Usability Evaluation of GSIS Touch Mobile Application in Kabayan, Benguet

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Abstract: This study evaluated the usability of the GSIS Touch mobile application among active Government Service Insurance System (GSIS) members in Kabayan, Benguet. Grounded on the ISO 9241-11 standard, usability was measured in terms of effectiveness, efficiency, and user satisfaction. A descriptive-quantitative research design was employed using a validated self-structured questionnaire distributed to 293 government employees, yielding a 79% response rate. Results indicated that GSIS Touch is generally perceived as effective (M = 4.11), very efficient (M = 4.29), and satisfactory (M = 4.10), with an overall usability rating of 4.17. Statistical analyses revealed a significant difference in satisfaction based on age, with middle-aged users reporting higher satisfaction compared to older users. Additionally, significant differences in effectiveness and efficiency were observed across agency affiliations, with employees from DepEd and LGU-Kabayan rating the app more favorably than other groups. Gender did not yield any significant differences. Despite positive usability ratings, issues such as limited awareness, technical compatibility, and non-enrollment remain. The findings highlight the need for targeted information campaigns, training initiatives, and continuous app enhancements to improve adoption and user experience, particularly among older employees and underserved agencies.

Keywords: GSIS touch, usability, m-government

INTRODUCTION

It has always been a challenge for the government to deliver public service to its stakeholders as conveniently and effectively as possible. Up until the use of the internet became widespread, governments worldwide have adopted e-government services, and their actual use has grown quickly (Long & Philips, 2023). Eventually, e-government services offered by several government institutions became accessible on smartphones. These can be easily accessed through different applications.

In the Philippines, one of the mobile applications introduced is the GSIS Touch mobile application, which aims to bring GSIS services to government employees and retirees digitally. However, as observed, there are still employees who prefer traditional means of availing GSIS services, like visiting the GSIS branch or approaching their Agency Authorized Officer (AAO) to answer their queries. Hence, this mobile application may be ineffective if its intended users do not find it usable.

GSIS Touch is an official mobile application of the Government Service Insurance System (GSIS), a government-owned and controlled corporation (GOCC) and a social insurance institution created under Commonwealth Act No. 186 and Republic Act No. 8291 (GSIS Act of 1997) that provides a defined benefit scheme to government employees (Government Service

Insurance System, n.d.). Through the GSIS Touch Mobile application, members may now access their records, conduct tentative loan computation, apply for a loan and monitor its status, acquire tentative claim computation, and apply for life and retirement claims. In order for these to be done, clients should upload the documents required. After which, they would receive premium and loan payments posting notifications and would be scheduled for Annual Pensioners' Information Revalidation (APIR) for pensioner members over their phones.

Recently an additional service was offered where members can now access their digital IDs. Unlike the traditional way where constituents need to visit any GSIS branch or kiosk to avail of their services, GSIS Touch offers a more convenient way. Moreover, this mobile application plays a significant role in promoting efficient, accessible, and transparent government service to the GSIS members (Government Service Insurance System, n.d.).

The potential benefits of mobile applications introduced by the government can help countries achieve both economic and human development (Alshammari et al., 2022). In relation to economy, m-government (mobile government) contributes to the enhancement in efficiency and reduction of costs of the government. Meanwhile, the citizens will enjoy the quality service it offers.

This research on usability of the aforementioned government service highlights areas for technological improvement that support the Philippine Development Plan 2023-2028 and SDG 9 (Industry, Innovation. and Infrastructure). Also, its result may be used in information campaigns to encourage users to shift to digital platforms which would lead to a reduction of paper usage and administrative waste, aligning with the SDG 12 (Responsible Production and Consumption) goal.

