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## E-Governance Implementation in the State Universities and Colleges in Region III: **Strategies for Enhanced Service Quality**

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### **Abstract**

Aim: This study assessed the implementation of e-governance in State Universities and Colleges (SUCs) in Region III and examined its relationship with service quality dimensions. The study highlights the role of information and communication technologies in improving service delivery and governance in higher education.

Methodology: A descriptive-correlational research design was employed, utilizing surveys to evaluate the extent of e-governance practices and their association with service quality indicators such as tangibility, reliability, responsiveness, assurance, and empathy.

Results: Findings revealed that e-governance practices were "Often Implemented" across all dimensions, with an overall mean of 3.91. Correlation analysis indicated significant associations between e-administration and service quality, particularly in tangibility (r = 0.413, p < 0.001) and empathy (r = 0.335, p < 0.001). The results suggest that digital platforms enhance service accessibility, stakeholder engagement, and operational efficiency in SUCs, although challenges in financial systems, infrastructure, and training remain.

Conclusion: The study concludes that strengthening ICT infrastructure, expanding digital training programs, and refining online service platforms are critical to maximizing the benefits of e-governance. Strategic policies should be developed to align SUC processes with technological advancements, while continuous evaluation of e-governance initiatives is necessary to ensure institutional relevance and stakeholder satisfaction.

Keywords: e-governance, service quality, State Universities and Colleges, digital transformation, public administration

### INTRODUCTION

Amid the ongoing shift toward digitization, the scope of e-governance has both narrowed and widened due to the penetration of information and communication technology (ICT) in government affairs. This transformation creates a clear point of service delivery but also raises issues of citizen participation in both developing and developed nations.

UNESCO defines e-governance as the formation of processes through which socio-political, economic, and administrative power are exercised to manage state affairs, including ensuring that citizens are able to exercise their rights, fulfill obligations, and defend their interests where possible. It is not solely about deliberative democracy but rather about utilizing ICT to make administrative and public services more accessible, accountable, and efficient (Sanchez, 2025).

E-governance involves the use of ICT by various social actors to improve their access to information. Governments worldwide have taken significant steps to maximize ICT's potential, such as establishing network management centers. ICT is considered a vital tool for accelerating service delivery and decision-making in global higher education institutions (Lameck, 2011; Carvajal et al., 2025).

In the Philippines, e-governance plays a key role in modernizing public administration and improving service quality. The government's e-Government Master Plan seeks to establish a transparent, citizen-centered governance



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system by integrating ICT into institutions. This effort aims to bridge the digital divide and foster inclusive growth (Department of Information and Communications Technology [DICT], 2022).

The COVID-19 pandemic further underscored the importance of digital transformation, as governments needed to ensure continuous public service delivery for remote, vulnerable, and underserved populations. Countries with more developed e-governance infrastructures were more successful in adapting to these challenges compared to those with weaker telecommunications systems and limited human capital development (Pangilinan, 2025).

While previous studies on service quality across SUCs in the Philippines were largely descriptive, this study is distinctive in its use of the SERVQUAL framework to analyze the relationship between service quality dimensions and institutional performance in Region III. It aims to provide empirical insights that could guide improvements in service delivery and stakeholder satisfaction (Amihan et al., 2023).

Despite the global adoption of e-governance, significant gaps remain in understanding its implementation within Philippine SUCs. Specifically, there is limited research on user experiences among faculty, staff, and students, as well as on the institutional constraints shaping its effectiveness. These gaps highlight the need for region-specific studies that assess not only policy but also the actual contribution of e-governance to service quality in higher

The study also emphasizes a disjunction between e-governance system implementation and the actual quality of service experienced by stakeholders in Region III SUCs. Although many institutions have adopted digital platforms for academic and administrative functions, their systems often fall short of user expectations in terms of accessibility, responsiveness, and inclusivity (Sanchez, 2023).

Notably, the level of e-governance adoption varies across SUCs. Some institutions have advanced considerably, while others face barriers such as outdated infrastructure, limited resources, and resistance to change. Addressing these challenges is essential to achieving convergence in digital governance practices across the sector.

