

FINTECH-BASED LENDING PLATFORM AWARENESS FRAMEWORK FOR MICROBUSINESS OWNERS IN NAGA CITY

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Abstract:

This study investigated the adoption of financial technology (FinTech) lending platforms among microbusiness owners in Naga City, Philippines. Specifically, it determined the FinTech lending platforms adopted, in terms of provider choice, usage extent, and perceived loan characteristics; the factors influencing adoption; the challenges encountered; and the development of an awareness framework to support informed adoption. A mixed-method research design was employed, combining quantitative survey data and qualitative insights from open-ended responses. A total of 100 microbusiness owners who had applied for or received FinTech loans within the past 24 months were selected using quota sampling to ensure representation across business types and operational profiles. The findings showed that microbusiness owners selectively adopted FinTech lending platforms, but once adopted, they used these platforms extensively for essential financing activities. Usability emerged as the most influential adoption factor, and financial challenges were identified as the most significant challenge. The thematic analysis revealed persistent confusion about interest computation, loan terms, data privacy, and repayment policies, along with a strong demand for clearer explanations and educational support. Based on these findings, a FinTech awareness framework was developed to address identified knowledge gaps and support informed use of FinTech lending platforms. The study concluded that while FinTech lending platforms provide accessible financing options for microbusiness owners, effective adoption depends on clarity, trust, usability, and targeted financial education. The results contribute localized empirical evidence to the literature on digital financial inclusion and offer practical guidance for FinTech providers, policymakers, and microbusiness stakeholders.

Keywords: fintech lending platforms, microbusiness owners, digital credit adoption, access to credit, barriers to adoption, financial inclusion.

INTRODUCTION

Access to affordable, timely credit remains a persistent challenge for microbusiness owners, particularly in developing economies, where traditional banking systems often impose strict requirements, lengthy processing times, and collateral demands that many small entrepreneurs cannot meet. Microbusinesses play a crucial role in local economic development by generating

employment, supporting household incomes, and sustaining community-based commerce. However, their limited access to formal financial services constrains their capacity to expand operations, stabilize cash flows, and respond to unexpected financial needs. As a result, many micro-entrepreneurs continue to rely on informal lending sources that often involve higher costs and greater financial risks.

FinTech lending platforms have emerged in recent years as targeted

solutions to address the critical access gap faced by microbusinesses. By leveraging digital technology to streamline credit assessments, documentation, and approval processes, these platforms significantly reduce barriers that kept many entrepreneurs excluded. In Southeast Asia, FinTech adoption among micro and small enterprises has been linked to improved liquidity management and operational flexibility (Parvez et al., 2023). Thus, FinTech lending represents a promising mechanism for bridging longstanding credit divides and empowering micro-entrepreneurs.

Despite its promise, FinTech lending adoption remains uneven. Previous research indicates that usage is influenced not only by technological availability but also by factors such as perceived credibility, usability, and functional capability of platforms (Sharma et al., 2023; Chen et al., 2023). Concerns regarding high interest rates, unclear fee structures, data privacy, and cybersecurity risks further complicate adoption decisions (Rahman, 2024). In many contexts, limited financial literacy and a lack of structured awareness initiatives restrict micro-entrepreneurs' ability to make informed borrowing choices. These challenges highlight that access alone does not guarantee meaningful or sustainable use of digital financial services.

Most studies have focused on broad trends, overlooking the urgent need for granular, context-sensitive insights—especially in smaller urban markets like Naga City, Philippines. Micro-entrepreneurs here operate amid unique

economic and social realities that shape adoption barriers and drivers. Exploring which FinTech platforms are used and why can reveal actionable insights missing from the current conversation. There is also a pressing need to translate research findings into practical resources that enable microbusinesses to navigate credit options confidently.

This study addressed these gaps by examining the adoption of FinTech lending platforms among microbusiness owners in Naga City, focusing on provider choice, usage extent, and loan characteristics. It also analyzed the factors influencing adoption, namely credibility, usability, and capability, as well as the financial, technological, awareness-related, and trust-based barriers that hinder effective utilization. Drawing on both quantitative and qualitative data, the study sought to develop a structured FinTech awareness framework to support informed, responsible borrowing decisions. Specifically, the purpose of this study was to develop a FinTech awareness framework that promotes informed adoption of FinTech lending platforms among microbusiness owners, thereby strengthening financial decision-making, reducing risk exposure, and enhancing the sustainability of micro-enterprise operations.

CONCEPTUAL FRAMEWORK

This study focuses on developing an awareness framework for a FinTech-based lending platform among microbusiness owners in Naga City.

