment remain critical determinants of how customers experience integrated financial technologies.

**Inputs as Basis for the Integration of Advanced Technology and Financial Literacy Program in Retail Lending.** The integration of advanced technology and financial literacy in retail lending should be built upon a user-centric digital infrastructure that prioritizes speed and transparency. According to the data, the program's foundation must be an intuitive mobile interface characterized by "Ease of Use" (4.43) and "Improved Response Time" (4.46). This involves streamlining the loan application process—specifically improving the document upload and tracking features—and utilizing AI-driven automation to ensure near-instantaneous feedback. Because "Company Reputation" and "Repeat Business" are heavily influenced by these efficiencies, the technology should not only be a tool for processing transactions but a platform for building trust through reliable, high-speed service delivery that meets the high expectations of the modern, employed workforce.

Simultaneously, the program must incorporate embedded educational modules that transform passive borrowers into informed decision-makers. The research indicates that "Product Awareness" and "Interest Rate Awareness" are vital drivers of satisfaction, suggesting that lenders should integrate interactive tools like interest calculators and clear, digital explanations of terms directly into the app experience. Since gender and employment status significantly impact how these services are perceived, the program should offer personalized financial "journeys" that foster an "Emotional Connection" (4.02). By combining high-tech efficiency with high-clarity financial education, institutions can bridge the gap between simple service provision and long-term customer empowerment, ultimately securing a competitive advantage in the retail lending market.

## DISCUSSION

The findings of this study highlight a respondent profile primarily composed of young, female, and college-educated individuals who strongly

value the integration of technology and education in financial services. Specifically, advanced technology significantly enhanced satisfaction (Overall Mean: 4.12), driven by ease of use (4.43) and speed of processing (4.16), while financial literacy initiatives simultaneously improved customer experiences (Overall Mean: 4.02) through better product awareness (4.16) and emotional connection (4.02). When combined, these factors exerted a highly significant influence on company reputation (4.39) and repeat business (4.28), with regression analysis confirming a statistically significant impact on overall satisfaction and retention ( $p < 0.001$ ). Furthermore, the study identified significant differences in customer satisfaction based on gender and employment status, while age, income, and civil status showed no significant variation.

This research successfully demonstrates that the synergy between digital innovation and consumer education is a critical determinant of institutional success in retail lending. By rejecting both H01 and H02, the study concludes that user-friendly technology and financial literacy do not just meet expectations but actively foster deeper trust and long-term institutional loyalty. These findings imply that retail lending institutions can secure a formidable competitive advantage by moving beyond simple transaction processing toward a model of customer empowerment. As highlighted by the statistical results, integrating these elements fosters positive word-of-mouth and improves operational efficiency, ensuring that actual service delivery aligns with the high expectations of a modern, tech-savvy workforce in urban centers like Makati City.

To capitalize on these insights, it is recommended that financial institutions prioritize investments in intuitive, responsive digital platforms while simultaneously incorporating structured financial literacy programs into their core service offerings. Educating borrowers on interest rates and repayment terms builds the transparency necessary for long-term relationships, while

policy-makers should ensure that AI-driven tools maintain high standards of fairness and data privacy. For our organization, a stepwise approach involving staff training, usability assessments, and continuous system monitoring is advised to bridge existing literacy gaps and ensure technological security. Borrowers are encouraged to engage with these digital tools to maximize transparency, while future researchers should explore long-term emotional trust, security risks in AI processing, and the satisfaction gaps between urban and rural lending environments to further refine the retail lending landscape.

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3