This study is significant as it addresses the urgent need for effective digital governance in higher education. By examining current practices, the research uncovers the barriers to deploying ICT solutions that improve service quality. Its findings demonstrate the potential of e-governance to enhance government efficiency, institutional transparency, and communication between stakeholders (Carvajal & Sanchez, 2024).

Furthermore, this research aligns with the mission of public administration practitioners at Tarlac State University's College of Public Administration and Governance. The results are expected to guide policymakers, administrators, and agencies such as CHED and DICT in developing context-sensitive strategies for e-governance implementation.

## **Review of Related Literature and Studies**

Relevant literature on e-governance in SUCs explores digital governance frameworks, challenges, and best practices that influence service quality.

Government-to-Citizen (G2C) literature highlights how digital technologies are reshaping relationships between governments and citizens. ICT has become central to everyday life, with tools such as artificial intelligence, cloud computing, and the Internet of Things significantly influencing governance worldwide (Singh, 2023). Such innovations support the modernization of public services but also demand strong infrastructure and user readiness.

Government-to-Business (G2B) studies emphasize how e-governance simplifies regulatory processes, boosts efficiency, and promotes economic development. However, success depends heavily on ICT readiness, stakeholder engagement, and the adaptability of business environments (Patsioura, 2016).

Government-to-Employee (G2E) research examines how digital systems reshape workplace structures, influencing employee performance and organizational efficiency. Atobishi et al. (2023) stress that successful G2E systems require both technological infrastructure and cultural adaptation.

Recently, Government-to-Government (G2G) e-governance has emerged as a framework emphasizing interagency coordination and policy capacity. Strengthening policy capacity in local governments enhances governance and service delivery. However, technical integration alone is insufficient without skilled personnel to manage these systems.

Service quality has also been linked to digital adoption. Zygiaris et al. (2022) demonstrated that responsiveness and accessibility in digital services significantly affect customer satisfaction. Similarly, Samsor (2021) and Jain (2020) highlight the difficulties faced by developing countries in implementing e-governance, including low literacy, poor infrastructure, and socio-cultural barriers.





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Gupta and Suri (2018) further observed that public value is a key metric in evaluating e-governance systems. However, in many developing nations, access to fully digital public services remains limited, requiring continued physical presence and highlighting inequities in service access.

Overall, literature across G2C, G2B, G2E, and G2G frameworks demonstrates the transformative role of ICT in governance. However, challenges in infrastructure, user readiness, and institutional culture remain barriers to maximizing the benefits of digital governance (Pangilinan et al., 2025).

### **Theoretical Framework**



Figure 1. Proposed Institutional E-Governance Capability Framework (IECF)

The framework was in contrast to Sen's Capability Approach, which was utilized in the present study for the design of e-governance programs in state universities and colleges (SUCs) that were efficient and equitable with regards to the participation of excluded groups like rural students, persons with disabilities, indigenous learners, and economically underprivileged communities. Some of the e-governance initiatives will include multilingual interfaces, adaptable content, and participatory decision-making so that the delivery of services does not inadvertently reinforce existing divides between the digital haves and have-nots.

## **Conceptual Framework**

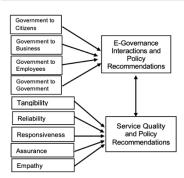


Figure 2. Conceptual Framework

The conceptual framework explores the link between e-governance implementation and service quality in State Universities and Colleges (SUCs), with the ultimate aim of guiding effective policy recommendations. Among the various e-governance interactions, key concepts include e-services, which enable citizens to perform public transactions online, such as electronic tax filing, without the need for physical visits to government offices. Another essential element is e-democracy, which facilitates engagement between civil society and formal political institutions through digital means, such as e-voting. These e-governance developments were often shaped by strategic policy directives, including the European Union's Digital Agenda, which defines goals for digital public administration (European Commission, 2010; Johannessen, 2010).

### **Statement of the Problem**

E-governance was increasingly being adopted by SUCs in Region III to enhance transparency, accountability, and overall service delivery. However, the implementation of e-democracy, e-administration, and eservices has been impeded by gaps in infrastructure, deficits in digital literacy, challenges regarding organizational readiness, resistance to change, and concerns about data privacy. These issues can reduce efficiency, restrict accessibility, and compromise service quality for stakeholders if left unaddressed.