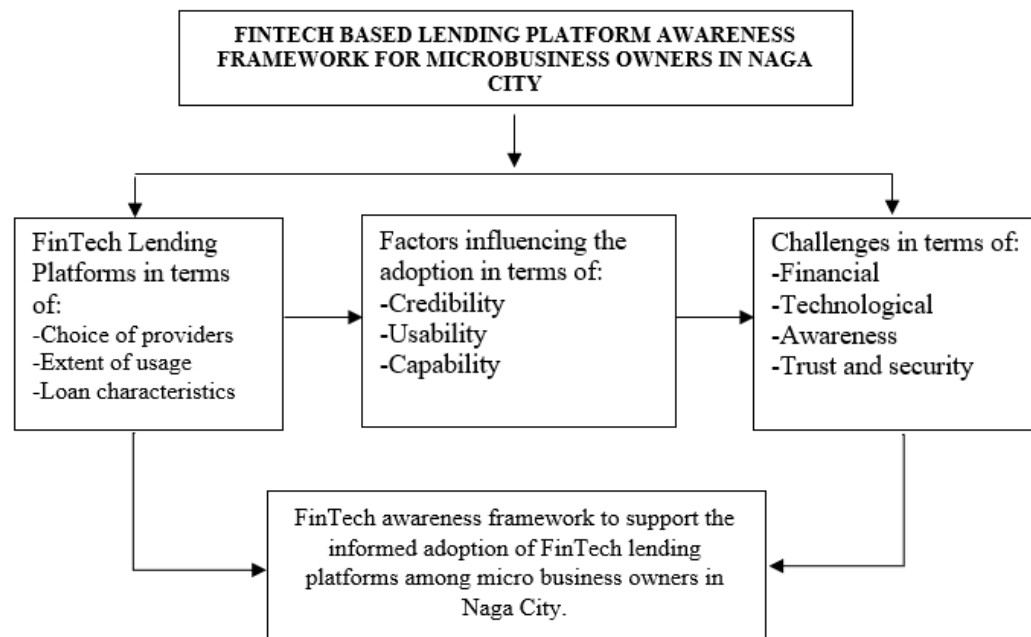


Figure 1. Conceptual Framework

Figure 1 presents the conceptual framework. At the core of the framework are the FinTech lending platforms, with a focus on the specific providers used by micro-entrepreneurs in Naga City. The framework highlights key factors influencing adoption, including credibility, usability, and capability, that shape micro-entrepreneurs' awareness and willingness to engage with digital lending platforms. It also considers barriers such as financial constraints, technological limitations, and trust-related concerns that may hinder effective utilization.

These elements collectively inform the proposed awareness framework to enhance knowledge, confidence, and the informed adoption of FinTech lending platforms among microbusiness owners.

LITERATURE AND THEORETICAL REVIEW

Recent studies highlight the role of FinTech lending platforms in expanding access to credit, particularly among micro and small enterprises in developing economies. Digital lending reduces traditional barriers such as collateral

requirements and lengthy processing, enabling faster and more accessible financing (Beck, 2020; Munyegera et al., 2021). However, challenges remain, including high interest rates, financial literacy gaps, and concerns about the sustainability of borrowing (Sharma, 2023).

Adoption of FinTech lending is influenced by key factors such as credibility, usability, and capability. Credibility, associated with trust, data security, and platform legitimacy, remains a critical determinant of user adoption (Nartey & Abor, 2023). Usability, including ease of navigation and accessibility, affects how effectively users engage with platforms, particularly among those with limited digital literacy (Adegboye et al., 2023). Capability refers to the extent to which platform features align with business needs (Kimani & Muturi, 2022).

Despite these advantages, several barriers limit adoption. Financial challenges, particularly high interest rates and repayment constraints, remain a major concern (Rahman, 2020). Technological limitations, such as poor internet

connectivity, further restrict access (Domingo, 2024). In addition, gaps in awareness and financial literacy, along with trust and security concerns, continue to discourage engagement (Gupta & Xia, 2021; Reyes, 2024).

In response, studies emphasize the importance of awareness and financial education in promoting responsible FinTech adoption. Awareness initiatives that combine financial literacy and practical guidance improve user confidence and decision-making (Aboobaker & Zakkariya, 2022). These programs are most effective when they address user concerns such as loan transparency, data security, and responsible borrowing.

Anchored on these insights, this study draws on the Digital Financial Inclusion Framework (Morgan & Trinh, 2021), the FinTech Adoption Model (Venkatesh et al., 2003), and the FinTech-Enabled Financial Empowerment perspective (Ozili, 2022) to explain how awareness, adoption factors, and user challenges influence engagement with FinTech lending platforms. These perspectives support the development of a context-specific awareness framework for microbusiness owners in Naga City.

METHODOLOGY

Research Design

This study employed a mixed-methods research design that combined quantitative and qualitative approaches.

The quantitative component of the study employed a structured survey to collect data on FinTech lending platforms adopted by micro-entrepreneurs in Naga City, as well as adoption factors (credibility, usability, and capability) and perceived challenges (financial, technological, awareness and knowledge, and trust and security). To complement this, the qualitative component used semi-

structured interviews to gather deeper insights into areas of confusion, information needs, and factors that could encourage greater adoption of FinTech lending platforms. These qualitative responses supported the development of the awareness framework.

Through this mixed-methods approach, the study ensured both breadth and depth of analysis, thereby supporting the development of an evidence-based awareness framework for micro-entrepreneurs.

Respondents of the Study

The respondents in this study were 100 microbusiness owners in Naga City operating with a total capital of ₱3,000,000 or less who had applied for or received loans from FinTech lending platforms within the past 24 months. This criterion ensured that respondents had recent, relevant experience with digital lending platforms, enabling a more accurate assessment of awareness, adoption, and perceived challenges.

The 24 months was adopted to enhance the reliability of respondents' recall and the relevance of their experiences, as prior studies suggest that the accuracy of self-reported financial behavior tends to decline beyond this timeframe (Feyen et al., 2023).

A quota sampling technique was employed to ensure that the sample reflected the distribution of microbusiness owners in Naga City while meeting the study's specific inclusion criteria. This approach was appropriate given the absence of a comprehensive sampling frame for microbusiness owners using FinTech lending platforms and the need to target respondents with relevant experience. A sample size of 100 respondents was considered sufficient to yield meaningful descriptive insights and to support the

development of the proposed awareness framework.

However, the use of quota sampling presents certain limitations. As a non-probability sampling technique, the findings may not be fully generalizable to all microbusiness owners in Naga City or other contexts. Additionally, there is a potential for selection bias, as respondents were selected based on accessibility and predefined characteristics. Despite these limitations, the sampling approach is appropriate for exploratory and framework-development studies where the objective is to generate context-specific insights.

Data Gathering Tools and Procedure

This study utilized two primary data-gathering tools: a structured survey questionnaire and semi-structured interviews to collect both quantitative data and in-depth insights on FinTech lending among microbusiness owners in Naga City.

