

# Client Adaptation to Virtual Pag-IBIG Services

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## ABSTRACT

The digital transformation of government services has been promoted to improve efficiency, accessibility, and client experience; however, the successful implementation of such platforms depends largely on users' readiness to adopt them. This study assessed the readiness of clients of the Pag-IBIG Fund – San Francisco Branch and its extension office, the Tandag Member Services Office, to adopt Virtual Pag-IBIG services for loan and benefit transactions. Specifically, the study examined clients' demographic profile and their level of readiness in terms of digital literacy, perceived usefulness and ease of use, trust and perceived security, accessibility and usability, and legal awareness and institutional support. Persistent reliance on in-branch transactions, despite the availability of online services, underscored the need for a localized assessment of client readiness in a provincial setting.

The study employed a descriptive research design and involved 122 Pag-IBIG clients selected through convenience sampling. Data were gathered using a validated and reliable structured questionnaire and were analyzed using descriptive and inferential statistical tools. Results showed that clients were generally Much Ready to adopt Virtual Pag-IBIG services, with legal awareness and institutional support and perceived usefulness and ease of use obtaining the highest mean ratings. Significant differences in readiness were found when respondents were grouped according to income level, internet connectivity, and type of digital device used, while age, sex, and educational attainment showed no significant differences. Security concerns, unfamiliarity with the system, and limited digital skills emerged as the most common barriers. Based on the findings, a Client Adoption Enhancement Framework was developed to strengthen digital literacy, trust, accessibility, and institutional support. The study provided empirical evidence to guide Pag-IBIG Fund administrators and policymakers in improving inclusive and effective digital service delivery at the branch level.

**Keywords:** Virtual Pag-IBIG, Client readiness, Digital literacy, E-government adoption, Digital inclusion, Trust and security

## INTRODUCTION

Pag-IBIG Fund's transition to digital service platforms promises faster loan processing, wider access to benefits, and reduced physical crowding at branch offices. Despite of this, clients at the branch level, particularly at urban branches, such as the Pag-IBIG Fund, still face barriers to effective adoption. This study assesses the readiness of clients of the Pag-IBIG Fund - San Francisco Branch to adopt Virtual Pag-IBIG in applying for loans and benefits services. It focuses on important aspects such as access to digital devices, connectivity to the internet, digital capabilities on computers, perceived usefulness and ease of use, trust to online systems, and awareness of data privacy and security. The intention of Virtual Pag-IBIG was to enhance the speed and ease of receiving services, however many clients continue to preference in-branch versus online which results to long queues and delays. By assessing the level of readiness clients to adopt the Virtual Pag-IBIG services will enhance the delivery of services to clients and all members of Pag-IBIG can benefit from these digital initiatives and innovations.

Based on a study conducted by some authors, most clients are aware of Virtual Pag-IBIG, but only a small percentage of it actually utilize the service. Convenience was shown to be the main reason of utilization, while ignorance and mistrust continued to be obstacles (Marbibí, Masinas, et al., 2022). Similarly, Andaya, Orlina, and

Ilustre (2025) pointed out that the main challenges to digital governance in the Philippines include ICT infrastructure gaps, low digital literacy, and the continuing digital divide. Citizen feedback from Caloocan City also revealed that although e-government platforms improved access and transparency, adoption was hindered by limited digital skills and connectivity issues (Valle, Bugayao, Gutierrez, & Malang, 2024). In addition, Policarpio and Magpantay (2024) found that digital access and literacy strongly influence the willingness of Filipinos to engage with online platforms. Although Virtual Pag-IBIG was introduced in 2019 and upgraded to a mobile application in 2022, no information is known about how prepared clients in provincial areas are to use these services.

Despite the growing body of research on e-government adoption, significant gaps remain that this study seeks to address. Existing studies are largely concentrated in metropolitan areas or focus on general perceptions of digital services rather than actual readiness at the branch level. There is limited empirical evidence on how clients in smaller cities and provincial municipalities experience and respond to digital government platforms such as Virtual Pag-IBIG. In the case of the Pag-IBIG Fund – San Francisco Branch and in its extension office, Tandag Member Services Office, persistent observations include long queues, repeated in-person follow-ups, and frequent requests for staff assistance even for transactions that are available online. Clients have expressed difficulties related to unstable internet connectivity, unfamiliarity with online procedures, delayed one-time passwords (OTPs), challenges in account recovery, and fear of online scams or data misuse. These lived experiences indicate that readiness involves not only access to devices and internet but also confidence, trust, and legal awareness. Moreover, there is insufficient data on how readiness varies across client groups based on income level, access to technology, and digital skills. These gaps highlight the necessity of a localized, empirical assessment to capture the realities faced by clients and to identify barriers that persist despite the availability of digital services.

The significance of this study lies in its potential to contribute concrete and actionable outputs that respond directly to the identified gaps in client readiness and digital service adoption at the branch level. Specifically, the study will generate a Client Adoption Enhancement Framework for Virtual Pag-IBIG Services, designed to address the barriers, challenges, and support needs revealed by the findings. Anchored on empirical evidence from clients of the Pag-IBIG Fund – San Francisco Branch and its extension office, Tandag Member Services Office, the proposed framework will integrate strategies for information dissemination, digital literacy development, system access enhancement, user experience optimization, and trust-building mechanisms. This output is intended to serve as a practical guide for Pag-IBIG Fund administrators and branch managers in strengthening digital service delivery, improving client readiness, and increasing the utilization of Virtual Pag-IBIG services. Moreover, the framework contributes to the body of knowledge on e-government adoption by offering a localized, branch-level model that may be adapted by other Pag-IBIG branches and similar government agencies, thereby supporting inclusive, user-centered, and sustainable digital transformation in the public sector.

## Legal Bases

This study is anchored on existing laws and policy frameworks that promote digital transformation in public service delivery while ensuring accountability, efficiency, and protection of client rights. The legal bases relevant to this research collectively establish the mandate for government agencies to provide accessible digital services, ensure ease of transactions, and safeguard personal information—key elements that directly relate to assessing client readiness to adopt Virtual Pag-IBIG.

Republic Act No. 9679, otherwise known as the Home Development Mutual Fund Law of 2009, provides the institutional foundation for Pag-IBIG Fund's authority to deliver housing-related financial services to its members. The law mandates Pag-IBIG Fund to ensure the efficient administration of savings, loans, and benefits for its members. While the law does not explicitly prescribe digital platforms, its emphasis on efficient service delivery and member welfare supports the adoption of innovative systems such as Virtual Pag-IBIG. The implementation of online services is therefore consistent with the Fund's legal obligation to enhance operational efficiency and improve member access to services. However, the effectiveness of such digital initiatives depends

on the readiness of clients to use them, making readiness assessment a necessary component of lawful and effective service implementation.

While RA 9679 provides the mandate for efficiency, Republic Act No. 11032, known as the Ease of Doing Business and Efficient Government Service Delivery Act of 2018, further strengthens the legal basis for this study. This law requires government agencies, including government-owned and controlled corporations like Pag-IBIG Fund, to streamline procedures, reduce processing time, and minimize bureaucratic burdens. It explicitly encourages the use of electronic and automated systems to improve service delivery and reduce physical transactions. Virtual Pag-IBIG directly responds to this mandate by enabling clients to transact online. However, the law's objective of efficiency can only be realized if clients are able and willing to use digital platforms. Persistent reliance on in-branch transactions, long queues, and repeated manual follow-ups suggest that structural efficiency alone is insufficient. Assessing client readiness helps determine whether the legal intent of RA 11032 is being achieved at the ground level and identifies barriers that hinder its full implementation.

Complementing the drive for digital efficiency is Republic Act No. 10173, or the Data Privacy Act of 2012, which provides safeguards for the collection, processing, and storage of personal information. This law is particularly relevant to Virtual Pag-IBIG, as the platform requires clients to submit sensitive personal and financial data online. The Data Privacy Act mandates government agencies to implement appropriate security measures and ensure transparency in data processing. However, compliance with data protection standards must also be accompanied by client awareness and trust. Many clients' hesitancy to adopt online platforms stems from fears of data breaches, online scams, and misuse of personal information. Thus, assessing legal awareness and perceived security as dimensions of client readiness directly aligns with the intent of RA 10173. Understanding how well clients comprehend and trust these legal protections is essential to promoting confident and sustained use of digital services.

Taken together, these three legal frameworks—RA 9679, RA 11032, and RA 10173—form an interconnected policy environment that supports the digital transformation of Pag-IBIG Fund services. RA 9679 establishes the mandate to serve members efficiently, RA 11032 promotes digitalization and streamlined transactions, and RA 10173 ensures the protection of client data in digital environments. This study aligns with and supports these laws by examining whether clients are adequately prepared to engage with Virtual Pag-IBIG in a manner that is efficient, secure, and inclusive. By assessing readiness at the branch level, the study contributes to the effective and lawful implementation of digital government services, ensuring that technological innovations translate into actual benefits for clients, particularly in local and provincial settings.

