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INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) SKILLS OF THE FIRST LINE SERVICE PROVIDERS OF CABUSAO, CAMARINES SUR

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ABSTRACT: *Cabusao is a 5th class agricultural municipality in the province of Camarines Sur. It shelters nine (9) barangays and a total population of 19,257 as per 2020 census. Hence, is a recipient of the “Damayan at Ugnayan sa Pamayanan” (Duy’ap) the Extension Service Program of CBSUA-Sipocot beginning 2023. Duy’ap provides output-based trainings and activities on varied areas including cultivating and advancing ICT skills and competencies. This descriptive-evaluative research used a survey questionnaire as major data gathering instrument. Cronbach’s Alpha test value of 0.98 suggests that the data gathered were sufficiently consistent and reliable. Frequency count and percentage, weighted mean and ranking, and average ranking showed that 30.11% of the total respondents had ICT related trainings, but, just like the remaining 69.89% with no previous similar trainings were found to be not proficient, hence, affirmed the need for ICT trainings. Consequently, the birth of “DUYAP-TECHTALK” of the College of Information Technology.*

This research-based extension project delivers trainings using developed modules which address the demographics and contextual characteristics of the target beneficiaries. Each helps beneficiaries be proficient on ICT infrastructure to deliver more enhanced, effective, and efficient service to the community. Implementation of “DUYAP-TECHTALK is in partnership with the Local Government of Cabusao, Camarines Sur.

Keywords: *ICT Capability and Training Needs; ICT Training Modules; Duy’ap TechTalk Extension Project*

INTRODUCTION

Information and communications technology (ICT) plays a paramount and irrefutable role in the “various aspects of society and socio-economic development, such as in education and training...” (Roztock, 2019). On it depends the advancement of modern society in all aspects together with the productivity, efficiency, and value of people. With it, employees, most especially the frontline service providers must deliver accessible and quick assistance to the public.

The Central Bicol State University of Agriculture is mandated to conduct extension services to communities where needs are prevalent. Extension activities primarily aim at helping communities and establishing strong

relationship by way of providing assistance through knowledge transfer and empowering communities through sustainable and relevant extension projects. The relevance is measured by the responsiveness of the beneficiaries and how lives are empowered (Agholor, 2013).

“Damayan at Ugnayan sa Pamayanan” (Duy’ap) the Extension Service Program of CBSUA-Sipocot began in 2023. It provides output-based trainings and activities on public and disaster risk management and safety, livelihood program, ICT skills and capabilities, and social literacy. “DUYAP TECHTALK” is the major output of this conducted research on the ICT skills of the first-line service providers in the municipality of Cabusao. As the banner extension project of the College of Information Technology is now one of



the scaffolds of Duy'ap Program of the Campus. Significantly, "DUY'AP TECHTALK" provides trainings that are all geared towards providing knowledge and proficiency on ICT infrastructure to the beneficiaries so the latter may deliver a more enhanced, effective, and efficient service to the community. More so, towards the completion of the project it intends to create a community-based team to attend to the basic ICT concerns of the barangay or endorse any requests for advanced ICT training or re-training to the College of Information Technology. Finally, shall be the core group in crafting a proposal for ICT program for the municipality of Cabusao.

The developed ICT training modules were written by IT major faculty handling the same subject. The demographics and contextual factors of the beneficiaries—the barangay officials, the barangay "tanod", and the coop/office personnel—were considered ensuring understanding and articulation of the target competencies. Each follows the format mandated by the University—Course Name, Module Developer, Course Learning Outcomes (CLO), Course Description/Content, Teaching Method, Assessment Details, Policies and Other Guidelines, Contact Hours, Reading List, Module Development Details, and Module Approval. The Program Chairperson and the Dean validated the content of the modules while a language professor proof read the same. Once approved, are endorsed by the College to the Campus Instructional Committee. Moreover, said modules are also ready for dissemination to possible interested sectors of the community such as the out-of-school youth, the law enforcers, the health care providers, any volunteer groups, and other local organizations.

MATERIALS AND METHOD

This descriptive-evaluative research utilized a 3-part survey questionnaire. Part I determined the respondents' characteristics covering the personal information, educational background, and membership to any organization; Part II identified the respondents' ICT resources owned, ICT skills previously acquired, proficiency level, and training needs along Computer and

Internet Fundamentals, Office Productivity Applications, Cloud Productivity Applications, Video Conferencing Platforms, and Multimedia Services; and Part III ascertained the respondents' written and oral communication training needs. More so, the questionnaire had provision for the respondents to suggest ICT topics that may not have been captured by the survey itself. The IT-related parameters in the survey questionnaire were crafted together with the dean and the chairperson of the College and were validated by the IT major faculty handling the subjects, whereas, communication related questions were corroborated by the language major faculty across colleges of the Campus.

The primary locales of this study were the nine (9) barangays of Cabusao, Camarines Sur, a principal beneficiary of the Duy'ap Extension Program of CBSUA-Sipocot. Employed was total enumeration of the respondents - barangay officials, SK officials, barangay "tanod", and cooperative/office personnel. Results served as bases in crafting the Duy'ap TechTalk extension project with developed ICT modules as primary training materials. The same front-line service providers in the barangay level are the major beneficiaries of the project as they are expected to have technological and communication capabilities to ensure their effective and efficient work performance.