The main instrument was a researcher-developed questionnaire aligned with the study objectives and grounded in literature on FinTech adoption, digital lending, and financial inclusion. It included the following sections: (1) FinTech platforms used (provider, usage, and loan characteristics); (2) adoption factors (credibility, usability, and capability); (3) challenges (financial, technological, awareness, and trust/security); and (4) open-ended questions on information needs and adoption considerations.

Platforms were selected based on their visibility and accessibility, with an “Other” option included. A 5-point Likert scale was used to measure perceptions, ensuring simplicity and accessibility. Open-ended responses informed the semi-structured interviews, allowing

participants to elaborate on their experiences.

The questionnaire was pilot-tested with ten microbusiness owners to improve clarity. Data were collected in person to ensure response accuracy. Participation was voluntary, with informed consent obtained, and interviews were recorded with permission for transcription.

All data were organized for analysis while maintaining confidentiality and anonymity. Information was securely stored for academic purposes, and recordings were deleted after transcription.

Data Analysis Techniques

This study employed both quantitative and qualitative methods of data analysis. For the quantitative data, descriptive statistics such as frequency, percentage, and weighted mean were used to analyze the responses gathered from the survey. The frequency and percentage were used to determine the distribution of responses regarding the microbusinesses' profiles. In contrast, the weighted mean was used to analyze all Likert-scale items in the study. This included measuring the level of adoption of various FinTech lending providers, the extent of platform usage, the reasons for usage, and respondents' perceptions of loan characteristics. The weighted mean likewise measured the level of agreement or extent of influence of the adoption factors-credibility, usability, and capability-as well as the degree to which financial, technological, awareness-related, and trust-and-security challenges were experienced by the respondents.

Qualitative data from the semi-structured interviews were analyzed through thematic analysis. Transcripts were coded according to the research objectives to identify recurring themes,

particularly those related to areas of confusion in FinTech lending, information that respondents wished platforms would explain more clearly, and factors that they believed would encourage greater adoption in the future. This combination of quantitative and qualitative analysis provided both measurable patterns and deeper insights, forming a strong basis for developing an awareness framework tailored to the needs of micro-entrepreneurs in Naga City.

RESULTS AND DISCUSSION

FinTech Lending Platforms adopted by micro business owners in Naga City
Choice of Providers

Table 1. Choice of FinTech Lending Platform Providers

Fintech Lending Platforms	Weighted Mean	Interpretation
GCash (GCredit, GLoan)	3.90	HA
Maya (Maya Credit, Maya Loan)	3.36	MA
Tonik	3.05	MA
Cashalo	2.97	MA
Tala	3.09	MA
JuanHand	2.85	MA
Home Credit	3.54	HA
BillEase	3.05	MA
Overall Weighted Mean	3.35	MA

Note: 3.50-4.00-Highly Adopted(HA);2.50-3.49-Moderately Adopted(MA);1.51-2.49-Slightly Adopted(SA);1.00-1.50-Not Adopted (NA)

The results showed that selected platforms, particularly GCash (GCredit, GLoan) and Home Credit, were highly adopted. In contrast, others were moderately adopted, resulting in an overall moderate level of FinTech adoption among microbusiness owners in Naga City (OWM=3.35).

This suggests that adoption is selective, with users favoring platforms

that are familiar, accessible, and integrated into their daily financial activities. Highly adopted platforms are likely preferred due to convenience and existing usage, while moderately adopted platforms may be less essential or offer fewer perceived advantages. Overall, FinTech lending appears to be used on a need-based basis rather than as a primary source of credit.

Extent of Usage

Table 2 .Extent of Usage of FinTech

Frequency of Using FinTech Lending Platforms	Weighted Mean	Interpretation
The FinTech lending platforms are used when applying for business loans.	3.75	HA
The FinTech lending platforms are used to monitor loan status.	3.75	HA
The FinTech lending platforms are used to make repayments.	3.83	HA
The FinTech lending platforms are used to check financial tools or features (e.g., reminders, payment schedules).	3.45	MA
The FinTech lending platforms are used whenever you need additional business funding.	3.68	HA
The FinTech lending platforms are used because the approval process is fast.	4.02	HA

The FinTech lending platforms are used because the application process is easy.	4.01	HA
The FinTech lending platforms are used because the interest rates are acceptable for your business.	3.32	MA
The FinTech lending platforms are used because they do not require collateral.	3.81	HA
The FinTech lending platforms are used because they offer flexible repayment terms	3.66	HA
Overall Weighted Mean	3.73	HA

Note: 3.50-4.00-Highly Adopted(HA);2.50-3.49-Moderately Adopted(MA);1.51-2.49-Slightly Adopted(SA);1.00-1.50-Not Adopted (NA)

The results showed that key features such as fast approval and ease of application were highly adopted, contributing to an overall high level of FinTech platform usage among microbusiness owners in Naga City (OWM=3.73). In contrast, lower adoption was observed in the use of financial tools and the perception of acceptable interest rates.

This suggests that adoption is primarily driven by speed, convenience, and ease of access, which are critical for microbusiness owners managing daily cash flow needs. The heavy use of repayment and monitoring features further indicates that these platforms are used as practical tools for short-term financial management. However, the lower adoption of financial tools and concerns regarding interest rates imply limited engagement with advanced features and continued sensitivity to borrowing costs. Overall, FinTech lending

platforms are widely used for their ability to support essential financing activities, rather than for their full range of features.