## REVIEW OF RELATED LITERATURE AND STUDIES

The increasing adoption of digital technologies in public service delivery has intensified scholarly interest in e-government platforms and user readiness. In the Philippines, digital government initiatives aim to enhance efficiency, transparency, and accessibility; however, actual utilization depends largely on citizens' readiness and capacity to engage with online systems. This section reviews recent local and foreign literature related to e-government adoption, digital literacy, trust and security, and accessibility, providing a foundation for examining client readiness to adopt Virtual Pag-IBIG.

### Local Literature and Studies

Recent Philippine studies highlight both the progress and persistent challenges in adopting e-government platforms. Marbibi, Masinas, et al. (2022) examined the awareness and utilization of Virtual Pag-IBIG among private employees and found that while awareness levels were relatively high, actual usage remained low. Convenience was identified as the primary motivator for adoption, whereas lack of knowledge and mistrust of online systems were the most common barriers. These findings suggest that awareness alone is insufficient and must be complemented by adequate digital skills and confidence.

Similarly, Andaya, Orlina, and Ilustre (2025) conducted a scoping review on digital governance in the Philippines and identified low digital literacy, inadequate ICT infrastructure, and the digital divide as persistent

systemic challenges. Their study emphasized that these barriers are more pronounced in non-urban and provincial areas, where access to reliable internet and digital devices remains uneven. This reinforces the need for localized assessments of readiness, particularly at the branch level of government agencies.

In a study focusing on local government units, Valle, Bugayao, Gutierrez, and Malang (2024) found that e-government platforms improved service transparency and access in Caloocan City. However, they also reported that adoption was hindered by unstable internet connectivity and limited digital competencies among users. The authors emphasized that citizen engagement with digital services is strongly influenced by usability and support mechanisms, such as guidance and assistance during online transactions.

Moreover, Policarpio and Magpantay (2024) examined the impact of digital access and literacy on online platform adoption and found that individuals with limited access to devices and lower digital skills were significantly less likely to engage with digital services. Although their study focused on e-commerce adoption, the findings are applicable to e-government platforms, as both require similar levels of digital competence and trust. This underscores the importance of assessing socioeconomic and technological factors when examining readiness to adopt Virtual Pag-IBIG.

Complementing these findings, Mangarin (2024) reviewed studies on digital literacy in the Philippines and concluded that gaps in functional digital skills persist despite increased exposure to technology. The author emphasized that digital literacy is not merely about access to devices but also about the ability to navigate systems confidently and securely. This perspective supports the inclusion of digital literacy as a key dimension of client readiness in the present study.

Collectively, local studies reveal that while the Philippines has made significant strides in digital government initiatives, readiness among users remains uneven. Factors such as digital literacy, access to technology, trust in online systems, and institutional support continue to shape adoption outcomes, particularly in provincial contexts.

## Foreign Literature and Studies

Foreign studies provide additional insights into the determinants of e-government adoption, particularly in developing countries. Alhassan and Abdulai (2021) investigated e-government adoption in Ghana and found that digital literacy and trust in government systems were significant predictors of usage. Their study emphasized that users were more likely to adopt online services when they perceived them as secure and reliable, highlighting the importance of trust and perceived security.

In Malaysia, Rahman and Hamid (2022) examined citizens' adoption of online government services and found that perceived security and privacy protection had a direct influence on willingness to use digital platforms. The authors stressed that concerns about personal data misuse discouraged users from fully engaging with e-government services, even when platforms were perceived as useful and efficient.

Similarly, Zhang, Chen, and Li (2023) analyzed e-government adoption in China using the Technology Acceptance Model and found that perceived usefulness and ease of use were the strongest determinants of user acceptance. However, they also noted that these factors were moderated by users' digital competence and access to technology. This finding supports the inclusion of perceived usefulness, ease of use, and accessibility as core components of readiness assessment.

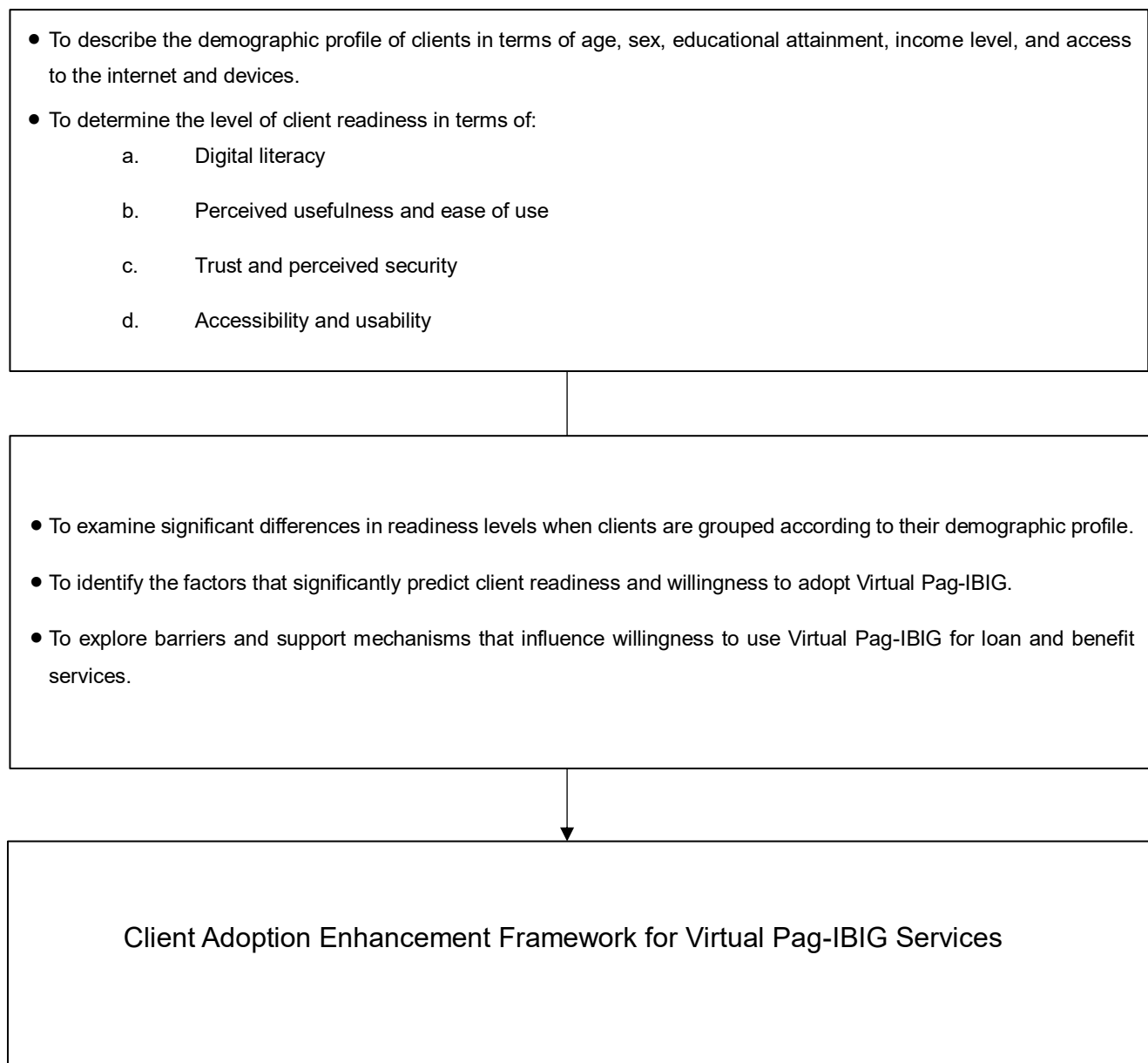
In the Indian context, Kumar and Singh (2021) found that rural populations experienced slower adoption of e-government platforms due to limited internet infrastructure and lack of digital skills. Their study emphasized that without targeted support and capacity-building initiatives, digital platforms risk excluding marginalized groups. This mirrors challenges observed in Philippine provincial settings and reinforces the relevance of localized readiness assessments.

Taken together, both local and foreign literature demonstrate that e-government adoption is influenced by a combination of technological, individual, and institutional factors. While digital platforms offer convenience and

efficiency, their success depends on users’ readiness, which includes digital literacy, perceived usefulness and ease of use, trust and perceived security, accessibility, and awareness of legal protections. Local studies highlight the uneven readiness among Filipinos, particularly in provincial and low-income communities, while foreign studies confirm that these challenges are common across developing countries.