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Despite increasing emphasis on digital governance, no empirical study has yet analyzed the correlation between e-governance implementation and service quality (using SERVQUAL dimensions) in Region III SUCs. This was an urgent issue given the public demand for efficient services that were orientated towards citizen needs, because of the mandate by CHED and DICT for digital transformation and modernization of higher education institutions. Region III SUCs constitute a priority context because they were characterized by student populations, resource capacities, and great diversity in their roles for accessible education in urban and rural communities. This study therefore aims to systematically evaluate current e-governance practices, identify challenges, and examine service quality, providing evidence-based recommendations to strengthen e-governance and improve service delivery in the region.

## **Research Objectives**

This study generally aims to examine e-governance implementation in SUCs of Region III and its relationship with service quality using SERVQUAL.

- 1. To analyze the areas of e-democracy, e-administration, and e-services in the implementation of egovernance in the SUCs in Region III.
- To evaluate the service quality (SERVQUAL) of State Universities and Colleges (SUCs) in Region 3 in terms of customer expectations and experiences.
- To identify the problems encountered by the State Universities and Colleges in Region III in the implementation of e-governance.
- To propose policy recommendations and programs to enhance e-governance by the SUCs in Region III.

## **Research Questions**

Specifically, this study sought to answer the following questions:

- How are is e-governance implemented in SUCs in Region III in terms of:
- 1.1. Government to Citizens:
- 1.2. Government to Business;
- 1.3. Government to Employees; and
- 1.4. Government-to-Government?
- 2. How is the service quality of State Universities and Colleges (SUCs) in Region III evaluated using SERVQUAL, in terms of customer expectations and experience?
- 3. What is the relationship between implementation and the service quality of e-governance by SUCs in Region
- 4. What are the problems encountered by the State Universities and Colleges in Region III in e-governance?
- 5. What policy recommendations and programs can be proposed to enhance e-governance by the SUCs in Region 3?

### **Hypothesis**

Ho: There is no significant relationship between the implementation of e-governance and the service quality of State Universities and Colleges (SUCs) in Region III.

H<sub>1</sub>: There is a significant relationship between the implementation of e-governance and the service quality of State Universities and Colleges (SUCs) in Region III.

### **METHODOLOGY**

This section discusses the background of the research, the design used in the study, the identification of the population, determination of the sample size and how the samples were selected, description of the respondents, research tool, conduct of the study, and the methods used for data analysis.

## **Research Design**

The quantitative descriptive-correlational design was chosen to determine whether and how the implementation of e-governance was linked to service quality in SUCs. The descriptive aspect of the study focused on assessing the e-governance practices of the SUCs, while the correlational component examined the relationship between these practices and service quality. This design has been widely used in educational and institutional research to analyze linkages between organizational practices and outcomes (Pangilinan, 2025).

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## **Population and Sampling**

The population of the study comprised the twelve (12) SUCs in Region III. To ensure complete representation of higher education institutions practicing e-governance, all twelve State Universities and Colleges in the region were included. These institutions were distributed across the seven provinces of Region III, namely Aurora, Bataan, Bulacan, Nueva Ecija, Pampanga, Tarlac, and Zambales. A total of 1,097 respondents were drawn from faculty members, non-teaching employees, students, and other stakeholders. The sampling ensured diverse perspectives were included, thereby strengthening the representativeness and reliability of findings (Amihan et al., 2023).

### **Instruments**

The questionnaire used in this study was developed by adapting insights from several foundational frameworks and academic studies, including the United Nations E-Government Survey (2020), Al Athmay's Theoretical Framework for E-Government Implementation, Gil-Garcia, Pardo, and Luna-Reyes' Integrative Study on E-Government Success (2005), and the SERVQUAL Model by Parasuraman et al. Although these sources did not provide ready-made questionnaires, they offered robust conceptual bases that informed the design, content, and structure of the instrument. Reliability was analyzed using Cronbach's alpha to measure internal consistency, which is a standard approach in validating instruments in governance and education studies (Bontuyan, 2025).