Loan Characteristics

Table 3.Loan Characteristics of FinTech Lending Platforms

Loan Characteristics	Weighted Mean	Interpretation
The loan interest rates provided are reasonable.	3.23	MA
The repayment terms offered are flexible.	3.57	HA
The loan amount received meets the business needs.	3.43	MA
The collateral requirements are easy to comply with.	3.78	HA
The payment schedules are manageable.	3.77	HA
Overall Weighted Mean	3.56	HA

Note: 3.50-4.00-Highly Adopted(HA);2.50-3.49-Moderately Adopted(MA);1.51-2.49-Slightly Adopted(SA);1.00-1.50-Not Adopted (NA)

The results showed that ease of complying with collateral requirements was the most highly adopted feature, while the perception of reasonable interest rates was the least adopted. Overall, the loan characteristics of FinTech lending platforms were generally highly adopted among microbusiness owners in Naga City (OWM=3.56).

This suggests that reduced collateral requirements are a key driver of adoption, as they lower barriers to accessing credit for microbusiness owners. However, the lower interest rate rating indicates that, while users accept the cost of borrowing, they remain cautious about its affordability. Overall, FinTech lending platforms are perceived as favorable primarily because of their accessibility, despite concerns about borrowing costs.

Factors influencing the adoption of FinTech Lending Platforms among micro business owners in Naga City

Credibility

Table 4. Extent to Which Credibility Factors Influence the Adoption of FinTech Lending Platforms

Credibility Factors	Weighted Mean	Interpretation
The platform is reliable and transparent in its services.	3.93	HI
The platform handles personal and financial data securely.	3.96	HI
The platform gives more confidence because it is partnered with known institutions.	3.59	H1
The platform provides clear and accurate information about its loan terms.	3.78	H1
The platform is reputable based on feedback from other business owners.	3.76	H1
Overall Weighted Mean	3.80	HI

Note: 3.50-4.00-Highly Influential (HI); 2.50-3.49-Influential (I); 1.51-2.49-Slightly Influential (SI); 1.00-1.50-Not Influential (NI)

The results showed that secure handling of personal and financial data was the most influential credibility factor, whereas confidence in partnerships with known institutions was the least influential. Overall, credibility is a highly influential factor in the adoption of FinTech lending platforms among microbusiness owners in Naga City (OWM=3.80).

This suggests that data security is a primary concern, reflecting the importance of trust in digital financial transactions. The relatively lower influence of institutional partnerships indicates that users rely more on direct

experience and perceived platform reliability than on external affiliations. Overall, trust-related factors play a central role in shaping adoption decisions.

Usability

Table 5. Extent to Which Usability Factors Influence the Adoption of FinTech Lending Platforms

Usability Factors	Weighted Mean	Interpretation
The platform is easy to navigate and understand.	4.03	HI
The loan application process is simple and user-friendly.	3.99	HI
The platform provides clear instructions for every step of your transaction.	3.90	HI
The platform's interface allows for transactions to be completed quickly.	3.80	HI
The platform's customer support is responsive and easy to reach.	3.51	HI
Overall Weighted Mean	3.85	HI

Note: 3.50-4.00-Highly Influential (HI); 2.50-3.49-Influential (I); 1.51-2.49-Slightly Influential (SI); 1.00-1.50-Not Influential (NI)

The results showed that ease of navigation and overall understandability were the most influential usability factors, while customer support responsiveness was the least influential. Overall, usability is a highly influential factor in the adoption of FinTech lending platforms among microbusiness owners in Naga City (OWM=3.85).

This suggests that users prioritize platforms that are simple and easy to navigate, particularly given varying levels of digital literacy. The relatively lower rating for customer support may indicate that users rely more on intuitive platform design than on external assistance, or that

support services are less accessible or less frequently utilized. Overall, usability plays a critical role in shaping adoption, with ease of use being the most immediate driver.

Capability

Table 6 - Extent to Which Capability Factors Influence the Adoption of FinTech Lending Platforms

Capability Factors	Weighted Mean	Interpretation
The Fintech lending platforms allow easy access to funds.	3.99	HI
The Fintech lending platforms give the option to better manage business finances.	3.76	HI
The loan and repayment status can easily be tracked through the app.	3.87	HI
The platform offers tools or features that support business growth.	3.63	HI
The platform provides flexible loan options suited to business needs.	3.46	I
Overall Weighted Mean	3.74	HI

Note: 3.50-4.00-Highly Influential (HI); 2.50-3.49-Influential (I); 1.51-2.49-Slightly Influential (SI); 1.00-1.50-Not Influential (NI)

The results showed that ease of access to funds was the most influential capability factor, while the availability of flexible loan options was the least influential. Overall, capability is a highly influential factor in the adoption of FinTech lending platforms (OWM=3.74).

This suggests that rapid access to funds is a key driver of adoption, reflecting microbusiness owners' need to address immediate cash flow demands. The relatively lower rating for flexible loan options indicates that existing loan

structures may not fully align with varying business needs or cycles. Overall, capability is valued for its ability to provide timely financial support, with speed being more influential than flexibility.

Challenges in the adoption of FinTech Lending Platforms among micro business owners in Naga City

Financial

Table 7. Extent to Which Financial Challenges Affect the Adoption of FinTech Lending Platforms

Financial Barriers and Challenges	Weighted Mean	Interpretation
The platform's high interest rates discourage borrowing.	3.97	HC
The loan limits offered are sometimes insufficient for the needs of the business.	3.76	HC
The repayment terms provided by the platform are too short or restrictive.	3.73	HC
The additional fees or hidden charges negatively affect borrowing decisions.	3.90	HC
The platform's loan requirements are difficult for small businesses to meet.	3.58	HC
Overall Weighted Mean	3.79	HC

Note: 3.50-4.00-Highly Challenging (HC); 2.50-3.4-Challenging (C); 1.51-2.49-Slightly Challenging (SC); 1.00-1.50-Not Challenging (NC)

The results showed that high interest rates were perceived as the most challenging factor discouraging borrowing, while difficulty in meeting loan requirements was the least challenging, though still significant. Overall, financial challenges are generally perceived as highly challenging by microbusiness

owners when engaging with FinTech lending platforms (OWM=3.79).