Despite the growing body of research on e-government adoption, there remains limited empirical evidence focusing on branch-level readiness within government-owned and controlled corporations such as the Pag-IBIG Fund. Most studies examine national or urban contexts, leaving a gap in understanding how clients in smaller cities experience and adopt digital government services. Addressing this gap, the present study focuses on assessing client readiness to adopt Virtual Pag-IBIG at the San Francisco Branch and its extension office, Tandag Member Services Office, contributing localized evidence that can inform more inclusive and effective digital service implementation.

**Figure 1. Schematic Diagram of the Study**



As shown in the Figure 1, the schematic diagram of the study illustrates the logical flow of the research using the Input–Process–Output (IPO) framework. It presents how client characteristics and readiness indicators are systematically examined to generate an output that enhances the client adoption of Virtual Pag-IBIG services.

The first box of the schematic diagram represents the input variables of the study, which consist of the clients of the Pag-IBIG Fund – San Francisco Branch and its extension office, Tandag Member Services Office, and their relevant characteristics. Specifically, this component aims to describe the demographic profile of clients in terms of age, sex, educational attainment, income level, and access to the internet and digital devices. These demographic factors are considered essential in understanding the background of the clients and in identifying possible variations in digital readiness and technology use.

In addition to demographic characteristics, the input stage includes the assessment of client readiness to adopt Virtual Pag-IBIG services. Readiness is examined across five key dimensions: digital literacy, which refers to the clients' ability to use digital tools and navigate online platforms; perceived usefulness and ease of use, which reflect clients' beliefs about the benefits and simplicity of Virtual Pag-IBIG; trust and perceived security, which capture clients' confidence in the platform's ability to protect personal and financial information; accessibility and usability, which pertain to the availability of reliable internet, devices, and system functionality; and legal awareness and institutional support, which involve clients' understanding of data privacy laws and the assistance provided by Pag-IBIG Fund. Collectively, these variables establish a comprehensive baseline for evaluating how prepared clients are to engage with digital services.

The second box represents the process component of the study, where the input variables are analyzed to address the core research objectives. At this stage, the study examines whether significant differences in readiness levels exist when clients are grouped according to their demographic profile. This analysis helps determine which groups may be prepared to adopt Virtual Pag-IBIG, thereby highlighting potential digital inequalities.

Furthermore, the process involves identifying the factors that significantly predict client readiness and willingness to adopt Virtual Pag-IBIG. By analyzing relationships among readiness dimensions and adoption-related variables, the study determines which factors exert the strongest influence on clients' willingness and capacity to use the platform. In addition, the process explores the barriers and support mechanisms that affect clients' willingness to use Virtual Pag-IBIG for loan and benefit services. These include technological, informational, and psychological barriers, as well as institutional support strategies such as digital assistance and user guidance. Through this analytical process, the study translates raw data into meaningful insights that explain client behavior and readiness patterns.

Finally, the third box of the schematic diagram represents the output of the study, which is the development of a Client Adoption Enhancement Framework for Virtual Pag-IBIG Services. This framework synthesizes the findings from the input and process stages to propose evidence-based strategies aimed at improving client adoption of Virtual Pag-IBIG. It integrates identified readiness gaps, predictive factors, and support mechanisms to recommend targeted interventions such as digital literacy programs, enhanced security communication, improved system usability, and branch-level assistance.

The Client Adoption Enhancement Framework is designed to guide Pag-IBIG Fund management and policymakers in strengthening digital service delivery at the local level. By aligning client needs with institutional strategies, the framework contributes to more inclusive, efficient, and sustainable adoption of Virtual Pag-IBIG services.

Overall, the schematic diagram demonstrates a clear and systematic progression from understanding client characteristics and readiness, through analytical evaluation, to the development of practical solutions. It visually and conceptually supports the study's objective of enhancing digital adoption and improving the effectiveness of e-government services in the Pag-IBIG Fund – San Francisco Branch and its extension office, Tandag Member Services Office.

## **Objectives of the Study**

The purpose of this study is to assess the client readiness to adopt Virtual Pag-IBIG services. By identifying levels of digital literacy, accessibility, trust, and awareness of legal and institutional support, the study seeks to provide evidence-based insights that can help improve service delivery and promote inclusive adoption of e-government platforms. Specifically, this study seeks to answer the following objectives:

To describe the demographic profile of clients in terms:

- a. age;
- b. sex;
- c. educational attainment;
- d. income level; and
- e. access to the internet and devices.

To determine the level of client readiness in terms of:

1. Digital literacy;
2. Perceived usefulness and ease of use;
3. Trust and perceived security;
4. Accessibility and usability; and
5. Legal awareness and institutional support.

To examine significant differences in readiness levels when clients are grouped according to their demographic profile;

To identify the factors that significantly predict client readiness and willingness to adopt Virtual Pag-IBIG;

To explore barriers and support mechanisms that influence willingness to use Virtual Pag-IBIG for loan and benefit services; and

To develop a Client Adoption Enhancement Framework for Virtual Pag-IBIG services based on the findings of the study.

### **Scope and Limitation of the Study**

This study focuses on assessing the readiness of clients to adopt Virtual Pag-IBIG services at the Pag-IBIG Fund – San Francisco Branch. Its general purpose is to examine clients' preparedness, willingness, and capacity to use digital platforms for selected Pag-IBIG transactions and to identify the factors that influence their adoption of online services. Guided by the Input–Process–Output framework, the study aims to generate empirical evidence that will support the development of a Client Adoption Enhancement Framework for Virtual Pag-IBIG services.

In terms of subject matter, the study primarily covers the demographic profile of clients and their level of readiness to adopt Virtual Pag-IBIG. Client readiness is examined across five dimensions: digital literacy; perceived usefulness and ease of use; trust and perceived security; accessibility and usability; and legal awareness and institutional support. The study also investigates differences in readiness when respondents are grouped according to demographic variables, identifies factors that significantly predict readiness, and explores the barriers and support mechanisms that influence clients' willingness to use Virtual Pag-IBIG.

Regarding the services covered, the study is limited to Virtual Pag-IBIG services related to loan and benefit transactions. These include online application and processing of Pag-IBIG housing loans and short-term loans, as well as benefit-related inquiries and transactions accessible through the Virtual Pag-IBIG platform. Other services such as membership registration, MP2 savings enrollment, contribution payments, and employer-related transactions are excluded from the scope of the study. This delimitation ensures a focused analysis of services that directly involve sensitive personal and financial data and require a higher level of client readiness, trust, and digital competence.

The locale of the study is the Pag-IBIG Fund – San Francisco Branch, located in San Francisco, Agusan del Sur, including its extension office at the Tandag Members Services Office in Tandag City, Surigao del Sur. These sites were selected because they cater to a diverse client population from both urban and rural areas, making them suitable locations for examining readiness to adopt digital government services in a provincial setting.

The respondents of the study are Pag-IBIG Fund clients who transact at the San Francisco Branch and its extension office and are engaged in loan and benefit-related services. Respondents were selected using a convenience sampling method, based on their availability and willingness to participate during the data collection period. As such, the findings reflect the perspectives of walk-in clients and may not fully represent purely online users or clients from other Pag-IBIG branches.

In terms of time frame, data were gathered over a specified period during the academic year 2025–2026, within a two-week data collection window. The study captures clients' readiness and perceptions at a particular point in time; therefore, changes in readiness levels due to future technological improvements, policy updates, or digital literacy interventions are beyond the scope of this research.

As to how the study was conducted, data were collected using a structured survey questionnaire supplemented by open-ended questions to capture both quantitative and qualitative insights. The study focuses solely on client readiness and adoption factors and does not examine the organizational readiness of Pag-IBIG Fund personnel, the technical performance of the Virtual Pag-IBIG system, or system-level security architecture.

Given these delimitations, the results of the study are applicable primarily to the Pag-IBIG Fund – San Francisco Branch and similar provincial branch settings. While the findings may offer insights relevant to other branches, generalization should be made with caution due to differences in client profiles, infrastructure, and service environments.

### Significance of the Study

This study is significant as it provides empirical evidence on client readiness to adopt Virtual Pag-IBIG services, offering practical and theoretical contributions to key stakeholders involved in digital government service delivery.

**Pag-IBIG Fund Management and Branch Personnel.** This study primarily benefits Pag-IBIG Fund management and branch personnel by providing data-driven insights on clients' readiness, barriers, and support needs, which can be used to improve digital service design, strengthen client assistance strategies, and enhance the effective implementation of Virtual Pag-IBIG services.

**Pag-IBIG Fund Clients and Members.** Clients benefit from the study through the identification of factors that hinder or facilitate their use of Virtual Pag-IBIG, leading to recommendations that can improve accessibility, usability, trust, and overall service experience in loan and benefit transactions.

