

Ebudget System and Engas: Lived Experiences of Finance Services Personnel in DPWH Surigao Del Norte Province, Philippines

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ABSTRACT

The Electronic Budget (eBUDGET) and Electronic New Government Accounting System (eNGAS) were digital platforms designed to automate and streamline financial management processes within government departments, aiming to enhance efficiency, accuracy, transparency, and decision-making. This study explored the lived experiences of nine (9) finance personnel in the Department of Public Works and Highways (DPWH) Surigao del Norte province, focusing on implementing eNGAS and budget systems. The Philippine government has adopted these systems to enhance financial management transparency, efficiency, and accountability. The researcher purposively sampled nine (9) finance services personnel and coded them from A to I to protect their identities. Key themes emerged from the categories and meaning units produced from the verbatim data, with 175 psychological meaning units classified into 14 concepts and six categories for the eBUDGET system and 162 psychological meaning units classified into 15 concepts and five categories for eNGAS. This study shed light on the challenges and benefits realized during the implementation process by exploring the lived experiences of nine selected finance personnel from the DPWH Surigao del Norte Province. The findings stressed the transformative power of the eBUDGET system and eNGAS in improving accountability, streamlining procedures, and enabling informed decision-making. Despite initial obstacles, such as learning curves and technological difficulties, continuous support, and adaptable strategies facilitated successful implementation. The study's implications extended to DPWH administrators, finance personnel, and future researchers, emphasizing the importance of embracing technological advancements, adaptability, ongoing training, and capacity-building initiatives. Reflecting on the experiences shared, it became evident that while the journey towards implementing the budget system and ENGAS may have been challenging, the resulting improvements in efficiency, accuracy, transparency, and decision-making justified the efforts invested, promising a brighter future for public financial management.

Keywords: Electronic Budget (eBUDGET) systems, Electronic New Government Accounting System (eNGAS), Lived-Experiences, Department of Public Works and Highways (DPWH), Philippines

I. INTRODUCTION

Globally, every private or state-owned establishment desires to be strong and successful. Organizations vary in work culture, leadership styles, behavioral norms, resources, technology, work processes, employees' expectations, customers, and business environment, leading to different outcomes (Rigopal,

2006; Tinoco & Arnaud, 2013). Each organization builds a structure or sets of departments based on their expertise to provide quality service, improve processes and performance, and monitor success. Finance is a critical department overseeing budgeting, financial reporting, and strategic planning, ensuring the stability and prosperity of the organization. Many finance departments have adopted financial innovations and sophisticated systems to increase efficiency and enhance their efficacy.

Financial innovation is crucial as it represents progress and can increase economic value (Frame & White, 2004). Implementing financial systems in the finance department enhances financial reporting and data analysis and streamlines repetitive activities. These innovations enable the department to adjust to evolving economic environments and opportunities. A resilient financial system improves clarity and responsibility, which is essential for upholding stakeholder confidence (Farida et al., 2021). In the Philippines, the government emphasizes the strategic implementation of systems to enhance governance, streamline processes, and ensure resource utilization. The Commission on Audit (COA) developed the electronic budget (eBUDGET) system and electronic new government accounting system (eNGAS) to enhance the accuracy, reliability, comprehensiveness, and timeliness of recording government financial transactions (COA, 2018; Navarro et al., 2023).

The Department of Public Works and Highways (DPWH) implemented the eBUDGET system and eNGAS to improve the efficiency and accuracy of financial reports, addressing the limitations of manual processes, which were prone to errors, time-consuming, and lacked security. Manual systems hindered timely and informed decision-making and posed challenges in data retrieval and security (Singh, 2018; DBM, 2015). The new systems aim to foster greater transparency and accountability in financial operations, enabling real-time expenditure tracking and appropriate fund use. This is crucial for building public trust and improving governance (COA, 2018). These systems provide finance personnel with comprehensive insights into the financial status of projects and operations, supporting informed decision-making and resource allocation (World Bank, 2017). The alignment with international accounting standards and local regulatory requirements ensures compliance and avoids legal and financial discrepancies (DPWH, 2020). However, transitioning to automated systems presents challenges that require strategic planning to overcome. This study explores the lived experiences of DPWH finance personnel in Surigao del Norte, offering insights into the advantages, challenges, and benefits of integrating these e-systems.

Conceptual Framework of the Study

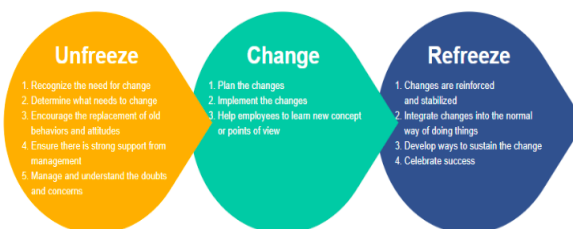


Figure 2: Lewin’s Change Management Theory

This study was anchored on Kurt Lewin's Change Management Theory. Lewin's Change Management Model is foundational to understanding and implementing organizational change. It was based on three main stages: Unfreeze, Change, and Refreeze. This theory could effectively be anchored to implementing an Electronic Budget (eBudget) system and Electronic New Government Accounting System (eNGAS) within an organization of the DPWH Surigao del Norte Province.

Unfreeze. At this stage, the DPWH Surigao del Norte financial department was designed and ready to embrace the need for change, which included transforming the manual finance procedures to the eBUDGET system and eNGAS. This outlined the shortcomings and inefficiencies of the present manual finance systems and the solutions provided by eBudget and eNGAS. It also sketched a precise picture of what the new system would accomplish (such as higher accuracy, efficiency, and transparency in financial management).

Change (Transition). At this point, the finance personnel began transitioning from the old method to the new one. The personnel begin to learn new habits, procedures, and ways of thinking. Give all finance staff thorough instructions on how to use the latest systems. Ensured users were at ease with the latest systems and provided ongoing assistance to resolve technical problems during the transition period. Before a complete rollout, test and improve procedures through a pilot program before implementing the system.

Refreeze. At this stage, it is necessary to establish the new procedures and systems as standard. The objective was to make sure that the improvement lasted. The financial department incorporated the new systems into its daily procedures and activities. Provide opportunities for continuous input and system improvement. Keep meticulous records of the latest procedures and disseminate information throughout the division.

By anchoring the eBudget system and eNGAS implementation in Lewin's Change Management Theory, the DPWH effectively managed the transition from manual to electronic financial management systems. This approach ensures that the need for change is communicated and understood (Unfreeze), the transition is well-supported and executed (Change), and the new systems are solidified and sustained within the organization (Refreeze).

