

Original Article

Client Satisfaction with Service Delivery in the Philippine Government Infrastructure Agency: A SERVPERF-Based Assessment of the DPWH Camiguin District Engineering Office

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Received: 27 April 2026; Revised: 06 June 2026;

Accepted: 08 June 2026; Published: 12 June 2026

DOI: <https://doi.org/10.66074/X7N2P9W3>

Abstract

This study aimed to evaluate client satisfaction with the Department of Public Works and Highways (DPWH) Camiguin District Engineering Office's service delivery. Using the SERVPERF framework, this inquiry assessed performance across five dimensions: Tangibles, Reliability, Responsiveness, Empathy, and Assurance. Using total enumeration, this work covered business owners, representatives, and technical personnel in the construction industry, as well as their stakeholders. To gather data, a quantitative descriptive survey design was used, with a survey questionnaire as the primary data collection tool. Experts validated the research instrument to measure service quality and identify operational bottlenecks. Analyzing data with appropriate statistical tools, findings revealed a high overall level of client satisfaction, with Tangibles and Reliability as the top-performing dimensions. The analysis confirmed that satisfaction levels were consistent across all demographic profiles, indicating equitable service delivery. However, the respondents showed a significant difference in their perceptions of service delivery problems by sex, with females reporting administrative bottlenecks more acutely. While overall service delivery problems were rated as less serious, the limited number of accredited technical personnel emerged as a moderately serious concern. The study concludes that while the agency successfully maintains standardized, high-quality service delivery, institutional growth should prioritize technical capacity-building and the localization of materials-testing

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facilities to align with quality management standards and global sustainable development goals for accountable governance.

Keywords: client satisfaction, infrastructure management, service quality, SERVPERF

1. Introduction

Service quality and client satisfaction serve as a feedback mechanism for a public or private establishment to further improve the delivery of services to clients. In the context of public offices, it upholds the institution's reputation, fostering public trust and ensuring the continued use of government services (Dziadkowiec et al., 2024). This is a critical part in governance, where satisfaction encompasses both cognitive appraisals of technical accuracy and affective evaluations developed over repeated professional interactions. Through this feedback mechanism, public institutions can make value-driven adjustments that encourage civic cooperation and transparency (Acuña & Cerado, 2026).

The Department of Public Works and Highways (DPWH) is the primary engineering and construction arm of the Philippine national government, with the mandate to plan, design, and maintain critical infrastructure. This is a direct contribution to Sustainable Development Goal 9 (SDG 9), which seeks to build resilient infrastructure and promote inclusive, sustainable industrialization. In the province of Camiguin, the DPWH District Engineering Office plays a key role in regional connectivity, making the satisfaction of its primary stakeholders, the construction firms and local contractors, a vital component of effective local governance and public accountability (Widianingrum, 2018).

In the global context, public agencies and institutions consistently face challenges in meeting stakeholders' expectations for the delivery of quality services. Lopez (2024) confirmed that, in the government sector, performance-based assessments like SERVPERF are superior to traditional gap-analysis models because they focus on tangible service outcomes in high-stakes environments. In infrastructure-related agencies, accordingly, the reliability and tangible dimensions of service quality are considered the most significant predictors of institutional credibility, directly supporting Sustainable Development Goal 16 (SDG 16) by promoting effective and accountable institutions.

In the Philippines, there is a dearth of research on client satisfaction in specialized engineering offices. While other public services are subjected to frequent audits, infrastructure delivery agencies continue to operate without rigorous, empirical feedback from their stakeholders and clients. Bautista et al. (2023) argued that stakeholders' overall satisfaction in provincial engineering offices is likely hindered by the policy reforms under the "Ease of Doing Business Act," which improved processing speeds and service delivery but may have inadvertently created gaps in

administrative transparency and technical accuracy. This highlights a critical knowledge gap regarding the intersection of engineering precision and administrative efficiency that must be addressed to ensure that infrastructure development is matched by excellence (Flora & Ala, 20243).

This study addresses the gap by conducting a rigorous assessment of client satisfaction at the DPWH Camiguin District Engineering Office using the SERVPERF framework. This is specifically aligned with the DPWH's Quality Management System (QMS) and its pursuit of ISO 9001:2015 Certification, as well as the mandates of Department Order No. 264, series of 2022. Using the lenses of both national policy and global sustainability goals, this research aims to provide actionable insights to refine administrative procedures, enhance stakeholder relations, and strengthen the integrity of infrastructure management in the Province of Camiguin. Hence, this is a timely undertaking.