During the pandemic in 2020, a study of Lee & Lee (2020) in South Korea showed that mobile applications from both government agencies and private developers played an important role in guiding people to testing centers, communicating movement trajectories of confirmed cases on digital maps, and tracking the health and movements of travelers and others who were at risk of exposure. Moreover, Briciu et al. (2020) illustrated in their paper that innovative technologies such as mobile applications can contribute to the promotion of a destination or tourism site (i.e., Brașov City), its cultural landmarks, and involvement of citizens. Likewise with the research of ALFarsi et al. (2020), they held that smartphones have become universal and devices across all categories now offer a wide range of functions and in the context of educational design, mobile-based applications play a significant role by supporting learning, simplifying information management, enhancing ease of use, and enabling users to track and engage with educational content in various ways. Therefore, these prove that the mobile applications are becoming a preferred delivery mode for the government sector. It also contributes to more convenient and timely services to the people (Sharma et al., 2018).

The main purpose of the study is to evaluate the usability of GSIS Touch among the active members (in-service government employees) of GSIS in Kabayan, Benguet. Specifically, it aims to assess the level of efficiency and effectiveness of the GSIS touch mobile application and the level of satisfaction of its users in providing various GSIS services in the area. Also, the research intends to investigate the significant differences in the satisfaction, effectiveness, and efficiency of GSIS Touch mobile application when respondents are grouped according to their demographic profiles in terms of age, gender, and agency affiliation.

For the literature review, several studies on mobile applications were conducted in the Philippines among different sectors such as healthcare, tourism, the local industry and others, there is a noticeable lack of research on mobile applications in life insurance. Despite the increasing digitalization of financial services, there is a dearth in the examination of the usability, adoption,

and impact of life insurance mobile apps in the Philippine context. This gap highlights the need to investigate how mobile applications can enhance accessibility, user experience, and even trust in life insurance services, especially given the country's financial literacy and digital adaptation challenges.

The research output may be used by the Government Service Insurance System to propose possible enhancements in the mobile application or the conduction of seminars related to the app. Moreover, this study may serve as an information campaign or a basis for policy development in partner agencies. Lastly, the output of the research may be a basis for future research.

METHODOLOGY

Research design
The study employed the quantitative method and use descriptive research design to assess the level of effectiveness and efficiency of the GSIS Touch in providing several GSIS services to its users and their level of satisfaction to the said mobile application in Kabayan, Benguet. In the context of this research, effectiveness, efficiency and satisfaction are components of usability.

Locale of Study
The researcher conducted the study in Kabayan, Benguet being one of the localities with weak/slow internet connection.

Respondents of the study
The respondents of the study are randomly selected among a total enumeration of 370 government employees assigned or working in different agencies present in the municipality and are still in service at the time of the survey.

Data Gathering Instruments
In the conduct of the study, a research-made questionnaire (Appendix G) was used founding from the measures of effectiveness, efficiency and satisfaction cited in the ISO 9241-11. To ensure relevance and enhance reliability and validity of the questionnaires, contents were validated by two GSIS Agency Authorize Officer and one GSIS employee. The content validation for the questionnaires for level of effectiveness, efficiency and satisfaction resulted to a weighted mean of 3.79, 3.90 & 3.85 respectively which suggests that there is no modification needed but could be improved with minor changes. A Five-point Likert Scale was utilized in the research, 5-Strongly Agree, 4-Agree, 3-Neither Agree or Disagree, 2-Disagree, 1-Strongly Disagree as according to Croasmun & Ostrom, 2011, it has strong internal consistency. A total of 370 questionnaires were administered but only 293 were retrieved as other target respondents opt not to participate. Thus, giving us a 79% response rate which is within the acceptable range of response rates (40%-75%) that have been reported across different specialties as stated by Sataloff & Vontela (2021) in their study.

Data Gathering Procedure
Before administering the survey, the researcher obtained permission to conduct the study from the dean of the College of Public Administration of Benguet State University-Bokod Campus and from the local chief executive of Kabayan, Benguet before going on with the survey. The researcher personally administered and retrieved the questionnaire to and from the respondents.

To ensure that the respondents understand the purpose of the study, their rights and how their data will be used, a survey consent form was utilized. During the distribution and retrieval of the questionnaires, informal interviews were conducted to clarify information supplied in the survey and to avoid missing data as well.