Descriptive Phenomenology

Amedeo Giorgi's 2003 work on phenomenological method in psychological research builds on the tradition influenced by Edmund Husserl. Giorgi emphasizes a descriptive approach, describing phenomena as individuals experience them without imposing preconceived notions or theoretical interpretations. He employs Husserl's concepts of epoché (bracketing) and phenomenological reduction, which involve setting aside biases to view phenomena purely and focusing on the essence of the experiences by removing extraneous details. Data collection typically involves gathering detailed descriptions of participants' experiences through open-ended interviews. The analysis consists of reading the descriptions to get a sense of the whole, dividing the text into meaning units, transforming these units into the language of psychology to capture their essence, and synthesizing them into coherent descriptions. Giorgi advocates for scientific rigor in qualitative research, emphasizing clarity, precision, and systematic procedures to ensure the validity and reliability of findings. His work provides a structured and rigorous method for exploring and understanding human experiences from a first-person perspective (Giorgi, 2003; Giorgi & Giorgi, 2003).

Data analysis using Giorgi's (2003) phenomenological method involves a systematic process to uncover human experiences' essential structures. It begins with reading the entire dataset, composed of detailed participant descriptions, to understand the experience. The text is then divided into meaning units, segments conveying specific aspects of the participant's experience. Each meaning unit is transformed from the participant's language into the language of psychology to uncover the underlying psychological meaning. These transformed meaning units are synthesized into a coherent description that reflects the

core aspects of the experience. The final product is a detailed, descriptive account of the essential knowledge structures, providing a clear and nuanced understanding from the participants' perspectives. This method emphasizes a structured and disciplined approach, ensuring findings are deeply rooted in the participants' descriptions while translated into meaningful psychological concepts (Giorgi, 2003).

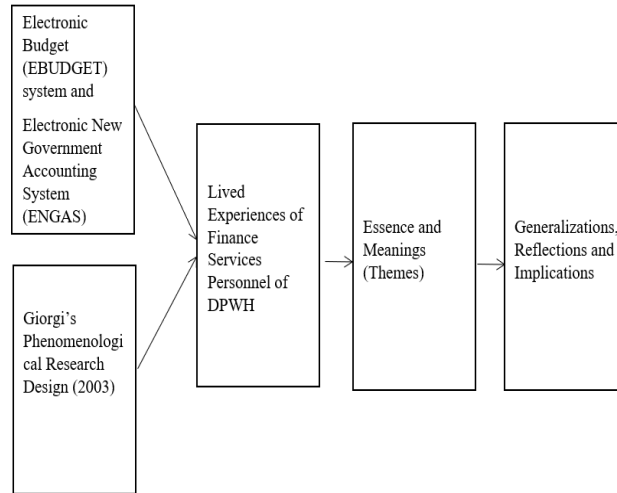


Figure 1. Eidetic Model of the Lived Experiences of Finance Services Personnel of DPWH Surigao del Norte Province

The eidetic model examines how humans focus their consciousness on a phenomenon and experience it (Syed, 2012). The eidetic model supports the lived experiences of DPWH Surigao del Norte's finance personnel upon integrating the eBUDGET system and eNGAS. By employing the eidetic model, the researcher can provide deep insights into the lived experiences of the finance personnel, offering valuable perspectives that can inform practice, policy, and further research.

Domains of Inquiry

The informants of the study were the regular finance service personnel in DPWH Surigao del Norte Province who have established and experienced the implementation of the eNGAS and budget system. Their experiences of being an eBudget system and eNGAS user captured the researcher's interest in integrating the same systems in her new workplace. The researcher's objective was to have a deeper understanding of how the finance personnel of DPWH experienced implementing the systems and get an idea of how they effectively run the system. With this, the researcher aimed to ask the following questions:

Open-Ended Questions:

1. What are the lived experiences of finance services personnel of the DPWH in Surigao del Norte regarding the ebudget system, and eNGAS?
2. What essence and meanings may be derived from these lived experiences?
3. What are the emerging themes coming from the lived experiences of the informants?
4. What generalizations, reflections, and implications can be drawn from the lived experiences of the informants?

REVIEW OF RELATED LITERATURE

The implementation and benefits of computerized accounting information systems (CAIS) in government agencies within developing countries to improve public financial management. These systems, including

budget management and financial reporting, help relieve fiduciary responsibilities and organize financial reports for various governmental entities (Baker & Powell, 2009; Din et al., 2021). Information systems significantly impact public institutions' financial management, corporate governance, and accountability by enhancing internal control and achieving organizational goals (ACCA, 2010).

The public sector has leveraged information technology (IT) to modernize administration across several functions, such as accounting, finance, project management, and inventory control. The extensive use of IT is anticipated to improve service quality and productivity within the government sector. Achieving good governance requires regional governments to continually improve the quality of financial reports to ensure transparency and accountability. Financial statements based on Government Accounting Standards (SAP) are essential for government entities to account for economic performance and ensure public trust (Khudhair, 2019).

To enhance service quality, many government agencies have adopted electronic systems. According to Mensah et al. (2017) and the World Bank (2015), electronic government (E-government or E-Gov) enhances government service, industry connections, and community empowerment through efficient management and information dissemination. E-Gov's significant advantages include boosting economic development, reducing expenses, increasing accountability and transparency, and improving service quality. However, citizen acceptance is crucial for reaping these benefits. The Department of Health's Electronic Data Management Systems (EDMS) implementation during the COVID-19 pandemic is an example of technological integration to address performance issues (Ramsey, 2020).

Enterprise systems (ES) like Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) are also utilized for integrating business processes and transaction data across organizations (Markus et al., 2003). These systems, designed to support strategy, operations, management analysis, and decision-making functions, affect various organizational-level users (Matende & Ogao, 2013). The Electronic Budget System (eBUDGET) and the Electronic New Government Accounting System (eNGAS) are examples of such technologies enhancing operational efficiency and transparency in governmental financial management. These systems ensure accurate and timely financial reporting and compliance with international standards (Institute for Labor Studies, 2016).

Implementing eBudget and eNGAS has improved the efficiency and transparency of government agencies' financial processes. Users report that these systems streamline tasks, minimize errors, and provide quick, reliable economic data (Velasco, 2021). However, introducing these systems presents challenges, such as adequate hardware, training, and technical support. Continuous improvements and capacity-building programs are essential to address these challenges and ensure effective utilization (Marcelo, 2015; DAP, 2022). The review synthesis indicates that CAIS integration enhances public financial management, but success depends on ongoing support and overcoming technical challenges to meet sector-specific goals (Macray et al., 2021; Velasco, 2021).