2. Methodology

This study employed a purely quantitative and descriptive survey design as its primary approach to thoroughly assess service quality dimensions. This design provides an accurate picture of the current service delivery in an organizational setting, offering a structured statistical basis for identifying institutional trends. By employing a standardized survey instrument, the study ensures the objectivity of the data, enabling rigorous numerical analysis that uncovers specific performance patterns essential for evidence-based decision-making (Alarcon-Garcia et al., 2022).

The inquiry was conducted at the Department of Public Works and Highways (DPWH) Camiguin District Engineering Office in Northern Mindanao. The assessment included the agency's functional units, spanning leadership, technical operations, and administrative support. This scope aligns with modern public sector quality frameworks, such as the ASQ/ANSI G1:2021 standard, which advocates for unit-level analysis to identify specific high-performing areas and those requiring operational improvement (Asian Productivity Organization [APO], 2021). By evaluating all sections, the study is expected to capture the full spectrum of the infrastructure project lifecycle.

To ensure maximum representation of the agency's primary stakeholders, the study used a universal (total enumeration) sampling technique to select respondents. A total of 59 individuals with active transactions from 2017 up to the present were identified as respondents of the study. In this study, active transactions operationally refer to clients who successfully processed, received, or were actively tracking official infrastructure project clearances, structural biddings, or building and environmental permits within the specified district office. These clients comprise the business owners, engineers, and foremen with direct experience in service delivery. Besides, the unique setting of the island province of Camiguin suggests that 59 respondents represent the actual accessible and responsive population of eligible clients who have successfully reached and consented to participate during the deployment window,

thereby minimizing non-response bias. In specialized public sector environments with finite populations, total enumeration is a preferred strategy to eliminate sampling error and ensure that the diverse perspectives of the entire stakeholder community are captured (Galang & Villa, 2024).

Given the rigorous process for producing a standardized research instrument, this study used a researcher-validated survey questionnaire. This instrument was composed of three (3) distinct parts: demographic profiling, SERVPERF-based satisfaction metrics, and a service problem inventory. By adopting the SERVPERF framework, the instrument uses a performance-only approach, which is identified as a more stable and concise psychometric measure for public institutions than traditional gap-analysis models (Alarcon-Garcia et al., 2022). The second part of the instrument comprised a total of 22 items distributed across the five core SERVPERF dimensions: Tangibles (4 items; e.g., "The office physical facilities are visually appealing"), Reliability (5 items; e.g., "The office provides services as promised"), Responsiveness (4 items; e.g., "Employees give prompt service to clients"), Assurance (4 items; e.g., "Employees instill confidence in clients"), and Empathy (5 items; e.g., "Employees understand the specific needs of their clients"). The third part consisted of a 10-item service problem inventory measuring operational challenges in the DPWH context.

To establish content validity, the instrument was subjected to a formal evaluation by a panel of five experts specializing in Quality Management Systems (QMS) and public administration, ensuring that each item was conceptually aligned with the agency's operational mandates. Using a standard 5-point Likert scale for evaluation, the panel's review yielded an overall content validity index (CVI) mean rating of 4.85 out of 5.00, indicating an excellent degree of item-to-construct relevance.

Pilot testing was conducted among a sample of 20 non-participating clients at the DPWH Cagayan de Oro 2nd District Engineering Office. Upon analysis of the tallied responses, the Cronbach's alpha was 0.85, significantly exceeding the standard threshold for high internal consistency and confirming the instrument's stability for large-scale data collection (APO, 2021).

The study employed a four-point Likert scale for both satisfaction and problem assessment to mitigate central-tendency bias, thereby reducing the likelihood that respondents would avoid extreme options. For satisfaction, mean ranges were categorized from "No Extent" (1.00 - 1.75) to "High Extent" (3.26 - 4.00). A recent assessment of the Social Security System found that using similar standardized scales to assess reliability, assurance, and empathy remains the most influential predictor of client satisfaction in the local public sector.