Three experts in public administration and e-governance validated the questionnaire to confirm its content validity. They assessed each item for clarity, relevance, readability, objectivity, and alignment with study objectives. While all items achieved perfect CVI scores, minor revisions were made to enhance the tool's reliability and clarity. The sample size was determined using Cochran's Finite Sample Size Formula combined with Stratified Random Sampling. Since the study population included a fixed number of employees and stakeholders in the SUCs of Region III, Cochran's formula ensured that the minimum required sample size met the desired confidence level (95%) and margin of error (±5%), generating statistically reliable results.

### **Data Collection**

For formal data collection, official permission was sought from the twelve SUCs in Region III: Aurora State College of Technology (ASCOT), Bataan Peninsula State University (BPSU), Bulacan Agricultural State College (BASC), Bulacan State University (BulSU), Central Luzon State University (CLSU), Don Honorio Ventura State University (DHVSU), Nueva Ecija University of Science and Technology (NEUST), Philippine Merchant Marine Academy (PMMA), President Ramon Magsaysay State University (PRMSU), Pampanga State Agricultural University (PSAU), Tarlac Agricultural University (TAU), and Tarlac State University (TSU). Securing authorization ensured ethical compliance and systematic data gathering. Data collection was conducted from January to October 2024.

- Formal letters were submitted to each institution's administration, outlining the purpose of the study and requesting permission to distribute the questionnaire to students, faculty, non-teaching staff, and other internal stakeholders.
- Ouestionnaires were distributed after permission was granted, ensuring compliance with ethical standards.

## **Treatment of Data**

After responses were collected, systematic checks were performed to validate the accuracy and completeness of data. The final stage of the study involved interpreting statistical results to address the research questions and provide evidence-based conclusions. Inferential statistics were applied to the data to identify relationships between e-governance practices and service quality.

Each research question was systematically addressed through data collection and analysis. Descriptive statistics, including means and percentages, summarized respondents' profiles and perspectives on e-governance implementation and SERVQUAL dimensions. Research Question 3 (RQ3) tested the relationship between egovernance implementation and service quality using Pearson's correlation coefficient. Each statistical tool was mapped clearly against its corresponding research question. Respondents' attitudes were measured using a five-point Likert Scale, interpreted through the following adjectival ratings:

Index	Adjectival Rating (AR)
5	Always Implemented
4	Often Implemented





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3	Sometimes Implemented
2	Rarely Implemented
1	Never Implemented

### **Ethical Considerations**

All participants were informed of the study's purpose and procedures and provided written consent before participating. They were informed about the study's objectives, potential risks and benefits, confidentiality measures, and their right to withdraw at any time without penalty. Participation was strictly voluntary, and anonymity was ensured by not collecting names and coding responses. Data were stored in password-protected files accessible only to the research team. The study complied with institutional protocols and the Data Privacy Act of 2012 (RA 10173), ensuring adherence to national ethical standards.

### **RESULTS and DISCUSSION**

The study results and analysis focus on the area of e-governance implementation of State Universities and Colleges in Region 3. This data analysis takes into consideration the survey data, observations, and visits to their websites.

## 1. Areas of E-democracy, E-administration, and E-services in the Implementation of E-governance in the SUCs in Region III

The survey on the areas of e-democracy, e-administration, and e-services in the implementation of egovernance was taken in the different State Universities and Colleges (SUCs) in Region III namely; Aurora State College of Technology (ASCOT), Bataan Peninsula State University (BPSU), Bulacan Agricultural State College (BASC), Bulacan State University (BUISU), Central Luzon State University (CLSU), Don Honorio Ventura State University (DHVSU), Nueva Ecija University of Science and Technology (NEUST), Philippine Merchant Marine Academy (PMMA), President Ramon Magsaysay State University (PRMSU), Pampanga State Agricultural University (PSAU), Tarlac Agricultural University (TAU) and Tarlac State University.

