	Polytechnic University of the Philippines **Santa Rosa Branch** **Bachelor of Science in Information Technology**	**FUNDAMENTALS OF RESEARCH** **CHAPTER 1**

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Proposed Title:

Seal of Good Local Governance for Barangay (SGLGB) Management System for the DILG of City of Santa Rosa

CHAPTER 1 INTRODUCTION

This chapter presents the different sections of the conducting of the study. These include the background and rationale, discussing and examining the DILG office's distinctive challenges, and the researchers' objective to ameliorate such challenges. This section also contains relevant proposed theories where the study is anchored; the conceptual framework, which will serve as the researchers' guide for investigation; the specific research questions the researchers sought to answer; the scope coverage and limitations, in acknowledgment of the inherent limitations of the study; its significance to the beneficiaries; and lastly, the definition of key terms used for a cohesive understanding of the study's language concepts.

Background and Rationale of the Study

Local government units (LGUs) in the Philippines are mandated to oversee the effective local governance in their respective jurisdictions. They serve as a crucial administrative partner that connects to the national government and are also responsible for delivering government services, implementing various policies and programs, and cultivating community development at the local level. According to the Local Government Code of 1991, a local government unit (LGU) can be a province, a city, a municipality, or a barangay. To guarantee the effective functioning and conforming operation of these LGUs, the Department of Interior and Local Government (DILG) is mandated to serve as the foundation of local governance based on the Department of Interior and Local Government Act of 1990, also known as Republic Act No. 6975, which was founded in response to the pressing need for decentralized government functions. The DILG guides and supports LGUs in facilitating local governance and ensuring the well-being of communities across the country.

Community development and the welfare of local communities are significantly influenced by the role played by local governance, and the "Seal of Good Local Governance for Barangay" (SGLGB) program, is an established project that shows the government's commitment to good governance. Introduced by the DILG in November 2018, the SGLGB program has undergone rigorous evaluation through two pilot testing rounds in 2019 and 2021, with a third and final pilot test taking place in 2022. This program evaluates barangays based on a '3+1' principle, requiring compliance with all three (3) Core Governance Areas namely, Safety, Peace and Order, Financial Administration and Sustainability, and Disaster Preparedness. Additionally, barangays must excel in at least one (1) of the three (3) Essential Governance Areas, such as Social Protection and Sensitivity, Business-Friendliness and Competitiveness, or Environmental Management.

The program provides a benchmark for good governance to motivate barangays to improve their services and engage their communities continually. However, the SGLGB program administration presents a variety of challenges, particularly in the administrative processes in the DILG office of the City of Santa Rosa. These challenges occur throughout the entire course of the program. First, the office obtains the hard copies of documents, known as Means of Verifications (MOVs), and assessment forms through barangays' submission which adds concerns to the limited space of the vicinity, verification, and tracking of the validity of the documents. Secondly, is the collection of the same copy of documents but in digital or soft copies provided by the barangays in a shared Google Drive link. The process becomes more complex because of the intricate auditing procedures managed by the DILG assessment team. Likewise, according to the office staff, document tracking, management, and encoding predominantly rely on Google Sheets and Google Docs, which, while accessible, may raise concerns about data organization and operational productivity. Finally, the office challenges are aggravated further by the confined working conditions. The limited space and storage constraints have become increasingly difficult for the office retrieval of the program documents from the preceding years, pressing the need to create innovative solutions for improved program administration.

One of the innovative solutions is the integration of information systems (IS). Information systems combine people, processes, software, hardware, and telecommunication networks to collect, process, store, and disseminate data or information for various organizational purposes. IS presents an opportunity to improve the efficacy and productivity of administrative processes in an era where information technology and systems are bringing about fundamental shifts in various sectors. IS also offers tools and platforms that can increase communication, expedite data management, and improve decision-making. Based on Mamma (2023), increasing the effectiveness of an organizational information system improves the effectiveness of an institutional organization. This concept can be extended to an information system's complete content, demonstrating that the organizational information system can be effective, of high quality, and successful in proper operation, and improvement of the produced services.

Recognizing the administrative challenges and needs of the DILG office, the researchers aim to design, develop, and implement the "Seal of Good Local Governance for Barangay Management System", a web-based system centered on addressing the office inefficiency of the SGLGB program administration. This system aims to integrate information systems and digital platforms to enhance and facilitate the implementation of the program, offering a comprehensive and efficient approach to data management, auditing, and eligibility assessment. The primary goal of the system is to digitize and centralize the submission of Means of Verification (MOV) documents and assessment forms by the barangays. In addition, the barangays may request an extension of the submission deadline through the system for a more flexible approach. For the DILG office, the system intends to enhance document tracking, specifically, identifying whether barangays have submitted the requirements, and for verification purposes, the office may approve or reject the submitted MOVs and forms. These call for the development of submission portals dedicated to the barangays enabling them to submit and comply with the required MOVs and forms, and the development of a management information system for the DILG office for the facilitation, tracking, approval, and organization of barangays submitted MOVs and forms.