This suggests that borrowing costs are the primary barrier to FinTech usage, reflecting concerns about affordability and repayment sustainability. The relatively low rating for loan requirements indicates that, while eligibility criteria pose challenges, they are less restrictive than the financial burden imposed by high interest rates. Overall, financial constraints significantly limit the full utilization of FinTech lending platforms.

Technological

Table 8. Extent to Which Technological Challenges Affect the Adoption of FinTech Lending Platforms

Technological Challenges	Weighted Mean	Interpretation
The poor internet connectivity makes it difficult to use FinTech applications.	3.80	HC
The limited access to smartphones or digital devices hinders the use of FinTech platforms.	3.36	C
The technical glitches or app errors reduce confidence in relying on the platform.	3.69	HC
The need to frequently update or maintain the app makes its usage inconvenient.	3.40	C
The system lags or failures during important transactions disrupt business activities.	3.52	HC
Overall Weighted Mean	3.55	HC

Note: 3.50-4.00-Highly Challenging(HC); 2.50-3.4-Challenging (C); 1.51-2.49-Slightly Challenging (SC); 1.00-1.50-Not Challenging (NC)

The results showed that poor internet connectivity was the most

challenging technological factor, while limited access to smartphones or digital devices was the least challenging. Overall, microbusiness owners perceive technological challenges as highly challenging (OWM=3.55).

This suggests that connectivity is the primary technological barrier, affecting users' ability to access and complete transactions on FinTech platforms. The relatively lower rating for device access indicates that while digital tools are necessary, most users already have access to them, making internet reliability a more significant concern. Overall, technological limitations, particularly unstable connectivity, hinder the effective use of FinTech lending platforms.

Awareness

Table 9. Extent to Which Awareness Challenges Affect the Adoption of FinTech Lending Platforms

Awareness Challenges	Weighted Mean	Interpretation
The awareness of the full range of services offered by FinTech platforms is limited.	3.48	C
The need for more information affects the effective use of FinTech lending applications.	3.64	HC
The marketing and communication efforts of FinTech platforms are not easily accessible to micro and small businesses.	3.62	HC
The opportunities to attend seminars or campaigns promoting FinTech lending are lacking.	3.73	HC

The information about FinTech lending platforms is often obtained through informal sources.	3.64	HC
Overall Weighted Mean	3.62	HC

Note: 3.50-4.00-Highly Challenging(HC); 2.50-3.4-Challenging (C); 1.51-2.49-Slightly Challenging (SC); 1.00-1.50-Not Challenging (NC)

The results showed that the lack of opportunities to attend seminars or promotional activities was the most challenging awareness-related factor, while limited awareness of the full range of FinTech services was the least challenging. Overall, awareness-related challenges are generally perceived as highly challenging by microbusiness owners (OWM=3.62).

This suggests that limited access to structured information and training is the primary barrier to awareness, restricting users' understanding of FinTech lending. The relatively low rating for service awareness indicates that, while users may have partial knowledge of platform features, the lack of formal education and outreach has a greater impact. Overall, gaps in awareness, particularly in terms of exposure and financial literacy, hinder the effective use of FinTech lending platforms.

Trust and Security

Table 10. Extent to Which Trust and Security Challenges Affect the Adoption of FinTech Lending Platforms

Trust and Security Challenges	Weighted Mean	Interpretation
The security of personal information when using FinTech platforms is a concern.	3.82	HC
The fear of scams or fraud discourages the frequent use of FinTech lending platforms.	3.88	HC

The data protection measures of the platform appear unclear.	3.72	HC
The possibility that accounts may be hacked or misused raises concern.	3.83	HC
The security-related concerns cause hesitation in recommending FinTech platforms to others.	3.52	HC
Overall Weighted Mean	3.75	HC

Note: 3.50-4.00-Highly Challenging(HC); 2.50-3.4-Challenging (C); 1.51-2.49-Slightly Challenging (SC); 1.00-1.50-Not Challenging (NC)

The results showed that fear of scams or fraud was the most challenging trust- and security-related factor, while hesitation to recommend FinTech platforms was the least challenging, though still significant. Overall, trust and security issues are generally perceived as highly challenging by microbusiness owners (OWM= 3.75).

This suggests that concerns about fraud and data security are major barriers to FinTech adoption, reflecting uncertainty about platform reliability and user protection. The relatively low hesitation to recommend platforms suggests that, while users are cautious, they may still recognize the benefits of FinTech services. Overall, trust and security concerns significantly influence users' willingness to engage with digital lending platforms.

Thematic Analysis of Open-Ended Questions

Table 11. Summary of Key Themes from Open-Ended Questions Supporting the Awareness Framework

Themes	Subthemes
Areas of confusion in Fintech Lending	Unclear interest and fee computation; unfamiliar loan terms and eligibility requirements; difficulty navigating platform features; data privacy and security concerns; confusing application and verification processes.
Information Needs for Clearer FinTech Understanding	Clear breakdown of charges and interest computation; clear explanation of loan terms and eligibility criteria; need for step-by-step guidance on process; better communication of data privacy and security measures; of clear policies on penalties, due dates, and payment posting.
Factors That May Encourage Future FinTech Adoption	Lower interest rates; transparent charges; need for better security; higher loan limits; need for more education and awareness campaigns.

Table 11 presents a consolidated thematic summary of responses to the three open-ended questions, highlighting key areas of confusion, information needs, and suggested improvements related to FinTech lending adoption. These themes served as qualitative inputs in the development of the awareness framework.