RESULTS AND DISCUSSION

Profile Characteristics of the Respondents

Age Profile. Young adults constitute the largest segment at 36.9% and this is noticeable as young people have been participating in local governance and community service at a great extent. This also fulfils the thrust of the Philippines for youth engagement in governance through the Sangguniang Kabataan (SK) system. The second largest group (middle age) at 30.9% is experienced community servants who may bring valuable institutional knowledge and community understanding to their roles. This group consists of seasoned community leaders that can lend mentorship and historical context to newer service providers, at 15.5%. The lower representation

groups includes 37-46 years (7.1%), 27-36 years (4.8%), and 67-76 years (4.8%). Figure 1 shows the age profile of the respondents of Duy'ap Extension Program.

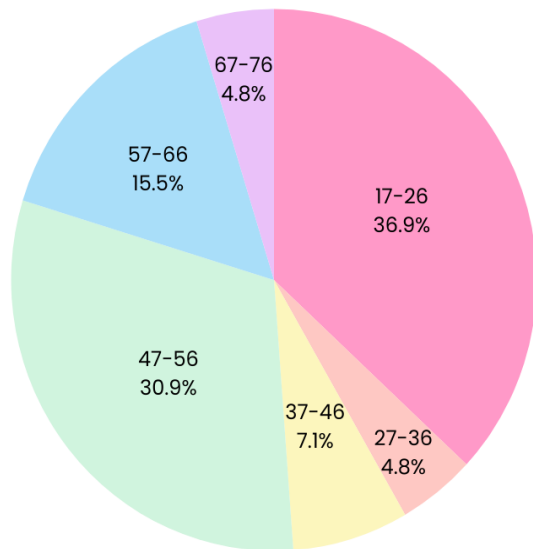


Figure 1. Age Profile of Duy'ap Extension Program Beneficiaries

The Technology-Organization-Environment Framework (TOE) (Tornatzky and Fleischer, 1990) confirms that age demographics influence technological adoption patterns mostly. This large youth representation (36.90%) provides some suggestion, which may be born out by real experience, of some advantages in ICT adoption: youth are more likely to have experience using digital technologies.

However, the significant presence of middle-aged and senior service providers (combined 51.19% for ages 47-76) indicates a need for carefully structured ICT training approaches. The training modules must consider these age based differences as supported by the Connectivism Learning Theory (Kropf, 2013) to maintain effective connections between learners and mentors.

This is particularly relevant to the study finding that 69.89% of respondents had no previous ICT related training, indicating a need for age appropriate training approaches for all demographic groups.

Gender Profile. It is shown that female (56.2%) constitute the majority of service providers, which is a positive trend of women's involvement

in local governance and community service. This is in line with global development goals for gender equality in public service and leadership positions. Strong female representation is a good sign for the breaking down of gender norms in public service.

Significantly, service providers consist of males (42.7%); however, a relatively balanced gender distribution exists among service providers. This near equal representation of gender ability to suggest a healthy gender diversity across community service roles. While the number of LGBTQIA (1.1%) service providers was only small, their presence indicates progress toward having service providers who are representative of inclusive local governance. It all seems consistent with 21st century concepts of diversity and inclusion in public service. Figure 2 shows the gender profile of the respondents of Duy'ap Extension Program.

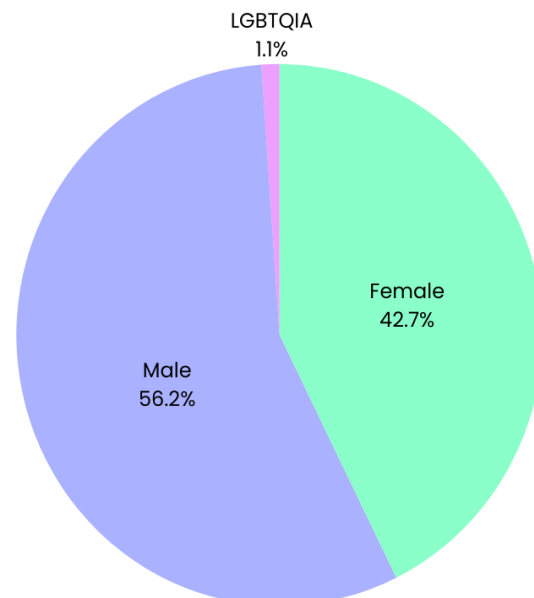


Figure 2. Gender Profile of Duy'ap Extension Program Beneficiaries

The gender distribution has important implications for the design and implementation of ICT training. ICT is important for socio economic development and gender considerations are important in technology adoption and training, as noted by Roztcoki et al. (2019). Gender diversity requires a training approach that is sensitive to gender specific learning needs and preferences. The Technology Organization

Environment Framework (Tornatzky & Fleischer, 1990) supports the proposition that organizational related factors, particularly gender composition, affect the patterns of technological adoption. The more or less even gender distribution provides an opportunity for peer learning and support systems that capitalize on the variety of perspectives and experiences in ICT adoption.