**Table 1.** Summary of the Implementation of E-governance Interactions in the SUCs in Region III

Implementation of E-governance Interactions	Mean	Verbal Description
Government to Citizens'	3.94	Often Implemented
Government to Business	3.89	Often Implemented
Government to Employees	3.85	Often Implemented
Government to Government	3.94	Often Implemented
Mean	3.91	Often Implemented

As presented in Table 1, significant developments took place in one of the e-governance areas of SUCs in Region III. Without any investments in infrastructure, education and training as well as strategic planning it was quite difficult to acknowledge that particularly infrastructure was the biggest obstacle and the above-mentioned promise used to the fullest extent. Extension of these innovations to the enhancement of service quality, performance efficiencies and satisfaction of all parties concerned, together with all functions of the university and management.

In this study, it was noteworthy to find out that many State Universities and Colleges in region III were able to have the e-governance transactions, with a grand mean of 3.91. The grand mean that many of these institutions were already using the available tools for effective and efficient governance. Government to Citizens has the highest mean of 3.94 and shows that the universities were employing these digital platforms to build better interfaces with the populace. This included the use of online tools and systems for the collection of inputs on university affairs, allow the students to take part in decision making and even the provision of avenues of customer response to the services, which were two things that support transparency and accountability growth.

Wherein in the study of (Barrios & Moreno, 2024) presented that various e-Government channels, the most significant being the e-Services Portal and the Open Data Portal, have uplifted the efficiency of administrative processes, shortened the time taken to process applications, and enhanced transparency. Nonetheless, the digital divide, resistance to change, and security concerns have greatly interfered with the effectiveness of these instruments.



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## 2. Service Quality of State Universities and Colleges (SUCs) in Region 3 Evaluation Based on the Levels of Customer Expectations and Experience

One of the most important indicators to meet the needs of the primary stakeholders of the institution, which were students, faculty, and staff, were evaluated in the processes of service quality of the State Universities and Colleges (SUCs) in the Region 3. The evaluation mainly involves the difference between what the customers expect from the services provided by the SUC and the extent to which the stakeholders agree to the quality of the services provided. This kind of approach allows for a two-level assessment of service quality: ways to work over the gaps in the works provided and current satisfaction of the stakeholder and ways to fulfill; and possible enhancements and strengthening in the future.

Table 2. Overall Summary of the Service Quality of State Universities and Colleges (SUCs) in Region 3 Based on the Levels of Expectations and Experience

Service Quality	Expectations	Experience	Expectations	Experience	
	<b>Grand Mean</b>	VD	<b>Grand Mean</b>	VD	
Tangibility	3.66	OI	3.95	OI	
Reliability	3.79	OI	3.99	OI	
Responsiveness	3.73	OI	3.97	OI	
Assurance	4.02	OI	4.10	OI	
Empathy	3.96	OI	4.04	OI	
Grand Mean	3.83	OI	4.01	OI	

Drilling into the Tangibility the distributional metric, it, in particular, captures the services' aspects that were physical (facilities and resources) in their provision; and in this case, the expectational mean of 3:66 while the experienced one was at 3:95. Some might see this as a typical case of expectations being too high but in reality, it was rare in the institutions for the expected portion of tangibility not to be covered. This may be attributed to the existence of aspects like better campus accommodation, improved digital access, library services and overall better infrastructure.

The summarized outcomes of these tables stress the significance of e-governance in improving the offerings in higher education institutions in Region III. There were four types of e-governance interactions—Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Employees (G2E), and Government-to-Government (G2G). In other words, these SUCs have adopted a robust technological environment which promotes interactivity, transaction, and cooperation among different people and areas. In account of service quality the Correlation analysis shows that e-administration does in fact lead to statistically significant effects across all the service quality domains tangibility, reliability, responsiveness, assurance, and empathy. Each construct of service quality was significantly related to e-administration,-going to show that digital governance can be one of the means of improving aspects of colleges and their services.

Furthermore, the results of the study of (Sulasula & Moreno, 2023) point that many areas of contention that hinder the effective performance of public service delivery among SUCs in the region. These include bureaucratic red tape, poor financing, inadequate infrastructure, and bureaucratic corruption. These challenges manifest as late and poor service delivery to the public. Nevertheless, this study also provides credit to some best practices adopted by progressive SUCs in the region to ensure faster and improved service delivery.