**Government Agencies and Policymakers.** The findings of this study provide valuable input for government agencies and policymakers in evaluating the effectiveness of e-government initiatives, supporting the development of inclusive digital policies aligned with the Ease of Doing Business Act, the Data Privacy Act, and broader digital governance goals.

**Local Communities and the Public.** Local communities benefit indirectly from improved digital service delivery as more efficient and accessible Pag-IBIG services reduce congestion in offices, save time and resources for citizens, and promote equitable access to government services in provincial areas.

**Academic Community and Future Researchers.** This study contributes to academic literature by providing localized, branch-level evidence on e-government adoption and client readiness, serving as a reference for future research on digital transformation in government-owned and controlled corporations and similar institutions.

### Definitions of Terms

For clarity of the research, the following terminologies are operationally defined.

**Accessibility and Usability.** These refer to the extent to which clients can conveniently access and effectively use the Virtual Pag-IBIG platform, considering factors such as internet availability, device functionality, system navigation, and ease of completing online transactions.

**Adoption.** This refers to the clients' actual use or willingness to use Virtual Pag-IBIG services for loan and benefit transactions instead of relying on face-to-face transactions.

**Barriers.** These are factors that hinder clients from using Virtual Pag-IBIG services, including limited digital skills, lack of internet access, system-related difficulties, security concerns, and preference for in-person transactions.

**Client Readiness.** This refers to the degree to which Pag-IBIG clients are prepared, capable, and willing to adopt Virtual Pag-IBIG services, as measured through digital literacy, perceived usefulness and ease of use, trust and perceived security, accessibility and usability, and legal awareness and institutional support.

**Demographic Profile.** This includes the characteristics of the respondents such as age, sex, educational attainment, income level, and access to internet and digital devices, which are analyzed to determine differences in readiness levels.

**Digital Literacy.** This refers to the clients' ability to use digital devices, access the internet, and navigate the Virtual Pag-IBIG platform to complete online loan and benefit transactions.

**Institutional Support.** This refers to the assistance, guidance, and resources provided by the Pag-IBIG Fund, such as staff support, orientations, help desks, and instructional materials, to help clients use Virtual Pag-IBIG services.

**Legal Awareness.** This refers to the clients' level of understanding of laws and policies related to online transactions and data protection, particularly the Data Privacy Act, as they relate to the use of Virtual Pag-IBIG services.

**Perceived Security.** This refers to the clients' confidence that their personal and financial information is protected when using Virtual Pag-IBIG services and that the system is safe from fraud, scams, or unauthorized access.

**Perceived Usefulness and Ease of Use.** Based on the Technology Acceptance Model, this refers to the clients' belief that Virtual Pag-IBIG improves transaction efficiency and is easy to learn and operate.

**Support Mechanisms.** These refer to the strategies, programs, or tools identified in the study that can help clients adopt Virtual Pag-IBIG, such as digital assistance desks, step-by-step guides, and system tutorials.

**Trust.** This refers to the clients' belief in the reliability, credibility, and integrity of the Virtual Pag-IBIG system and the Pag-IBIG Fund in delivering secure online services.

**Virtual Pag-IBIG.** This refers to the official online platform of the Pag-IBIG Fund that allows members to access selected services—specifically loan and benefit-related transactions—without visiting a physical branch.

## RESEARCH METHODOLOGY

This section contains methods used by the researcher to gather reliable data for the study.

### Research Design

This study employed a descriptive research design, which systematically describes the characteristics and current conditions of the clients of the Pag-IBIG Fund – San Francisco Branch and its extension office in Tandag City. The study focuses on assessing the level of client readiness to adopt Virtual Pag-IBIG services, including

dimensions such as digital literacy, perceived usefulness and ease of use, trust and perceived security, accessibility and usability, and legal awareness. No variables are manipulated; the study strictly observes and reports the existing conditions among clients.

Recent literature emphasizes that descriptive research is ideal for understanding “what exists” rather than determining cause-and-effect relationships. According to Alhassan and Abdulai (2021), descriptive studies are valuable for documenting the status, behaviors, or perceptions of a population, providing baseline information for planning interventions. Rahman and Hamid (2022) also note that descriptive research helps in assessing readiness, awareness, and attitudes, particularly when implementing new systems or technologies, such as e-government services. Similarly, Zhang, Chen, and Li (2023) highlight that descriptive research is effective in identifying patterns and trends in user adoption of digital platforms, enabling targeted improvements in service delivery. These studies demonstrate that descriptive research is particularly useful for capturing current readiness, perceptions, and barriers among users of digital systems.

The descriptive method is highly applicable to this study because the primary goal is to document and understand the current level of client readiness to adopt Virtual Pag-IBIG. Through structured surveys and questionnaires, the study collects data on clients’ demographic profiles, digital capabilities, perceptions of usefulness and ease of use, trust and security concerns, accessibility, and awareness of legal protections. By presenting these characteristics in an organized and systematic way, the study provides a comprehensive snapshot of readiness, identifies potential barriers, and informs practical recommendations for enhancing adoption of Virtual Pag-IBIG services. This approach ensures that findings are grounded in actual client experiences and can guide evidence-based strategies to improve digital service delivery at the branch level.

### **Research Locale**

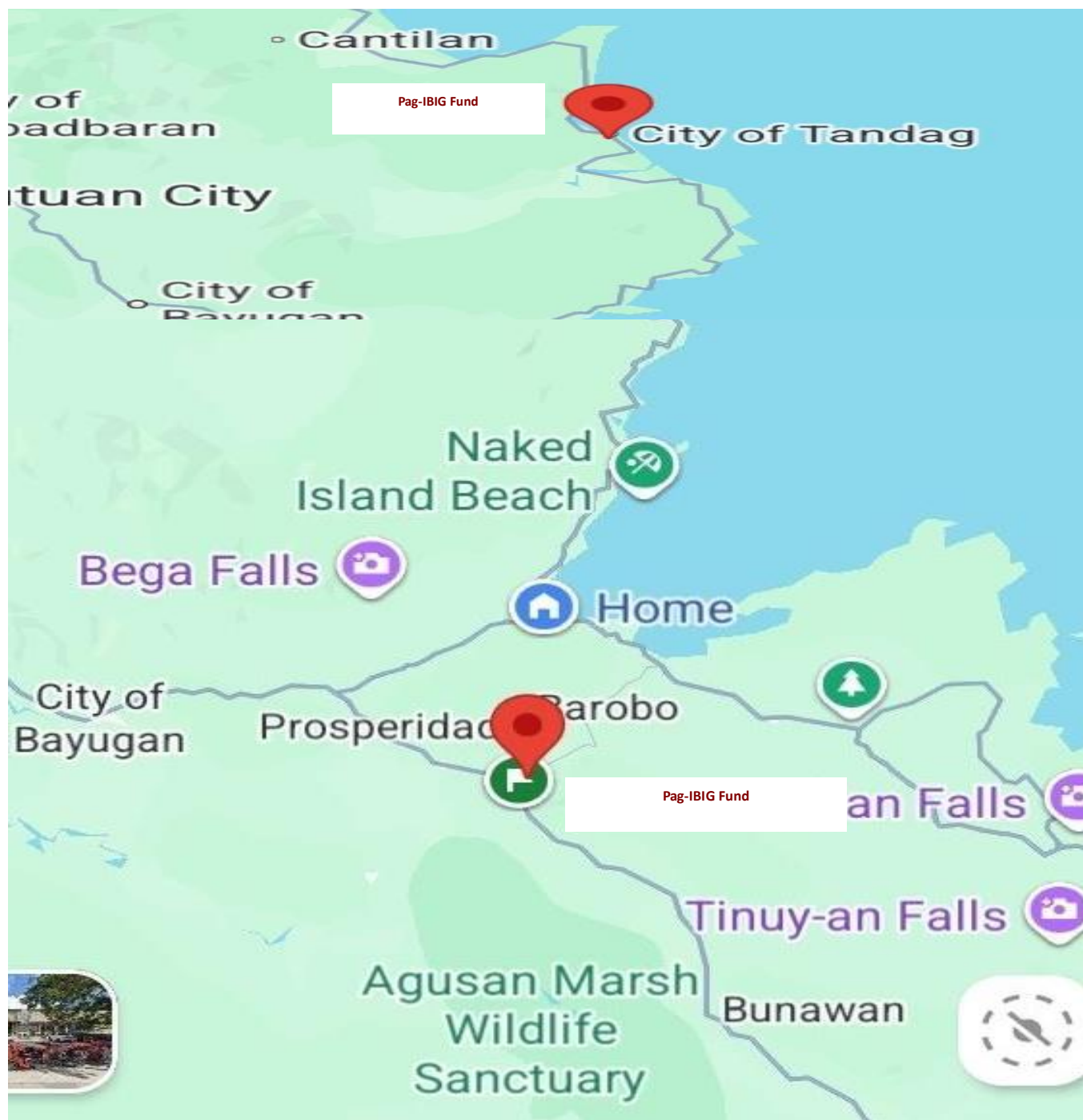
The study was conducted at the Pag-IBIG Fund – San Francisco Branch, located in San Francisco, Agusan del Sur, and its extension office, the Tandag Member Services Office, in Tandag City, Surigao del Sur, within the region.