Synthesis of the Review. The cited literature highlighted that implementing computerized accounting information systems (CAIS) in government agencies across developing countries significantly enhanced public financial management by improving budget management, decision-making processes, and financial reporting (Baker & Powell, 2009; Din et al., 2021). These systems, which also aided corporate governance and accountability, positively impacted financial and fiduciary risk management (ACCA, 2010). Adopting information technology (IT) in the public sector modernized various administrative functions, leading to better service quality and productivity. Critical systems like the Electronic Budget (eBUDGET) and Electronic New Government Accounting System (eNGAS) improved efficiency,

transparency, and accountability in financial transactions and reporting. While these systems enhanced operational efficiency and compliance with accounting standards, they faced challenges, such as adequate training and infrastructure to support their implementation (Marcelo, 2015; COA, 2018). Overall, the successful adoption of these technologies depended on continuous improvements, capacity-building programs, and addressing technical challenges to ensure effective utilization and improved public trust in government financial management (Macray et al., 2021; Velasco, 2021). The main similarities across sectors were the improvements in efficiency, transparency, and the challenges of training and infrastructure. The primary difference was the public sector's focus on governance and public trust, contrasting with the private sector's emphasis on internal controls and achieving corporate objectives. In conclusion, the integration of CAIS in both the public and private sectors proved beneficial. However, its success relied on ongoing support and enhancements to overcome implementation challenges and meet sector-specific goals.

II. METHOD

This study employed the descriptive phenomenological research method articulated by Giorgi (2003), which focuses on understanding the meaning of lived experiences for several individuals concerning a particular phenomenon. This approach emphasizes exploring the structures of consciousness in human experiences from the participants' perspectives without deception. Unlike interpretive methods, descriptive phenomenology provides a clear, participant-centered context. The research aimed to describe the lived experiences of DPWH Surigao del Norte finance personnel in integrating the eBUDGET system and eNGAS, creating a phenomenological story or "life text." This methodology effectively gains deep insights into personal experiences, examines ingrained beliefs, and questions widely accepted ideas. It seeks transcendental subjectivity by continually evaluating the researcher's influence to maintain objectivity. The approach allows for comprehensive explanations and the development of new hypotheses or regulatory changes. Through semi-structured interviews validated by experts, the researcher collected data on the experiences of finance staff before and during the implementation of the budget system and eNGAS, analyzing the evolution of these experiences over time. The study took place on-site in the finance sections of the DPWH Surigao Del Norte, focusing on the contributions and performance enhancements of the finance personnel in the process.

The informants of this study were nine (9) exclusively regular employees of the finance department who have lived experiences in the operation. They were chosen using purposive sampling techniques consisting of individuals from the DPWH first and second district engineering office of Surigao del Norte, as illustrated in the table below: The researcher used the following criteria to select the informants: a.) They must be a regular employee of the DPWH; b.) They must be a direct EBUDGET System and an ENGAS user; and c.) They must be capable of making rational judgments for themselves.

The researchers employed a variety of instruments for data collection, including a researcher-made interview guide to gather detailed experiences and insights from informants. This flexible tool allowed for the exploration of emergent topics during interviews. A paper and pencil questionnaire was provided to informants beforehand to prepare them for the formal interview. An audio recorder captured verbatim responses, and content validation ensured qualitative experts verified the research questions.

After obtaining approval, the researcher scheduled interviews with selected DPWH employees, explaining the study's objectives and ensuring confidentiality. Interviews were recorded and transcribed, with data analyzed using Giorgi's descriptive phenomenology method. This involved bracketing to mitigate

researcher bias, translating informal responses to formal English, and ensuring validity through reference markers. The analysis followed Giorgi's empirical phases: reading for a sense of the whole, identifying meaning units, transforming them to uncover essential meanings, and synthesizing them into a cohesive narrative. The final step articulated the essential structure of the experience, identifying fundamental themes and significances and ensuring the study remained grounded in the informants' perspectives.

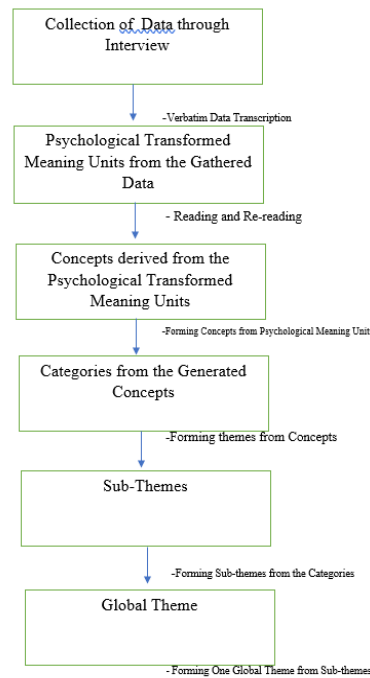


Figure 5. Flowchart of the Procedure in the Empirical Phase (Giorgi, 2003).

III. RESULTS AND DISCUSSION

The researcher meticulously observed research ethics throughout the study by obtaining necessary permissions and securing informed consent from participants. Informed consent documents detailed the study's purpose, risks, and benefits, emphasizing voluntary participation and confidentiality of personal data. Human rights protection was prioritized by adhering to ethical guidelines, ensuring participants were free from physical or psychological harm, and using codes to anonymize identities. The risk-benefit assessment confirmed that the study posed no significant risks, while procedures for data collection were designed to ensure participant comfort and data quality. The study involved one-on-one interviews with finance personnel about their experiences with the eBudget system and eNGAS implementation. It followed stringent ethical protocols to protect participants' rights and confidentiality, ensuring their voluntary and informed involvement.

Procedure for analyzing the data (Giorgi, 2003)

The interview results were analyzed using the empirical phase procedure by Giorgi (2003). I read all the transcriptions several times to understand their experiences implementing the eBudget system and eNGAS better. After that, I extracted significant meanings from the interview transcripts relevant to the desired phenomena. I developed and arranged concepts into categories, which evolved into themes based on the extracted significant meaning. I incorporated the results into a rich and exhaustive description of the informants' lived experiences.

Electronic Budget System

Theme 1: Leveraging digital technology to enhance financial management practices.

Most business people worldwide seek digital technology to improve management services, particularly finance. As a result, the COA has developed a system with good features that can significantly improve the processes and records of any agency that employs it. The DPWH was willing to implement the eBudget system because it was suggested by the COA, who conducted or handled an audit of government agencies. So, the budget agency accepted and implemented the DPWH system to enhance their budgeting decisions and records and ensure the timely submission of reports.

Category 1: Functionality

When deciding which system to implement, particularly in finance, the agency must carefully consider the system's functionality. It should be compatible with the agency's goals or objectives. The system helps the agency **streamline management since it is user-friendly**, and the eBudget system relieves employees from many processes. The system makes creating and reviewing budget allocations, obligations, disbursements, and balances easy. In addition to streamlining the process of submitting and printing reports, the eBudget system facilitates monitoring budget allocation balances within the agency. Moreover, it increases work productivity and efficiency. According to the informants:

“**B5 & 28**...However, because the budget is electronic, creating allocations, obligations, disbursements, and balances is quite simple. So, everything is simple. While I am not currently focused on the Ebudget, some of its features are similar to those of ENGAS.”