Civil Status Profile. Most (52.22%) of the service providers are single as one would expect with the majority of young adults being between 17 and 26 years of age. This demographic characteristic may indicate: a) increased flexibility to attend training sessions; b) more time to learn new ICT skills; and c) increased familiarity with technology through generational exposure.

A significant portion of service providers are married (40%), suggesting: (1) consideration of family responsibilities in training schedules; (2) time constraint that affect participation in training, and (3) knowledge transfer with family units. Widowed Status (6.67%) and Separated Status (1.11%) groups represent a smaller but important segment that may require: a) special considerations in training support systems; b) flexibility in schedule; and c) additional motivation and encouragement. Figure 3 shows the marital status profile of the respondents of Duy'ap Extension Program.

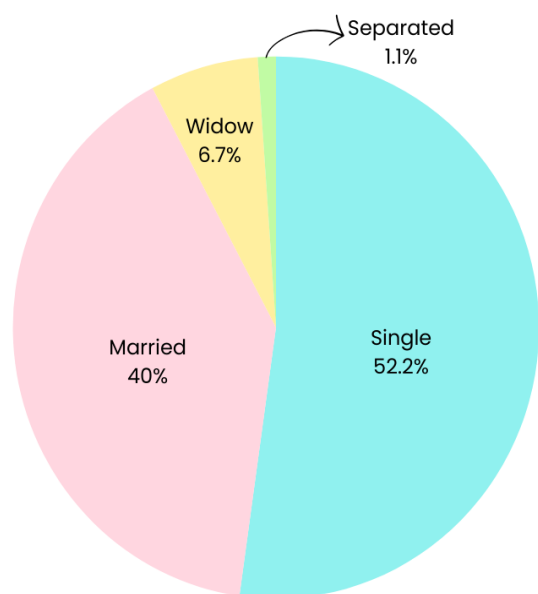


Figure 3. Civil Status Profile of Duy'ap Extension Program Beneficiaries

The study's theoretical framework—Technology Organization Environment (TOE) Framework (Tornatzky & Fleischer, 1990)—indicates that these organizational and environmental contexts, along with personal conditions (such as civil status), partly shape technology adoption.

According to the Connectivism Learning Theory (Kropf, 2013), it is important to keep the connections between learners and mentors. The civil status distribution suggests the need for different support systems and flexible learning approaches to meet different personal circumstances.

As noted in "How to Create a Training Module: A Step-by-Step Guide" (Colman, 2019), training modules must be suitable to the learners' circumstances and understanding level. The diversity of the civil status of the target group indicates that it is necessary to develop adaptable training schedules and training content.

Educational Background Profile. The largest segment comprises high school graduates (29.5%), which has significant implications for ICT training: a) bases of knowledge necessary for further learning; b) bridging program to bridge perceived knowledge gap for technical understanding; and c) enhanced ICT skill through structured ICT training. The second-largest group consists of those with some college education (25.3%), suggesting: a) higher learning environment exposure; b) technology exposure in academic settings; and c) faster ICT skills adoption.

College graduates (10.5%) represent a significant minority, indicating: a) academically trained individuals who can help peers, b) previous exposure to technology; and c) potential peer mentors in ICT training programs. Basic Education groups includes High School Level (16.8%), Elementary Graduates (11.6%), and Elementary Level (5.3%). These groups may require: a) more fundamental ICT training approaches; b) additional support in technical concept understanding; and c) carefully paced learning modules. The smallest segment with specialized technical training (1.1%) may: a) bring practical skills to the learning environment; b) have

specific technical competencies; and c) contribute unique perspectives to peer learning. Figure 4 shows the educational background profile of the respondents of Duy'ap Extension Program.

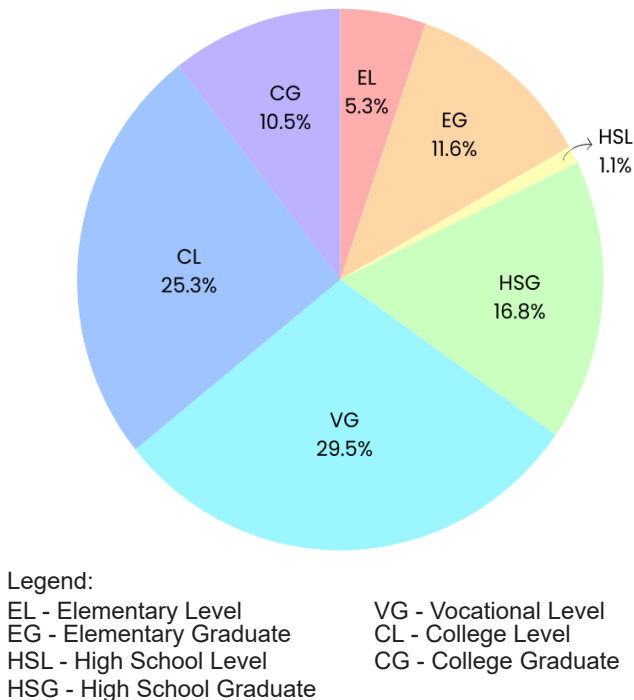


Figure 4. Educational Background Profile of Duy'ap Extension Program Beneficiaries

The study's theoretical frameworks are aligned with the diverse educational backgrounds. However, ICT is an important factor in socio-economic development, according to Roztcoki et al. (2019), its effectiveness hinges on the learners educational foundation. According to the Technology Organization Environment Framework of Tornatzky & Fleischer (1990), educational levels play an important role in the adoption of technology and this too results in different patterns. Based on the Connectivism Learning Theory (Kropf, 2013), there is a need for critical consideration of learning connections and knowledge networks in the design for different educational levels.