These sites were selected due to their strategic role in servicing both urban and rural populations. San Francisco Branch caters to clients from the town proper and surrounding municipalities, while the Tandag extension office serves clients from more remote areas, providing a diverse sample of Pag-IBIG Fund members with varying levels of digital access and literacy.

The area is relevant to the study because it exemplifies a provincial setting where the adoption of digital government services faces unique challenges. Many clients rely on in-branch transactions despite the availability of the Virtual Pag-IBIG platform. Persistent issues observed in these locations include long queues, repeated follow-ups, and requests for staff assistance, indicating potential barriers to digital adoption such as limited digital literacy, unreliable internet connectivity, and apprehension about online security.

Studying these locales allows for a contextualized assessment of client readiness by directly engaging with the realities faced by Pag-IBIG members in provincial areas. The selected branches are particularly representative due to their mixed urban and rural clientele, which ensures diversity in access to technology and digital skills, ranging from town residents to members from nearby provincial communities. Compounding this diversity is the high transactional volume at both offices, which presents a robust opportunity to assess readiness and adoption patterns among frequent service users under real-world conditions. Crucially, because both offices already provide access to Virtual Pag-IBIG services, they serve as ideal settings to observe how existing digital infrastructure is actually utilized and to identify the specific barriers that prevent wider adoption.

Figure 2. Location Map of the Study



The study was conducted in these areas specifically to capture the actual conditions and readiness of clients in provincial settings, where digital transformation initiatives face distinct challenges compared to metropolitan areas. By focusing on these areas, the study generates locally relevant insights that can inform branch-level interventions and support strategies aimed at increasing adoption of Virtual Pag-IBIG services.

### Research Respondents

The respondents of this study were clients of the Pag-IBIG Fund – San Francisco Branch and its extension office, the Tandag Member Services Office, who availed of loan and benefit-related services during the data collection period. A total of 122 respondents were included in the study. These respondents represent actual and potential users of the Virtual Pag-IBIG platform and are therefore appropriate for assessing client readiness to adopt digital services.

To ensure the relevance and appropriateness of the respondents, inclusion criteria were applied. Only registered Pag-IBIG Fund members who personally transacted at either the San Francisco Branch or the Tandag Member Services Office were included. Respondents were required to be at least 18 years old, engaged in loan or benefit-related transactions that are accessible through the Virtual Pag-IBIG platform, and willing to participate voluntarily in the study. Clients who visited the branch solely for employer-related concerns, contribution remittances, or membership registration without involvement in loan or benefit services were excluded from the study.

Table 1. Distribution of Research Respondents

Research Locale	Sampler
Pag-IBIG Fund – San Francisco Branch	78
Tandag Member Services Office (Extension Office)	44
<b>Total</b>	122

The use of convenience sampling is appropriate and justified for this study due to its descriptive nature and localized focus. Etikan and Bala (2020) emphasized that convenience sampling allows researchers to capture real-time experiences of respondents who are directly involved in the phenomenon under investigation. Similarly, Taherdoost (2020) noted that this sampling technique is suitable for studies assessing readiness, acceptance, or perceptions of new systems, especially when a complete sampling frame is unavailable. In this study, the objective was to assess client readiness to adopt Virtual Pag-IBIG services at the branch level rather than to generalize findings to the entire Pag-IBIG membership nationwide. As further explained by Jager, Putnick, and Bornstein (2022), non-probability sampling methods such as convenience sampling remain scientifically acceptable when the primary goal is to inform program improvement and policy implementation within a specific context. Thus, convenience sampling enabled the efficient and practical collection of relevant data from actual Pag-IBIG clients, making it an appropriate technique for achieving the objectives of the study.

The sampling procedure was conducted systematically. Approval to conduct the study was first secured from the management of the Pag-IBIG Fund – San Francisco Branch. Data collection was carried out over a two-week period during regular office hours at both the main branch and its extension office. Walk-in clients were initially screened based on the established inclusion criteria. Eligible clients were then informed of the purpose of the study and assured that their participation was voluntary and that all responses would be treated with confidentiality. Those who consented were provided with a structured survey questionnaire, which they completed on-site. Completed questionnaires were retrieved, checked for completeness, and subsequently coded for statistical analysis. A total of 122 valid responses were obtained and included in the final dataset.

## Research Instrument

The study used in this study was a researcher-made structured survey questionnaire designed to assess the readiness of clients to adopt Virtual Pag-IBIG services for loan and benefit transactions. The questionnaire was developed based on the objectives of the study, the Input–Process–Output framework, and a review of related literature on e-government adoption, digital literacy, technology acceptance, trust, and accessibility. The instrument was intended to gather both quantitative and qualitative data that reflect clients' demographic characteristics, readiness dimensions, willingness to adopt digital services, perceived barriers, and needed support mechanisms. The use of a structured questionnaire was deemed appropriate as it allows for systematic data collection, comparability of responses, and statistical analysis of readiness levels and influencing factors.

The questionnaire consisted of five major components. Part I covered the demographic profile of the respondents, including age, sex, educational attainment, household income, access to the internet, and type of digital device used. These variables were used to describe the respondents and to analyze differences in readiness when grouped according to demographic characteristics. Part II measured client readiness to adopt Virtual Pag-

IBIG across five dimensions: digital literacy; perceived usefulness and ease of use; trust and perceived security; accessibility and usability; and legal awareness and institutional support. This section utilized a five-point Likert scale ranging from 1 (Not Ready) to 5 (Much Ready).

Part III focused on willingness to adopt Virtual Pag-IBIG, specifically examining intention and motivation, social and environmental influence, and commitment to adoption. Part IV identified barriers that hinder the use of Virtual Pag-IBIG and the support mechanisms needed to facilitate adoption. Part V consisted of open-ended questions that allowed respondents to express personal experiences, perceived difficulties, and suggestions for improving the Virtual Pag-IBIG system.

To establish the validity of the research instrument, face and content validation were conducted prior to data collection. The questionnaire was evaluated by four (4) validators, composed of Pag-IBIG Fund branch personnel with expertise relevant to the study. The inclusion criteria for validators were as follows: (1) must be currently employed at the Pag-IBIG Fund; (2) must have at least three years of experience in member services, loan processing, or digital system support; (3) must be knowledgeable about Virtual Pag-IBIG services and client transactions; and (4) must have experience in handling client inquiries or service delivery processes. The validators assessed the questionnaire in terms of clarity of items, relevance to the study objectives, appropriateness of language, adequacy of coverage of readiness dimensions, and suitability for the target respondents. Suggestions provided by the validators included rephrasing ambiguous items, simplifying technical terms, and improving the logical flow of some questions. All comments and recommendations were carefully reviewed and incorporated to enhance the clarity, relevance, and comprehensiveness of the instrument.

After validation, the revised questionnaire underwent pilot testing to determine its reliability. The pilot test was conducted among ten (10) Pag-IBIG Fund employees who were not included in the actual respondents of the study but were familiar with Virtual Pag-IBIG services and digital transactions. The pilot respondents completed the questionnaire under conditions like the actual data collection process. The responses were then subjected to reliability analysis using Cronbach's alpha to determine the internal consistency of the readiness and willingness scales. The results revealed a Cronbach's alpha coefficient exceeding 0.70, which is considered acceptable for social science research. Minor adjustments, such as refining item wording and response alignment, were made based on pilot test feedback to further improve the instrument.

Overall, the processes of validation and pilot testing ensured that the questionnaire was both valid and reliable for assessing client readiness to adopt Virtual Pag-IBIG services. The incorporation of expert feedback and pilot test results strengthened the quality of the instrument and increased confidence in the accuracy and credibility of the data collected. All versions of the questionnaire, validation forms, validator comments, and pilot test results are included in the Appendices of this study for reference and transparency.

## **Data Gathering Procedure**

The conduct of the study followed a systematic and sequential process to ensure the accurate, ethical, and reliable collection of data leading to the achievement of the study's objectives. The procedure was divided into distinct stages, beginning with preparation, planning, and concluding with data analysis and reporting, all of which directly contributed to the development of the study's output.