The eBudget system **enhances the agency's financial efficiency through eBudget transactions and reporting**. Unlike the manual process, the eBudget system enables agencies to make informed decisions by determining the necessary account balances effortlessly. Additionally, the system generates all the data, making their transactions even more efficient. They find it much easier to identify erroneous entries in the system, locate payments and disbursements, and allocate project balances, which is particularly satisfying when generating and submitting various reports. As stated by my informants:

“**B7-8**...Anywhere you want to put the money, all it takes is one click. It can produce reports with ease, much like the E budget. Since everything is automatically connected, you can quickly determine which accounts have been paid for and which have not.”

Unlike the traditional process, the e-budget system gives **efficacy to the budget procedures** of the DPWH. They improve their time management, double their work output, and minimize expenses. According to them:

“**D3**...Advanced due to its incredibly time-efficient system.

“**F4,6,7,11**...The EN gas and E-budget systems boast advanced capabilities compared to manual methods. The E-budget system plays a crucial role in our accounting procedures. It functions as an integral part of our accounting process, commencing with budgeting and seamlessly progressing to disbursements and payments. Implementing the E budget system has been quite convenient for me as a budget officer.”

“**G5-6**...It offers considerable advancement, significantly saving time and ensuring user-friendliness. Its intuitive interface eliminates the necessity for manual documentation; one needs to input or type the necessary information.”

Government agencies should equip themselves with a system to facilitate enhanced management of their financial resources, particularly in finance. The budget system facilitates the identification and monitoring of government fund balances, streamlines operations, and generates accurate and reliable reports, all of which contribute to preventing corruption. According to D. Immaniar et al. (2019), eBudgeting streamlines

administrative duties by providing reasonable access to financial data, enabling leadership to assess the situation promptly, guarantee transparency, and prevent misappropriation of funds. Additionally, the system includes essential elements such as resource allocation, budget-guided decision-making, ongoing performance monitoring, variance analysis to identify budgetary deviations, and communication with stakeholders about the organization's financial performance (Inventory, n.d.).

Category 2: Process optimization

The e-budget system improved transaction processing in the DPWH's budget section. They became more organized and productive, unlike when they used the traditional method. The effective reports generated by the system facilitated the execution of solid strategies and decisions. A user-friendly system improves financial oversight and reporting precision. It is easier for them to submit the report on time. The budget employees were able to efficiently generate reports, streamline tasks, simplify the review and approval of obligations, and positively impact overseeing and monitoring financial operations. My informants said that:

“**B**_{26,29}...The E budget is the same; all information is precise, truthful, and in-depth. However, the E budget differs in that it cannot carry out tasks in the same manner as ENGAS.”

“**C**_{19,29}...However, occasionally, someone can require a report—for instance, 15—because they have a regional conference meeting. Sophisticated since it produces reports with ease.”

The **budget system enhances the financial transparency and efficiency** of the DPWH agency. The system automatically generates reports, making it easier for budget employees to submit reports required by management, the COA, and the regional and national offices without worrying about accuracy. If the maker made an error when entering the transaction into the system, they cannot simply edit the information because it requires the approval of their budget officer. If the error transaction has already been approved at the agency level, they must seek approval to change it at the national level. Also, the COA auditor assigned to the agency has their system and can see its transactions. According to my sources:

“**B**₄₀...However, everything is simple to view with the aid of ENGAs and E Budget, and you can reply to inquiries regarding the disbursement right away.”

The **eBudget system streamlines employees' daily tasks** in the budget section of the DPWH agency. Their system-generated nature facilitates the completion of their bulk tasks. Additionally, the delay in submitting reports is prevented, improving the agency's accomplishments.

“**B**₂₀...However, since the ENGAS and E budgets are automatic, they are a part of our everyday activities.”

“**C**_{9,10,12}...When using the manual method, it can take days to complete the assignment, and occasionally, we cannot finish it within the allotted time. We felt much lighter with the budget because it made it easier to complete the task at hand. Because it may generate the desired process immediately, it is therefore relatively simple.”

Implementing the budget system helps the DPWH agency manage **the budgetary tasks according to established protocols**. The agency has already established an organized and productive procedure encompassing multiple stages, including budget allocation receipt, obligation fulfillment, calculation of completed and unfinished projects, and project disbursement. Furthermore, it facilitates their ability to ascertain whether they still possess a budget. My informants shared that:

“**B**₉₋₁₁...I will first discuss the E budget since I have utilized it for four or five years. At that point, I focused solely on the E budget, particularly when entering allotments, approving responsibilities, and

producing reports. I am the one who finds the budget, decides where to charge for it, reviews it, and gets permissions."

According to Sidik et al. (2021), using e-budgeting could improve the structure of planning documents and generate comprehensive reports regarding the allocation of company funds. Furthermore, we can address illegal budget misappropriation and expedite, improve, and execute budget preparation with greater precision and accuracy.

Theme 2: Resilience in Action: Overcoming Budgeting Challenges and EBudget System Hurdles

The e-Budget system has significantly benefited the DPWH Surigao del Norte finance department. However, success comes with challenges. Unreliable internet connections, natural disasters, and working away from the family for training are some obstacles they face. Nevertheless, despite facing impediments, they demonstrate determination and devise tactics to overcome these obstacles in conjunction with the agency and COA.

Category 1: Resilience

The resilience of the management and employees during implementing the budget system at DPWH Surigao del Norte is the best. They have been working together to meet the goals they have set. They are eager to meet the challenges they face in implementing the eBudget system. As newbies to the e-budget system, they have been experiencing errors in their transactions, work delays, and even sacrifices in their health and family life. Anyway, this is temporary. To overcome this, they worked overtime to transfer and balance the transactions from the manual to the eBudget system. There are even times that they will travel to Manila to balance the account and correct their error since they need the approval of the national level for the change of data in the system. **Overcoming operational hurdles such as internet and system disruptions is a burden for them, as they have no control over these events.** Weather conditions are one of the reasons for this. If this were to happen, they would contact the IT department to back up their finished transactions. Even so, those challenges and errors make them eager to learn even more to succeed in adopting the system. My informants shared that:

“C_{13,24}... The issue with E-Budget occasionally arises during blackouts and inclement weather due to unstable internet service. Because without the data, how could a system function or produce anything?”

“D₁₃... This update can sometimes cause delays in our work.”