Awareness Framework

The framework is structured into four key components: input variables, identified gaps, process, output, and outcome, which collectively explain the development of the FinTech-based lending platform awareness framework.

The input variables-accessibility, affordability, usability, trust and security, and speed and convenience-were derived from the empirical findings and represent the key factors influencing FinTech lending awareness and adoption among microbusiness owners. The results indicate that while digital lending

platforms are generally accessible and convenient, concerns about cost, data privacy, and platform reliability remain significant considerations when using them.

The identified gaps highlight critical issues that hinder informed, sustained adoption, including low awareness, misconceptions about loan terms, and limited readiness to adopt. Respondents demonstrated uncertainty about interest computations and expressed concerns about platform legitimacy and potential risks, indicating the need for targeted awareness interventions.

The process component outlines the development of a strategic intervention in the form of a FinTech awareness guide. This intervention translates the study's findings into practical, accessible, and context-specific information designed to improve financial understanding and decision-making among microbusiness owners. It also considers dissemination through community-based programs and institutional support to enhance reach and effectiveness.

The framework's output is the FinTech Awareness Guide (L.O.A.N. Guide), which provides structured, user-friendly guidance on FinTech lending, including platform use, loan evaluation, and responsible borrowing practices. The guide is designed to be platform-neutral and adaptable to various FinTech providers.

Finally, the expected outcomes of the framework include improved awareness, more informed adoption, enhanced access to credit, and stronger business sustainability among microbusiness owners. The framework assumes that increased knowledge and

confidence will lead to more effective and responsible use of FinTech lending platforms.

While the proposed FinTech Awareness Framework is grounded in empirical findings and supported by established theoretical perspectives, it remains conceptual in nature and has not

undergone statistical validation. The framework is intended as a context-specific model for microbusiness owners in Naga City. Future research is recommended to validate the framework using quantitative techniques and to assess its applicability in other settings.

Table 12. Awareness Framework for the Adoption of Fintech Lending Platforms among Microbusiness Owners in Naga City

Framework Component	Variables/Elements	Description
Input Variables (Empirical Findings from the Study)	Accessibility	Ease of loan application, availability of mobile-based platforms, minimal documentation, and low collateral requirements identified as key adoption drivers among microbusiness owners.
	Affordability	Perceptions of interest rates, fees, total repayment amount, and repayment flexibility-identified as both motivating factors and major sources of confusion and barriers.
	Capability	Simplicity of platform interface, ease of navigation, and clarity of instructions, which obtained the highest influence among adoption factors.
	Credibility	Trust in data privacy, platform legitimacy, and security, identified as highly influential in adoption decisions.
	Usability	Simplicity of platform interface, ease of navigation, and clarity of instructions, which obtained the highest influence among adoption factors.
	Speed and Convenience	Fast approval processes and quick fund release, which ranked highly in extent of usage and reasons for adoption.
Identified Gaps/Issues (From Challenges results and Open-Ended Responses)	Limited Financial Literacy	Difficulty evaluating whether interest rates are reasonable and whether loan terms are suitable for business cash-flow capacity.
	Low Awareness	Limited understanding of how FinTech lending works, lack of exposure to seminars, and insufficient guidance on loan features and processes.
	Misconceptions and Confusion	Confusion regarding interest computation, fees, loan terms, eligibility requirements, verification processes, and penalties.
	Trust and Security Concerns	Fear of scams, fraud, misuse of personal data, and uncertainty about platform legitimacy.
Process	Content Development	Creation of the L.O.A.N. guide using simplified, Taglish explanations tailored to barangay-level microbusiness owners.

<i>(Awareness Framework Intervention)</i>	Information Translation	Conversion of technical fintech concepts into practical, easy-to-understand examples, checklists, and reminders.
	Thematic Integration	Incorporation of common issues and concerns identified from open-ended responses into manual sections (e.g., legitimacy checks, interest understanding, responsible use).
	Stakeholder Support	Dissemination through business associations, cooperatives, DTI, FinTech providers, and Local Government Units.
Output <i>(Research Output)</i>	Fintech Awareness Guide (L.O.A.N.)	Structured program promoting informed adoption of fintech lending platforms.
Outcome <i>(Expected Results)</i>	Enhanced Business Stability	Better loan decision-making, improved cash-flow management, and more sustainable use of digital credit among microbusiness owners.
	Enhanced Credit Access	Easier, faster, and more reliable access to credit.
	Improved Awareness	Increased understanding of FinTech lending concepts, platform legitimacy, interest and fee structures, and borrower responsibilities.
	Informed Adoption	More deliberate and confident use of FinTech lending platforms based on business needs rather than convenience alone.
	Reduced Risk Exposure	Lower susceptibility to scams, hidden charges, and misuse of digital lending services.

CONCLUSION

Adoption of Fintech Lending Platforms

1. Choice of Providers. The findings indicated that microbusiness owners in Naga City adopted FinTech lending platforms selectively, favoring providers that were familiar, easily accessible, and embedded within their existing financial routines. This pattern suggested that adoption was driven more by convenience and ecosystem integration than by the breadth of available lending options. This pattern was consistent with prior evidence showing that while digital credit expanded access to financing, adoption remained uneven across platforms due to differences in accessibility and perceived usefulness (Beck, 2020).
2. Extent of Usage. The results showed that FinTech lending platforms were widely adopted for business

financing, particularly due to their fast approval processes and ease of application. This finding suggested that speed and convenience were the primary drivers of adoption, reflecting microbusiness owners' preference for financing options that supported immediate liquidity needs. This finding aligned with global research indicating that MSMEs were more likely to adopt digital credit when platforms enabled rapid access to funds and minimized transaction complexity (Robinson & Baird, 2021).