Organization/Cooperative Membership. The majority of service providers are not affiliated with any organizations or cooperatives (58.24%). This significant percentage suggests: a) networking opportunities; b) exposure to organized professional development; and c) opportunity to introduce collaborative learning

environments through ICT training. A substantial portion, primarily consisting of barangay officials and cooperative personnel (41.76%), have organizational affiliations indicating: a) structured organizational systems experience; b) collaborative work environment exposure; and c) potential to use existing organizational networks for ICT training. Figure 5 shows the organizational/cooperative membership of the respondents of Duy'ap Extension Program.

The Technology Organization and

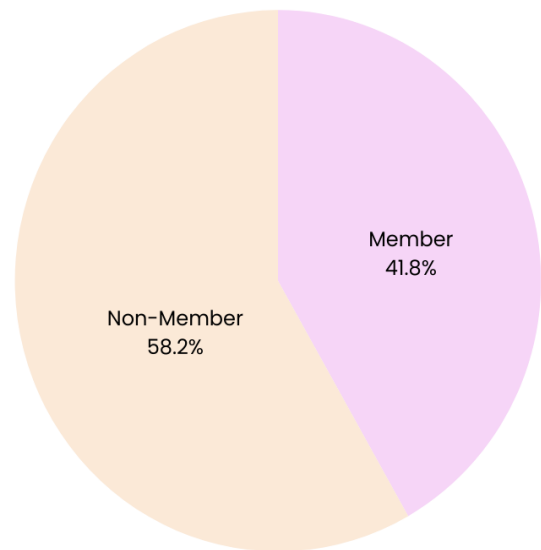


Figure 5. Organization/Cooperative Membership of Duy'ap Extension Program Beneficiaries

Environment (TOE) Framework (Tornatzky & Fleischer, 1990) reflects that technology adoption is directly related to organizational context. The membership distribution suggests the need for different approaches for organized and non-organized participants. According to the Connectivism Learning Theory (Kropf, 2013), the most powerful assumption is that these connections (with learners and mentors) need to be nurtured and maintained. Organized groups already exist to provide an existing framework for these connections, but new networks may have to be created for non members. Ammakiw (2013) emphasizes that extension activities primarily aim at helping communities and establishing strong relationships through knowledge transfer. The organizational membership data suggests opportunities for: a) using existing organizational structures for training delivery; b) building new

collaborative networks between non-members; and c) building peer support systems across membership status.

ICT Resources Owned and ISP Subscription of the Respondents

Owned Devices/Equipment. The study reveals significant disparities in ICT device ownership among different groups of first-line service providers in Cabusao, Camarines Sur. Barangay officials showed the highest rate of device ownership, followed by cooperative/office personnel and SK officials, while barangay tanod demonstrated the lowest ownership rates. The most owned device was smartphones (64.66%), followed by laptops (21.05%) and personal computers (13.53%). Notably, 2.25% of respondents reported owning no ICT devices at all. Figure 6 shows the owned devices/equipment of Duy'ap Extension Program beneficiaries.

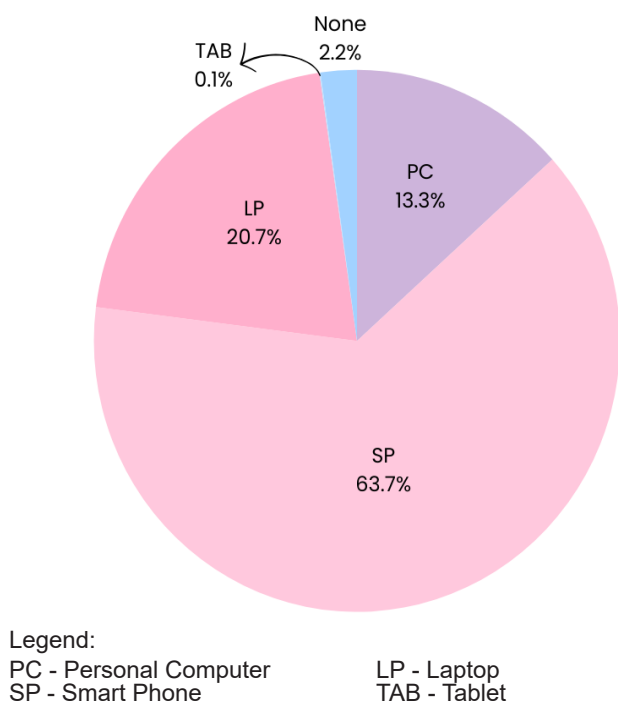


Figure 6. Owned Devices/Equipment of Duy'ap Extension Program Beneficiaries

This ownership pattern mirrors the broader development of digital device adoption in developing regions where smartphones are the dominant method of accessing digital services (Roessler, 2018). This is consistent with global trends in mobile first technology adoption by

public service providers in emerging economies (World Bank, 2024).