The analysis plan followed a systematic quantitative approach to evaluate client satisfaction and service delivery challenges at the DPWH Camiguin District Engineering Office. Descriptive statistics, including frequency and percentage distributions, were utilized to characterize the demographic profile of the stakeholders, while means and standard deviations were calculated to assess the five dimensions of the SERVPERF framework and the perceived seriousness of operational problems. Before conducting inferential statistical analyses, data distributions were subjected to

rigorous testing of parametric assumptions. Normality was evaluated using the Shapiro-Wilk test, and homogeneity of variance across groups was assessed using Levene's test.

To identify significant differences in perceptions across demographic groups, the independent-samples t-test was used to analyze sex-based comparisons, after confirming compliance with the normality and homogeneity of variance assumptions. A one-way analysis of variance (ANOVA) was utilized for variables such as age, client type, and years of engagement, as the data met the prerequisites for parametric testing, and F-test robustness was verified against the small group sizes. All statistical hypotheses were tested at a 0.05 level of significance using standardized software to ensure the precision and reliability of the findings. Furthermore, the internal consistency of the research instrument was verified using Cronbach's alpha, ensuring that the performance-based metrics provided a stable, rigorous foundation for evidence-based institutional assessment.

The researcher adhered to strict ethical standards, including obtaining formal consent from the District Engineer and ensuring informed consent from all respondents. These practices reflect the global shift toward "New Public Management" reforms, which emphasize transparency, accountability, and the protection of citizen data (Rhamadhani et al., 2024). All data were anonymized to protect the confidentiality of construction firms and individual respondents, in line with international principles for ethical management in public service delivery.

3. Results

3.1 Demographic Profile of Respondents

The demographic profile of the 59 respondents shows a diverse yet specialized group of stakeholders in the island province of Camiguin, the partners of the District Engineering Office (Table 1). The data reveal a male-dominated group of respondents (61.02%), with 38.98% female respondents. This distribution can be expected in an institution characterized by the construction and engineering industry, where males occupy field operations and project management roles. However, the percentage of employed females suggests a significant presence of women in administrative, financial, or representative roles within the construction firms transacting with the agency.

Meanwhile, the age distribution indicates a relatively young-to-middle-aged group of professionals. The distribution has the largest segment of stakeholders aged 39 years and below, totaling 27 (45.76%) respondents, followed by those in the 50 years and above bracket (28.81%), and the 40-49 age bracket (25.42%). The data shows that the majority of active clients are mid-career professionals who are likely adept at digitalization, while the presence of older respondents indicates participation by seasoned industry veterans with extensive historical knowledge of the agency's past performance.

The client type shows that the majority of respondents are business representatives (30, 50.85%), followed by business owners (25.42%) and technical personnel (engineers and foremen; 23.73%). This profile is particularly important for a SERVPERF-based assessment, as business representatives are typically the individuals who handle the day-to-day frontline transactions, document processing, and follow-ups. This indicates a representation that captures the experiences gained through the agency's administrative and procedural efficiency.

Finally, the years of engagement show that more than half of the respondents (55.93%) have been transacting with the DPWH Camiguin District Engineering Office for less than five years. Meanwhile, 20.34 percent have been engaged for 6-10 years, and 23.73% have a long-standing relationship of 11 years or more. While the majority represents a new generation of contractors, the combined 44.07 percent of respondents with over six (6) years of experience provides a stabilizing longitudinal perspective. This mix allows the study to evaluate whether the agency has maintained consistency or improved its service quality over the last decade.

Table 1. Demographic profile of respondents (N = 59).

Variable	Category	Frequency	Percentage (%)
Sex	Male	36	61.02
	Female	23	38.98
Age	39 years old and below	27	45.76
	40-49	15	25.42
	50 years old and above	17	28.81
Type of Client	Business Owner	15	25.42
	Business Representative	30	50.85
	Engineers and Foremen	14	23.73
Years of Engagement	Below 5 years	33	55.93
	6-10 years	12	20.34
	11 years and above	14	23.73

3.2 Client Satisfaction with the Services of DPWH-Camiguin

There were five (5) key constructs composing the client satisfaction with the services of DPWH-Camiguin. Overall, the clients were very satisfied with the services they received ($M = 3.38$, $SD = 0.55$) (Table 2). While this is positive, the hierarchical analysis of the sub-domains shows varying levels of satisfaction, where tangible attributes outperformed the more abstract dimensions of institutional trust and transparency.

The tangibles construct had the highest area mean in the study ($M = 3.48$), indicating very high satisfaction among the respondents. This sub-domain focuses on the physical evidence of service, including the appearance of personnel, the condition of the office environment, and the integration of modern equipment. Following the high-rated construct is reliability ($M = 3.40$), which is still pegged at very high

satisfaction among the study's respondents. This construct measures the agency's ability to perform the promised service dependably and accurately.