The preparation and planning stage involved the formulation of the research design, development of the research instrument, and identification of the target respondents. Necessary approvals were secured from the Pag-IBIG Fund – San Francisco Branch management prior to data collection. The validated and pilot-tested questionnaire was finalized, printed, and prepared for administration. The researcher also coordinated with branch personnel to determine appropriate schedules for data gathering to avoid disruption of regular operations and ensure the availability of eligible respondents.

The implementation stage involved the actual conduct of the study at the Pag-IBIG Fund – San Francisco Branch and the Tandag Member Services Office. During this phase, the researcher positioned at designated areas within the service offices where clients completed their transactions. Eligible walk-in clients were identified based on the inclusion criteria and were provided a brief orientation regarding the purpose of the study, confidentiality of

responses, and voluntary nature of participation. This stage served as the primary means of engaging respondents who were actual or potential users of the Virtual Pag-IBIG system, ensuring that data collected reflected real-time service experiences and readiness levels.

The administration of assessments consisted of distributing the structured survey questionnaire to consenting respondents. The instrument was self-administered, with the researcher available to clarify instructions or items when necessary. Respondents completed the questionnaire on-site to ensure a high retrieval rate and minimize non-response bias. The questionnaire captured data on demographic characteristics, readiness dimensions, willingness to adopt Virtual Pag-IBIG, perceived barriers, and needed support mechanisms. Completed questionnaires were immediately retrieved, checked for completeness, and securely stored for subsequent processing.

The collection of demographic and contextual data was integral to the study, as it allowed for the examination of variations in readiness and willingness across different respondent groups. Contextual information such as access to digital devices, internet connectivity, frequency of Pag-IBIG transactions, and prior exposure to online services was gathered to provide a comprehensive understanding of the environment influencing Virtual Pag-IBIG adoption. These data were essential in identifying patterns and relationships between client characteristics and their readiness to adopt digital services.

Throughout the data gathering process, the researcher also observed influencing factors that could affect respondents' readiness, such as the level of assistance provided by branch personnel, the availability of informational materials on Virtual Pag-IBIG, queue conditions, and clients' visible familiarity with digital processes. While these observations were not quantitatively measured, they provided contextual support in interpreting survey results and understanding practical challenges encountered by clients during branch transactions.

Following data collection, the analysis and reporting stage commenced. All retrieved questionnaires were coded and encoded into statistical software for analysis. Descriptive statistics were used to summarize demographic profiles, readiness levels, willingness to adopt, barriers, and support needs. Inferential analyses were conducted to determine relationships between demographic variables and readiness dimensions, as aligned with the study objectives. The results analyzed were then interpreted to identify key factors influencing client readiness and adoption of Virtual Pag-IBIG services.

The findings from the data analysis directly led to the output of the study, which focused on developing evidence-based recommendations and strategic interventions to enhance client readiness and adoption of Virtual Pag-IBIG services. The results informed proposed improvements in client education, digital support mechanisms, service accessibility, and institutional policies. Through this structured data gathering procedure, the study ensured that the output was grounded in empirical evidence and reflective of the actual experiences and needs of Pag-IBIG Fund clients.

## Statistical Treatment

The quantitative data gathered in this study were systematically analyzed using descriptive and inferential statistical tools, appropriately selected based on the level of measurement, to address each objective: describing the respondents' demographic profile, assessing their level of readiness and willingness to adopt Virtual Pag-IBIG services, identifying perceived barriers and needed support mechanisms, and examining the relationships between these variables.

**Frequency and Percentage.** These tools were used to describe the Objectives 1 and 5 respectively: respondents' demographic profile in terms of age, sex, educational attainment, income level, and access to the internet and devices, and to quantify the barriers and support mechanisms influencing their willingness to use Virtual Pag-IBIG for loan and benefit services, while additional statistical measures were applied to assess their level of readiness and willingness to adopt the platform and to examine the relationships between these variables.

**Weighted Mean.** This tool used to address Objective 2 by quantifying and summarizing the average level of client readiness across its key dimensions—digital literacy, perceived usefulness and ease of use, trust and perceived security, accessibility and usability, and legal awareness and institutional support—based on respondents' ratings, thereby providing a descriptive foundation for Objective 4 by establishing the baseline readiness and willingness scores that will be subsequently analyzed to identify which of these dimensions, along with other variables, significantly predict client readiness and willingness to adopt Virtual Pag-IBIG.

**Analysis of Variance (ANOVA).** To address Objective 3, this tool was used to determine whether significant differences exist in the mean readiness scores of clients when they are grouped according to their demographic profile categories—such as age, sex, educational attainment, income level, and access to internet and devices—by comparing the variance between groups relative to the variance within groups, thereby revealing which demographic factors influence varying levels of client readiness to adopt Virtual Pag-IBIG services.

Finally, all statistical results were systematically presented in tables and interpreted in relation to the study's objectives. The findings derived from these statistical treatments served as the empirical basis for the conclusions and recommendations of the study and directly informed the proposed output aimed at enhancing client readiness and adoption of Virtual Pag-IBIG services.

## RESULTS AND DISCUSSIONS

This chapter presents the results and corresponding discussions of the study based on the objectives set forth in the Statement of the Problem. The findings include the respondents' demographic profile, level of readiness to adopt Virtual Pag-IBIG services, differences in readiness when grouped according to selected demographic variables, predictors of client readiness, and the barriers and support mechanisms influencing adoption. Each table is introduced and discussed following the sequence of the objectives, highlighting the highest and lowest results, their implications, and their relationship to existing literature on digital service adoption.

### Demographic Profile of Respondents

Table 2 presents the demographic characteristics of the 122 respondents in terms of age, sex, educational attainment, monthly household income, and access to internet and digital devices. The results indicate that the largest proportion of respondents belonged to the 25–34 age group (27%), followed by those aged 35–44 (25%), while the smallest proportion was observed among those aged 55–65 (9%). Female respondents comprised the majority (57%), while males accounted for 43%. In terms of educational attainment, most respondents were college graduates (41%), followed by those with college-level education (19%) and vocational or technical training (14%). Regarding income, the highest proportion of respondents fell within the ₱10,000–₱24,999 range (39%), whereas only 4% reported having no personal digital device. Notably, 93% of respondents reported having access to internet connectivity, and 94% primarily used smartphones for digital transactions.

Table 2. Demographic profile of the respondents

Variable	Category	Frequency (n)	Percentage (%)
Age	18-24	19	16
	25-34	33	27
	35-44	30	25
	45-54	29	24
	55-65	11	9
	<b>Total</b>		<b>122</b>

<b>Sex</b>	Male	53	43
	Female	69	57
	<b>Total</b>	<b>122</b>	<b>100</b>
<b>Highest Educational Attainment</b>	Elementary	5	4
	High School	15	12
	Vocational	17	14
	College Level	23	19
	College Graduate	50	41
	Master/PhD	12	10
	<b>Total</b>	<b>122</b>	<b>100</b>
<b>Household Monthly Income</b>	Below 10,000	30	25
	10,000-24,999	47	39
	25,000-49,999	19	16
	50,000-above	25	20
	Prefer not to say	1	1
	<b>Total</b>	<b>122</b>	<b>100</b>
<b>Access to Internet</b>	Yes	114	93
	No	8	7
	<b>Total</b>	<b>122</b>	<b>100</b>
<b>Device Used</b>	Smartphone	115	94
	Laptop	2	2
	Tablet	1	1
	None	4	3
	<b>Total</b>	<b>122</b>	<b>100</b>

The high prevalence of internet access and smartphone ownership implies favorable conditions for the adoption of Virtual Pag-IBIG services. According to Venkatesh, Thong, and Xu (2021), access to digital infrastructure significantly enhances individuals' capacity to adopt and sustain the use of e-government platforms. However, the presence of low-income groups and respondents without personal devices suggests persistent digital inequality that may hinder full participation in online services. This finding supports the observation of van Deursen and Helsper (2020), who emphasized that socioeconomic disparities continue to shape unequal outcomes in digital adoption despite widespread access to technology.

### Level of Client Readiness

Table 3 presents the weighted mean scores and adjectival ratings of client readiness to adopt Virtual Pag-IBIG services across five dimensions: digital literacy; perceived usefulness and ease of use; trust and perceived security; accessibility and usability; and legal awareness and institutional support.

For interpretation, the range of values used in this study was adopted to ensure a systematic, balanced, and statistically interpretable measurement of client readiness to adopt Virtual Pag-IBIG services. Respondents' ratings were categorized using a five-point Likert scale with the following intervals: scores from 4.21 to 5.00 were interpreted as "Very Much Ready," indicating the highest level of preparedness to use the platform; 3.41 to 4.20 as "Much Ready," reflecting a high degree of readiness; 2.61 to 3.40 as "Ready," denoting moderate preparedness; 1.81 to 2.60 as "Less Ready," suggesting limited readiness; and 1.00 to 1.80 as "Not Ready," representing the lowest level of preparedness. This scaling approach provides a clear and consistent framework for interpreting the mean scores obtained from client responses across the various dimensions of readiness.