## 3. Relationship between Area of Implementation of E-governance Interactions and the Service Quality of E-governance by SUCs in Region III

The scope for digital transformation in higher education is limited by the extent of e-governance interaction as an area of implementation and e-governance service quality in State Universities and Colleges (SUCs) in Region III. E-governance implies the delivery of services using some technology to the people straight at their doorsteps or some technology for internal government functioning, such as administrative processing, student service processing, academic management, and communicating with stakeholders. As per instances, the embodiments of such information technologies do also influence in the quality of services given to the students as well as to the lecturers and non-academic staff. There was a provision of the facilities like online registration, enhanced e-learning sites, digital resource tools, automatic financial management systems and others.

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Examining the linkage between areas of e-governance implementation and service quality advances the understanding of the extent to which technology acts as a positive force for efficiency within the higher education system. It sheds light on the characteristics of the e-governance variables in which domains each e-governance dimension contributes to more impactful service quality i.e. service quality can be applied to more productive unit of

The research addressed the various issues, challenges, and limitations in e-governance, then proceed to suggest recommendations regarding strategies for overcoming these limitations. The study critically analyzes the development and various definitions of e-government, including e-government project processes within ethical environments, as part of this inquiry. It will also address the limitations and challenges, as well as how to strengthen e-government research. Finally, findings concerning strategies for effective e-governance will be made and a conclusion drawn (Malek, Pandey, Pandey, & Dattana, 2020).

**Table 3.** Correlation between Implementation of E-Administration and Service Quality

Components	Pearson r	<i>p</i> -value	Decision	Result
Tangibility	0.413	0.000	Reject H₀	Significant
Reliability	0.289	0.000	Reject H₀	Significant
Responsiveness	0.272	0.000	Reject H₀	Significant
Assurance	0.295	0.000	Reject H₀	Significant
Empathy	0.335	0.000	Reject H₀	Significant

This study examines how e-administration was implemented and it was shown that all the five service variables - tangibility, reliability, responsiveness, assurance, and empathy, dimension indicators were statistically related to e-administration. All of these have a significance level at 0.000 and other words, such results were not due to chance. This further means that the findings were such that the existence of the associated bonds cannot be determined with ease at the same time that enormous possibilities of the occurrence of such bonds were considered to be negligible.

Table 4. Correlation between Implementation of E-Services and Service Quality

Components	Pearson r	<i>p</i> -value	Decision	Result
Tangibility	0.430	0.000	Reject H₀	Significant
Reliability	0.393	0.000	Reject H₀	Significant
Responsiveness	0.338	0.000	Reject H₀	Significant
Assurance	0.353	0.000	Reject H₀	Significant
Empathy	0.384	0.000	Reject H₀	Significant

Table 4 presents the correlation between the implementation of e-services and various components of service quality, showcasing the relationship between digital service offerings and key dimensions of service quality. The Pearson correlation coefficients (r) for all components were positive and statistically significant, indicating that the implementation of e-services contributes to improvements in service quality across all five dimensions: Tangibility, Reliability, Responsiveness, Assurance, and Empathy.

**Table 5.** Correlation Between Implementation of E-Democracy and Service Quality

Components	Pearson r	<i>p</i> -value	Decision	Result
Tangibility	0.435	0.000	Reject H₀	Significant
Reliability	0.358	0.000	Reject H₀	Significant
Responsiveness	0.330	0.000	Reject H₀	Significant
Assurance	0.338	0.000	Reject H₀	Significant
Empathy	0.368	0.000	Reject H₀	Significant

Table 5 shows the interrelation between the integration of e-democracy and measures associated with quality of services. All service quality components were found to have a significant and positive relationship with all Pearson coefficients which lie between 0.330 and 0.435 was observed, all of which was associated with a p-value of 0.000. Therefore, it was apparent that the introduction of e-democracy practices has a significant bearing on the service qualities namely, Tanqibility, Reliability, Responsiveness, Assurance and Empathy.



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## 4. Problems Encountered by the State Universities and Colleges in the Region III in E-governance

The study examines the barriers to the successful implementation and realization of e-governance systems among State Universities and Colleges (SUCs) in Region III.