The hierarchical pattern of device ownership with respect to administrative roles may have implications for service delivery and digital governance. Other developing regions have also observed similar patterns, where higher ranking local government officials tend to have better access to ICT resources (Santiago et al., 2021). Public service delivery can be impacted through this digital resource stratification with regards to its quality and efficiency of its delivery.

The 2.25% without any ICT devices is a critical gap in the digital readiness gap that can divert the execution of e-governance-based initiatives. In accordance with the Technology Organization Environment Framework (Tornatzky & Fleischer, 1990), the availability of technological infrastructure (as represented in technological infrastructure stock) affects the adoption patterns. Similarly, study of Choi & Xavier (2021), shows that lack of device ownership by public service providers inhibits advanced digital transformation in local governance.

Opportunities and challenges are suggested by the dominance of smartphones (64.66%) over other devices. By providing basic digital access, smartphones, as Aker (2017) suggests, limit service delivery efficiency with the complexity of administrative tasks they are unable to execute at scale. This is consistent with the Perceived Usefulness principle of the Technology Acceptance Model (Davis, 1989) where real usefulness of devices mediates how they are used and adopted.

Internet Service Provider (ISP) Subscription. The study finds that Smart/PLDT is dominant in the ISP market among first line service providers in Cabusao, Camarines Sur, with 74.4% of subscriptions. DITO, which is relatively a new player in the Philippine telecommunications market, has 2.4% of subscriptions while Globe has 23.2% market share. This distribution pattern is a result of the historical telecommunications landscape and current market dynamics in the Philippines. Figure 7 shows the internet service provider subscription of Duy'ap Extension Program beneficiaries.

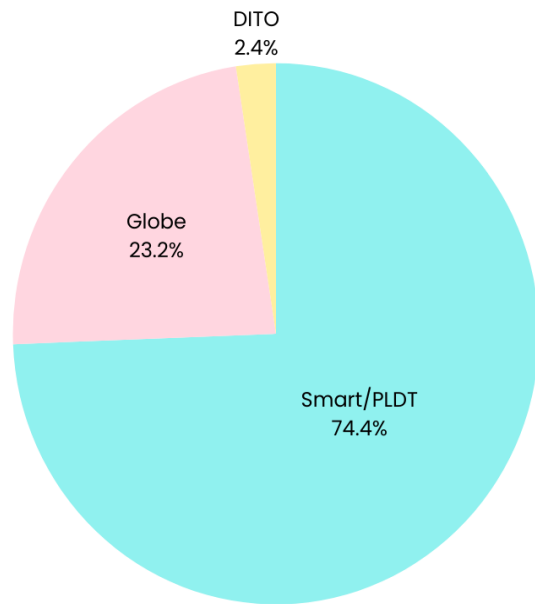


Figure 7. Internet Service Provider (ISP) Subscription of Duy'ap Extension Program Beneficiaries

Findings from the Mirandilla-Santos (2021) policy note on telecommunications coverage of rural municipalities correspond with the intensity of infrastructure of established providers in provinces; therefore there is more presence of established providers in provinces. The concentration of market is especially noteworthy for Class 5 municipalities such as Cabusao where investment in infrastructure by several players may be constrained by cost factors.

Lizares (2018) explain the combined 97.6% market share of Smart/PLDT and Globe among the respondents as a result of the Philippines' duopolistic telecommunications market structure. The study shows how historical development of infrastructure and regulatory frameworks have shaped this market distribution, especially in rural areas where infrastructure deployment costs are higher.

DITO's (2.4%) minimal presence shows recent entry into the market and is still expanding the network. This is consistent with ADB (2022) observations on the difficulties new telecommunications providers have in extending coverage to lower income municipalities, due to infrastructure costs and regulatory requirements.

This ISP subscription pattern is important

to understand in the context of the Technology-Organization-Environment (TOE) Framework used in the study. According to Serafica et al. (2023), internet connectivity service availability and reliability have a huge effect on the acceptance and use of digital governance initiatives in the local government units.

Internet Service Provider (ISP) Connection.

The study also found that among the first line service providers in Cabusao, Camarines Sur, mobile data was the most used mode of internet connection at 56.9%, followed by Wi-Fi at 36.6%, and Local Area Network (LAN) at 6.5%. This distribution pattern represents a wider trend that in the developing regions, a mobile internet connectivity has become the predominant way to access services online. Figure 8 shows the internet service provider connection of Duy'ap Extension Program beneficiaries.