Theoretical Framework

The theories anchored in this study are the Bureaucratic and Systems theories. Bureaucratic Theory as defined by Max Weber in 1922, instituted the belief that an organization is a highly structured hierarchy, formalized, and impersonal, characterized by clear rules of authority, a division of labor, and adherence to rules and procedures. In this theory, the Department of Interior and Local Government (DILG) office in the City of Santa Rosa embodies bureaucratic elements such as a structured hierarchy with defined functions and roles and formal procedures regarding the adherence to the implementation of the “Seal of Good Local Governance for Barangay” (SGLGB) program. Bureaucratic theory helps the researchers understand the internal structure and workings of the DILG office, including the specific individuals assigned to tasks related to the program administration.

In contrast, Systems Theory introduced by Ludwig von Bertalanffy in 1940, views organizations based on the principle that the component parts of an organizational system can be best understood in the context of interconnectedness and interdependence. It draws attention to the dynamic relationships, feedback loops, and adaptability essential for organizational success. In this case, the systems theory views the DILG office and various barangays as interconnected and interdependent components within a larger system, specifically in the context of the SGLGB program. The DILG office and barangays share interdependence through the flow of documents. The process is co-dependent: the DILG office requires the submission of necessary Means of Verification (MOV) documents from the barangays, while the barangays, in turn, depend on the directives of the DILG office. This mutual reliance emphasizes the interconnected nature of their relationship, where progress is linked to collaborative document exchange. Intending to guarantee the success of the program, systems theory indicates the significance of effective collaboration and communication between the DILG office and barangays.

In essence, these theories provide an understanding of how the internal structure of the DILG office influences collaboration with the barangays and how this collaboration contributes to the success of the SGLGB program. The “Seal of Good Local Governance for Barangay Management System” acts as an innovative tool to address the office’s bureaucratic challenges, improving communication, data management, and adaptability within the organizational system of the DILG office in collaboration with barangays. This improvement contributes to the operational efficiency in program implementation. Therefore, within the scope of the SGLGB program, the bureaucratic and systems theories are applied specifically to understand the coordination between the DILG office and barangays in the City of Santa Rosa, aiding and providing the researchers with a holistic approach in devising the SGLGB Management System.

Conceptual Framework

The framework that was used in the study is the Input-Process-Output Model, as shown in Figure 1. In the IPO model, a process is viewed as a series of boxes (processing elements) connected by inputs, processes and outputs. What goes in is the input, what causes the change is the process, what comes out is the output. The model was utilized to show the approaches used in designing and enhancing the management system for the Seal of Good Local Governance for Barangay (SGLGB).