DISCUSSION OF FINDINGS

Profile of the Respondents
The demographic profile of the respondents reveals significant insights into the composition of participants in the study. The majority belong to the age group of 31 to 50 years old (67.2%), suggesting that most respondents are experienced professionals likely to be moderately to highly familiar with digital tools. This is followed by 17.4% aged 51 to 65, indicating seasoned workers who may have adopted technology later in their careers, and 15.4% aged 22 to 30, representing younger, digitally-native employees. In terms of gender, female respondents comprise the majority at 74.06%, while males account for 25.94%. Agency affiliation data show that most respondents are from the Department of Education-Kabayan District (56.31%), followed by those from the Local Government Unit of Kabayan, Benguet (35.50%). Other agencies, including COMELEC, PNP, National Museum, DOH-CAR, BIR, and DILG, had significantly fewer respondents, each comprising less than 4% of the total. Regarding enrollment in the GSIS Touch mobile application, 60.07% of respondents are enrolled, while 39.93% are not, indicating that a notable portion of the workforce remains unregistered in the digital service despite its availability.

Level of Effectiveness of GSIS Touch
The data presented in Table 2 illustrates the respondents' overall positive perception of the effectiveness of the GSIS Touch mobile application in delivering various GSIS services. The weighted mean scores for individual items range from 3.897 to 4.33, all falling within the "agree" to "strongly agree" range, indicating consistent favorable responses. The highest-rated item, "GSIS Touch mobile application simplifies complex tasks making them easy to complete," received a weighted mean of 4.33, interpreted as "very effective." Conversely, the lowest-rated item, "I encounter minimal errors while using the GSIS Touch Mobile Application," still scored 3.897, suggesting that even the less positively viewed aspect of the application remains effective.

The overall weighted mean of 4.11 with a standard deviation of 0.61152 confirms a general consensus among users that the app is effective. This supports the notion that GSIS Touch is successfully fulfilling its role in improving service accessibility and user convenience. These findings align with Ameyaw et al. (2023), whose systematic review on mobile health (mHealth) applications found them effective in enhancing service delivery in targeted areas, indicating a broader trend in the effectiveness of well-designed mobile service platforms.

Level of Efficiency of GSIS Touch
The findings demonstrate that the GSIS Touch mobile application is perceived by respondents as highly efficient in delivering GSIS services. All evaluated items yielded high weighted mean scores, ranging from 4.15 to 4.51, with an overall weighted mean of 4.29 and a standard deviation of 0.631. This falls under the "strongly agree" category, interpreted as "very efficient." The highest-rated item, "Using GSIS Touch saves me from additional costs such as transportation, printing expenses, and others," received a weighted mean of 4.51, highlighting the app's effectiveness in reducing logistical burdens. The lowest-rated item, "Using GSIS Touch does not

cause me significant mental or physical stress," still scored favorably with a mean of 4.15, indicating that most users do not find the app stressful to use.

Collectively, these results suggest that GSIS Touch streamlines processes with minimal waste of time, effort, and resources, reinforcing its role as a reliable e-governance tool. These findings echo those of Li and Kostka (2024), who found that frequent engagement with mobile government (m-government) applications enhances users' experiences by offering increased convenience, social recognition, and psychological satisfaction—factors that likely contribute to the perceived efficiency of GSIS Touch.

Level of Satisfaction with GSIS Touch

The data highlights the respondents' overall satisfaction with the GSIS Touch mobile application. The weighted mean scores range from 3.85 to 4.27, with an overall mean of 4.10 and a standard deviation of 0.671, falling under the category of "Agree," and interpreted as "Satisfied." The highest-rated item, "The design and functionality of GSIS Touch features are user-friendly," received a weighted mean of 4.27, indicating that intuitive interface and usability are key strengths of the application. On the other hand, the lowest-rated item, "GSIS Touch seldom leads to complaints due to technical or usability problems," scored 3.85, suggesting that while generally reliable, there may still be occasional technical concerns.

Overall, the findings indicate that the GSIS Touch app meets user expectations and delivers a satisfactory experience for its intended services. This aligns with Ishengoma's (2024) study on the LUKU m-government payment system in Tanzania, which found that mobile-based platforms can enhance user satisfaction by fostering trust, improving accessibility, and providing a more secure and convenient alternative to traditional service delivery methods.