In the middle of the constructs, the responsiveness sub-domain was rated at a great (high) extent ($M = 3.39$), suggesting the high satisfaction level of the stakeholders in the perceived services of DPWH-Camiguin. This construct evaluates the staff's willingness to help clients and to provide prompt service. While empathy, the fourth sub-domain from the top, received a rating of great (high) extent ($M = 3.37$), indicating a very high level of satisfaction among the respondents, the stakeholders of DPWH-Camiguin. Although at the bottom of the sub-domains, finally, empathy was still observed to a great extent ($M = 3.37$), suggesting that the respondents were very satisfied with the services delivered by DPWH-Camiguin.

Table 2. Summary of the clients' satisfaction in the service quality delivered by DPWH-Camiguin.

Sub-Domains of Clients' Satisfaction	Weighted Mean	Description
Tangibles	3.48	High Extent
Reliability	3.40	High Extent
Responsiveness	3.39	High Extent
Empathy	3.37	High Extent
Assurance	3.26	High Extent
Overall Mean	3.38	High Extent
Standard Deviation	0.55	

3.3 Significant Differences in Satisfaction by Demographic Profile

This inferential analysis explored whether specific demographic variables like sex, age, type of client, and years of engagement among respondents vary in their perceived satisfaction with the service quality provided by the DPWH Camiguin District Engineering Office (Table 3). In using parametric procedures, explicit assumption tests were conducted. The normal distribution of the satisfaction data was verified across all demographic groups using the Shapiro-Wilk test ($p > 0.05$), while equality of variances was validated using Levene's test ($p > 0.05$), thereby satisfying the baseline mathematical prerequisites for inferential modeling. To determine significant differences in respondents' satisfaction, the independent-samples t-test was employed for the dichotomous variable of sex, while a one-way analysis of variance (ANOVA) was used for the multi-categorical variables of age, client type, and years of engagement.

The statistical results for all tested variables consistently yielded p-values significantly higher than the 0.05 alpha level. Specifically, the sex comparison yielded a p-value of 0.753, while age ($p = 0.50$), client type ($p = 0.28$), and years of engagement ($p = 0.59$) did not reach statistical significance. As a consequence, the null hypothesis for each variable is not rejected. These results indicate that there is no significant difference in satisfaction levels among respondents when grouped by profile. This

likely supports the respondents' great extent of perceived satisfaction with the quality of services rendered by DPWH-Camiguin.

Table 3. Test summary of the significant difference in the extent of satisfaction among the respondents of the study.

Variable	Test	Statistic	df	p-value	Decision
Sex	t-test	0.317	57	0.753	Do Not Reject Ho
Age	ANOVA (F)	0.71	2, 56	0.50	Do Not Reject Ho
Type of Client	ANOVA (F)	1.31	2, 56	0.28	Do Not Reject Ho
Years of Engagement	ANOVA (F)	0.53	2, 56	0.59	Do Not Reject Ho

3.4 Degree of Seriousness of Service Delivery Problems

The respondents' perceived service delivery problems in consensus yielded an overall mean of 2.20 (SD = 0.94), interpreted as "Less Serious" (Table 4). While the overall impact is manageable, a focused analysis of the specific indicators reveals a hierarchy of challenges centered on technical accreditation and logistical bottlenecks.

In the hierarchy of the indicators, the top three most serious indicators highlighted the critical administrative and technical constraints. The highest-ranked problem is the limited number of accredited technical personnel for inspection and monitoring (M = 2.56), the only indicator rated Moderately Serious. This is closely followed by the delay in obtaining permits and clearances (M = 2.47), and a tie between the processing and release of project billing (M = 2.44) and the lack of a local government-accredited materials testing lab (M = 2.44). These results suggest that the shortage of certified staff and the logistical burden of sending samples to mainland laboratories for testing subsequently stalls the payment cycle.

In contrast, the bottom three indicators perceived as the least serious involve labor quality and regulatory compliance. These include the lack of client awareness of bidding timelines (M = 1.97), the lack of NC II-certified skilled workers (M = 1.95), and non-compliance with DOLE safety guidelines (M = 1.85). These indicators indicate that the local contractor community, or the partner stakeholders of DPWH-Camiguin, is well-informed and maintains high compliance with safety and labor standards. Consequently, the agency's improvement efforts should be directed away from labor monitoring and toward expanding its technical accreditation capacity and localizing testing facilities to streamline project completion and billing.