**Table 6.** Problems Encountered in the E-Governance

Problems Encountered in the E-Governance	F	%	R
Inadequate IT Infrastructure	573	52.23	1
Lack of awareness about the e-Government services	572	52.14	2
Budgets and operating costs	550	50.14	3
Lack of confidence and trust in to use of e-government services	479	43.66	4
Lack of security and privacy	478	43.57	5
Lack of training and knowledge transfer	457	41.66	6
Insufficiently skilled human resources	433	39.47	7
Lack of public-private collaboration/partnership	432	39.38	8
Lack of a clear strategy	415	37.83	9
Lack of e-Government transformation and resistance to change	406	37.01	10
Lack of a comprehensive policy, Legal, and regulatory framework	386	35.19	11

The top-ranked issue garnered 52.23%, placing the issue of an IT infrastructure that is lacking. This causes a systemic gap in the availability of reliable hardware, software, and internet connectivity across SUCs, especially with regard to satellite campuses scattered in remote areas. The different SUCs cited issues such as slow internet speed and limited server access, which impeded the smooth operations of e-governance platforms.

## 5. Policy Recommendations and Programs Proposed to Improve E-Governance and Service Quality

The policy considerations of the study were formed and steered through a comprehensive investigation of the problems confronted by the State Universities and Colleges (SUCs) in the Region III in the implementation of egovernance systems. These problems cropped up through empirical data from institutional reports and surveys involving stakeholders and interviews with those subjected to administrative and academic personnel. The findings indicated that in the Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Employee (G2E), and Government-to-Government (G2G) services, the SUCs had considerably proceeded with their digitization of services; yet, some systemic-induced obstacles barred the complete optimization of the e-governance thrusts.

## Conclusion

The implementation of e-governance strategies in the SUCs of Region III, therefore, witnesses the ultimate acceptance of technology in their administrative and academic undertakings. Digital platforms were mainly utilized to foster G2C services, which allow public involvement and facilitate communication and service delivery. This ICT application extends to G2B establishments that support business and external entity transactions, thus enhancing operational efficiency.

Intra-organizationally, technology finds use in improving managerial procedures while consolidating G2E interactions. Virtual mechanisms for data and communication in inter-university and inter-agency collaborations substantiate e-governance's applicability. The strategic application of e-governance in G2C, G2B, G2E, and G2G domains appears to be a good match with service quality, with digital initiatives widespread and functionally integrated within these institutions.

The full implementation of these e-governance initiatives still hindered by challenges. These include the relatively poor physical IT infrastructure, low skills in ICT, and financial limitations. Efficient management of these constraints through strategic policy implementation and capacity-building interventions can help to sustain and strengthen e-governance. The e-governance facade is suggested to increase efficiency, transparency, and inclusivity at SUCs in Region III, where most digital services are said to have met and, at times, exceeded the expectations of stakeholders, according to the findings of this study.

## Recommendations

To strengthen e-governance in State Universities and Colleges (SUCs) in Region III, institutions may prioritize upgrading IT infrastructure, addressing outdated hardware, and ensuring reliable connectivity while deploying multi-layered security systems such as firewalls, encrypted servers, two-factor authentication, and regular







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security audits. Equally important is human resource development through regular training for academic and administrative staff on digital platforms, the integration of AI tools for workflow automation and analytics, and the establishment of onboarding programs, feedback mechanisms, and peer mentoring to support smooth digital adoption across departments.

At the governance level, SUCs are encouraged to align their digital initiatives with CHED's Digital HEI Framework by formulating clear roadmaps that specify priorities, timelines, accountable offices, and measurable indicators of success. Service delivery may be enhanced by consolidating core processes—such as enrollment, tuition payments, and academic advising—into mobile-accessible platforms while involving stakeholders in system testing to ensure responsiveness and usability. To sustain these initiatives, SUCs may secure funding through national grants, partnerships with LGUs and private firms, and collaborations with tech companies to pilot innovations like AI-driven systems, blockchain for academic records, and IoT-enabled campuses. Finally, an action plan consolidating these strategies should be formally prepared and submitted to the Department of Information and Communications Technology (DICT) for guidance and support in advancing digital transformation across the region.

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