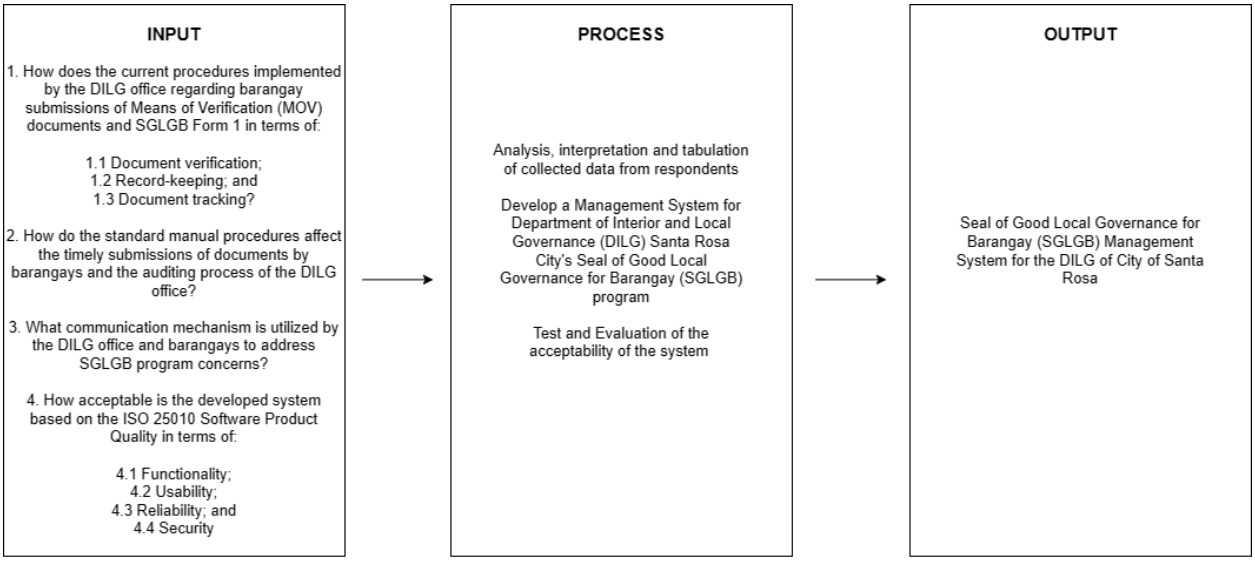

Figure 1. Conceptual Framework

The input phase assesses the current processes integral to the SGLGB program within DILG Santa Rosa City's operational framework, such as the submissions of Means of Verification (MOV) documents and how it is verified, tracked and recorded. It also explores the impact of manual procedures on timeliness and the auditing process of the DILG office, while also investigating the communication dynamics between the DILG office and barangays regarding concerns and important, private notices. The process phase involves the systematic analysis, interpretation and tabulation of data collected from the respondents. This data is analyzed to design a Management System tailored specifically for the SGLGB program. The subsequent step involves the development of the system, integrating insights from the analysis and rendering the theoretical considerations into practical solutions to address the needs and requirements of both the DILG office and barangays. Testing and evaluation of the system follow, ensuring that it meets the established standards, guaranteeing its functionality, usability, reliability and security. The output phase results in the implementation of Seal of Good Local Governance (SGLGB) Management System for the DILG Santa Rosa City. This solution, derived from analysis and testing, addresses specific needs related to Means of Verification (MOV) submissions, verification processes, timeliness and communication dynamics between the DILG office and barangays.

Statement of the Problem

This study aims to determine the existing methods implemented by the DILG office and the effectiveness of integrating the SGLGB Management System concerning the administration of the Seal of Good Local Governance for Barangay (SGLGB) program in the City of Santa Rosa.

Specifically, it seeks to answer the following questions:

1. What are the current procedures implemented by the DILG office regarding barangay submission of Means of Verification (MOV) documents and SGLGB Form 1 in terms of:
    1.1 Document verification;
    1.2 Record-keeping; and
    1.3 Document tracking?
2. How do the standard manual procedures impact the timely submission of MOV documents and SGLGB Form 1 by barangays and the auditing process in the DILG office?
3. What communication mechanism is utilized by the DILG office and barangays to address SGLGB program concerns?
4. How acceptable is the developed system based on the ISO 25010 Software Product Quality in terms of:
    a) Functionality;
    b) Usability;
    c) Reliability; and
    d) Security?

Scope and Limitation

The researchers aim to implement the SGLGB Management System for the Department of Interior and Local Governance (DILG)'s Seal of Good Local Governance for Barangay (SGLGB) program in the City of Santa Rosa, introducing a centralized web-based system to streamline the current manual processes of document collection and verification. It is concentrated within Santa Rosa City's City Hall, where the DILG office is situated, and the 18 barangays within the city. These barangays include Aplaya, Balibago, Caingin, Dila, Dita, Don Jose, Ibaba, Kanluran, Labas, Macabling, Malitlit, Malusak, Market Area, Pooc, Pulong Santa Cruz, Santo Domingo, Sinalhan, and Tagapo.

The study has a focus on DILG personnel and barangay officials responsible for the submission of Means of Verification (MoV) documents. The proposed system capabilities are limited only to the data gathering, assessment, online data entry, and consolidation phases of the SGLGB program within the City of Santa Rosa, which the city's DILG office handles. Any changes in the program's memorandum, policy or any other related issuances will be considered within the scope of this study.

Significance of the Study

The research aims to provide information and knowledge in the domain of good governance and information technology. Likewise, the research and application of information systems will benefit the following:

The Component City and Municipal Performance Assessment Team (CC/M PAT):

The CC/M PAT which serves as the primary SGLGB Assessment Team in DILG Santa Rosa City, will experience the utmost benefits from the integrated system. The system will alleviate the intricate process of SGLGB assessment which entails gathering, verifying, and consolidating printed Documentary Checklists and compiled MOVs from Barangays. It will also provide a secure communication platform for announcements and management of submission deadlines for each barangay. Thus, the consolidated assessment forms and shortlisted SGLGB participants will be delivered in less time and with fewer resources.