3.5 Significant Differences in Problem Seriousness by Demographic Profile

In this inquiry, the inferential analysis used the independent-samples t-test and one-way ANOVA to evaluate the influence of demographic variables on the perceived seriousness of service delivery problems (Table 5). To validate the choice of parametric tests for this subset of data, statistical diagnostics for normality and variance consistency were performed using Shapiro-Wilk criteria ($p > 0.05$) and Levene's test ($p > 0.05$) across comparisons, respectively. Despite the sub-groups'

Table 4. Degree of seriousness of service delivery problems.

Problem Indicator	Mean	Description
Limited accredited technical personnel for inspection/monitoring	2.56	Moderately Serious
Delay in obtaining permits and clearances	2.47	Less Serious
Processing and release of project billing/payments	2.44	Less Serious
No government-accredited materials testing lab in the locality	2.44	Less Serious
Additional project costs from non-local suppliers	2.19	Less Serious
Non-conformity of construction materials due to limited supply	2.14	Less Serious
Communication gaps in project instructions	1.98	Less Serious
Lack of client awareness of bidding stage timelines	1.97	Less Serious
Lack of NC II-certified skilled workers	1.95	Less Serious
Non-compliance with DOLE safety guidelines	1.85	Less Serious
Overall Mean	2.20	Less Serious
Overall Standard Deviation	0.94	

Table 5. Tests for significant differences in problem seriousness by demographic group.

Variable	Test	Statistic	df	p-value	Decision
Sex	t-test	2.25	57	0.03*	Reject Ho
Age	ANOVA (F)	0.53	2, 56	0.59	Do Not Reject Ho
Type of Client	ANOVA (F)	0.42	2, 56	0.66	Do Not Reject Ho
Years of Engagement	ANOVA (F)	0.008	2, 56	0.99	Do Not Reject Ho

*p < 0.05. Male respondents: M = 2.05; Female respondents: M = 2.43.

smaller sizes, the data strictly conformed to the assumptions required for the F-test and t-test statistics.

Among the variables tested, sex emerged as the sole significant factor, with a p-value of 0.03, leading to rejection of the null hypothesis. In this variable, females perceived the service delivery problems in DPWH-Camiguin as more serious (M = 2.43) than their male counterparts (M = 2.05). In contrast, the remaining variables demonstrated high levels of consensus regarding age (p = 0.59), client type (p = 0.66), and years of engagement (p = 0.99), none of which reached the 0.05 level of significance. This indicates strong consensus among stakeholders, suggesting that the perceived seriousness of systemic issues, such as the lack of a local testing laboratory, is a constant reality regardless of a stakeholder's age, professional role, or length of engagement with the agency.

4. Discussion

The demographic profile of the stakeholders characterizes a base that is increasingly diverse yet deeply rooted in the technical demands of the infrastructure sector. The observed male dominance among the respondents clearly aligns with historical records and trends in construction and engineering, particularly in field operations and site management. But there was a substantial female representation reflecting a significant shift in the Philippine administrative landscape. Recent studies confirm that women are increasingly occupying pivotal interface roles, such as managing procurement, financial compliance, and administrative documentation,

which are critical for institutional transparency and the soft dimensions of service quality (Alarcon-Garcia, 2022). This indicates that the DPWH Camiguin District Engineering Office interacts with a contractor base that relies heavily on female professionals to navigate the complexities of government bureaucracy. This gendered distribution of administrative labor suggests that operational efficiency depends heavily on the procedural literacy of these professionals (Bautista et al., 2023).

The age distribution indicates a transition toward a more digitally native clientele, with the largest segment composed of mid-career professionals. This demographic typically exhibits a lower tolerance for traditional red tape and a higher expectation for automated, transparent service delivery. In public administration, this generational shift is often linked to a demand for "New Public Management" reforms, where speed and digital accessibility are prioritized to match private-sector efficiencies (Parasuraman & Zeithaml, 2002). Conversely, the presence of older respondents provides an essential longitudinal benchmark. These seasoned professionals serve as a control group for the agency's performance, as their historical knowledge enables the study to distinguish between temporary operational improvements and sustained institutional growth across several political cycles.