Despite budget employees' challenges in implementing the system, they did not give up and persevered for the DPWH. To alleviate the hurdles we face, we must adapt the process and make it our guide to success. **Adapting to initial hurdles during system implementation** is their way to alleviate the stress it caused them. The support of their coworkers and the top management was their strength in reaching their work efficiency. According to my informants:

“C_{17,18,23,25,26}... It is not applicable if you are both the encoder and the person reviewing it because the roles of the encoder and reviewer are separated. Every month, the balances and allotments must be presented. The first set of problems and obstacles we faced was to encode all of the department's data when we initially started using the e-budget system. I enjoyed what I did. Because if the task is not completed, we cannot return home. We take a five-day trip to Manila once a month, and if necessary, we require an extension.”

According to Nugraha, A. Y., and Wibowo, U. B. (2020, February), e-government's complexity necessitates the presence of numerous implementation and management challenges and obstacles. ICT infrastructure, internet connectivity, errors in the application system, hackers and viruses, lack of professional/expert employees, minimum skills and experience in running the system, and sometimes

resistance to manual-to-digital transitions are the most significant and frequent technical challenges and obstacles to e-budgeting implementation.

Category 2: Data Protection

Globally, data protection is an absolute necessity for all organizations and enterprises. If someone intends to jeopardize our employer, we can avoid it by being extra careful. Take extra precautions when handling reports, including scratch paper, which may contain potentially revealing information. When using computers, if required, secure them with a password to prevent unauthorized access. Strict vigilance is all we can do to safeguard sensitive information against unauthorized access, fraud, and corruption. Especially in this age of technological advancement, numerous hackers and con artists are just waiting for the opportunity to bet; thus, we must maintain constant vigilance. **Safeguarding data integrity with systematic backups and thorough review protocols** is applied by the DPWH when handling the system. Those who have an account of the budget system duly approved by the DPWH Caraga region can access the system. My informants shared:

“C_{14-16,27,28,40...} However, our IT will then create a backup of the files to ensure the security of all the data we enter. We encode it solely and review it extremely. We will make sure to review it appropriately when we do so. Moreover, at that point, we enjoy our work the entire time to avoid feeling stressed. It works effectively. Furthermore, IT may always perform a backup in case of typhoons or other unforeseen disasters, which makes it easier to find the files.”

According to Anant et al. (2020), data protection is required to comply with personal data management laws and regulations and maintain trust between organizations and individuals. By comprehensively understanding the fundamental principles, regulatory structures, and optimal data protection methodologies, institutions can efficiently fortify their data and uphold the confidence of their clientele and users.

Theme 3: Empowering Efficiency and Transparency: Unveiling the Advantages of EBudget Systems.

In the current era of digital technology, the traditional method of budgeting using paper is becoming inefficient and ineffective for businesses. eBudget systems enable secure and streamlined efficiency and transparency transactions within the finance section of the DPWH Surigao Del Norte Province. By integrating the budget system, the finance department can now centralize its budget transactions, and they can trace the budget allocations on time, enhance the efficiency of its work, generate reports in real-time, enforce data-driven decision-making, speed up and simplify transactions, boost productivity, and improve its workflow by enforcing budget rules and controls.

Category 1: Operational Efficiency and Transparency

The launch of the e-budget system in DPWH Surigao del Norte has been successful. It has provided several benefits and advantages regarding the agency's operational efficiency and transparency. It simplifies employees' tasks by allowing them to conveniently access their transaction records in real time, especially when someone requires their report. The technology **improves the financial accountability and efficiency of the agencies by providing precise data reporting** and enables them to generate data within the system. As to my informants:

“E_{13-14,17...} These systems effectively guarantee the accuracy and reliability of reports used for financial and budgetary purposes. The improvements in reporting have led to more pertinent and precise reports, ensuring that the presented data is accurate and relevant to the financial and budgetary context.

Implementing both systems has notably enhanced the speed and precision of reporting, thereby contributing to informed decision-making processes."

According to Mynenko, S. V., and Liulov, O. V. (2022), the sources of revenue, articles, and methods of budget expenditures must be transparent. Execution of digital services. These objectives are anticipated to enhance the transparency and openness of data, bolster public trust in the institutions of the public financial management system, and enhance the quality of public and administrative services.

Category 2: Financial Optimization

Through the eBudget system, the DPWH Surigao del Province has various strategies to effectively use its financial resources that align with the agency's goals and objectives. It also **streamlines administrative tasks and fosters transparency with system accessibility**. According to my source:

"**D**₂₄₋₂₇...This E budget, on the other hand, only requires printing, signing, and being ready. One noteworthy accomplishment is efficiency. For instance, an engineer may inquire about the project's budget or funding, and in response, you may search the system, and it will answer the question. In terms of financial openness, the majority of us have an account in the budget system."

The budget system enhances the performance of the DPWH agency in monitoring, allocating funds, and making decisions. DPWH budget section **streamlines compliance and task completion with the system's efficiency**.

"**C**_{31-32,34-36}...Thus, using the system makes work Compliance very simple. This is remarkable as, in contrast to our prior experiences, the task assigned allows us to deliver our work on time and with less burden. Moreover, we can quickly fix it if there is a small mistake. It makes a big difference since, in certain cases, when our supervisor asks or tells us about the AC or absorptive capacity, it is simple to adjust. I can then calculate the appropriation amount compared to obligations and see the absorptive capacity there."

"**E**₁₈...Key achievements include the marked improvement in daily reporting accuracy and the increased data reliability."

The e-budget system impacted the goal of the DPWH agency to provide and manage quality infrastructure facilities and services responsive to the needs of the Filipino people in the pursuit of national development objectives. The system helps the agency to develop a strategy for **enhancing its financial operations efficiency and decision-making**. They shared that:

"**B**_{36,50,52}...The accounting and budget sections benefit greatly from using EN Gas and E Budget. Because we must adhere to the deadlines, the long-term benefit of the EN gas and E budgets is that they are processed on time. That is the benefit of the EN gas and E budget system—that is, it is easy to track the funds to see if they are accounted for."

A budget system saves not only the time and resources of the agency but also promotes enhanced communication and decision-making throughout the organization. Hakim et al. (2021) contend that implementing an E-Budget system enhanced the caliber of public budgeting services, promoted transparency, reduced administrative expenses, and empowered stakeholders in the budget and governance implementation processes. By utilizing the E-Budget system, stakeholders can benefit from increased efficiency in cost management and transparency of reports while also being empowered as users. E-budgeting is an online-based financial system that provides all parties with complete and transparent access to its data.