3. Loan Characteristics. The findings revealed that flexible collateral requirements and manageable repayment terms were key loan characteristics supporting the adoption of FinTech lending platforms among microbusiness owners. This result suggested that respondents valued loan features

that reduced borrowing barriers and aligned with short-term business cash-flow constraints. This result was consistent with evidence that FinTech loans tended to be less collateral-intensive than traditional bank credit, making them more accessible to small and informal enterprises (Caballero et al., 2025).

Factors Influencing Adoption

1. **Credibility.** The findings indicated that credibility was a central determinant of FinTech lending adoption among microbusiness owners in Naga City. High ratings for secure handling of personal and financial data suggested that trust, data protection, and perceived platform legitimacy were essential preconditions for adoption. This result aligned with evidence from other developing economies showing that concerns over security and consumer protection strongly shaped borrowers' willingness to engage with digital lenders (Otieno & Ochieng, 2021).
2. **Usability.** The findings indicated that credibility was a central determinant of FinTech lending adoption among microbusiness owners in Naga City. High ratings for secure handling of personal and financial data suggested that trust, data protection, and perceived platform legitimacy were essential preconditions for adoption. This result aligned with evidence from other developing economies showing that concerns over security and consumer protection strongly shaped borrowers' willingness to engage with digital lenders (Otieno & Ochieng, 2021).
3. **Capability.** The findings further indicated that platform capability,

particularly ease of accessing funds, played an important role in adoption. High ratings for simplified borrowing processes suggested that microbusiness owners valued functional features that enabled timely access to credit with minimal procedural constraints. This result supported earlier evidence that fintech products offering quick disbursement and flexible loan structures were more attractive to small enterprises seeking short-term liquidity support (Boateng & Appiah, 2021).

Challenges

1. **Financial.** The findings indicated that financial cost was the most substantial challenge to FinTech lending adoption among microbusiness owners in Naga City, with high interest rates emerging as the primary concern. This suggested that affordability constraints significantly discouraged continued use of digital lending platforms. However, this finding should be interpreted in the context of a rapidly expanding FinTech market, where the growing number of providers may intensify competition and, over time, lead to more affordable loan products. Similar evidence showed that highly effective interest rates reduced the attractiveness of fintech loans compared with traditional credit options (Zhou & Wang, 2022).
2. **Technological.** The results showed that unstable internet connectivity was the most critical technological challenge affecting FinTech lending use. This suggested that unreliable connectivity undermined users' ability to complete transactions consistently and weakened

confidence in digital lending processes. Prior research likewise demonstrated that poor network stability constrained digital finance usage by increasing the risk of transaction failures and user frustration (Setiawan & Arifin, 2020).

3. Awareness. The results showed that unstable internet connectivity was the most critical technological challenge affecting FinTech lending use. This suggested that unreliable connectivity undermined users' ability to complete transactions consistently and weakened confidence in digital lending processes. Prior research likewise demonstrated that poor network stability constrained digital finance usage by increasing the risk of transaction failures and user frustration (Setiawan & Arifin, 2020).
4. Trust and Security. The findings indicated that fear of scams and fraud represented the most significant trust-related barrier to FinTech lending adoption. This suggested that concerns about digital security and privacy strongly influenced borrowers' reluctance to use online lending services. Consistent with this result, prior studies reported that perceived fraud risk discouraged digital loan usage in contexts with weak consumer protection awareness (Okoye & Ikechukwu, 2020).

Awareness Framework

The findings indicated that microbusiness owners required clearer, more accessible, and more practical guidance to understand and safely engage with FinTech lending platforms effectively. In response, the study developed a FinTech awareness framework designed to translate

empirical findings into simplified explanations, step-by-step guidance, and essential information on platform use, associated risks, and potential benefits. This conclusion underscores the importance of structured educational interventions as complementary mechanisms to digital lending services, supporting informed decision-making and more responsible adoption among microbusiness owners.

LIMITATIONS OF THE STUDY

This study had several limitations that may have influenced the interpretation of its findings. First, the focus on microbusiness owners in Naga City limited the external validity of the results, as adoption behaviors and constraints may differ in areas with varying economic conditions, regulatory environments, or levels of digital and financial infrastructure. Second, the study relied on self-reported survey and interview data, which may have been affected by recall bias, social desirability bias, and limited financial literacy among respondents. These issues were particularly relevant for variables related to interest rates, fees, and loan terms, where incomplete understanding may have influenced responses. Third, the analysis focused on adoption patterns, perceptions, and usage behaviors rather than platform-specific financial outcomes such as repayment performance, profitability, or long-term business impact. Consequently, the findings explained how and why FinTech lending platforms were adopted, but did not assess their actual financial effectiveness or sustainability. Finally, the selection of FinTech lending platforms reflected market visibility at the time of data collection. Given the rapidly evolving nature of the fintech sector, changes in platform availability, features, and

pricing may limit the temporal relevance of the findings.

Despite these limitations, the study provided context-specific insights into FinTech lending adoption and offered a grounded basis for future empirical research and policy-oriented financial education initiatives.