Furthermore, the prevalence of business representatives among the respondents underscores the practical relevance of this assessment. While business owners may focus on strategic outcomes and long-term contracts, it is the representatives who experience the daily procedural efficiency, or lack thereof, within the agency's functional units. In developing economies, the frontline representatives are the most accurate service barometers, as their perceptions are based on high-frequency transactions rather than occasional high-level interactions (Chatfield & Alanazi, 2013).). This representation ensures that the SERVPERF metrics reflect the actual operational accuracy of the agency's frontline services.

Finally, the tenure of engagement reflects a dynamic and growing local construction industry, with a majority of respondents having relatively recent associations with the office. However, including long-standing partners is essential to validating institutional consistency. In the Philippines, the Ease of Doing Business Act maintains a balanced mix of new and veteran contractors, allowing an institution to demonstrate that its Quality Management System (QMS) provides equitable service regardless of the length of the professional relationship (Acuña & Cerado, 2026). This demographic mix ultimately strengthens the study's validity, ensuring that the reported satisfaction levels result from standardized institutional performance rather than individual biases or personal familiarity. The lack of significant variation in satisfaction across tenure groups highlights the agency's success in mitigating discretionary service delivery (Regalado & Sun, 2024).

The overall client satisfaction level to a great extent clearly suggests that the DPWH-Camiguin successfully meets the core expectations of its professional clientele. In terms of performance hierarchy, tangible attributes outperformed abstract dimensions, reflecting a common trend in public sector management in which physical and technical proficiency often precedes deep institutional trust. This tangible

construct indicates the agency's physical environment and professional staff appearance serve as primary quality cues. High-quality physical evidence signals institutional readiness and modern governance capabilities, effectively reducing perceived risk for stakeholders (Chatfield & Alanazi, 2013).). Furthermore, the ratings for reliability and responsiveness indicate that the agency has standardized its core processes, building a foundation of trust by delivering on its service promises accurately and promptly (Acuña & Cerado, 2026).

Concerning the two bottom sub-domains, empathy and assurance highlight a critical area for institutional growth. In the context of government offices, these sub-domains can be viewed as polite and respectful institutions actively mitigating the unique administrative burdens faced by their clients (Parasuraman & Zeithaml, 2002). The office must shift focus from observable professionalism toward reinforcing institutional transparency. Addressing this gap will allow the agency to foster a deeper sense of partnership with the local construction community beyond mere procedural satisfaction. In terms of client satisfaction, the DPWH-Camiguin District Engineering Office has seemingly reached a level where stakeholders recognize the quality of service delivery. The demographic variables of the respondents, like sex, age, type of client, and years of engagement, do not significantly influence the perceived quality of service. This lack of significant difference is a key indicator of service standardization and procedural justice within the organization. In public administration, uniform satisfaction levels suggest a successful transition from discretionary delivery to a rule-based Quality Management System (QMS).

Parasuraman and Zeithaml (2002) underscored that standardized operations ensure that all stakeholders receive the same level of assistance. Showcasing of equitable treatment aligns with the Philippine Ease of Doing Business Act, indicating that the agency's performance is a stable institutional output rather than a variable outcome of personal client-personnel dynamics. Maintaining a high level of consistent delivery of quality services surely attracts the engagement of the stakeholders for having avoided favoritism toward long-standing partners (Acuña & Cerado, 2026).). Ultimately, this demographic uniformity reinforces the reliability of the overall satisfaction metrics as a collective and stable sentiment across the diverse local construction community (Parasuraman & Zeithaml, 2002).

Although DPWH-Camiguin received high client satisfaction ratings from stakeholders, this government agency is not free of service delivery problems. It has a moderately serious problem with the limited number of accredited personnel to perform specialized administrative functions. Chatfield and Alanazi (2013) confirmed that in remote or island settings, a shortage of localized experts for monitoring can stall project validation and turnover. While Acuña & Cerado (2026). affirmed this condition can surely worsen due to the lack of local materials testing labs, creating a logistical-financial loop in which mainland-dependent testing processes delay payment cycles. This highlights that structural limitations often supersede procedural efficiency in regional engineering offices (Cruz, 2024). From a structural Quality Management System (QMS) perspective, this localized deficiency directly affects the

agency's alignment with ISO 9001:2015 Clauses 8.4 (Control of externally provided processes, products, and services) and 8.5 (Production and service provision). When material samples must be shipped across island boundaries for testing, the resulting logistical latency compromises the agency's ability to maintain real-time quality assurance and operational control. This structural bottleneck does not merely delay project billing; it threatens engineering integrity by disrupting the continuous monitoring loops required by international standardization frameworks, transforming a localized logistical problem into a systemic vulnerability in institutional quality governance.