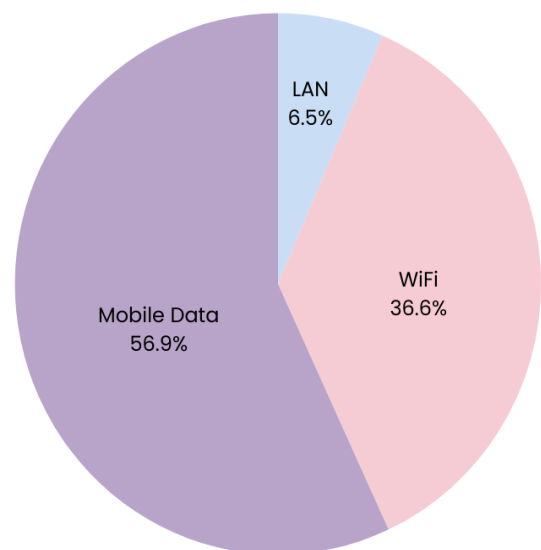


Figure 8. Internet Service Provider (ISP) Connection of Duy'ap Extension Program Beneficiaries

The fact that mobile data is increasingly used instead of fixed broadband connections (LAN and Wi-Fi) can be expressed as "mobile first digitalization" in developing economy, as mentioned by Chen (2021). This is a phenomenon of communities skipping traditional fixed line infrastructure to go mobile. This pattern is especially pronounced in agricultural municipalities such as Cabusao, where, as OECD (2012) notes, mobile networks provide greater flexibility and lower

deployment costs than fixed infrastructure.

The relatively lower Wi-Fi adoption rate (36.6%) can be explained through "infrastructure gap" (Whitacre, 2015) in rural digitalization. Their research shows that geographical, economic and technical constraints often prevent the deployment of fixed broadband networks in rural areas, resulting in a reliance on mobile connectivity.

This is consistent with Dlamini & Vilakati (2021) who found that resource constraints and lack of technical expertise availability often limit the use of LAN connections in institutional LAN setups in rural governance structures. As argued by Bhatt & Kumar (2023), this technological limitation can have a major impact on the quality of e-government service delivery in rural communities.

ICT4D (Information and Communication Technologies for Development) initiatives (Flor & Gonzales-Flor, 2019) need to understand these connectivity patterns. Haug et al. (2023) point out that the type and quality of internet access are critical to the success of digital transformation in public service delivery.

Internet Subscription. Figure 9 shows a huge difference in internet subscription patterns among first line service providers in Cabusao, 76.3% using prepaid and 23.7% using postpaid. Alternatively, this contradiction in preferences for

subscriptions should be evaluated more deeply in light of digital inclusion and public service delivery.

The high prepaid subscription rate is consistent with Huggings & Izushi (2002) found in their study of rural public service digitalization as resource adaptive ICT adoption. The study shows that financial constraints and irregular funding patterns in local government units often result in a preference for more flexible payment structures.

The lower postpaid subscription rate (23.7%) can be understood through Diop et al. (2020) study. Their study shows that formal procurement processes and budget allocation mechanisms in public institutions can be barriers to long term service commitments, especially in resource constrained municipalities.

Previously acquired ICT Skills, Level of IT Proficiency, and ICT Training Priorities of the Respondents

Previous ICT Trainings Attended. The study also showed that a majority (69.89%) of the frontline service providers in Cabusao, Camarines Sur had no prior ICT related training while 30.11% had some form of ICT training experience. Further analysis revealed that most of the trainees were SK officials, who were mostly educated at vocational and college levels. However, even this trained group expressed the need for additional ICT capacity building, particularly in areas such as Computer and Internet Fundamentals, Office Productivity Applications, Cloud Productivity Applications, Video Conferencing Platforms, and Multimedia Services. Figure 10 shows the previous ICT trainings attended of Duy'ap Extension Program beneficiaries.

The high percentage of untrained personnel (69.89%) matches up with Raboy & Cimene (2019) describe as the "digital divide in public service delivery" whereby frontline workers, especially in rural municipalities, are often completely lacking in basic ICT competencies needed for modern service delivery.

The finding that even previously trained officials desired additional training supports Treceñe (2021) assertion that ICT competency development requires continuous updating due to rapidly evolving technology landscapes. This

