

I. Project Information

Project Title: A Foundation for an ICT Enhancement Program: An Empirical Analysis

of the Key Challenges and Opportunities in Evaluating the Digital Literacy Readiness of Barangay Workers in Hagonoy, Bulacan

Implementing Agencies: Bulacan State University

Research Management Office

Malolos, Bulacan

Cooperating Agency: Bulacan State University

Monitoring Agency: Bulacan State University

Research Management Office

Project Location: Bulacan State University

Malolos, Bulacan

Project Duration: 6 months (January 2024 – June 2024)

Fund sources: Php 198,500.00

Bulacan State University Research Funds

Project Leader: Mr. Darvin M. Evidor

II. Background Information

Rationale:

The rationale of this study is to ascertain the level of digital literacy among barangay workers in Hagonoy, Bulacan, as an input to a community extension program. The emerging trend for information technology, such as the use of digital equipment, has risen, and it has become less of a choice but more of a requirement for an individual in performing tasks, hence making it a vital asset, especially in the working environment.

A barangay is considered the smallest unit of government in the Philippines. It is recognized for its transformative and participatory governance, serving its constituents and the community. As the population increases, the number of households in each barangay in the country increases. As a result, more and more people are seeking the services of the barangay. An increasing number of people means an increasing workload for the barangay officials and their personnel. This situation challenges the barangay workers to ramp up their services to adequately and efficiently serve the people. An essential area of service is data processing, storage, management, and retrieval.

The provision of fundamental services and initiatives at the community level, such as healthcare, education, and public safety, is crucially dependent on barangay employees. The growing usage of information and communication technology (ICT) in recent years has brought attention to the necessity for barangay workers to acquire digital literacy skills. The inability of many barangay employees to use ICT tools and services effectively, however, may limit their capacity to provide the community with essential services and programs.

This study is significant because it would shed light on the main obstacles and openings in assessing the level of digital literacy among barangay workers in Hagonoy, Bulacan. Moreover, it will serve as a framework for an ICT improvement program that takes advantage of the chances to improve the digital literacy of barangay workers while addressing the problems that have been identified. Policymakers, community leaders, and other stakeholders can use the study's findings as a reference



when creating initiatives to improve the digital literacy of barangay workers, which will result in more efficient service delivery at the local level.

Related Literature and studies

In order to ensure the thoroughness and accuracy of our research, we conducted a comprehensive review of related literature and studies. By examining existing research in the field, we aimed to gain a deeper understanding of the topic and identify any knowledge gaps that our study could potentially address. These materials served as invaluable references for additional information, and guided our research process every step of the way.

"Assessing Digital Literacy in Higher Education: A Review of Existing Frameworks" by Kathleen A. Langan and Leigh E. Rich (2016) - This paper provides an overview of existing frameworks for assessing digital literacy, which refers to the ability to use and understand digital technologies. It discusses the different dimensions of digital literacy and the challenges of measuring it.

"Development of a Computer Literacy Assessment Instrument for Secondary School Students" by Cheung and Huang (2011): This study aimed to develop a reliable and valid assessment instrument for measuring computer literacy readiness among secondary school students in Hong Kong. The authors used a mixed-methods approach, including focus group interviews and a survey, to develop the instrument and evaluate its psychometric properties. The findings suggest that the instrument has good reliability and validity and can be used to measure computer literacy readiness among secondary school students.

"Assessment of computer literacy and needs of healthcare workers in rural India" by Kumar et al. (2020). This study assesses computer literacy among healthcare workers in rural India and identifies the needs and challenges in using computer-based systems. The results show that healthcare workers have a basic level of computer literacy, but they face challenges in accessing and using technology due to infrastructure limitations.

The study, "Assessing computer literacy skills among library personnel in a developing country: The case of Uganda" by Sarah Kaddu and Tonny Kirabira, aims to evaluate the level of computer literacy skills among library personnel in a developing country like Uganda. The study utilized a survey questionnaire to gather data on the respondents' computer literacy skills, knowledge, and attitudes towards computer technology. The results showed that although the majority of the respondents had basic computer skills, they lacked more advanced skills that are required in a modern library setting.