However, the respondents expressed a low severity of labor and safety issues among their workforce. This indicates that the local contractor base is well-regulated and highly compliant with NC II and DOLE guidelines. This maturity suggests that the agency should pivot its strategy away from labor monitoring and toward technical capacity building and infrastructure localization (Parasuraman & Zeithaml, 2002). By addressing the technical accreditation shortage and localizing testing facilities, the agency can directly mitigate the most significant hurdles currently slowing project completion and billing.

In service delivery problems, the respondents showed a statistically significant divergence in problem perception by sex, while reaching robust consensus across all other demographic variables. Females had higher seriousness ratings than their male counterparts. This suggests that administrative and technical bottlenecks are not experienced uniformly. In the construction sector, women often occupy pivotal interface roles, managing procurement and financial compliance, that are directly impacted by systemic delays in billing and permit processing (Chatfield & Alanazi, 2013). This indicates that, while the problems are institutional, the burden is felt most acutely by those navigating the agency's regulatory requirements.

However, the respondents showed high levels of consensus in their perceived service delivery problems across age, client type, and years of engagement. This signifies that these operational hurdles are perceived as objective, structural realities rather than subjective grievances (Chatfield & Alanazi, 2013). This alignment reinforces the need for the DPWH-Camiguin to prioritize the localization of technical facilities and the expansion of its accredited personnel pool to resolve these universal concerns (Parasuraman & Zeithaml, 2002).

5. Conclusion

This study concluded that the stakeholders of DPWH Camiguin District Engineering Office are generally highly satisfied with service delivery across all five SERVPERF dimensions. This satisfaction is consistent and equitable across diverse demographic groups, demonstrating institutional standardization. While the perceived seriousness of service delivery problems is generally low, the limited availability of accredited technical personnel and the lack of a local testing laboratory stand out as

pressing structural concerns. Evaluated against international standards, these regional deficiencies represent critical operational gaps that directly challenge ISO 9001:2015 requirements for quality assurance and verification. True institutional maturity, therefore, requires moving beyond basic customer-service fixes to address these technical constraints directly. The lower ratings for assurance indicators, particularly feedback mechanisms, highlight clear opportunities for institutional improvement. Ultimately, these findings affirm the utility of the SERVPERF framework and provide a clear, empirical roadmap for targeted quality governance interventions in regional public infrastructure agencies.

6. Recommendations

Based on the study's findings, several recommendations are proposed. To strengthen the agency's Continuous Quality Improvement (CQI) framework under ISO 9001:2015, the DPWH Central Office should prioritize the strategic localization or formal cross-accreditation of a satellite materials testing laboratory within Camiguin. This intervention would eliminate delays associated with mainland-dependent testing, support compliance with Clause 8.4 requirements, and help maintain project engineering integrity. Furthermore, DPWH Camiguin should address the shortage of accredited technical personnel by requesting additional plantilla positions, hiring qualified engineers or inspectors, and providing capacity-building and accreditation training for existing staff. These measures would contribute to developing a competent, sustainable workforce capable of effectively supporting the implementation of a Quality Management System (QMS).

In addition, the agency should institutionalize gender-responsive service delivery by conducting gender-sensitivity and customer service training for all frontline personnel to ensure that services remain inclusive and responsive to the needs of both male and female clients. The proposed action plan should also be formally adopted by DPWH Camiguin officials and monitored quarterly to maintain high levels of client satisfaction while systematically addressing identified service gaps. Finally, future researchers are encouraged to replicate this study using larger, more diverse samples across multiple districts, employ mixed-methods or longitudinal research designs, and investigate additional factors, such as digital service adoption and procedural transparency, to further enrich the evidence base on public sector service satisfaction.

Acknowledgment

Sincere appreciation is given to all peer reviewers for their valuable comments and suggestions, which helped the authors to improve the quality of the manuscript.

Conflict of Interest Statement

The authors declare no conflict of interest.

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Author Contributions: Nob, I.M., Magto, C.; Study design, method conception, data collection, data analysis and manuscript writing.