The Barangays' Officials:

The Barangay Captains and Barangay Secretaries will also benefit from the system's submission portal. It will simplify the filling out of the Documentary Checklist, compilation of MOVs, and submission of these documents to the SGLGB Assessment Team via digitized format. It will also provide a secure communication channel for submission inquiries, requests, and submission updates during the submission phase.

The DILG Office:

The office of the Department of the Interior Local Government in the City of Santa Rosa will significantly benefit from the system. It will promote a digitized collection of assessment documents thus freeing spaces within the office.

The Researchers:

The researchers will also primarily benefit from this research. The knowledge allows researchers to explore and understand government initiatives for improved governance. The experience also enhances web development capabilities and offers opportunities to integrate information technology with government programs and institutions. Additionally, it improves the strategic planning of researchers to guarantee the delivery of a functional system within constraints.

The Future Researchers and Developers:

This study can serve as a valuable reference for future researchers and developers, offering a basis for studies and software development of information systems pertaining to government, record management, document management, and instant messaging. Furthermore, it has the potential to spark the interest of individuals to pursue further studies and system integration in these domains.

Definition of Terms

Operational Terms

Core Governance Area. This is a set of primary indicators for assessment of Barangay's administrative performance that greatly influence the effectiveness and efficiency of programs and projects that are aligned to the national goals of the Philippine Government.

Essential Governance Area. This is a set of secondary indicators for assessment of the Barangay's capability to sustain its operations and the welfare of its environment and citizens.

Means of Verification (MOV). It includes reports and certification documents acquired and produced by the barangay during their operations. These are numerous documents compiled that serve as the basis for auditing, budget allocation, and assessing the annual administrative performance of the Barangay. Despite its importance, the limited office space necessitates efficient storage at the DILG office for retrieval and assessment.

Assessment Forms. These are consolidated forms that contain checklists, validation, and evaluation data from MOV documents that are duly signed and certified by the authorized personnel.

DILG. The Department of Interior Local Government (DILG) is an agency that supervises Local Government Units (LGUs). It established the "Seal of Good Local Governance for Barangay" assessment program and designated its officers as primary assessors.

SGLGB. Seal of Good Local Governance for Barangay.

C/MLGOO. The City/Municipal Local Government Operations Officer also known as the City/Municipal SGLGB Assessor is in charge of initial screening of eligible SGLGB participants.

NBOO. National Barangay Operation Office guides in developing and enhancing the administrative capabilities of barangay officials including such areas as formulation, management, and implementation of developmental activities. They oversee the SGLGB implementation, conduct barangay profiling and research to progressively improve the SGLGB implementation as well as gauge the administrative improvements of local barangays.

SGLGB Form 1. Barangay Documentary Checklist and Certification Page is a form certified by Barangay Officials. It is a checklist that contains the list of MOVs per governance area that needs to be submitted.

SGLGB Form 2. Data Capture Form is the form accomplished and certified by C/MLGOO and their assessment team. This form is used to verify the matching of SGLGB Form 1 and submitted MOVs of the barangay, examine its validity, and record the required data from MOVs.

SGLGB Form 3. Technical Notes are detailed information to determine the validity of the submitted MOV documents of barangays.

SGLGB Form 4. The Component City/Municipality Consolidated Performance Assessment Form (CC/M CPAF) is filled out and certified by the C/MLGOO and their assessment team. This form includes a participant list with corresponding columns denoting the governance areas they have either successfully passed (marked with checkmarks) or not (marked with crosses). Additionally, the document provides specific details regarding which barangays have successfully passed the initial screening for the SGLGB program.

Technical Terms

Information System (IS). An information system is an application developed on top of existing manual operation leading to faster, labor-saving, and digitized operation. This aids the operation of the organization's communication, transaction, storing, sharing, retrieval, updating, and archival of documents.

Software. developing an Information System produces software. Software is a computer application that takes required input to assist users in performing a specific task more efficiently than conventional manual operation. It is designed to process and make tasks easier, faster, and more accurate, reducing the potential for human error.

ISO 25010. It is the documentation that provides up to date framework for ensuring quality standards of software are produced.

Google Drive. It is an online electronic file storage provider that requires user accounts to store and access files regardless of the geographical distance of users in an organization.

Google Sheets. Is an application that is accessible over the internet using an internet browser. It is a tool to create, edit, store, and organize data in electronic files in Google Drive. Google sheet files contain table rows and columns to store the data, perform calculations, and create summarized information in graphs, charts, etc.

Google Docs. Is an application to create and edit electronic documents stored in Google Drive which is accessible over the internet using an internet browser.