Electronic New Government Accounting System (engages)

Theme 1: Optimizing financial Management: Leveraging ENGAS for Enhanced Reporting, Analysis, and Operational efficiency

Accounting departments are crucial in achieving success in the business world. They deal with a wide range of transactions, like holding all the records of cash transactions, revenue, expenses, payables, receivables, creditors, journal entries, financial reports, and more. Employing an accounting system improves financial management regarding reporting, analysis, decision-making, and operational efficiency. Businesses adopt technology innovation to compete and survive in this digital era.

Category 1: Financial Automation

Financial automation enhances the DPWH Surigao del Norte accounting section's transactions and process flow. As a result of the user-friendly system, ENGAS improves the accuracy and efficiency of its financial records and gains insightful information that enables it to make more informed financial decisions. In terms of their accounting processes, they can effortlessly transact the accounting journal entry voucher, reconcile bank accounts, check the general ledger, provide real-time updated reports, detect errors or variances in the transaction, and able for them to plan and analyze their financial status. As stated by my informants:

“A1.6...The ENGAS system has an easy-to-use setup process allows you to quickly encode, set up, query, and search through older files. All that needs to be done regarding the E budget is to encode the obligation requests, which are very easy to use. It does not take much time and is quite simple.”

The process of manually creating reports, prone to errors and discrepancies, has been transformed into an automated accounting system incorporating integrated error detection and validation. The data is also secured, can be retrieved, and is easy to use and navigate. Implementing the ENGAS system in DPWH's finance department improves record precision and creates an **efficient financial management system** that produces timely reports needed by management. The My informants said that:

“A2.4.7...Finding everything you are looking for is simple. It is quite easy to generate the trial balance and payroll while computing balances or anything else. It is the same with the E budget since it simply prepares the financial commitments and allocations. It is quite simple to use and navigate, particularly in trial balance and FS. I do not need to carry it out by hand. It is easy to generate everything. If we use JEV, the transaction will likewise repeat, and the procedure will be repeated.”

For every business to effectively manage its finances, replacing its antiquated accounting system with a multifunctional automated accounting process is necessary. The management should select software that meets the client's requirements and enables the organization to monitor all financial transactions efficiently and straightforwardly. According to Sharma (2023), integrating accounting functionalities within software necessitates astute judgment and domain expertise regarding what is essential and what is discretionary to fulfill the organization's objectives. It should be user-friendly, capable of recording all financial transactions, handling rapid updates, ensuring transaction security and transparency, and providing real-time updated reports that are easy to access and analyze.

Category 2: Optimizing Financial Accountability

Using an eNGAS system, the accounting department of DPWH Surigao del Norte has established a robust internal control mechanism. This system ensures the protection of their records and the accuracy of their financial data, thereby maintaining transparency in the accounting department. They developed policies and procedures that serve as their guide to effectively managing their financial resources. The system also offers **efficient reporting that is both accurate and timely**. My informants shared that:

“**B**_{12,14,17,25,27}...ENGas is now responsible for checking that our templates are placed in the correct account. eNGAS can produce reports quarterly, monthly, or throughout the reporting period. Next, my responsibility as a system user is to verify that everything is accurate. The system generates results quickly, which makes my work easier. However, that is a necessary step in the eNGAS process, so all the information is correct and well-examined. It is more appealing; I can say that! Particularly with reports, where I am positive that the procedure is simple and that all of the system's information is accurate “**I**₁₄₋₁₅...Regarding reporting, the process has become notably simpler as all data is inputted into the system, enabling the rapid generation of reports as needed. The system facilitates quick production of required files, ensuring prompt compliance with report deadlines.”

The DPWH Surigao del Norte Province previously employed a manual approach for all their transactions before implementing the gas system. According to them, they experienced consistent delays during such periods, and retrieving their data is time-consuming and susceptible to errors. Nevertheless, through implementing eNGAS accessibility, finance employees can now **effortlessly retrieve their transactions and promptly use the system**. Informants said:

“**A**₁₆₋₁₇...In a manner that makes finding the files, I require simple. When our head wants a file or paper regarding the balances, for instance, with the system's assistance, I can locate the precise document.”

“**H**₂₂₋₂₃...If they request any data, we can promptly provide it to them. Whatever data they need, we can give it to them immediately.”

Using eNGAS has significantly **enhanced financial management efficiency** within the DPWH finance department. They can now pinpoint specific repetitive jobs for resolution and accurately assess locations with high error rates. Their productivity is also boosted, and they efficiently execute and generate transactions within the designated timeframe. The informants shared that:

“**B**_{16,18,20,21,23,24}...For this reason, we occasionally truly need to assess and, if needed, make adjustments. Indeed, if we choose to handle it manually, as expected, payment vouchers are the procedure, so in that case, there is a delay. However, since the EN gas and E budgets are automatic, they truly are a part of our everyday activities. For example, we must first enter the data into the EN system before the distribution procedure can begin, and it is just a quick procedure. We cannot be certain that we entered everything if it is manual. There are occasions when it has already been paid out but is not listed in the manual approach.”

The implementation of eNGAS significantly **enhances the accuracy and accountability of financial operations** within the DPWH finance department. The DPWH finance department can effortlessly produce and submit a real-time report, ensuring timely submission. They said that:

“**A**_{5,8}...As an accounting clerk, I think I can encode journals and e-vouchers, disbursing, and other tasks assigned to me. It is just copying and pasting with that system, but I must carefully check it.”

“**B**_{13,15}...Therefore, I am responsible for verifying everything is correct and accounted for when evaluating. ENGas can produce reports quarterly, monthly, or throughout the reporting period. Next, it is my responsibility as a sys.

Edgardo Jr., M. et al. state that implementing the Electronic New Government Accounting System (e-NGAS) enabled a streamlined and enhanced process for managing financial data. E-NGAS facilitates daily transactions and generates reports for employees. This software efficiently generates trial balances, financial statements, and accounts receivable and payable schedules by personnel. The data produced is not only timely but also accurate and comprehensively documented.

Through the facilitation of a unified and integrated database, this system improves the quality of financial reports. It offers decision-making support to the organization, thus enabling a holistic understanding of its operations. e-NGAS further enhances the precision and effectiveness of routine transactions and reporting procedures by simplifying government accounting, verifying adherence to global accounting norms, and periodically generating relevant financial reports.

Also, according to Boban, M., and Šušak, T. (2015), one of the essential functions of accounting information systems is to support decision-making at all organizational levels within a local government unit because it provides relevant information that is significant in financial transactions.

Theme 2: Overcoming Financial Hurdles: Adapting to Budgeting Setbacks and ENGAS Implementation Challenges

It is unavoidable that financial failures and operational challenges will be faced when implementing an accounting system, especially for small businesses. Nevertheless, strategies and a proactive approach are necessary to overcome these hurdles and achieve your financial goals. The challenges are not hindrances to the DPWH finance department in implementing the eNGAS, as they aim to have a better system that makes their work efficient and provides accuracy and transparency. For them, continuous monitoring of the transactions, adaptation of the new learnings, and commitment to improvement are their secret to success in financial budgeting and ENGAS utilization.