Table 3. Level of client readiness

Indicators	Weighted Mean	Adjectival Rating
Digital Literacy	4.003	Much Ready
Perceived usefulness and ease of use	4.130	Much Ready
Trust & Perceived Security	3.851	Much Ready
Accessibility and Usability	3.852	Much Ready
Legal Awareness & Institutional Support	4.149	Much Ready
<b>Over-all Weighted Mean</b>	<b>3.997</b>	<b>Much Ready</b>

The results reveal that respondents were generally Much Ready, with overall readiness obtaining a mean score of 3.997. Among the dimensions, legal awareness and institutional support recorded the highest mean ( $M = 4.149$ ), followed closely by perceived usefulness and ease of use ( $M = 4.130$ ). These findings suggest that respondents recognize the legitimacy of Virtual Pag-IBIG and perceive it as beneficial and user-oriented. In contrast, trust and perceived security ( $M = 3.851$ ) and accessibility and usability ( $M = 3.852$ ) yielded the lowest mean scores, although both remained within the "Much Ready" category.

The high ratings for perceived usefulness and institutional support imply strong alignment between system design and user expectations. This result is consistent with the Technology Acceptance Model, which posits that perceived usefulness is a primary determinant of digital adoption (Davis et al., as cited in Al-Okaily et al., 2022). However, the comparatively lower scores for trust and accessibility suggest ongoing concerns related to data security, system reliability, and internet stability. Recent studies have shown that trust remains a critical challenge in government digital platforms, particularly in contexts where users are wary of online fraud and data misuse (Mensah & Adams, 2020; Carter et al., 2021). These concerns may temper readiness despite generally positive perceptions.

### Significant Difference in Readiness Across Demographic Groups

Table 4 presents the inferential analysis examining differences in client readiness when respondents are grouped according to age, sex, educational attainment, monthly household income, internet access, and type of device used.

Table 4. Significant difference in readiness across demographic groups

Sources of Variation	Computed f	P-value	Decision	Conclusion
Age	1.300	0.274	Failed to reject Ho	Not Significant
Sex	0.870	0.354	Failed to reject Ho	Not Significant
Educational Attainment	2.150	0.065	Failed to reject Ho	Not Significant
Income	9.100	0.000	Reject Ho	Significant
Access to Internet	109.840	0.000	Reject Ho	Significant
Devices Used	18.480	0.000	Reject Ho	Significant

The results indicate no statistically significant differences in readiness when respondents were grouped by age ( $p = .274$ ), sex ( $p = .354$ ), and educational attainment ( $p = .065$ ). However, significant differences were observed when respondents were grouped according to monthly household income ( $p < .001$ ), internet connectivity ( $p < .001$ ), and type of digital device used ( $p < .001$ ).

These findings imply that readiness to adopt Virtual Pag-IBIG is not determined by basic demographic attributes such as age, sex, or education, suggesting a broad diffusion of digital capability across these groups. This supports the findings of Dwivedi et al. (2022), who noted that demographic differences become less pronounced as digital services become more normalized. Conversely, the significant influence of income, internet access, and device ownership underscores the importance of technological and economic resources in shaping readiness. Individuals with limited connectivity or inadequate devices may experience functional barriers, reinforcing arguments by Robinson et al. (2020) that digital inequality is increasingly driven by quality of access rather than mere availability.

### Predictors of Client Readiness and Willingness to Virtual Pag-IBIG

Table 5 presents the computed mean scores for factors that predict client readiness, namely intention and motivation, social and environmental influence, and commitment to adoption.

Table 5. Predictors for client readiness and willingness to virtual Pag-IBIG

Indicators	Weighted Mean	Adjectival Rating
Intention & Motivation	4.12	Much Ready
Social & Environmental Influence	3.864	Much Ready
Commitment to Adoption	4.126	Much Ready
<b>Over-all Weighted Mean</b>	<b>4.037</b>	<b>Much Ready</b>

Among these factors, commitment to adoption recorded the highest mean ( $M = 4.126$ ), followed closely by intention and motivation ( $M = 4.120$ ), both interpreted as Much Ready. Social and environmental influence obtained the lowest mean ( $M = 3.864$ ), though still within the same adjectival category.

These results suggest that internal factors—such as personal motivation and commitment—play a stronger role in shaping readiness than external social pressures. This aligns with findings by Alshurideh et al. (2021), who emphasized that intrinsic motivation is a stronger predictor of sustained digital service use than social influence

in government platforms. While social influence contributes to awareness and encouragement, the decision to adopt Virtual Pag-IBIG appears to be largely self-driven and goal-oriented.

### Barriers and Support Mechanisms

Table 6 presents the frequency and percentage distribution of barriers encountered by respondents in adopting Virtual Pag-IBIG services.

Table 6. Barriers and support mechanisms that influence willingness to adopt Virtual Pag-IBIG

Indicators	Frequency	Percentage
<b>Barriers</b>		
Lack of internet connection	20	16
Lack of device (smartphone or computer)	5	4
Lack of knowledge on how to use online systems	40	33
Concern about security or scams	48	39
Preference for face-to-face transactions	35	29
Unfamiliarity with Virtual Pag-IBIG	45	37
<b>Support Mechanisms</b>		
Training or orientation on how to use Virtual Pag-IBIG	7	6
Step-by-step printed guides or tutorials	37	30
Onsite digital assistance desks	66	54
Better internet access within the community	34	28
Clearer communication about online safety and legitimacy	30	25

The most frequently cited barrier was concerns about online security and scams (39%), followed by unfamiliarity with the Virtual Pag-IBIG system (37%) and lack of knowledge in using online services (33%). The least reported barrier was lack of a suitable device (4%).

On the other hand, the support mechanisms identified by respondents as necessary to facilitate adoption. The most frequently requested support was the establishment of onsite digital. The most frequently requested support was the establishment of onsite digital assistance desks (54%), followed by step-by-step printed guides or tutorials (30%) and improvements in community-level internet access (28%).

The preference for human-assisted digital support suggests that clients value guided onboarding rather than fully autonomous digital transitions. According to Mergel, Edelman, and Haug (2021), hybrid service models that combine digital platforms with face-to-face assistance are critical during transitional phases of e-government implementation. Open-ended responses further revealed system-specific issues such as OTP delays, difficulty retrieving passwords, and limited access to Statements of Account, indicating areas where technical enhancements and clearer communication could significantly improve user experience.

## Client Adoption Enhancement Framework For Virtual Pag-Ibig Services

### INTRODUCTION

Virtual Pag-IBIG is a digital platform developed by the Pag-IBIG Fund to provide members with convenient access to housing loans, short-term loans, membership records, and benefit-related services through online channels. The platform represents a critical component of Pag-IBIG's digital transformation agenda aimed at improving service efficiency, accessibility, and transparency. However, despite the availability of this digital service, findings of the present study reveal that client adoption remains uneven due to challenges related to trust, system usability, digital literacy, and access to reliable internet and devices.

The results of the study indicate that while respondents are generally much ready to adopt Virtual Pag-IBIG, readiness is constrained by concerns over online security, unfamiliarity with system processes, and unequal access to digital resources. Significant differences in readiness based on income level, internet access, and device ownership further underscore the need for targeted institutional interventions. In response to these findings, the Client Adoption Enhancement Framework for Virtual Pag-IBIG Loan and Benefits Services is proposed to systematically address the identified gaps and strengthen client readiness and adoption.

### Framework Objectives

The framework is designed to achieve the following objectives, which are directly anchored on the empirical findings of the study:

- Increase client awareness and understanding of Virtual Pag-IBIG services by addressing unfamiliarity with the platform and limited knowledge of available online transactions.
- Improve client readiness in terms of digital access, literacy, and confidence, particularly among low-income clients and those with limited digital resources.
- Address identified barriers to online service adoption, including security concerns, lack of technical knowledge, and system usability issues.
- Strengthen institutional support mechanisms for digital transactions through guided assistance and hybrid service models.
- Enhance overall user experience and satisfaction with Virtual Pag-IBIG, thereby increasing sustained utilization of online services.