REFERENCES

- Aboobaker, N., & Zakkariya, K. A. (2022). Digital financial literacy and FinTech adoption: Evidence from SMEs. *Journal of Financial Services Marketing*, 27(3), 180–195.
<https://doi.org/10.1057/s41264-021-00114-3>
- Aboobaker, N., & Zakkariya, K. A. (2022). Financial literacy and fintech adoption: Evidence from micro and small enterprises. *Journal of Small Business Management*, 60(6), 1092–1115.
<https://doi.org/10.1080/00472778.2020.1865499>
- Adegboye, F. B., et al. (2023). Digital financial services and financial inclusion: Evidence from emerging markets. *Journal of Financial Innovation*, 9(1), 1–18.
<https://doi.org/10.1186/s40854-023-00410-5>
- Alliance for Financial Inclusion. (2022). FinTech for MSMEs: Framework for digital financial inclusion. <https://www.afi-global.org>
- Beck, T. (2020). Finance in the times of coronavirus. *Economics in the Time of COVID-19*, 73–76.
- Beck, T. (2020). FinTech and financial inclusion: Opportunities and challenges. *World Bank Research Observer*, 35(1), 1–22.
<https://doi.org/10.1093/wbro/lkz005>
- Boateng, R., & Appiah, O. (2021). FinTech lending and access to credit among microenterprises in Ghana. *Journal of Small Business and Enterprise Development*, 28(5), 785–802.
<https://doi.org/10.1108/JSBED-01-2020-0025>
- Caballero, J. A., Candelon, B., & de Haan, J. (2025). FinTech credit and collateral requirements in emerging markets. *BIS Bulletin* No. 87. Bank for International Settlements.
<https://www.bis.org/publ/bisbull87.htm>
- Chen, AJ and Even-Tov, Omri and Kang, Jung Koo and Wittenberg Moerman, Regina, Digital Lending and Financial Well-Being: Through the Lens of Mobile Phone Data (November 11, 2024). *The Accounting Review*, Forthcoming, Harvard Business School Accounting & Management Unit Working Paper No. 23-076, *The Accounting Review*, 2025[10.2308/TAR-2024-0046], Available at SSRN: <https://ssrn.com/abstract=4457741> or <http://dx.doi.org/10.2308/TAR-2024-0046>
- Domingo, R. (2024). Digital financial inclusion and MSMEs in the Philippines. *Philippine Institute for Development Studies Working Paper*.
- Feyen, Erik H.B.; Natarajan, Harish; Saal, Matthew. *Fintech and the Future of Finance : Market and Policy Implications* (English). Washington, D.C. : World Bank Group.
<http://documents.worldbank.org/curated/en/099450005162250110>

- Gupta, A., & Xia, C. (2021). Digital lending and financial inclusion: The role of trust and risk. *Journal of Banking and Finance*, 122, 105–123. <https://doi.org/10.1016/j.jbankfin.2020.105123>
- Khatun, F., & Hasan, M. (2021). Determinants of digital financial service adoption by microenterprises in Bangladesh. *Information Development*, 37(4), 610–623. <https://doi.org/10.1177/0266666920958084>
- Kimani, D., & Muturi, W. (2022). FinTech adoption and financial performance of small enterprises. *International Journal of Finance and Banking Research*, 8(2), 45–52.
- Morgan, P. J. (2022). FinTech and financial inclusion in Southeast Asia and India. *Asian Economic Policy Review*, 17(2), 183–208. <https://doi.org/10.1111/aepr.12379>
- Munyegera, G. K., & Matsumoto, T. (2021). ICT for financial access: Mobile money and the financial behavior of rural households. *World Development*, 142, 105–121. <https://doi.org/10.1016/j.worlddev.2021.105412>
- Nartey, D., & Abor, J. Y. (2023). Financial technology and financial inclusion: Evidence from developing countries. *Journal of Financial Services Research*. <https://doi.org/10.1007/s10693-022-00382-5>
- Okoye, L. U., & Ikechukwu, I. (2020). Fintech lending and consumer trust in Nigeria. *Journal of African Business*, 21(3), 321–337. <https://doi.org/10.1080/15228916.2019.1701>
- Otieno, S., & Ochieng, D. (2021). Trust, security, and adoption of digital lending platforms in Kenya. *Journal of African Business*, 22(3), 389–406. <https://doi.org/10.1080/15228916.2020.1837745>
- Ozili, P. K. (2021). Financial inclusion research around the world: A review. *Forum for Social Economics*, 50(4), 457–479. <https://doi.org/10.1080/07360932.2020.1715238>
- Parvez, A.-A., Katha, E. H., Shaeba, M. K., & Hossain, S. (2023). Fintech and inclusive growth: Evidence from 25 Asian developing countries. <https://doi.org/10.56506/QMHR3332>
- Rahman, A. (2024). Financial Inclusion through Technological Advancements in Banking Institutions: An Analytical Review. *Advances: Jurnal Ekonomi & Bisnis*, 2(3), 163–173. <https://doi.org/10.60079/ajeb.v2i3.303>
- Rahman, M. M. (2020). Digital lending and microenterprise financing: Evidence from Bangladesh. *Journal of Asian Finance, Economics and Business*, 7(10), 123–132.
- Reyes, J. (2024). Data privacy and FinTech adoption in the Philippines. *Asia-Pacific Journal of Financial Studies*.
- Robinson, J., & Baird, S. (2021). Mobile money, digital finance, and inclusion of small firms. *World Development*, 146, 105564. <https://doi.org/10.1016/j.worlddev.2021.105564>

- Setiawan, R., & Arifin, Z. (2020). Digital financial services adoption in Indonesia: The role of infrastructure readiness. *Journal of Asian Finance, Economics and Business*, 7(12), 891–900. <https://doi.org/10.13106/jafeb.2020.vol7.no12.891>
- Sharma, S. K., Ilavarasan, P. V., & Karanasios, S. (2023). Small businesses and FinTech: a systematic review and future directions. *Electronic Commerce Research*, 1–41. Advance online publication. <https://doi.org/10.1007/s10660-023-09705-5>
- Sharma, S. K., Ilavarasan, P. V., & Karanasios, S. (2023). Small businesses and FinTech: A systematic review and future directions. *Electronic Commerce Research*. <https://doi.org/10.1007/s10660-023-09705-5>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Zhou, Y., & Wang, X. (2022). Interest rates, risk, and borrower participation in peer-to-peer lending markets. *Finance Research Letters*, 44, 102092. <https://doi.org/10.1016/j.frl.2021.102092>