Category 1: Operational Hurdles

Trials always precede the successful implementation of a system. The launch of eNGAS brought this experience to the DPWH finance staff. Among the many operational challenges they encountered at first were the migration data from manual reports in the eNGAS, a reliable internet connection, and extended stays in the central office for training and account reconciliation. They experienced a backlog since the internet was not stable at that time and also experienced an error since they were in the learning process using the new system, which caused delays to the transaction.

“**A9-10**...Upon losing the internet connection, I will surely experience problems. The system is linked to our central office; thus, in such a scenario, it will likewise stop working.”

The DPWH agency, with the support of the management, team, COA, and DPWH regional and central offices, has been formulating a comprehensive strategy to **address all challenges** encountered during the integration of the eNGAS. The central office finance section at DPWH assists the Surigao del Norte finance staff in balancing the reports, particularly the premium accounts they struggle to balance. They must visit the DPWH's central office to settle and balance the accounts and bring their transaction vouchers. The DPWH staff gradually learned and adjusted the method until they successfully incorporated the eNGAS, facilitating their entire finance process. To ensure accuracy and reliability, the transaction maker meticulously entered the transaction into the system and ensured the approver double-checked it before acceptance. My informants said that:

“**B31-32**...Even EN gas depreciates over time, so occasionally, we need to verify or double-check for errors. Errors may potentially go undetected by EN Gas, in which case the user or us as the system operators are ultimately responsible.”

Finally, the DPWH Surigao Del Norte created guidelines to ensure that their IT staff always performed and had backups of transactions to address the system challenges. My informants also shared that:

“**A11-15**...We will thus contact an IT specialist to address the matter if it is simple. Next, our central office will receive a file backup from IT. We wait for a solution; thus, we cannot use the system in such a scenario. The only thing we can do is wait for any updates from our central office. Like the Ebudget

system, this will present the same challenges and may potentially lead to similar issues that we face with the ENgas system."

"**B33-35**...Through checking in detail. We must make any necessary adjustments if needed. If we closely examine the system after it has been generated, we can identify any problems, as they will show as negative. To be certain of the things we performed, we must verify whether a system generated them."

"**E16**...We promptly addressed these challenges by implementing necessary adjustments directly within the systems, ensuring smoother functioning and resolution of the identified issues."

Before government agencies fully utilized e-NGAS, they encountered challenges during its implementation. It includes the lack of communication, the absence of support from upper management, insufficient training, limited resources, work-related inconveniences, required job and skill adjustments for employees, the communication process, habitual seeking and ignorance, system errors, and data privacy, according to Navarro et al. (2023). Nevertheless, to overcome the challenges encountered throughout the e-NGAS implementation, the organization evaluated the procedure with an emphasis on and acknowledgment of the employees' requirements. The organization improved its capabilities by providing the necessary software, facilitating communication with the system developer for inquiries, and enrolling in seminars and training sessions about the system (Mauricio J. et al., 2023; Ornedo et al.). Furthermore, they acknowledged the Commission on Audit's need to enhance the e-NGAS system.

Theme 3: Unlocking Efficiency and Transparency: Maximizing Benefits Through ENGAS Integration.

Companies that rely primarily on eNGAS must optimize resource management in today's competitive business environment. ENGAS offers a better solution and excels when integrated with other corporate systems. This integrated method enables previously unheard-of productivity levels, openness, and data-driven decision-making.

The integration of eNGAS unlocks the efficiency and transparency of the financial management of the DPWH Surigao del Norte province. The system streamlines their operations, enhances the visibility of their data, heightens the transparency and accuracy of their transactions, generates reports in real-time, strengthens fiscal transparency, and avoids government corruption.

Category 1: Financial Efficiency and Transparency

eNGAS offers advantages and benefits to the DPWH agency and other agencies using the system. Among these are financial efficiency and transparency, which **ensure accurate and reliable financial reports** for the organization. It saves time and money for the agency by automating repetitive tasks and reducing transactional errors. Informants shared that:

"**E13-14**...These systems effectively guarantee the accuracy and reliability of reports used for financial and budgetary purposes. The improvements in reporting have led to more pertinent and precise reports, ensuring that the presented data is accurate and relevant to the financial and budgetary context."

"**H9,13**...However, the main point is that the system's work is correct or accurate once you input the correct information. However, there are still errors in ENgas, but they are minimal, so they need to be checked." The eNGAS also **enhanced** transparency and efficiency through real-time access to data. They need not worry if someone asks them to submit a report. They can easily reconcile and check transactions. It also boosts the confidence and credibility of the finance department by increasing the comprehensiveness and transparency of information that supports data-driven decision-making. Thus, tracking and retrieving financial transactions is easy for them. My informants shared that:

“A_{27,28,32,34}... Yes, each time there is an update, the central office notifies us to prepare and tells us when a fund needs to be added to the system. It is transparent, yes, ma'am. They are easy to locate because there is a record of the transactions or disbursements. Every transaction is documented, along with the amount of any outstanding balances. Reporting is done quickly and efficiently.”

According to Edgardo Jr., M. A. et al., computerized accounting systems help agencies record, categorize, compute, and transmit financial data, leading them to make good decisions. Also, according to Murungi and Kayigamba (2015), implementing an accounting system enhanced financial reporting performance, improved the speed and quality of reports, streamlined transaction publishing processes, and enhanced accuracy and efficiency in record keeping.

Category 2: Operational Efficiency

Electronic new government accounting systems (eNGAS) increase operational effectiveness among government agencies. By automating activities, boosting data accuracy, and increasing transparency, eNGAS has the potential to transform public sector financial management completely. Compared to manual processes, the **system guarantees** accurate and reliable data, therefore really streamlining processes of the DPWH financial department. Informants shared that:

“H_{12,24-27}... There is a significant improvement; if we assess it, the improvement compared to manual processes is immense. There have not been any awards, but the notable aspect for me is the system's generation process. It undeniably makes our job easier, despite occasional errors, which are minimal. The fact that it operates smoothly and provides what we need on time is truly remarkable. It is like each employee has an easier time because they have specific tasks assigned to them.”

“I₂₆₋₃₀... Its ability to function smoothly and provide timely output is remarkable. Employees find their tasks more manageable as they are assigned specific responsibilities. For instance, if someone handles payroll, their primary focus is solely on payroll-related tasks. The precision of data holds significant importance as it directly impacts the reliability of the information we furnish to management. Accurate data empowers management to make well-informed decisions.”