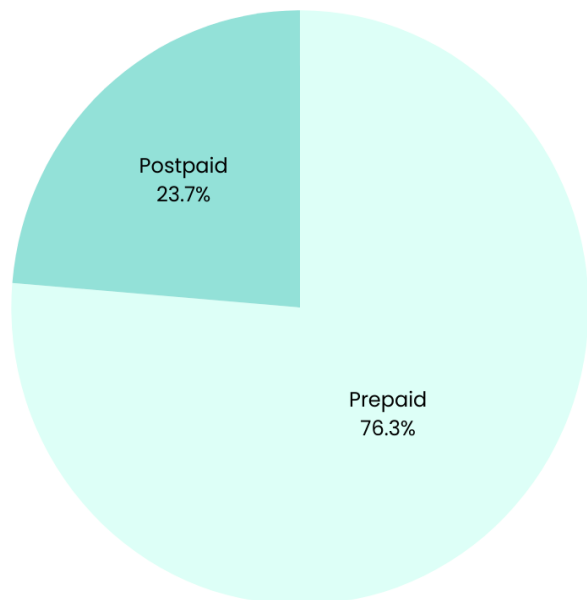


Figure 9. Internet Subscription of Duy'ap Extension Program Beneficiaries

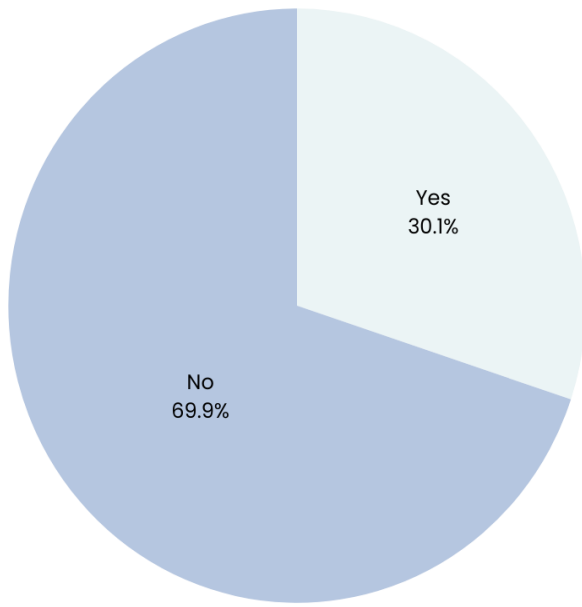


Figure 8. Previous ICT Trainings Attended of Duy'ap Extension Program Beneficiaries

is particularly relevant in public service contexts where digital transformation is increasingly becoming essential for effective service delivery.

This matches Van Dijk's (2017) digital inequality framework which suggests that people's educational background are often a primary predictor of digital skills acquisition and training opportunities.

Chohan & Hu (2020) agree that significant training gap (69.89%) is one of the critical barriers for digital government implementation, especially in rural areas where ICT infrastructure as well as training opportunities are behind.

ICT Proficiency Level. Table 1 presented

Table 1. ICT Proficiency Level of Duy'ap Extension Program Beneficiaries

ICT Category	Key Observations	Proficiency Range	Highest Scoring Group
Computer and Internet Fundamentals	- Basic Computer Manipulation ranked highest (AWM: 1.51) - Computer Troubleshooting ranked lowest (AWM: 1.35)	1.35-1.51	SK Officials (AWM: 2.11)
Office Productivity Applications	- Microsoft Word ranked highest (AWM: 1.66) - Microsoft Publisher ranked lowest (AWM: 1.43)	1.43-1.66	SK Officials (AWM: 2.30)
Cloud Productivity Applications	- Gmail ranked highest (AWM: 1.50) - Google Sheets ranked lowest (AWM: 1.37)	1.37-1.50	SK Officials (AWM: 2.25)
Video Conferencing Platforms	- Google Meet ranked highest (AWM: 1.48) - MS Teams ranked lowest (AWM: 1.34)	1.34-1.48	SK Officials (AWM: 2.31)
Multimedia Services	- Photo Editiing ranked highest (AWM: 1.47) - Digital Printing ranked lowest (AWM: 1.35)	1.35-1.47	SK Officials (AWM: 2.18)

Legend: 4.20 - 5.00 - Highly Proficient 2.60 - 3.39 - Moderately Proficient 1.00 - 1.79 - Not Proficient
3.40 - 4.19 - Proficient 1.80 - 2.59 - Slightly Proficient

Note: AWM = Average Weighted Mean

significant results in the five major ICT categories. The SK Officials achieved the highest scores (AWM: 2.11 - 2.31) in every category, however, remained below the proficient level. The category of Office Productivity Applications achieved the highest proficiency rating among all categories (AWM: 1.55), however, Multimedia Services demonstrated the lowest proficiency (AWM: 1.41). Within specific applications, Basic Computer Manipulation, Microsoft Word, Gmail, Google Meet, and Photo Editing ranked highest in their respective categories, while Computer Troubleshooting, Microsoft Publisher, Google Sheets, MS Teams, and Digital Printing received the lowest proficiency ratings. The study revealed that all participant groups scored below 1.79 points on its proficiency scale which demonstrates an extensive requirement for ICT training throughout all user categories.

The findings are consistent with Bona & Camara (2021) and Lagon (2019) who found similar digital literacy problems for local government workers in developing areas as a reason to provide it with basic ICT training. This is consistent with Dy et al. (2023) who found that although the most commonly used office application, proficiency levels of local government workers were below acceptable standards for effective service delivery. Abied et al. (2022) have argued that cloud based services are becoming increasingly important for modern public service delivery. Noteworthy is the low proficiency in video

conferencing platforms, given the post pandemic context and the modest proficiency in multimedia services reveal an existing skills gap in the area of digital content creation.

IT Training Needs. Table 2 displays multiple essential insights about priority training across Barangay Officials. The study revealed uniform patterns regarding respondent preferences for different technological competencies. Basic operational skills took priority over all other categories and communication tools such as Gmail and Google Meet received similar high priority rankings, however, advanced applications received lower priority rankings.

Survey results displayed a distinct order of training significance according to skill value. The participants identified basic computer operation and word processing as the most essential skills among foundation competencies. Communication tools formed the second tier of importance, while

Written and Oral Communication Training Needs. The evaluation of communication priorities among Barangay Officials produced important insights which are presented in Table 3. Among the highest-priority areas, two topics emerged with perfect priority scores of 1.00: Solicited Project Proposal and the 5 Basic Principles of Parliamentary Procedure. All categories agreed that Writing an E-mail and Informational Report ranked second with a consensus score of 1.25 which demonstrated consistent importance of basic communication skills. Stakeholder groups showed different communication needs that varied between each other.