### Guiding Principles

The framework is anchored on the following guiding principles:

- **Digital inclusivity and accessibility.** The framework ensures that Virtual Pag-IBIG services are accessible to all client groups regardless of socioeconomic status, age, or digital skill level. This principle directly responds to findings showing that income, internet access, and device ownership significantly influence readiness.
- **Data privacy and cybersecurity compliance.** Given that security concerns emerged as the most frequently reported barrier, the framework emphasizes strict adherence to data privacy laws, secure authentication mechanisms, and transparent communication on cybersecurity measures.
- **Client-centered service innovation.** All strategies under the framework prioritize the needs, experiences, and feedback of clients. This principle addresses usability issues and aligns service design with client expectations.
- **Transparency and responsiveness.** Clear communication regarding procedures, turnaround times, system updates, and issue resolution is emphasized to reduce uncertainty and increase trust in the platform.
- **Collaboration with stakeholders (LGUs, employer groups, agencies).** The framework promotes partnerships with LGUs, barangays, employers, cooperatives, and community organizations to extend digital support beyond Pag-IBIG offices.

## Core Components of the Framework

1. **Information and Awareness Campaign.** To address respondents' unfamiliarity with Virtual Pag-IBIG, educational materials such as brochures, infographics, and tutorials will be distributed. Social media strategies will disseminate updates and guides, while branch-based digital helpdesks provide in-person guidance. This directly responds to the study finding that 37% of respondents reported unfamiliarity as a barrier.
2. **Digital Literacy and Capability Building.** Orientation sessions and hands-on workshops will equip first-time users with the skills needed for online account management, loan applications, and benefits tracking. Partnerships with barangays, LGUs, and community centers ensure reach to clients with limited digital experience. This addresses the identified gaps in digital literacy (mean score  $M = 4.003$ ) and low confidence among certain demographics.
3. **System Access Enhancement.** Provision of self-service kiosks and mobile assistance units will increase accessibility for clients in remote areas or with unreliable internet. Expansion of customer service hotlines ensures support is readily available. This tackles barrier related to device availability (4% without devices) and poor internet access (16%).
4. **User Experience (UX) Optimization.** Simplified platform navigation, video guides, chatbots, and a FAQ library improve usability, while transparent turnaround times reduce frustration. These interventions are designed to improve scores on accessibility and usability ( $M = 3.852$ ), ensuring smoother adoption for clients across different technological competencies.
5. **Trust and Confidence Building.** Transparent policies on data privacy and security, sharing of success stories, and structured resolution protocols respond to the most cited barrier—security concerns (39%). Clear communication strengthens client confidence, addressing apprehensions about online transactions and system reliability. Also, the following tools or instruments will be used for implementation:
  - Printed and digital educational materials
  - Social media engagement platforms
  - Orientation modules and workshop guides
  - Self-service kiosks, mobile assistance vans, and hotline systems
  - Online platform enhancements, video tutorials, chatbots, FAQ library
  - Policy documents, complaint resolution forms, client testimonials

## Budgetary Requirements

Allocate resources for staff training, production of educational materials, kiosks and mobile units, IT infrastructure upgrades, and marketing campaigns. Ensure budget planning aligns with both implementation and sustainability of the strategies.

Table 7. Proposed Branch-Level Budgetary Requirements for the Client Adoption Enhancement Framework (Pag-IBIG Fund San Francisco Branch)

Budget Item / Activity	Description	Estimated Cost (₱)	Justification
<b>Information and Awareness Campaign</b>			
Printing of brochures and user guides	Production of step-by-step Virtual Pag-IBIG guides for branch clients	20,000	Addresses client unfamiliarity with the platform
Infographics and posters	Visual materials displayed within the branch	10,000	Enhances awareness during branch visits
Social media content (branch-level)	Creation of basic tutorial posts and announcements	5,000	Extends information reach at minimal cost
<b>Branch-Based Digital Helpdesk</b>			
Digital helpdesk setup	Table, signage, and basic equipment for onsite assistance	25,000	Responds to demand for guided digital support
<b>Digital Literacy and Capability Building</b>			
Client orientation sessions	Materials and logistics for periodic orientations	20,000	Improves digital confidence of first-time users
Staff digital facilitation training	Short training for assigned branch personnel	15,000	Ensures consistent and effective assistance
<b>System Access Enhancement</b>			
Self-service computer/kiosk	One desktop unit with basic internet setup	50,000	Addresses lack of personal devices among clients
Internet connectivity enhancement	Monthly subscription and upgrades	18,000	Supports stable online transactions User Experience (UX) Support
<b>User Experience (UX) Support</b>			
Video guides and FAQs (localized)	Short instructional videos and printed FAQs	15,000	Reduces navigation and transaction difficulties
<b>Trust and Confidence Building</b>			
Data privacy and security information materials	Posters and handouts explaining online safety	10,000	Addresses security and scam concerns
Feedback and complaint documentation tools	Forms and logging materials	5,000	Improves responsiveness and trust
<b>Monitoring and Evaluation</b>			
Client feedback surveys	Printing and basic analysis tools	10,000	Measures effectiveness of interventions
<b>Total Estimated Branch-Level Budget</b>		<b>215,000</b>	

### Monitoring and Evaluation Indicators

The framework will be evaluated using the following indicators:

- Increase in number of Virtual Pag-IBIG registered users
- Percentage of loan and benefits transactions done online

- Reduced branch walk-in traffic for digital-capable services
- Client satisfaction scores and feedback patterns
- System usability and error reporting trends

### **Sustainability Measures**

- Regular digital literacy refresher sessions
- Continuous platform updates based on client needs
- Institutional integration into client services policy
- Partnership development with LGUs, cooperatives, and employer groups

### **Expected Outcomes**

- Higher adoption and utilization of Virtual Pag-IBIG services
- Improved service efficiency and reduced processing time
- Enhanced client confidence in digital government services
- Strengthened branch capacity for e-governance implementation

## **CONCLUSIONS**

The Client Adoption Enhancement Framework provides a strategic roadmap to strengthen the adoption and utilization of Virtual Pag-IBIG loan and benefits services. By addressing the gaps identified in this study—such as digital literacy, security concerns, accessibility issues, and system unfamiliarity, the framework empowers clients to confidently engage with online services. Initiatives such as educational campaigns, digital capability building, system access enhancements, user experience optimization, and trust-building measures directly support Pag-IBIG’s digital transformation agenda, enabling the institution to shift from traditional, face-to-face processes to efficient, technology-driven service delivery.

Moreover, the framework aligns with the national direction toward digital public service delivery, promoting inclusivity, transparency, and accessibility while ensuring compliance with data privacy and cybersecurity standards. Through collaborative engagement with stakeholders and continuous monitoring and evaluation, the framework fosters a sustainable digital ecosystem where clients are informed, capable, and confident in utilizing government online services, contributing to the broader goal of e-governance and citizen-centered digital transformation.

## **CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents a synthesis of the major findings, the conclusions derived from the results, and the recommendations proposed to improve client adoption of Virtual Pag-IBIG. The discussion translates the results into actionable implications for program implementation, digital service design, and future research directions.

### **Conclusions**

Based on the results presented in Part II, the study concludes that clients of Pag-IBIG Fund – San Francisco Branch generally demonstrate a favorable level of readiness to adopt Virtual Pag-IBIG in terms of digital literacy, perceived usefulness and ease of use, legal awareness, and institutional support. The demographic analysis shows that while readiness is consistent across age, sex, and educational attainment, significant differences exist when clients are grouped according to income level, internet access, and device availability, indicating that socioeconomic and technological factors continue to influence digital readiness. Clients exhibit strong intention, motivation, and commitment to use Virtual Pag-IBIG; however, persistent concerns related to data security, system reliability, unfamiliarity with online procedures, and preference for face-to-face transactions limit full adoption. These findings suggest that while psychological and attitudinal readiness is already present, actual system usage is constrained by access-related and confidence-related barriers. Overall, client readiness can be strengthened further through targeted support mechanisms, improved system accessibility, and guided digital

assistance, emphasizing the need for a structured framework that translates readiness into sustained utilization of Virtual Pag-IBIG services.

## Recommendations

Based on the conclusions of the study, Pag-IBIG Fund–San Francisco Branch may consider utilizing the proposed Client Readiness and Adoption Framework as a guiding tool in strengthening the implementation and sustained use of Virtual Pag-IBIG services. Branch management may further enhance system usability, reliability, and accessibility by addressing identified technical concerns and by ensuring that digital platforms are optimized for clients with varying levels of internet access and device availability. To address issues related to trust and confidence, the branch may intensify information and awareness initiatives that clearly communicate data privacy, security measures, and proper online transaction procedures.

The establishment of branch-based digital assistance mechanisms, such as helpdesks or self-service kiosks, may also be considered to provide guided support for clients who require hands-on assistance. In collaboration with local government units and community partners, the branch may explore opportunities to promote digital inclusion through orientations, digital literacy activities, and the dissemination of simplified instructional materials. Lastly, future researchers may use the findings and the proposed framework as reference in conducting similar studies across other Pag-IBIG branches or in assessing the long-term effectiveness of digital readiness interventions in public service delivery.

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