Usability Evaluation

The overall usability of the GSIS Touch mobile application, as assessed by users in Kabayan, Benguet, shows favorable results across three core dimensions: effectiveness, efficiency, and satisfaction. Based on the mean scores presented in Table 5, efficiency received the highest mean (4.29), followed by effectiveness (4.11), and satisfaction (4.09), leading to an overall usability factor mean of 4.17. This suggests that users generally find GSIS Touch functional and helpful in completing transactions with minimal time, effort, or resource waste. However, the slightly lower satisfaction score implies that while the app performs well, some users may experience occasional technical or usability concerns that affect their overall contentment.

Further analysis of usability across demographic profiles yields key insights. ANOVA results in Table 6 reveal that age significantly influences user satisfaction (p = 0.012), while effectiveness (p = 0.191) and efficiency (p = 0.060) show no significant difference across age groups. Post-hoc analysis using LSD indicates that middle-aged users (31–50) are significantly more satisfied than older users (51–65), suggesting that "tech-adapted professionals" find the app more user-friendly than those nearing retirement.

Gender, as shown in Table 7, does not significantly affect any of the usability factors—effectiveness (p = 0.74), efficiency (p = 0.12), or satisfaction (p = 0.56)—indicating a relatively consistent user experience across male and female respondents.

However, when grouped by agency affiliation (Table 8), significant differences emerge in effectiveness (p = 0.033) and efficiency (p = 0.030), though satisfaction does not significantly differ (p = 0.053). Follow-up comparisons reveal that respondents from LGU-Kabayan and DepEd report significantly higher effectiveness and efficiency ratings than those from smaller or less

represented agencies. This may reflect better institutional support, training, or frequency of use within these larger organizations.

In summary, GSIS Touch is generally perceived as usable, effective, and efficient by its users. However, variations in user satisfaction and perceived performance based on age and agency affiliation suggest opportunities for further user experience enhancements—particularly for older users and smaller agency groups. These findings underscore the importance of targeted digital literacy support and ongoing usability improvements to ensure inclusive and optimal mobile service delivery.

CONCLUSION

First, the demographic profile of respondents indicates that most are female, within the middle age bracket (31–50 years old), and affiliated with the DepEd-Kabayan District. Notably, only 60% of respondents are enrolled in the GSIS Touch mobile application, suggesting a need for greater awareness and user engagement strategies to boost adoption rates.

Second, while respondents generally perceive the GSIS Touch as effective in providing various GSIS services, minor issues such as occasional errors still exist. Nonetheless, the app has proven to improve service accessibility and reduce the need for physical branch visits, mirroring findings in mHealth research where mobile apps have demonstrated effectiveness in enhancing service delivery.

Third, GSIS Touch is widely viewed as a very efficient tool, offering users a convenient and time-saving alternative to traditional service access. This affirms the value of m-Government platforms in streamlining public service delivery.

Fourth, the usability assessment reveals that GSIS Touch is generally user-friendly and meets the expectations of its users. Positive satisfaction ratings point to an enhanced user experience, reinforcing the app's reliability and accessibility in accessing GSIS services.

Fifth, the overall usability rating—combining effectiveness, efficiency, and satisfaction—shows that the app successfully delivers a high-quality digital service. This benefits both users and the government by improving operational efficiency and user engagement.

Lastly, differences in user experience emerge across age groups. Middle-aged respondents (31–50 years old) report significantly higher satisfaction than those in the 51–65 age range, suggesting that digital literacy influences satisfaction levels. Younger and middle-aged users show no notable differences, indicating that the app meets expectations for both groups. Meanwhile, satisfaction levels do not significantly vary by agency; however, effectiveness and efficiency ratings do. Employees from LGU-Kabayan and DepEd-Kabayan District report significantly higher ratings than those from other agencies, possibly due to more frequent use, better institutional support, or higher digital readiness within these groups. This implies that GSIS may benefit from targeted support or training for less-engaged agencies and older users to ensure a more inclusive and optimized user experience.

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