The research analysis produced multiple uniform trends throughout. Basic communication skills maintained the top position in each category although digital communication tools earned high priority from all groups. Specialized communication topics maintained a lower priority

Table 2. IT Training Needs of Duy'ap Extension Program Beneficiaries

Training Category	Top Priority	Second Priority	Third Priority	Overall Priority Pattern
Computer and Internet Fundamentals	Basic Computer Manipulation (AWM: 1.75)	Basic Computer Networking (AWM: 1.88)	Internet Fundamentals (AWM: 3.00)	Focus on fundamental operation and connectivity
Office Productivity Applications	Microsoft Word (AWM: 1.38)	Microsoft Excel (AWM: 2.25)	Microsoft Powerpoint (AWM: 2.75)	Emphasis on essential document processing tool
Cloud Productivity Applications	Gmail (AWM: 1.25)	Google Docs (AWM: 2.75)	Google Sheets (AWM: 4.00)	Priority on communication and basic document creation
Video Conferencing Platforms	Google Meet (AWM: 1.50)	Zoom (AWM: 2.00)	MS Teams (AWM: 2.50)	Preference for widely-used platforms
Multimedia Services	Photo Editing (AWM: 1.25)	Digital Printing (AWM: 2.00)	Video Editing (AWM: 2.75)	Focus on visual content creation

Note: AWM = Average Weighted Mean

advanced applications such as Publisher and Google Sites were consistently ranked as lower priorities.

There was notable consensus among all groups regarding certain applications. Gmail and Photo Editing capabilities received exceptionally high priority rankings, with an average rank of 1.25. The Microsoft Word ranked first among all participants with an average position of 1.38. Basic Computer Manipulation skills received identical rankings from all groups at 1.75.

level than other areas throughout the entire study. The analysis showed three main trends which included stakeholder groups placing high importance on electronic communication methods and project proposal writing skills and fundamental communication principles. The research demonstrates that stakeholders strongly prefer practical essential communication skills which can be used across multiple situations with a focus on digital and electronic communication tools representing modern workplace needs.

Table 3. Written and Oral Communication Needs of Duy'ap Extension Program Beneficiaries

Communication Category	Top Priority	Second Priority	Third Priority	Overall Priority Pattern
Basic Report Writing	Workplace Writing (AWM: 1.75)	Incident Report (AWM: 2.25)	Pictorial Report (AWM: 3.00)	Focus on fundamental writing skills and documentation
Business Report Writing	Informational Report (AWM: 1.25)	Annual Report (AWM: 3.00)	Financial Report (AWM: 4.25)	Emphasis on essential business documentation
Formal Correspondence Writing	Resume and Application Letter (AWM: 1.75)	Recommendation Letter (AWM: 4.38)	Acknowledgment Letter (AWM: 4.50)	Priority on professional development documentation
"Netiquette" in Using Online Platform	Writing an Email (AWM: 1.25)	Social Media Report (AWM: 1.75)	Blogging (AWM: 3.00)	Focus on digital communication skills
Project Proposal Writing	Solicited Project Proposal (AWM: 1.00)	Unsolicited Project (AWM: 2.88)	Renewal Project Proposal (AWM: 3.00)	Emphasis on funding acquisition skills
Online Presentation	Basic Online Presentation (AWM: 1.50)	Rules in Online Presentation (AWM: 1.88)	"Netiquette" in Online Presentation (AWM: 2.63)	Priority on virtual presentation competencies
Public Relations	Informative Speaking (AWM: 1.50)	Public Communication (AWM: 2.50)	Persuasive Speaking (AWM: 2.75)	Focus on clear communication delivery
Parliamentary Procedure	5 Basic Principles (AWM: 1.00)	4 Modes of Voting (AWM: 2.00)	3 Ways to Amend a Motion (AWM: 3.00)	Emphasis on procedural knowledge

Note: AWM = Average Weighted Mean

CONCLUSION

The Duy'ap TechTalk Extension Project presents a valuable opportunity for all extension beneficiaries, fostering enhanced performance and office productivity. The demographic data which includes age groups, gender distribution, civil status, educational backgrounds, and occupational types demonstrates the need for customized learning approaches in the training modules. The project success depends on delivering content that remains accessible while being engaging which will maximize attendance rates and active participation and hands-on activity completion. The project's core objectives will be achieved through this alignment which enables beneficiaries to acquire practical skills and knowledge that produce meaningful progress.

RECOMMENDATION

On Crafting the Modules

The framers of modules may consider that the technical aspect of the lessons, as well as, the instructions and activities must be comprehensible

enough in order to attain the target competencies and eventually for the beneficiaries to articulate the learnings in their varied field of work.

On the Implementation of the Project

The Duy'ap TechTalk project must calendar the beneficiaries by groups as it is deemed implausible to gather the five groups as one big cluster considering the beneficiaries' varying demographics and contextual characteristics.

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