The research study titled "Access Skills and Constraints of Barangay Officials towards the Use of Information and Communications Technology (ICT)" conducted by Centeno et al. sheds light on the challenges that Barangay officials face in adopting and utilizing information and communications technology (ICT) in their day-to-day operations. The study aimed to identify the extent of ICT adoption in the Barangay, determine the ICT access and skills of Barangay officials, and examine the constraints that hinder the adoption and use of ICT. To achieve these objectives, the study used a survey questionnaire as its main research instrument, which was administered to Barangay officials across the Philippines.

The study revealed that while most Barangay officials recognize the importance of ICT, a significant number still lack access to the necessary technology and have limited ICT skills. The constraints that hinder the adoption and use of ICT were identified as lack of funds, limited technical support, and inadequate training and capacity-building programs.

The findings of this study are highly relevant and informative for policy-makers, ICT practitioners, and local government officials who seek to improve the delivery of services at the Barangay level. The study's recommendations, which include the provision of adequate funding for ICT infrastructure, the establishment of technical support services, and the implementation of capacity-building programs, can serve as a guide for the development of policies and programs that support the effective use of ICT in the Barangay.

III. Project Objectives

General objective: To provide a comprehensive assessment of the digital literacy readiness of barangay workers in Hagonoy, Bulacan.

Specific objectives:



- 1. Determine the level of digital literacy awareness among barangay workers in Hagonoy, Bulacan.
- 2. Identify the key challenges in evaluating the digital literacy readiness of barangay workers in Hagonoy, Bulacan.
- 3. Identify the opportunities for enhancing the digital literacy skills of barangay workers in Hagonoy, Bulacan.
- 4. Develop an ICT program based on the identified challenges and opportunities to enhance the digital literacy skills of barangay workers in Hagonoy, Bulacan.

IV. Mechanism of Implementation

The research site of the study is the different barangays of Hagonoy in the province of Bulacan. The barangay workers who were chosen to be the respondents are community members who serve in a variety of capacities and hold various roles and responsibilities within the barangay known as the smallest administrative unit in the Philippines. Barangay health workers and mother leaders will be among the respondents in this study.

Technical and Operational Aspect

Baseline assessment is the first step to conduct in this study-a baseline assessment of the digital literacy skills of Barangay workers in Hagonoy, Bulacan. This assessment will involve conducting a survey to gather data on the workers' current level of digital literacy, the challenges they face in using technology, and their attitudes towards technology.

Based on the findings of the baseline assessment, an ICT enhancement program through extension services will be developed to address the identified challenges and opportunities for improving the digital literacy readiness of Barangay workers. The program may include training sessions, mentoring and coaching, and access to technology and resources.

Organization and Management

This research project team is composed of a team leader and two faculty collaborators. The team leader will have a vital role to perform in this research project from the start until its completion, such as will be in charge of the overall monitoring of the activities to be conducted by the team, will ensure that all details of the project are carried out successfully, will keep track of the timeline, will supervise the team on various activities/tasks within deadlines, will schedule and hold team meetings as needed, will address the issues and concerns that may arise while doing the research project. On the other hand, the two collaborators will assist the team leader in the accomplishment of the research project, will work on the assigned tasks like crafting the research instrument, data gathering and documentation, will coordinate with the team leader for some concerns, will provide inputs to the team for further improvement of the research project, and will attend the meetings organized by the team leader.

Financial Plan

The total cost of this research project amounts to one hundred ninety eight thousand and five hundred pesos (Php 198,500) will be for the honoraria of the project leader and two faculty collaborators, supplies and materials to be utilized for the documentation (bond paper, ink for printing), transportation expenses (from BuISU - Hagonoy Campus going to the target barangays), meal allowance during the conduct of meetings, surveys, and interviews.

V. Timetable of the study

See attached sheet

VI. Budget Allocation

See attached sheet



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