In today's fast-paced world, achieving seamless financial management is crucial for individuals and businesses. It is about getting things done quickly and ensuring the information you are working with is reliable. Not only does eNGAS streamline the operations of the DPWH finance department, but it also **maximizes efficiency and accuracy with seamless financial management**. It provides a roadmap for the agency's financial decisions. By implementing these strategies and leveraging the power of technology, the DPWH agency achieved seamless financial management. By integrating the e-NGAS, the agency benefited from greater efficiency in financial management, improved decision-making, and, ultimately, a stronger financial future. My informants shared that:

“A₃₆₋₃₇... This is because transactions are created and categorized by the system. In particular, if there will be FS, if we complete it by hand, it will take nearly a year, but with EN gas, everything happens quickly.”

Lastly, within government organizations, eNGAS is essential to empowering financial staff. eNGAS offers effective processes, quick data access, and enhanced analytical tools. Thus, it enables finance professionals to make well-informed choices that benefit the government's financial management and the people it serves. eNGAS is a friendly user that finance staff members with different technical backgrounds can easily use. Also, eNGAS promotes cooperation amongst several divisions within the government organization. Better communication and coordinated decision-making result from this.

Because eNGAS offers standardized reporting and easily accessible electronic information, auditing is made easier. In audits, this lessens the workload for financial staff. Informants shared that:

“A₃₅...Everything is handled expertly when it comes to our records.”

“B_{42,45-49}...We can see our work in the system with our heads. Because we have a deadline to meet, it has favorably impacted us. In this instance, the system's overall performance has made our work easier and more enjoyable. Making financial judgments is crucial, particularly when we are requesting money. If it is truly needed, we must give it out immediately. This way, if our heads convene a meeting, they can easily make decisions because all the information is readily available and personally given.”

Most businesses in the business world today have installed a newly improved accounting system to help them run their businesses and monitor their financial transactions. The system implementation has played a significant role in enabling an easy and faster way of generating reports, processing, and storing financial information. The use of accounting procedures and the method to prepare and transfer financial statements has made it easier to use the system, according to Kharuddin et al. (2010).

As stated by Dacosta (2012), cited by Edgardo Jr., M. Andres, et al., computerized accounting systems can help businesses save time and money. It simplifies the process of entering accounting data. The system processes and posts transactions after they are entered into the system. Accounting software expedites and ensures that financial reports are produced on time. This functionality empowers managers to promptly recognize and resolve issues and make decisions grounded in evidence across multiple agency departments. Additionally, a computerized accounting system facilitates the instantaneous accessibility of data and its simultaneous distribution to users situated in various locations, thereby allowing for the completion of reports at any given moment.

The global theme emerged by analyzing the essence of the three evolving themes: Navigating the Digital Frontier and revolutionizing Financial Management with Resilience, Efficiency, and Transparency. These themes highlight how eBudget technology has revolutionized the financial management procedures of the DPWH. Using digital technology improves accuracy and productivity in operations, and conquering obstacles shows tenacity and flexibility. In the end, putting these procedures into place promotes transparency and efficiency, improving resource distribution, compliance, and public confidence. These realizations highlight how essential digital solutions are to modernizing public sector financial management.

The global theme emerged by analyzing the essence of the three evolving themes: Empowering Financial Transformation, Maximizing eNGAS Integration for Efficiency, Resilience, and Transparency. These themes emphasize how eNGAS has revolutionized the financial management procedures of the DPWH. The department may streamline its financial procedures using eNGAS for improved reporting, analysis, and operational effectiveness. Overcoming financial obstacles and implementation difficulties demonstrates resilience and flexibility, ensuring a successful system integration. Ultimately, the complete integration of eNGAS optimizes advantages and reveals notable gains in resource management, efficiency, and transparency. These observations emphasize how essential digital platforms are to improving general organizational effectiveness and upgrading public sector finance management.

IV-GENERALIZATION, IMPLICATIONS, AND REFLECTION

Generalization

The study "eNGAS and eBudget Systems: Lived Experiences of DPWH Finance Personnel of Surigao del Norte" provides an in-depth look at the transition from manual to electronic financial systems within the

DPWH. Key findings include the significant operational efficiency gained through the automation of repetitive tasks, allowing finance staff to focus on more strategic activities. Digital technology has enhanced the accuracy and integrity of financial data by reducing human error, leading to fewer transaction and reporting errors. This has supported better decision-making and ensured reliable financial records. The eNGAS and eBudget systems have also improved financial management accountability and transparency, with real-time data access and detailed audit trails aiding in internal audits and regulatory compliance. This technology has enabled efficient resource distribution and financial planning, resulting in better budget management. The transition to digital systems presented challenges, such as a high learning curve, technological difficulties, and resistance to change, which were mitigated through effective change management, ongoing training, and robust technical support. Adopting these systems has advanced the professional capabilities of finance staff by improving their technical skills and understanding of modern financial systems. The availability of accurate and timely financial data has facilitated more strategic and informed decision-making, enhancing overall organizational performance and aligning financial control with company objectives.

Implications of the Study

This study identified several critical implications for the financial staff at DPWH Surigao del Norte regarding their experiences with the eBudget system and eNGAS implementation:

DPWH Administrators. The success of these systems highlights the importance of embracing technological advancements in financial management. Administrators should invest in digital solutions, foster a culture of innovation, and provide support for adopting new technologies. They must prioritize building resilient systems to overcome implementation challenges, enhancing financial transparency, efficiency, and accountability.

DPWH Finance Personnel, The study underscores the need for adaptability and resilience in managing system implementation complexities. Ongoing training and capacity-building initiatives are necessary to enhance technical skills and knowledge of digital tools. Finance personnel should prioritize data protection and regulatory compliance to maintain financial information integrity. By effectively leveraging technology, finance personnel can streamline processes, improve reporting accuracy, and enhance decision-making capabilities.

Future Researchers. The study's findings serve as a reference for future research on implementing finance systems. Governments can enhance financial management efficiency, transparency, and accountability by improving systems, reevaluating policies, and involving stakeholders. Future researchers can build on these findings, exploring new areas and technologies to enhance the capabilities and impacts of eBudget systems and eNGAS, leading to better public service outcomes and a more knowledgeable government.

Reflections

The study on the eBudget system and eNGAS, based on the experiences of nine finance department employees at DPWH in Surigao del Norte, revealed that implementing these systems was challenging but beneficial. Despite obstacles, resilience among staff and support systems led to success. The implementation improved efficiency, accuracy, and precision in financial operations and reporting, reducing human errors and streamlining workflows. These systems enhanced decision-making, transparency, and public confidence in government financial management. The research underscored the importance of effective execution, user support, and continuous technological enhancement to maximize the benefits of eBudget and eNGAS in public financial management.

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